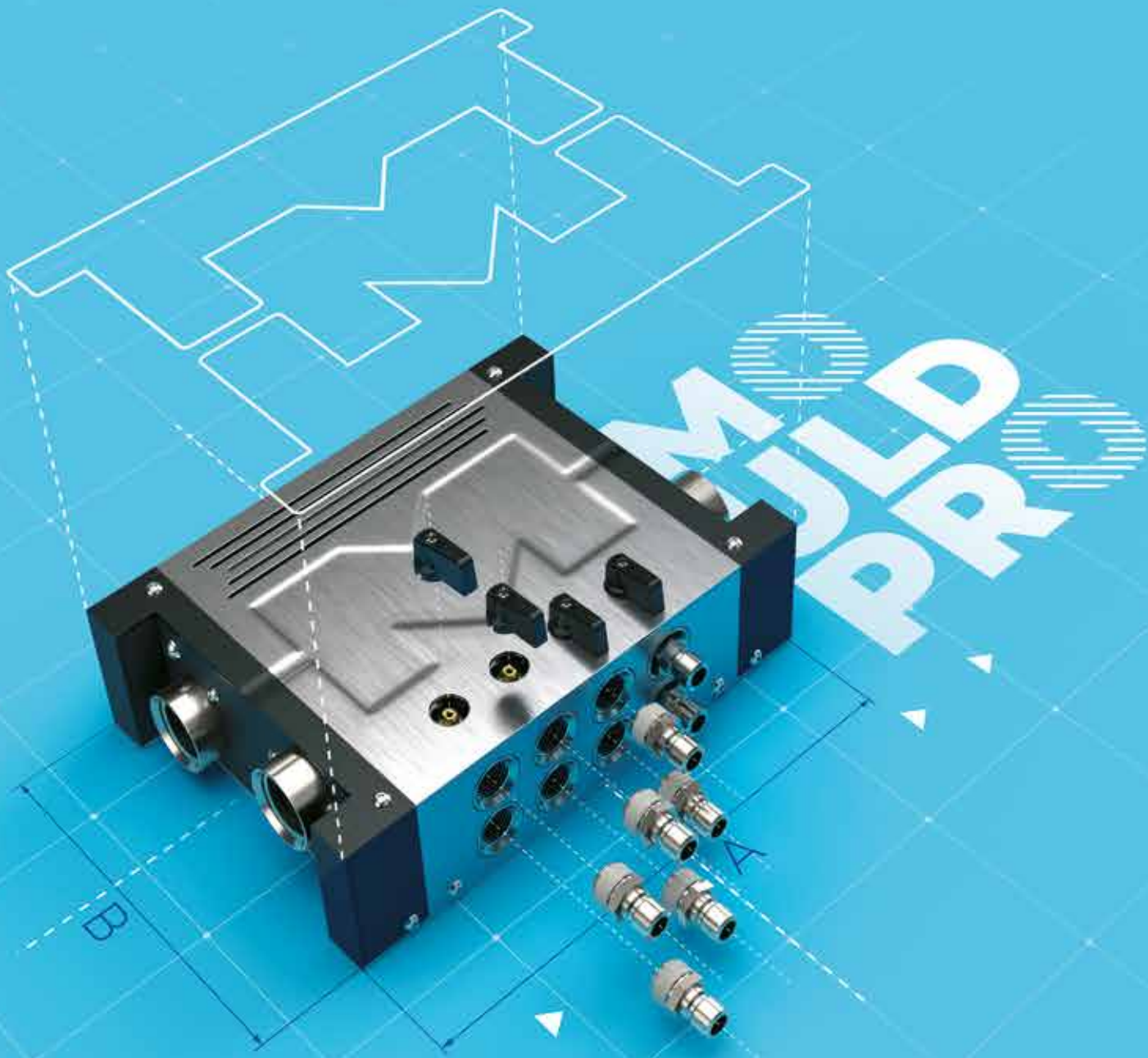


2022

CATALOGUE

EDITION **13**


FUN
EXCELLENCE
PASSION
STRONG
EFFECTIVE
FLEXIBLE
RESPONSIBLE
BRAVE
AUTHENTIC
BEST
STRONG
ADAPTABLE
SUSTAINABLE
PEOPLE
TRANSPARENT
FLEXIBLE
BRAVE
FUN
PASSION
DYNAMIC
GLOBAL
BEST
VALUE
CREATIVE
TRUSTED
PASSION
INTEGRITY
FORWARD THINKING
BRAVE
TRUSTED
EFFECTIVE
EXPERIENCE
PARTNERSHIP
CARING
PROGRESSIVE
PEOPLE
TRUSTED
BRAVE
POSITIVE
PASSION
FLEXIBLE
FUN
PASSION
BEST
COMMITTED
PASSION
RESOURCES
FORWARD THINKING
SUCCESSFUL
DYNAMIC
APPROACHABLE
REPUTATION
PROACTIVE
PEOPLE
EFFECTIVE
VALUE
FUN
FLEXIBLE
BEST
PASSION
FOCUSED
ADAPTABLE
CREATIVE
TRUSTED
FUN
POSITIVE
AUTHENTIC
CARING
PEOPLE
FUN
NETWORK
BRAVE
PROGRESSIVE
PASSION
PEOPLE
FOCUSED
FLEXIBLE
PROACTIVE
BEST
INTEGRITY
FORWARD THINKING
CREATIVE
BEST
FUN

MOULDPRO

NEW ENTRIES

2022

NEW

Cable Cutter

Ergonomic Cable cutter.



145

NEW

Cable Glands

New Cable Glands in Polyamide.

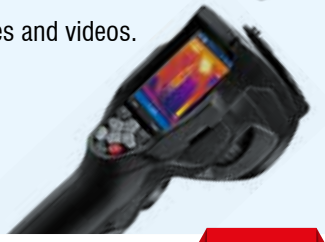


142

NEW

Thermal Cameras

Cameras for thermal images and videos.



148

NEW

Hose Assembly Tool

Premium Assembly Tool.



55

NEW

Heavy Duty Hose Cutter

Suitable for Stainless Steel Hoses.



54

NEW

Power and Thermo Cables

Cables for heaters and thermocouples.



144

NEW

NSF Foam Cleaner

Foam Cleaning Agent Food Grade.



111

NEW

Heavy Duty Manifolds



81

NEW

Mould Pry Bars

Alu-Bronze.



215

NEW

Gate Cutters

Curved Back.



209

CONTENTS

MOULDING SUPPLIES EDITION 13

5 01. MOULD COOLING



84 02. THERMAL MANAGEMENT



108 03. CONSUMABLES



124 04. TEMPERATURE CONTROL



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162 06. END OF ARM TOOLING (EOAT)



202 07. END OF BARREL



208 08. TOOLS & ACCESSORIES



230 09. MACHINE ACCESSORIES



240 10. MOULD CLAMPING



248 11. LIFTING

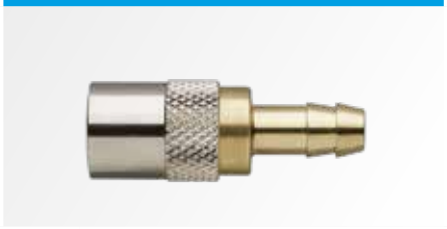


256 12. MOULD COMPONENTS



01.
MOULD COOLING

6 COUPLERS



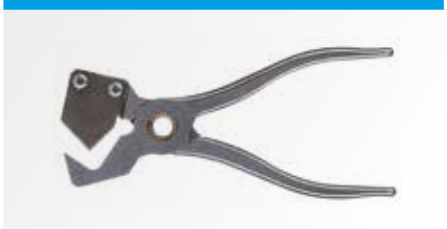
45 HOSES



52 HOSE PROTECTION



54 HOSE CUTTING



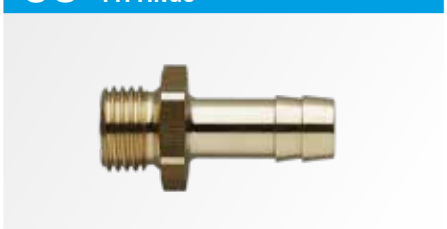
55 HOSE ASSEMBLY TOOL



56 HOSE CLAMPING



58 FITTINGS



71 VALVES



76 PUSH IN FITTINGS



78 MANIFOLDS



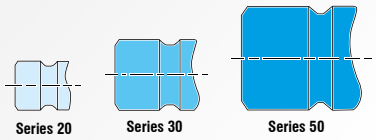
82 SEALANT & TAPE



01.
MOULD COOLING

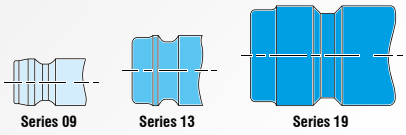
8
INTERNATIONAL SERIES 20 / 30 / 50



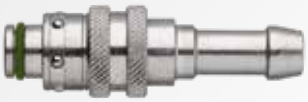


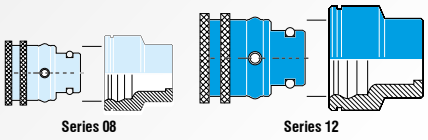
18
EUROPEAN SERIES 09 / 13 / 19





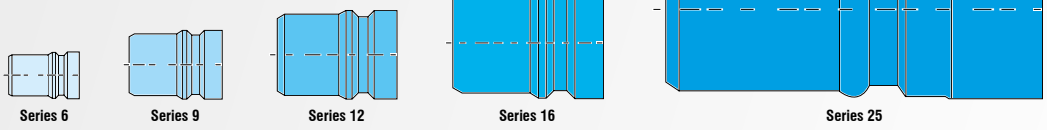
30
FRENCH SERIES 08 / 12





36
FRENCH MATIC SERIES 6 / 9 / 12 / 16 / 25





42
LARGE FLOW COUPLINGS 75 / 85 / 96 / 105





45
MULTI COUPLINGS SERIES



MOULDPRO
SAFETY COUPLING TYPE TS



The patented quick connect safety coupling features an automatic locking mechanism that offers an effective solution for accidental disconnection and unlocking.

The coupling is designed for use with aggressive media such as mould cooling applications with hot and cold water (as well as thermal oil) between -20°C and +200°C*.

High quality FKM o-rings mean that the coupling is ideal for mould cooling circuits especially for high temperature.

The couplings are available in both European and International series making it fully compatible with existing moulds; it is not necessary to change the connector nipples.

* water up to 160° C oil up to 200°C

Coupling in unlocked position, sleeve is in default position ready to connect



Coupling in locked position, and green code indicates that the coupling is locked and safe



The Mouldpro quick connect safety coupling system is characterized by its simple and intuitive connection process.

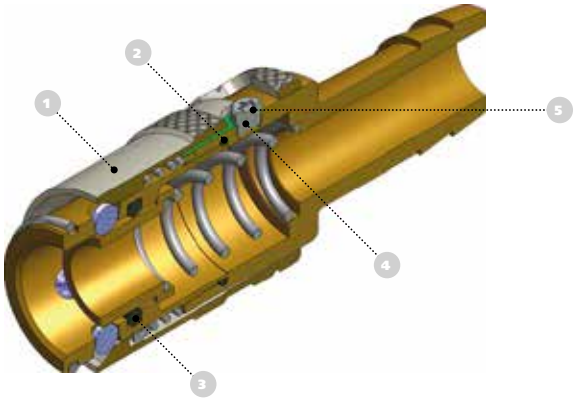
Even in difficult and hidden areas, this enables a safe operation. The connection takes place via automatic locking.

An additional colour coding on the locking sleeve indicates a correct and secure connection clearly and unequivocally.

The disconnecting process can be blindly executed due to the forced guidance of the locking sleeve – it requires an axial movement of turning the locking sleeve, basically a manual unlocking motion.

An accidental or unintentional disconnection is practically impossible.

1. Strengthened release sleeve made of high resistant special brass
2. Separate O-ring sealing on the connector
3. Special-Hitec-FKM-O-ring
4. Forced guidance design with visual colour coding on the locking sleeve
5. Patented automatic safety locking mechanism (dependable security when disconnecting)



Nominal Diameter

20 / 30 / 50





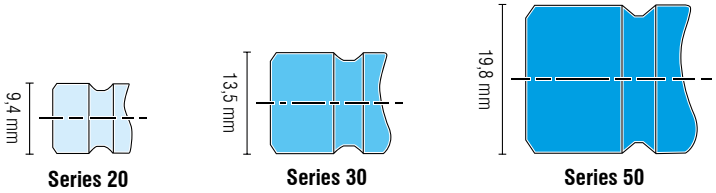


Illustration scale 1:1

Technical Description

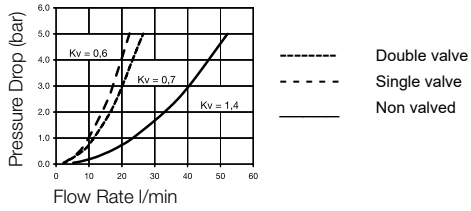
Coupling series especially developed for connecting coolant lines on injection moulds.

Fully interchangeable with other brands with the same plug profiles.

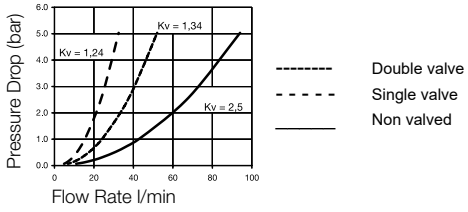
All dimensions and tolerances according to original specs.

Chart

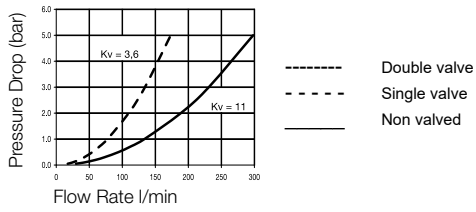
Serie 20



Serie 30



Serie 50



Material

Coupling

Back Body	Brass
Valve Body	Brass
Sleeve	Brass (without Valve)
Sleeve	Brass, Nickel Plated (with Valve)
Valve	Brass
Locking Balls	AISI 420
Spring	AISI 301
Seal	FKM

Plug

Plug Profile	Brass
Back Body	Brass
Valve	Brass
Spring	AISI 301
Seal	FKM

Working Pressure

15 bar, maximum static working pressure with safety factor of 4 to 1.

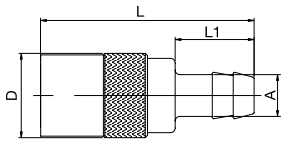
Working Temperature

Standard Couplers
Water up to 140°C
Oil up to 180°C

TS Couplers
Water up to 160°C
Oil up to 200°C

Straight Coupling

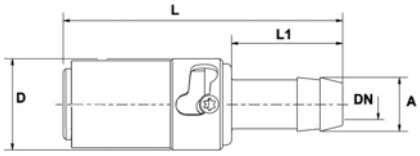




DN	Series			A	D	L	L1	
4,5	20	20K6V	20K6	6	18	46	17	10
6		20K10V	20K10	10	18	51	22	10
		20K13V	20K13	13	18	51	22	10
7	30	30K10V	30K10	10	24	64	22	10
9		30K13V	30K13	13	24	66,5	25	10
15	50	50K19V	50K19	19	32	89	32	5

Safety Coupling, Type TS, Straight

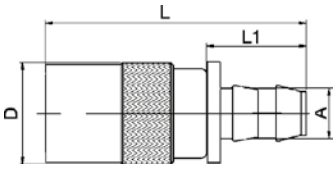




DN	Serie			A	D	L	L1	
6	20	20K10V-TS	20K10-TS	10	18	59,5	22	5
7	30	30K10V-TS	30K10-TS	10	23	64,5	25	5
9		30K13V-TS	30K13-TS	13	23	64,5	25	5
15	50	50K19V-TS	50K19-TS	19	32	90,8	34	1

Push Lock - Straight Coupling

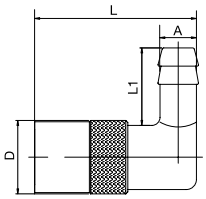




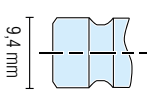
DN	Series			A	D	L	L1	
6	20	20K10V-PL	20K10-PL	10	18	58	28	10
9	30	30K10V-PL	30K10-PL	10	24	64,5	28	10
		30K13V-PL	30K13-PL	13	24	64,5	28	10

90° Coupling

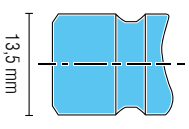




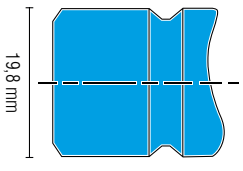
DN	Series			A	D	L	L1	
4,5	20	20K6V/90	20K6/90	6	18	40	19	10
6		20K10V/90	20K10/90	10	18	40	22	10
7	30	30K10V/90	30K10/90	10	24	56	22	10
9		30K13V/90	30K13/90	13	24	56	28,5	10
15	50	50K19V/90	50K19/90	19	32	77	32	5



Series 20



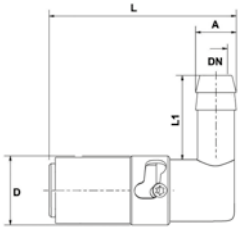
Series 30



Series 50

Safety Coupling, Type TS, 90°

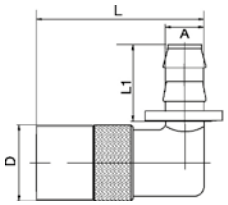




DN	Serie	⟷	⟷	A	D	L	L1	
6	20	20K10V/90-TS	20K10/90-TS	10	18	52,5	22	5
7	30	30K10V/90-TS	30K10/90-TS	10	23	68,5	25	5
9		30K13V/90-TS	30K13/90-TS	13	23	68,5	25	5
15	50	50K19V/90-TS	50K19/90-TS	19	32	80,8	34	1

Push Lock - 90°Coupling

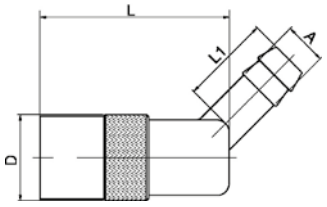




DN	Series	⟷	⟷	A	D	L	L1	
6	20	20K10V-90-PL	20K10-90-PL	10	18	40,5	28	10
7	30	30K10V-90-PL	30K10-90-PL	10	23	61,5	28	10
9		30K13V-90-PL	30K13-90-PL	13	23	61,5	28	10

45° Coupling

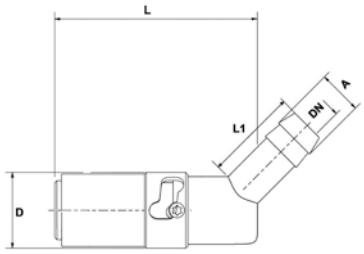




DN	Series	⟷	⟷	A	D	L	L1	
4,5	20	20K6V/45	20K6/45	6	18	55,5	19	10
6		20K10V/45	20K10/45	10	18	55,5	22	10
7	30	30K10V/45	30K10/45	10	24	71	22	10
9		30K13V/45	30K13/45	13	24	75	25	10
15	50	50K19V/45	50K19/45	19	32	77	30	5

Safety Coupling, Type TS, 45°



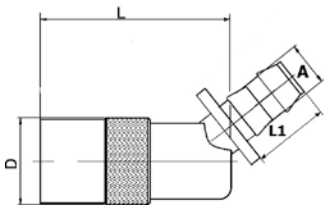


DN	Serie	⟷	⟷	A	D	L	L1	
6	20	20K10V/45-TS	20K10/45-TS	10	18	52,5	22	5
7	30	30K10V/45-TS	30K10/45-TS	10	23	68,5	25	5
9		30K13V/45-TS	30K13/45-TS	13	23	68,5	25	5
15	50	50K19V/45-TS	50K19/45-TS	19	32	80,8	34	1

See explanation of symbols on page 268

Push Lock - 45° Coupling

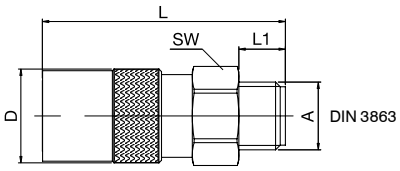




DN	Series	⟷	⟷	A	D	L	L1	
6	20	20K10V-45-PL	20K10-45-PL	10	18	40,5	28	10
7	30	30K10V-45-PL	30K10-45-PL	10	23	61,5	28	10
9		30K13V-45-PL	30K13-45-PL	13	23	61,5	28	10

Male Threaded Coupling

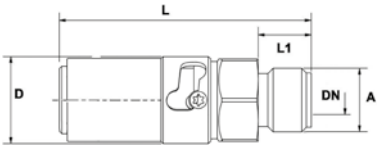




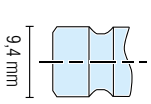
DN	Series	⟷	⟷	A	D	L	L1	SW	
6	20	20KUR1/4V	20KUR1/4	G1/4	18	38	9	17	10
		20KUR3/8V	20KUR3/8	G3/8	18	38	9	19	10
9	30	30KUR1/4V	30KUR1/4	G1/4	24	48,5	9	22	10
		30KUR3/8V	30KUR3/8	G3/8	24	48,5	9	22	10
		30KUR1/2V	30KUR1/2	G1/2	24	51,5	12	22	10
15	50	50KUR1/2V	50KUR1/2	G1/2	32	73	12	30	10
		50KUR3/4V	50KUR3/4	G3/4	32	77	16	30	5

Safety Coupling, Type TS, Male Threaded

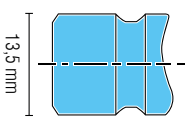




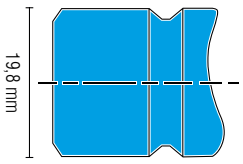
DN	Serie	⟷	⟷	A	D	L	L1	
6	20	20KUR1/4V-TS	20KUR1/4-TS	G1/4	18	55,5	11	5
		20KUR3/8V-TS	20KUR3/8-TS	G3/8	18	55,5	11	5
9	30	30KUR1/4V-TS	30KUR1/4-TS	G1/4	23	57,5	12,5	5
		30KUR3/8V-TS	30KUR3/8-TS	G3/8	23	57,5	12,5	5
		30KUR1/2V-TS	30KUR1/2-TS	G1/2	23	57,5	12,5	5
15	50	50KUR1/2V-TS	50KUR1/2-TS	G1/2	32	75,8	15	1
		50KUR3/4V-TS	50KUR3/4-TS	G3/4	32	76,8	16	1



Series 20



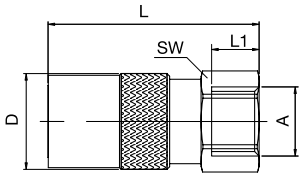
Series 30



Series 50

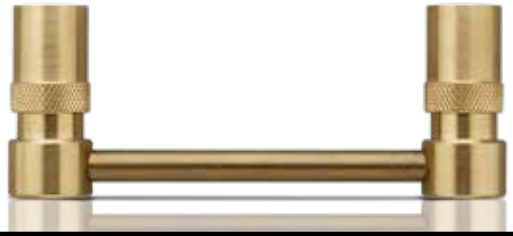
Female Threaded Coupling

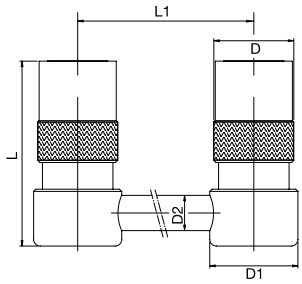




DN	Series	⟲	⟷	A	D	L	L1	SW	
6	20	20KIR1/8V	20KIR1/8	G1/8	18	40	10	17	10
		20KIR1/4V	20KIR1/4	G1/4	18	40	10	17	10
		20KIR3/8V	20KIR3/8	G3/8	18	44	10	19	10
9	30	30KIR1/4V	30KIR1/4	G1/4	24	51,5	10	21	10
		30KIR3/8V	30KIR3/8	G3/8	24	51,5	10	21	10

Banjo Bridge

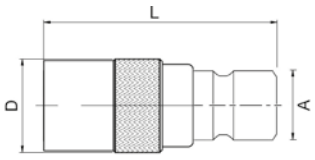




DN	Series	⟷	A	D	L	D1	D2	L1	
6	20	20K125		18	42	20	8	125	1
		20K250		18	42	20	8	250	1
		20K500		18	42	20	8	500	1
9	30	30K125		24	58	26	10	125	1
		30K250		24	58	26	10	250	1
		30K500		24	58	26	10	500	1
15	50	50K160		32	78	36	14	160	1
		50K315		32	78	36	14	315	1
		50K500		32	78	36	14	500	1

Coupling with Plug

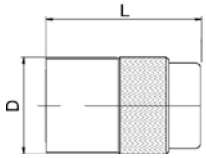




DN	Series	⟲	⟷	A	D	L	
6	20	20K30NV	20K30N	13,5	18	50,5	10
9	30	30K20NV	30K20N	9,4	24	52,5	10

Blind Coupling





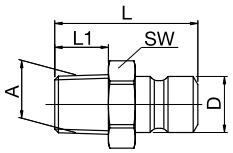
DN	Series	⟷	D	L	
6	20	20K	18	30	10
9	30	30K	24	37	10

See explanation of symbols on page 268

Male Plug



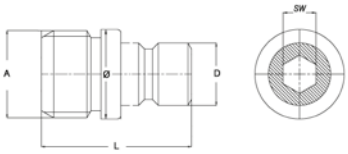




DN	Series			A	D	L	L1	SW	
6	20		20NM10	M10x1	9,4	23	8	13	25
			20NR1/8	R1/8	9,4	24	9	13	25
			20NR1/4	R1/4	9,4	29	12	16	25
		20NR1/4V		R1/4	9,4	29	14	16	25
			20NR3/8	R3/8	9,4	30	12	19	25
9	30		30NR1/8	R1/8	13,5	29,5	20,5	14	25
		30NR1/4V	30NR1/4	R1/4	13,5	34	12	16	25
		30NR3/8V	30NR3/8	R3/8	13,5	34	12	19	25
			30NR1/2	R1/2	13,5	39	17	24	10
15	50		50NR1/2	R1/2	19,8	44	17	22	10
			50NR3/4	R3/4	19,8	45	19	29	10

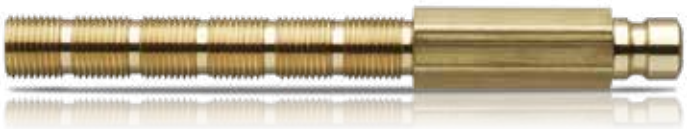
Male Plug - with Internal Hex

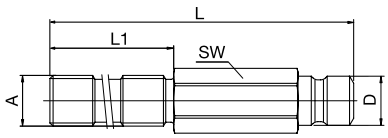




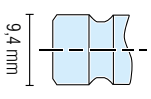
DN	Series		A	D	L	Ø	SW	
6	20	20NSWR1/8	G1/8	9,4	20,7	13	5	10
		20NSWR1/4	G1/4	9,4	22,7	13,5	5	10
9	30	30NSWR1/4	G1/4	13,5	30	15	8	10
		30NSWR3/8	G3/8	13,5	30	19	8	10

Adjustable Plug

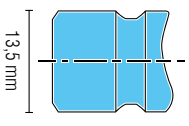




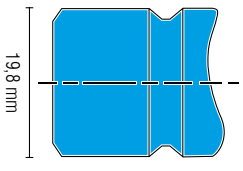
DN	Series		A	D	L	L1	SW	
6	20	20NR1/8/100	G1/8	9,4	100	60	11	10
		20NR1/4/100	G1/4	9,4	100	60	14	10
9	30	30NR1/4/100	G1/4	13,5	100	60	14	10
		30NR3/8/100	G3/8	13,5	100	60	17	10



Series 20



Series 30



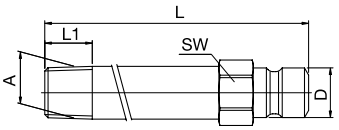
Series 50

INTERNATIONAL SERIES

Extended Plug

Tapered Thread BSPT



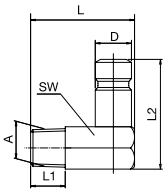


DN	Series	↔	A	D	L	L1	SW	
6	20	20N50	R1/8	9,4	50	9	11	10
		20N50-1/4	R1/4	9,4	50	12	14	10
		20N100	R1/8	9,4	100	9	11	10
		20N100-1/4	R1/4	9,4	100	12	14	10
		20N150	R1/8	9,4	150	9	11	10
		20N150-1/4	R1/4	9,4	150	12	14	10
		20N200	R1/8	9,4	200	9	11	10
		20N200-1/4	R1/4	9,4	200	12	14	10
		20N250	R1/8	9,4	250	9	11	10
		20N250-1/4	R1/4	9,4	250	12	14	10
9	30	30N50	R1/4	13,5	50	12	15	10
		30N100	R1/4	13,5	100	12	15	10
		30N150	R1/4	13,5	150	12	15	10
		30N200	R1/4	13,5	200	12	15	10
		30N250	R1/4	13,5	250	12	15	10

90° Male Plug

Tapered Thread BSPT

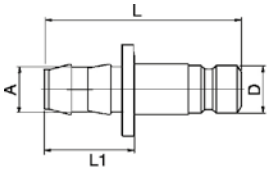




DN	Series	↔	A	D	L	L1	L2	SW	
6	20	20NM10/90	M10x1	9,4	27	9	28,5	11	25
		20NR1/8/90	R1/8	9,4	27	9	28,5	11	25
		20NR1/4/90	R1/4	9,4	27	9	28,5	11	25
9	30	30NR1/4/90	R1/4	13,5	34	9	32	15	25
		30NR3/8/90	R3/8	13,5	34	9	32	15	25

Push Lock - Hosetail Plug



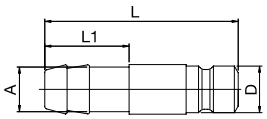


DN	Series	↔	A	D	L	L1	
6	20	20N10-PL	10	9,4	44	28	10
7	30	30N10-PL	10	13,5	44	28	10
9		30N13-PL	13	13,5	44	28	10

See explanation of symbols on page 268

Hosetail Plug

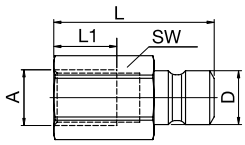




DN	Series	↔	A	D	L	L1	
6	20	20N10	10	9,4	39	22	25
		20N13	13	9,4	39	22	25
7	30	30N10	10	13,4	41	25	25
9		30N13	13	13,4	41	25	25
15	50	50N19	19	13,4	41	25	10

Female Plug

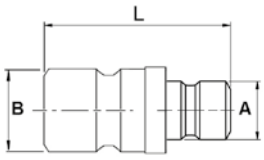




DN	Series	↔	A	D	L	L1	SW	
6	20	20NR1/8I	G1/8	9,4	28	11	13	25
		20NR1/4I	G1/4	9,4	32	13	16	25
		20NR3/8I	G3/8	9,4	34	13	19	25
9	30	30NR1/4I	G1/4	13,5	37	13	16	25
		30NR3/8I	G3/8	13,5	39	13	19	25

Double Plug





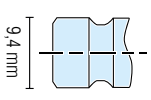
DN	A Series	B Series	↔	L	
6	20	20	2020DB	31	10
		30	2030DB	31	10
9	30		3030DB	34	10

Replacement Seals FKM

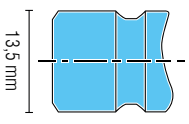
+140 °C
+200 °C



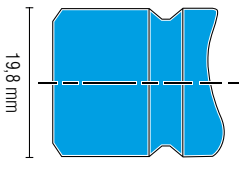
S	Series	Part No.	
6	20	200V	10
9	30	300V	10
16	50	500V	10



Series 20



Series 30



Series 50

Nominal Diameter

09 / 13 / 19





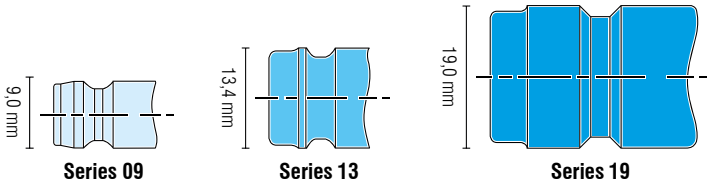


Illustration scale 1:1

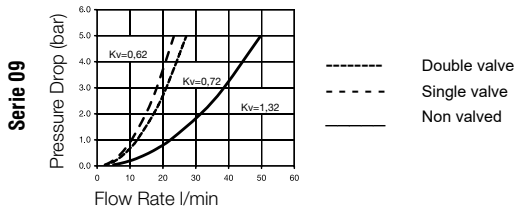
Technical Description

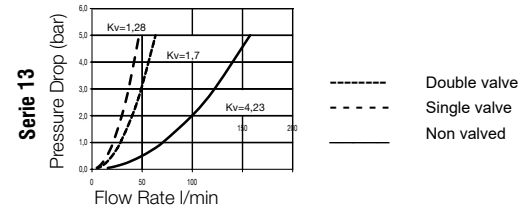
Coupling series especially developed for connecting coolant lines on injection moulds.

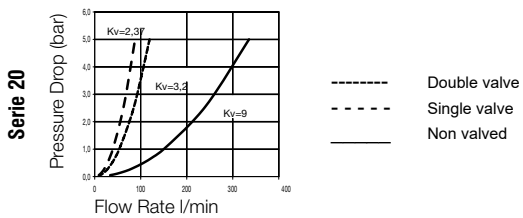
Fully interchangeable with other brands with the same plug profiles.

All dimensions and tolerances according to original specs.

Chart







Material

Coupling	
Back Body	Brass
Valve Body	Brass
Sleeve	Brass (with valve)
Sleeve	Brass, Nickel Plated (without valve)
Valve	Brass
Locking balls	AISI 420
Spring	AISI 301
Seal	FKM

Plug	
Plug Profile	Brass
Back Body	Brass
Valve	Brass
Spring	AISI 301
Seal	FKM

Working Pressure

15 bar, maximum static working pressure with safety factor of 4 to 1.

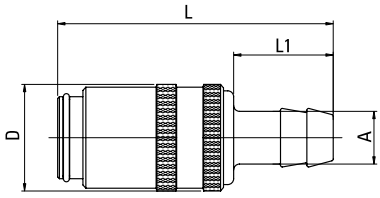
Working Temperature

Standard Couplers
Water up to 140°C
Oil up to 180°C

TS Couplers
Water up to 160°C
Oil up to 200°C

Straight Coupling

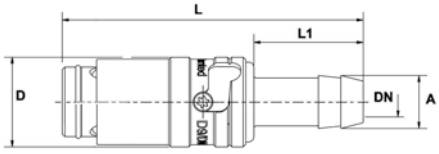




DN	Series			A	D	L	L1	
6	09	09K10V	09K10	10	18	52	22	10
		09K13V	09K13	13	18	52	22	10
7	13	13K10V	13K10	10	23	61,5	25	10
9		13K13V	13K13	13	23	61,5	25	10
13	19	19K19V	19K19	19	32	90	32	5

Safety Coupling, Type TS, Straight

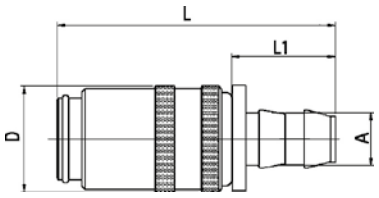




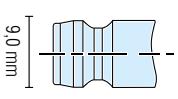
DN	Serie			A	D	L	L1	
6	09	09K10V-TS	09K10-TS	10	18	59,5	22	5
9	13	13K13V-TS	13K13-TS	13	23	63	25	5
13	19	19K19V-TS	19K19-TS	19	32	91	34	5

Push Lock - Straight Coupling

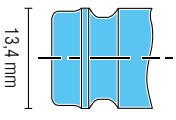




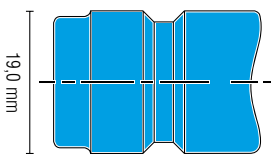
DN	Series			A	D	L	L1	
6	09	09K10V-PL	09K10-PL	10	18	58,5	28	10
9	13	13K13V-PL	13K13-PL	13	23	64,5	28	10



Series 09



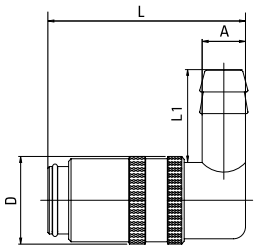
Series 13



Series 19

90° Coupling

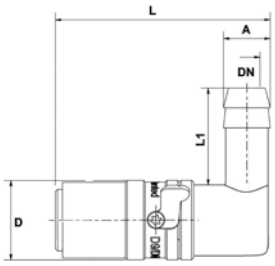




DN	Series	OW	↔	A	D	L	L1	
6	09	09K10V-90	09K10-90	10	18	41	22	10
7	13	13K10V-90	13K10-90	10	23	51	28,5	10
9		13K13V-90	13K13-90	13	23	51	28,5	10
13	19	19K19V-90	19K19-90	19	32	78	32	5

Safety Coupling, Type TS, 90°

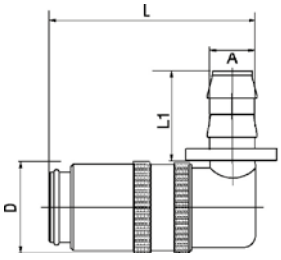




DN	Serie	OW	↔	A	D	L	L1	
6	09	09K10V/90-TS	09K10/90-TS	10	18	52,5	22	5
9	13	13K13V/90-TS	13K13/90-TS	13	23	68,5	25	5
13	19	19K19V/90-TS	19K19/90-TS	19	32	81	34	1

Push Lock - 90° Coupling



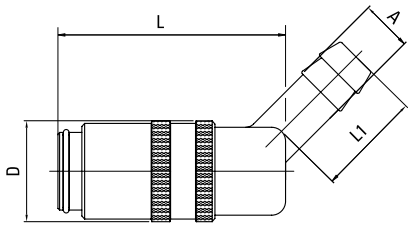


DN	Series	OW	↔	A	D	L	L1	
6	09	09K10V-90-PL	09K10-90-PL	10	18	42,5	28	10
9	13	13K13V-90-PL	13K13-90-PL	13	23	51	28	10

See explanation of symbols on page 268

45° Coupling

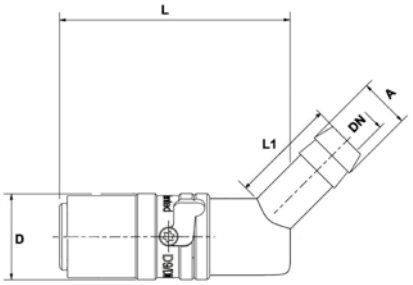




DN	Series	OW	↔	A	D	L	L1	
6	09	09K10V-45	09K10-45	10	18	41	22	10
7	13	13K10V-45	13K10-45	13	23	51	28,5	10
9		13K13V-45	13K13-45	13	23	51	28,5	10
13	19	19K19V-45	19K19-45	19	32	78	32	5

Safety Coupling, Type TS, 45°

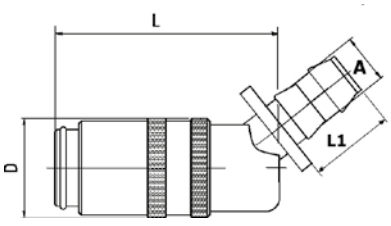




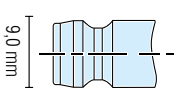
DN	Serie	OW	↔	A	D	L	L1	
6	09	09K10V/45-TS	09K10/45-TS	10	18	52,5	22	5
9	13	13K13V/45-TS	13K13/45-TS	13	23	68,5	25	5
13	19	19K19V/45-TS	19K19/45-TS	19	32	81	34	1

Push Lock - 45° Coupling

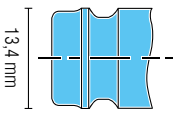




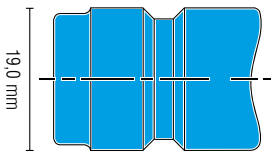
DN	Series	OW	↔	A	D	L	L1	
6	09	09K10V-45-PL	09K10-45-PL	10	18	42,5	28	10
9	13	13K13V-45-PL	13K13-45-PL	13	23	51	28	10



Series 09



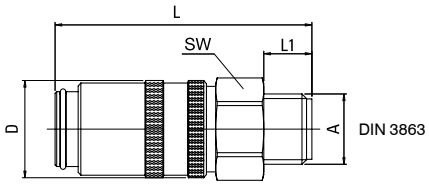
Series 13



Series 19

Male Threaded Coupling

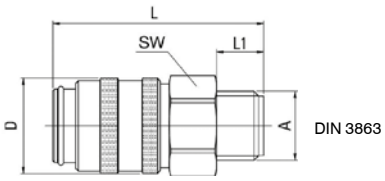




DN	Series	⟷	⟷	A	D	L	L1	SW	
6	09	09KUM14V	09KUM14	M14x1,5	18	48	9	17	10
		09KUR1/4V	09KUR1/4	G1/4	18	48	9	17	10
		09KUR3/8V	09KUR3/8	G3/8	18	48	9	19	10
9	13	13KUM16V	13KUM16	M16x1,5	23	51,5	9	22	10
		13KUR1/4V	13KUR1/4	G1/4	23	51,5	9	22	10
		13KUR3/8V	13KUR3/8	G3/8	23	51,5	9	22	10
		13KUR1/2V	13KUR1/2	G1/2	23	54,5	12	22	10
13	19	19KUR1/2V	19KUR1/2	G1/2	32	74	12	30	5
		19KUR3/4V	19KUR3/4	G3/4	32	78	16	30	5

Male Threaded Coupling, Short version

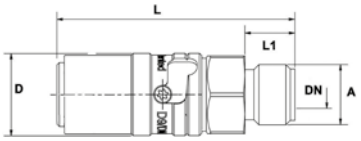




DN	Series	⟷	A	D	L	L1	SW	
6	09	09KSR1/4	G 1/4	18	38	9	17	10
9	13	13KSR3/8	G 3/8	24	38	9	22	10

Safety Coupling, Type TS, Male Threaded



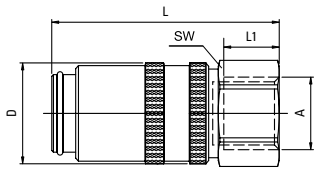


DN	Serie	⟷	⟷	A	D	L	L1	
6	09	09KUM14V-TS	09KUM14-TS	M14X1,5	18	55,5	11	5
		09KUR1/4V-TS	09KUR1/4-TS	G1/4	18	55,5	11	5
		09KUR3/8V-TS	09KUR3/8-TS	G3/8	18	55,5	11	5
9	13	13KUM16V-TS	13KUM16-TS	M16X1,5	23	57,5	12,5	5
		13KUR1/4V-TS	13KUR1/4-TS	G1/4	23	57,5	12,5	5
		13KUR3/8V-TS	13KUR3/8-TS	G3/8	23	57,5	12,5	5
		13KUR1/2V-TS	13KUR1/2-TS	G1/2	23	57,5	12,5	5
13	19	19KUR1/2V-TS	19KUR1/2-TS	G1/2	32	77	16	1
		19KUR3/4V-TS	19KUR3/4-TS	G3/4	32	77	16	1

See explanation of symbols on page 268

Female Threaded Coupling

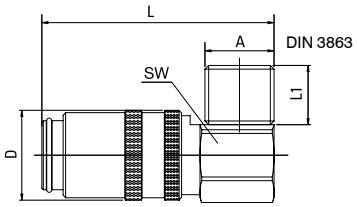




DN	Series			A	D	L	L1	SW	
6	09	09KIR1/4V	09KIR1/4	G1/4	18	41	10	17	10
		09KIR3/8V	09KIR3/8	G3/8	18	45	10	19	10
9	13	13KIR1/4V	13KIR1/4	G1/4	23	46,5	10	21	10
		13KIR3/8V	13KIR3/8	G3/8	23	46,5	10	21	10
		13KIM16V	13KIM16	M16x1,5	23	46,5	10	21	10

90° Male Threaded Coupling

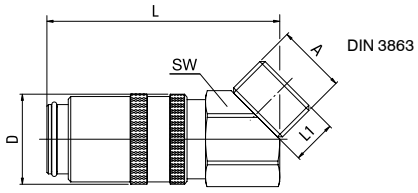




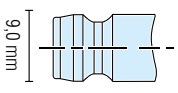
DN	Series			A	D	L	L1	SW	
6	09	09KM14/90V	09KM14/90	M14x1,5	18	47	12	17	10
		09KR1/4/90V	09KR1/4/90	G1/4	18	47	12	17	10
9	13	13KUM16/90V	13KM16/90	M16x1,5	23	53,5	12	22	10

45° Male Threaded Coupling

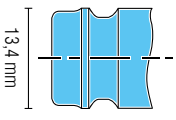




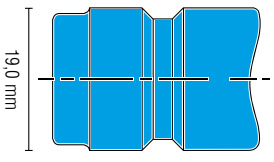
DN	Series			A	D	L	L1	SW	
6	09	09KM14/45V	09KM14/45	M14x1,5	18	47	9	17	10
		09KR1/4/45V	09KR1/4/45	G1/4	18	47	9	17	10
9	13	13KUM16/45V	13KUM16/45	M16x1,5	23	53,5	9	22	10



Series 09



Series 13

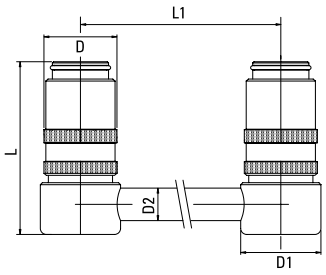


Series 19

EUROPEAN SERIES

Banjo Bridge

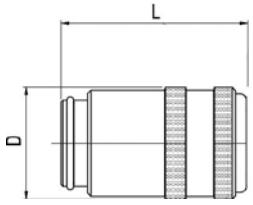




DN	Series	↔	D	L	D1	D2	L1	
6	09	09K125	18	43	20	8	125	1
		09K250	18	43	20	8	250	1
		09K500	18	43	20	8	500	1
9	13	13K125	23	53	26	10	125	1
		13K250	23	53	26	10	250	1
		13K500	23	53	26	10	500	1
13	19	19K160	32	80	36	14	160	1
		19K315	32	80	36	14	315	1
		19K500	32	80	36	14	500	1

Blind Coupling

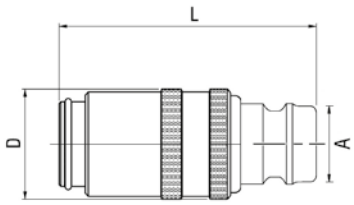




DN	Series	↔	D	L	
6	09	09K	18	30	10
9	13	13K	24	37	10

Coupling with Plug



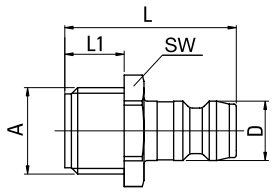


DN	Series	⟲	↔	A	D	L	
6	09	09K13NV	09K13N	13,4	18	45	10
9	13	13K9NV	13K9N	9,0	23	51	10

See explanation of symbols on page 268

Male Plug





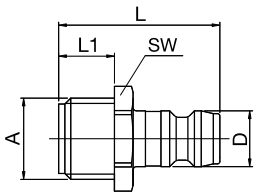
DN	Series	⟷	A	D	L	L1	SW	
6	09	09NM8	M8x0,75	9	24	7	11	25
		09NM10	M10x1	9	24	7	11	25
		09NR1/8*	G1/8	9	24	7	11	25
		09NM12	M12x1,5	9	27	10	14	25
		09NM14	M14x1,5	9	26	9	15	25
		09NM14V	M14x1,5	9	29	12	15	25
		09NR1/4*	G1/4	9	26	9	15	25
		09NR1/4V*	G1/4	9	29	12	15	25
		09NR3/8*	G3/8	9	30	10	17	25
9	13	13NR1/8*	G1/8	13,4	25	8	14	25
		13NM14	M14x1,5	13,4	26	9	15	25
		13NR1/4*	G1/4	13,4	26	9	15	25
		13NR1/4V*	G1/4	13,4	31	12	15	25
		13NR3/8*	G3/8	13,4	26	9	17	25
		13NR3/8V*	G3/8	13,4	30	12	17	25
		13NM16	M16x1,5	13,4	26	9	17	25
		13NM16V	M16x1,5	13,4	30	12	17	25
13	19	19NM24V	19NM24	M24x1,5	19	51	16	27	10
		19NR1/2V*	19NR1/2*	G1/2	19	47	12	22	10
		19NR3/4V*	19NR3/4*	G3/4	19	51	16	27	10

* Nickel Plated

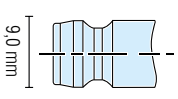
Male Plug - Stainless Steel

STAINLESS STEEL

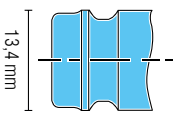




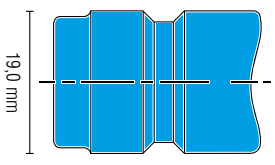
DN	Series	⟷	A	D	L	L1	SW	
6	09	09NM8SS	M8x0,75	9	24	7	11	25
		09NM10SS	M10x1	9	24	7	11	25
		09NR1/8SS	G1/8	9	24	7	11	25
		09NR1/4SS	G1/4	9	26	9	14	25
9	13	13NR1/4SS	G1/4	13,4	26	9	14	25
		13NR3/8SS	G3/8	13,4	26	9	17	25



Series 09



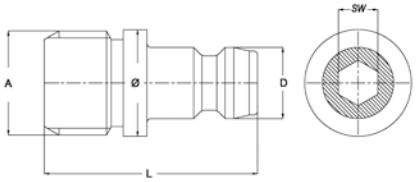
Series 13



Series 19

Male Plug - with Internal Hex

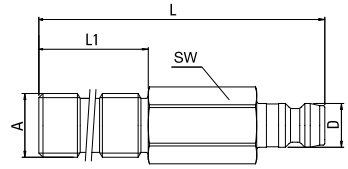




DN	Series	⟷	A	D	L	Ø	SW	
6	09	09NSWM8	M8X0,75	9	24	10	5	10
		09NSWM10	M10X1	9	24	13	5	10
		09NSWR1/8	G1/8	9	24	13	5	10
		09NSWM14	M14X1,5	9	26	14,5	5	10
		09NSWR1/4	G1/4	9	27	13,5	5	10
9	13	13NSWM14	M14X1,5	13,4	26	14,5	6	10
		13NSWR1/4	G1/4	13,4	26	13,5	6	10
		13NSWR3/8	G3/8	13,4	26	17	6	10

Adjustable Plug

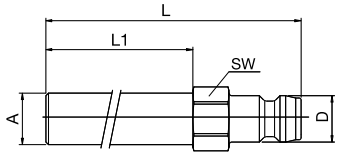




DN	Series	⟷	A	D	L	L1	SW	
6	09	09NR1/8/100	G1/8	9	100	60	11	10
		09NR1/4/100	G1/4	9	100	60	14	10
9	13	13NR1/4/100	G1/4	13,4	100	60	14	10
		13NR3/8/100	G3/8	13,4	100	60	19	10

Extended Plug



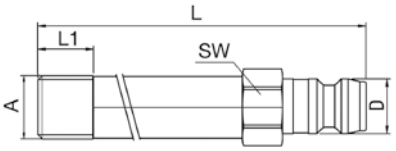


DN	Series	⟷	A	D	L	L1	SW	
6	09	09N63	8	9	63	42	9	10
		09N100	8	9	100	79	9	10
		09N120	10	9	120	100	11	10
		09N240	10	9	240	220	11	10
		09N360	10	9	360	340	11	10
9	13	13N150	14	13,4	150	125	15	10
		13N300	14	13,4	300	275	15	10
		13N450	14	13,4	450	425	15	10
13	19	19N500	21	19	500	465	22	5

See explanation of symbols on page 268

Extended Plug Threaded

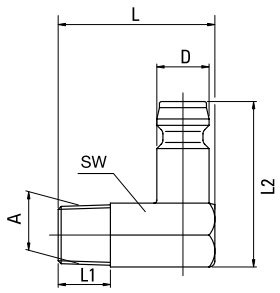




DN	Series	↔	A	D	L	L1	SW	
6	09	09NM10-60	M10X1	9	60	9	11	10
		09NM10-100	M10X1	9	100	9	11	10
		09NM10-150	M10X1	9	150	9	11	10
		09NR1/8-60	R1/8	9	60	9	11	10
		09NR1/8-100	R1/8	9	100	9	11	10
		09NR1/8-150	R1/8	9	150	12	14	10
		09NR1/4-60	R1/4	9	60	12	14	10
		09NR1/4-100	R1/4	9	100	12	14	10
		09NR1/4-150	R1/4	9	150	12	14	10
9	13	13NR1/4-60	R1/4	13,4	60	12	14	10
		13NR1/4-100	R1/4	13,4	100	12	14	10
		13NR1/4-150	R1/4	13,4	150	12	14	10

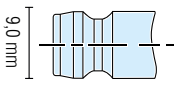
90° Male Plug



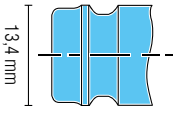


DN	Series	↔	A	D	L	L1	L2	SW	
6	09	09NM8/90	M8x0,75	9	27	9	28,5	11	25
		09NM10/90	M10x1	9	27	9	28,5	11	25
		09NR1/8/90*	R1/8	9	27	9	28,5	11	25
		09NR1/4/90*	R1/4	9	27	9	28,5	11	25
9	13	13NM14/90	M14x1,5	13,4	34	11	32	15	25
		13NR1/4/90*	R1/4	13,4	34	11	32	15	25
		13NR3/8/90*	R3/8	13,4	34	11	32	15	25
13	19	19NM24/90	M24x1,5	19	47	16	54	24	5
		19NR1/2/90*	R1/2	19	47	16	54	24	5

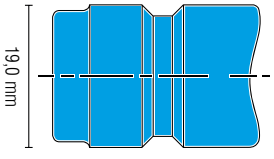
* Nickel Plated



Series 09



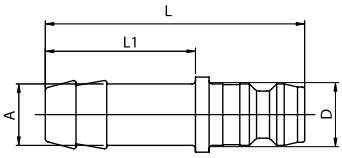
Series 13



Series 19

Hosetail Plug



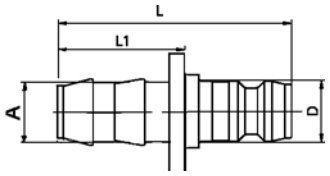


DN	Series	↔	A	D	L	L1	
6	09	09N10	10	9	38	22	25
		09N13	13	9	38	22	25
9	13	13N10	10	13,4	41	25	25
		13N13	13	13,4	41	25	25
13	19	19N13	13	19	61	32	5
		19N19	19	19	61	32	5

Push Lock - Hosetail Plug





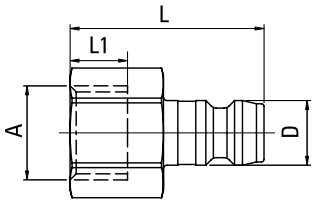


DN	Series	↔	A	D	L	L1	
6	09	09N10-PL	10	9	44	28	10
9	13	13N13-PL	13	13,4	44	28	10

See explanation of symbols on page 268

Female Plug



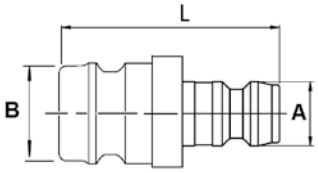


DN	Series	↔	A	D	L	L1	SW	
6	09	09NR1/8I	G1/8	9	24	7	11	25
		09NR1/4I	G1/4	9	24	7	16	25
		09NR3/8I	G3/8	9	27	10	19	25
9	13	13NR1/4I	G1/4	13,4	33	10	16	25
		13NR3/8I	G3/8	13,4	35	10	19	25

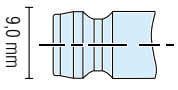
* Nickel Plated

Double Plug

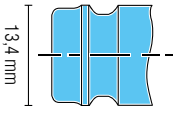




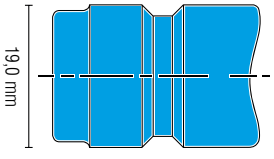
DN	A Series	B Sseries	↔	L	
6	09	09	0909DB	34	10
		13	0913DB	34	10
9	13		1313DB	34	10



Series 09



Series 13



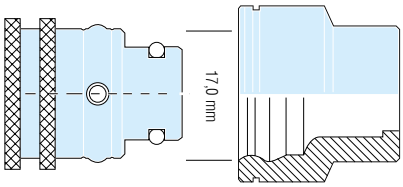
Series 19

FRENCH SERIES

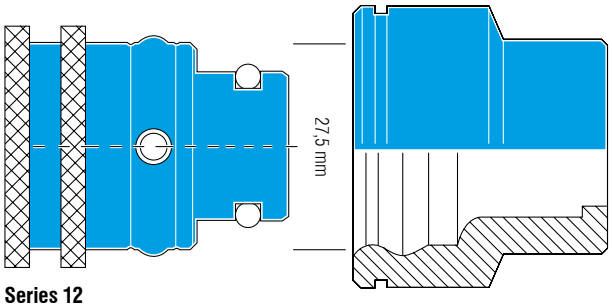
Nominal Diameter

08 / 12





Series 08



Series 12

Illustration scale 1:1



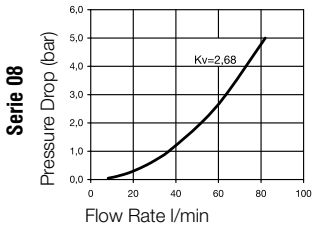
Technical Description

Coupling series especially developed for connecting coolant lines on injection moulds.

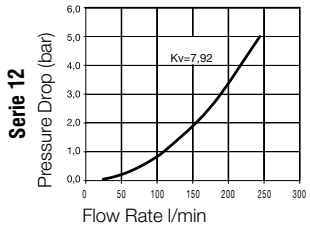
Fully interchangeable with other brands with same plug profiles.

All dimensions and tolerances are made according to original specs.

Chart



Non valved



Non valved

Material

Coupling		Plug	
Body	Brass, Nickel Plated	Plug	Brass, Nickel Plated
Locking Balls	AISI 420		
Spring	AISI 301		
Seal	FKM		

Working Pressure

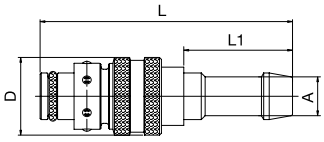
15 bar, maximum static working pressure with safety factor of 4 to 1.

Working Temperature

Water -15°C up to +140°C
Oil -15°C up to +180°C

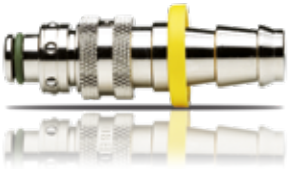
Straight Coupling

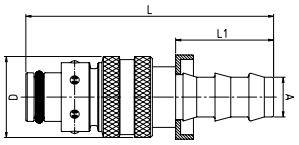




DN	Series	↔	A	D	L	L1	
6	08	08K8	8	20	65	28	10
8		08K10	10	20	65	28	10
		08K12	13	20	65	28	10
9	12	12K13	13	28	77	33	10
12		12K16	16	28	77	33	5

Straight Coupling - Push Lock

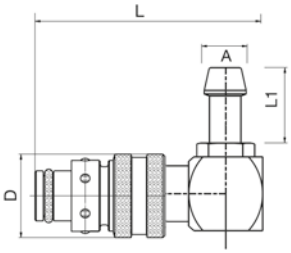




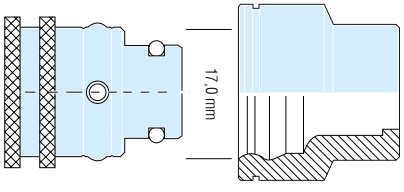
DN	Series	↔	A	D	L	L1	
8	08	08K10-PL	10	20	61,5	24,5	10
		08K12-PL	13	20	65	28	10
12	12	12K13-PL	13	28	77	33	10

90° Coupling

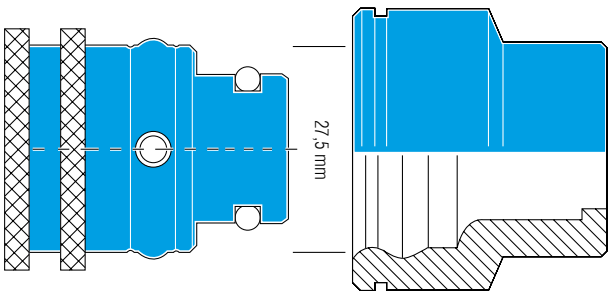




DN	Series	↔	A	D	L	L1	
8	08	08K10/90	10	20	51	20	10
		08K12/90	13	20	51	20	10
9	12	12K13/90	13	28	59	25	5
12		12K16/90	16	28	62	25	5



Series 08

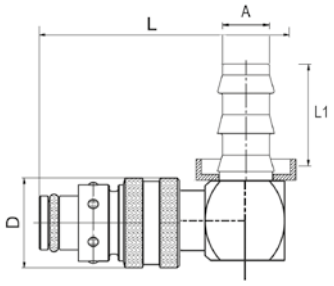


Series 12

FRENCH SERIES

90° Coupling - Push Lock

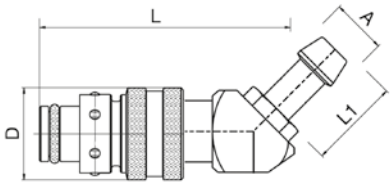




DN	Series	↔	A	D	L	L1	
8	08	08K10/90-PL	10	20	51	20	10
		08K12/90-PL	13	20	51	20	10
9	12	12K13/90-PL	13	28	59	25	10
12		12K16/90-PL	16	28	62	25	10

45° Coupling

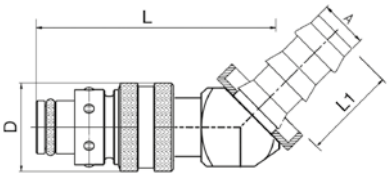




DN	Series	↔	A	D	L	L1	
8	08	08K10/45	10	20	51	20	10
		08K12/45	13	20	51	20	10
9	12	12K13/45	13	28	55	25	5
12		12K16/45	16	28	55	25	5

45° Coupling - Push Lock



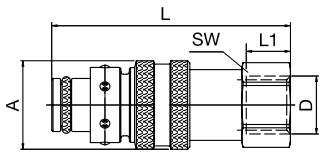


DN	Series	↔	A	D	L	L1	
8	08	08K10/45-PL	10	20	51	20	10
		08K12/45-PL	13	20	51	20	10
9	12	12K13/45-PL	13	28	55	25	5
12		12K16/45-PL	16	28	55	25	5

See explanation of symbols on page 268

Female Threaded Coupling

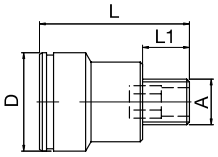




DN	Series	↔	A	D	L	L1	
8	08	08KIR1/4	20	G1/4	43	15	10
12	12	12KIR1/2	20	G1/2	60	20	10

Male Plug

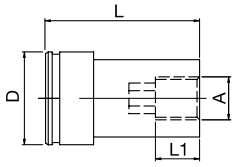




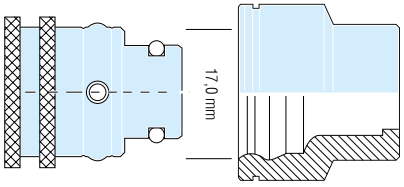
DN	Series	↔	A	D	L	L1	SW	
8	08	08NM10	M10x1	21	32	10	6	25
		08NR1/8	G1/8	21	32	10	6	25
		08NR1/4	G1/4	21	33	12	8	25
		08NR3/8	G3/8	21	24	13	8	25
12	12	12NR3/8	G3/8	32	41	13	10	10
		12NR1/2	G1/2	32	44	16	14	10
		12NR3/4	G3/4	32	32	19	14	10

Female Plug

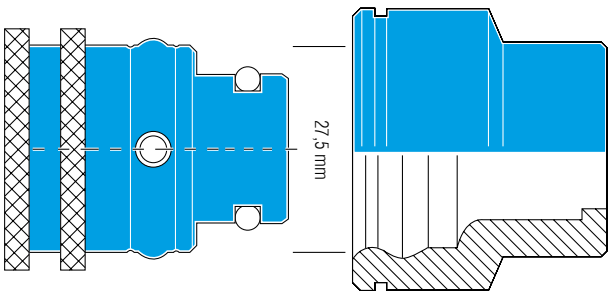




DN	Series	↔	A	D	L	L1	SW	
8	08	08NR1/8I	G1/8	21	35	10	6	10
		08NR1/4I	G1/4	21	40	14	8	10
12	12	12NR3/8I	G3/8	32	49	14	12	10
		12NR1/2I	G1/2	32	50	14	12	10



Series 08

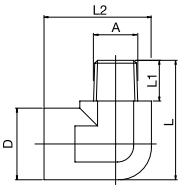


Series 12

FRENCH SERIES

90° Plug

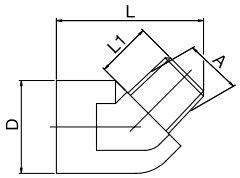




DN	Series	↔	A	D	L	L1	L2	
8	08	08NR1/8/90	R1/8	22	34	11	33	10
		08NR1/4/90	R1/4	22	37	13	33	10
		08NR3/8/90	R3/8	22	37	13	33	10

45° Plug

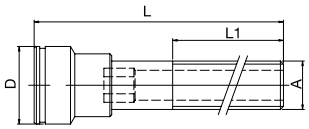




DN	Series	↔	A	D	L	L1	L2	
8	08	08NR1/8/45	R1/8	22	33	10,5		10
		08NR1/4/45	R1/4	22	33	10,5		10

Extended Plug





DN	Series	↔	A	D	L	L1	SW	
8	08	08NR1/8/50	G1/8	21	50	28	6	10
		08NR1/8/100	G1/8	21	100	60	6	10
		08NR1/8/150	G1/8	21	150	60	6	10
		08NR1/4/50	G1/4	21	50	28	8	10
		08NR1/4/100	G1/4	21	100	60	8	10
		08NR1/4/150	G1/4	21	150	60	8	10
		08NR1/4/200	G1/4	21	200	60	8	10

See explanation of symbols on page 268

Coupling Colour Tags





	Series	Part No.	Colour	
Colour Clip for Couplers	08	08KR		10
Colour Clip for Couplers		08KB		10
Colour Clip for Couplers		08KS		10
Colour Clip for Couplers	12	12KR		10
Colour Clip for Couplers		12KB		10
Colour Clip for Couplers		12KS		10

Plug Colour Tags





	Series	Part No.	Colour	
Colour Clip for Connectors	08	08NR		10
Colour Clip for Connectors		08NB		10
Colour Clip for Connectors		08NS		10
Colour Clip for Connectors	12	12NR		10
Colour Clip for Connectors		12NB		10
Colour Clip for Connectors		12NS		10

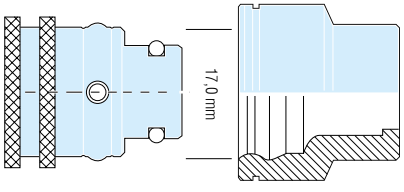
Replacement Seals FKM +200°C

+140 °C

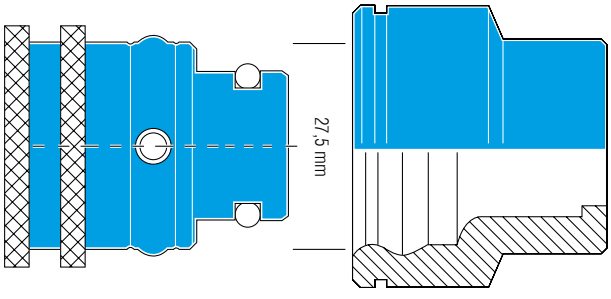
+200 °C



Part No.	Series	S	
08V	08	(8)	10
12V	12	(12)	10



Series 08



Series 12

Nominal Diameter

6 / 9 / 12 / 16 / 25



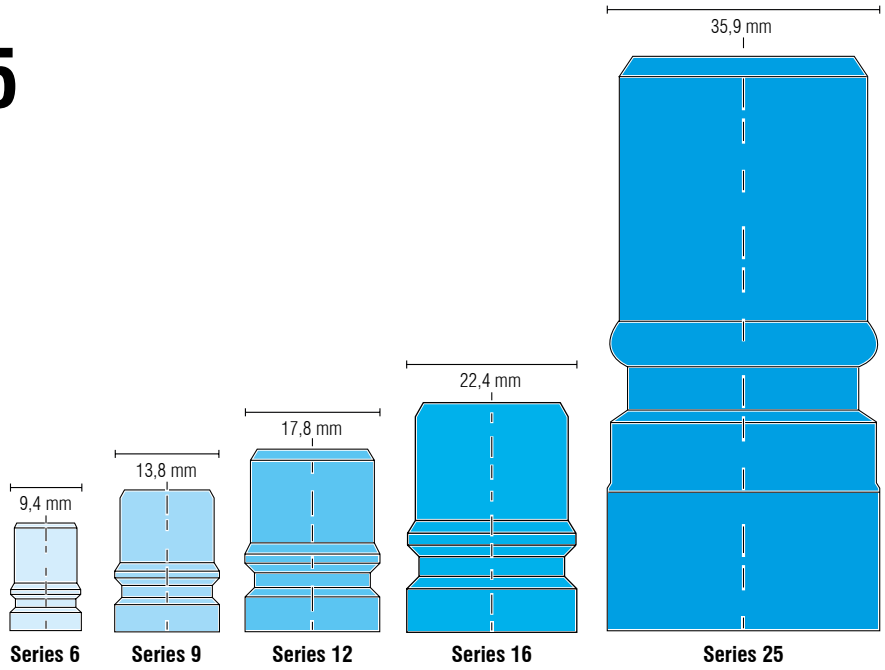


Illustration scale 1:1



Technical Description

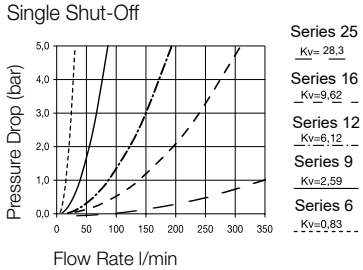
Coupling series especially developed for connecting coolant lines on injection moulds.

Fully interchangeable with other brands with same plug profiles.

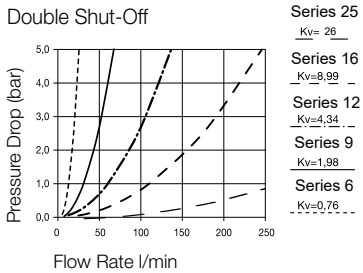
All dimensions and tolerances are made according to original specs.

Chart

Single Shut-Off



Double Shut-Off



Material

Coupling

Body	Brass, Nickel Plated
Locking Balls	AISI 420
Spring	AISI 301
Seal	FKM

Plug	**Series 6/9/12**	**Series 16/25**
Plug Profile	Brass, Nickel Plated	Steel, Zinc Plated
Back Body	Brass, Nickel Plated	Brass, Nickel Plated
Valve	Brass	Brass
Spring	AISI 301	AISI 301
Seal	FKM	FKM

Working Pressure

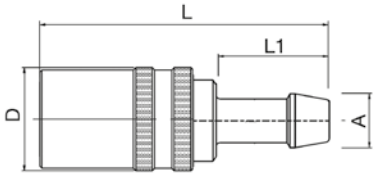
15 bar, maximum static working pressure with safety factor of 4 to 1.

Working Temperature

Water -15°C up to +140°C
Oil -15°C up to +180°C

Straight Coupling

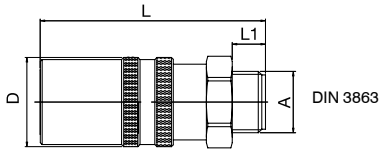




DN	Series		A	D	L	L1	
6	6	F6K8V	8	20	58	22	10
9	9	F9K12V	12	24	71	25	10
12	12	F12K16V	16	32	90,5	32	10
16	16	F16K19V	19	38	112,5	36	5

Male Threaded Coupling

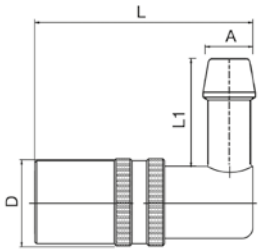




DN	Series		A	D	L	L1	
6	6	F6KUR1/4V	G 1/4	20	54	9	10
9	9	F9KUR3/8V	G 3/8	24	61,0	9	10
12	12	F12KUR1/2V	G 1/2	32	74,5	12	10
16	16	F16KUR3/4V	G 3/4	38	90,5	17	5
25	25	F25KUR1/1V	G 1	60	142	19	1
		F25KUR1-1/4V	G 1-1/4	60	144	22	1

90° Coupling



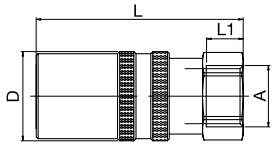


DN	Series		A	D	L	L1	
6	6	F6K8V/90	8	20	60,5	22	10
9	9	F9K10V/90	10	24	60,5	22	10
		F9K12V/90	12	24	60,5	28,5	10

FRENCH MATIC SERIES

Female Threaded Coupling

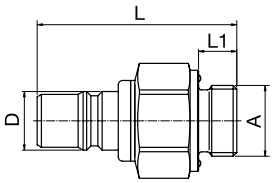




DN	Series		A	D	L	L1	
6	6	F6KIR1/4V	G1/4	20	45	10	10
9	9	F9KIR3/8V	G3/8	24	53	10	10
12	12	F12KIR1/2V	G1/2	32	67	12	10
16	16	F16KIR3/4V	G3/4	38	90	20	5
25	25	F25KIR1/1V	G1	60	140	21	1
		F25KIR1-1/4V	G1.1/4	60	140	21	1

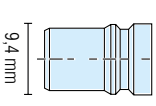
Valved Plug



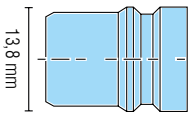


DN	Series		A	D	L	L1	HEX	
6	6	F6NR1/8V	G 1/8	9,4	45	7	17	10
9	9	F9NR1/4V	G 1/4	13,8	45	9	19	10
		F9NR3/8V	G 3/8	13,8	48	12	24	10
		F9NR1/2V	G 1/2	13,8	50	12	27	10
12	12	F12NR3/8V	G 3/8	17,8	60	9	24	10
		F12NR1/2V	G 1/2	17,8	62	12	27	10
		F12NR3/4V	G 3/4	17,8	64	16	32	10
16	16	F16NR3/4V	G 3/4	22,4	78	16	34	5
		F16NR1/1V	G 1	22,4	81	19	41	5
25	25	F25NR1/1V	G 1	36	149,5	19	50	1
		F25NR1-1/4V	G 1 1/4	36	152,5	22	50	1

See explanation of symbols on page 268



Series 6

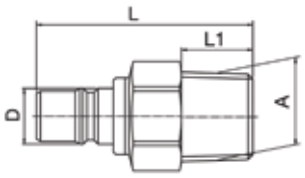


Series 9

Valved Plug Taper Thread





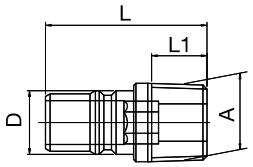


DN	Series		A	D	L	L1	HEX	
6	6	F6NT1/8V	1/8	9,4	45,8	10	17	10
		F6NT1/4V	1/4	9,4	44,8	12	17	10
9	9	F9NT1/4V	1/4	13,8	48,5	12	19	10
		F9NT3/8V	3/8	13,8	47	12	19	10
12	12	F12NT3/8V	3/8	17,8	63	13	24	10
		F12NT1/2V	1/2	17,8	64,5	17	24	10
16	16	F16NT3/4V	3/4	22,4	83	21	32	5

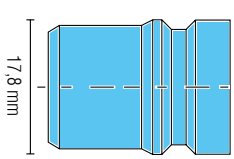
Male Plug with Innner Hex



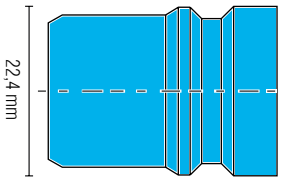




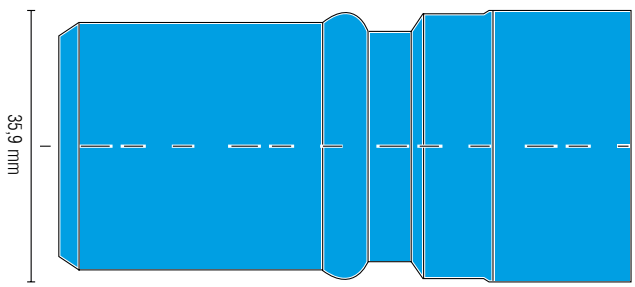
DN	Series		A	D	L	L1	HEX	
6	6	F6NR1/8	R 1/8	10	30	9	5	10
9	9	F9NR1/4	R 1/4	13,8	35	12	8	10
		F9NR3/8	R 3/8	13,8	35	12	8	10
12	12	F12NR3/8	R 3/8	17,8	40	12	10	10



Series 12



Series 16



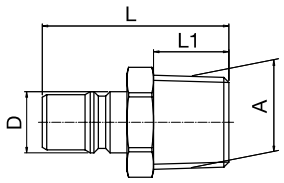
Series 25

FRENCH MATIC SERIES

Male Plug Taper Thread





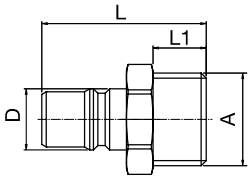


DN	Series	⟷	A	D	L	L1	HEX	
12	12	F12NR1/2	R 1/2	17,8	42	17	22	10
16	16	F16NR3/4	R 3/4	22,4	59	19	27	10

Valved Plug Short Model



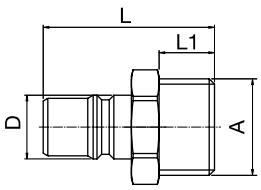




DN	Series	⟷	A	D	L	L1	HEX	
9	9	F9NR1/2V-S	G 1/2	13,8	37	12	22	10
12	12	F12NR3/4V-S	G 3/4	17,8	46	16	27	10

Male Plug



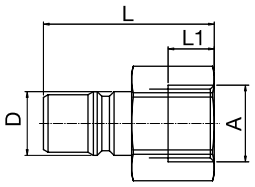


DN	Series	⟷	A	D	L	L1	HEX	
9	9	F9NR1/2	G 1/2	13,8	37	12	22	10
12	12	F12NR3/4	G 3/4	17,8	46	16	27	10

See explanation of symbols on page 268

Female Plug

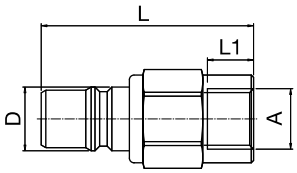




DN	Series	↔	A	D	L	L1	HEX	
6	6	F6NR1/4I	G 1/4	9,4	34	11	17	10
9	9	F9NR3/8I	G 3/8	13,8	37	10	22	10
12	12	F12NR1/2I	G 1/2	17,8	45	12	27	10
25	25	F25NR1/1I	G 1	36	100	20	41	1

Female Plug Valved



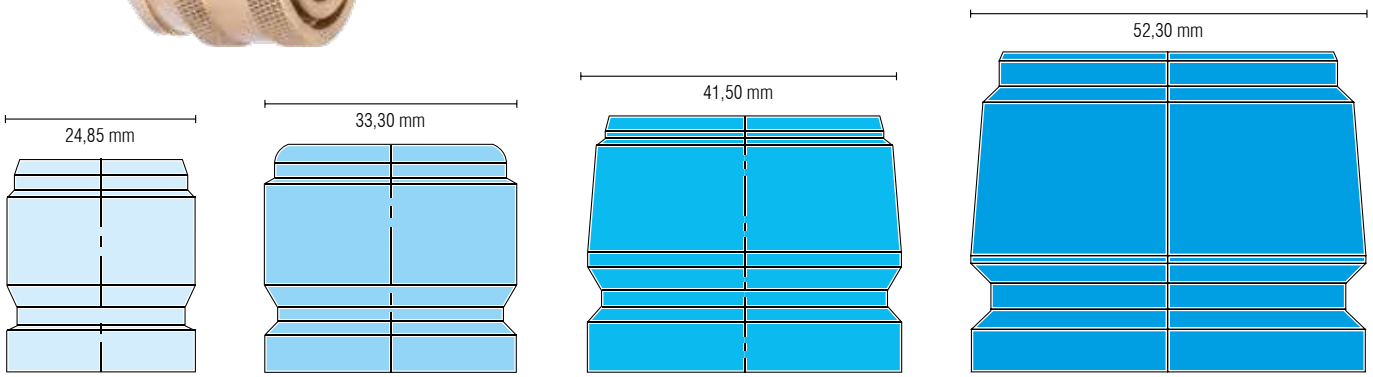


DN	Series	OW	A	D	L	L1	HEX	
9	9	F9NR1/4VI	G 1/4	13,8	46	10	19	10
		F9NR3/8VI	G 3/8	13,8	48	10	22	10
16	16	F16NR3/4VI	G 3/4	22,4	80,5	16	32	5
25	25	F25NR1/1VI	G 1	36	148,5	20	50	1
		F25NR1-1/4VI	G 1-1/4	36	158	20	50	1

LARGE FLOW COUPLINGS

Nominal Diameter
75 / 85 / 95 / 105

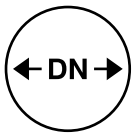




Series 75 **Series 85** **Series 95** **Series 105**

Illustration scale 1:1

Series	Nominal Diameter (DN)
75	18,0 mm
85	23,8 mm
95	30,3 mm.
105	36,5 mm.



Technical Description

Coupling series especially developed for connecting feed lines on Manifolds.

Temperature control units or chiller cooling lines.

The Couplings offer maximum flow capacity.

Material

Coupling		Plug
Back Body	Brass	Brass
Valve Body	Brass	
Sleeve	Brass	
Locking Balls	AISI 420	
Spring	AISI 301	
Seal	FKM	

Working Pressure

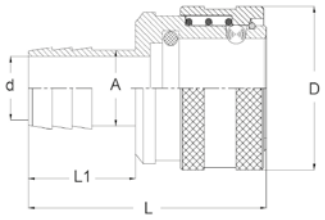
15 bar, maximum static working pressure with safety factor of 4 to 1.

Working Temperature

Water -15°C up to +140°C
Oil -15°C up to +180°C

Straight Coupling

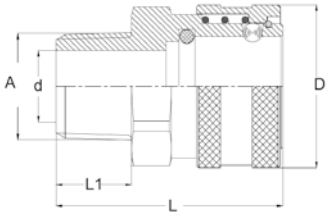




DN	Series	Part No.	A	D	d	L	L1	
18	75	75K19	19	41	16	60	27	1
23,8	85	85K25	25	50	21,5	82	41,5	1
30,3	95	95K32	32	64	28	62	39	1
36,5	105	105K38	38	79	34	104	46	1

Male Threaded Coupling

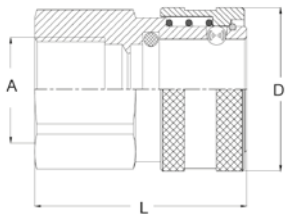




DN	Series	Part No.	A	D	L	L1	d	
18	75	75KUR3/4	3/4" BSPT	41	57	19	18	1
23,8	85	85KUR1/1	1" BSPT	50	65,5	25	24,5	1
30,3	95	95KUR1-1/4	1-1/4" BSPT	64	76,4	24	31,8	1
36,5	105	105KUR 1-1/2	1-1/2" BSPT	79	88,8	25	36,5	1

Female Threaded Coupling



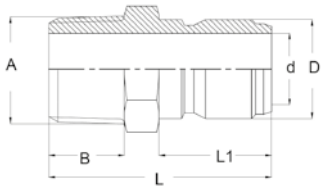


DN	Series	Part No.	A	D	L	
18	75	75KIR3/4	3/4" BSP	41	53,3	1
23,8	85	85KIR1/1	1" BSP	50	60	1
30,3	95	95KIR1-1/4	1-1/4" BSP	64	62	1
36,5	105	105KIR1-1/2	1-1/2" BSP	79	74	1

LARGE FLOW COUPLINGS

Male Plug

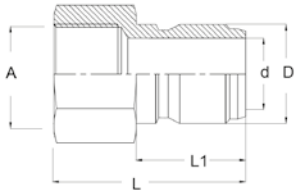




DN	Series	Part No.	A	D	L	L1	d	
18	75	75NR3/4	3/4" BSPT	24,85	56	19	18	1
23,8	85	85NR1/1	1" BSPT	33,3	63,6	14,4	23,8	1
30,3	95	95NR1-1/4	1-1/4" BSPT	41,5	71	24,5	30,3	1
36,5	105	105NR1-1/2	1-1/2" BSPT	52,3	84	25	36,5	1

Female Plug

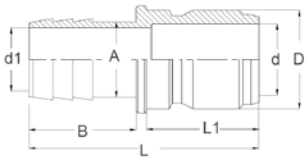




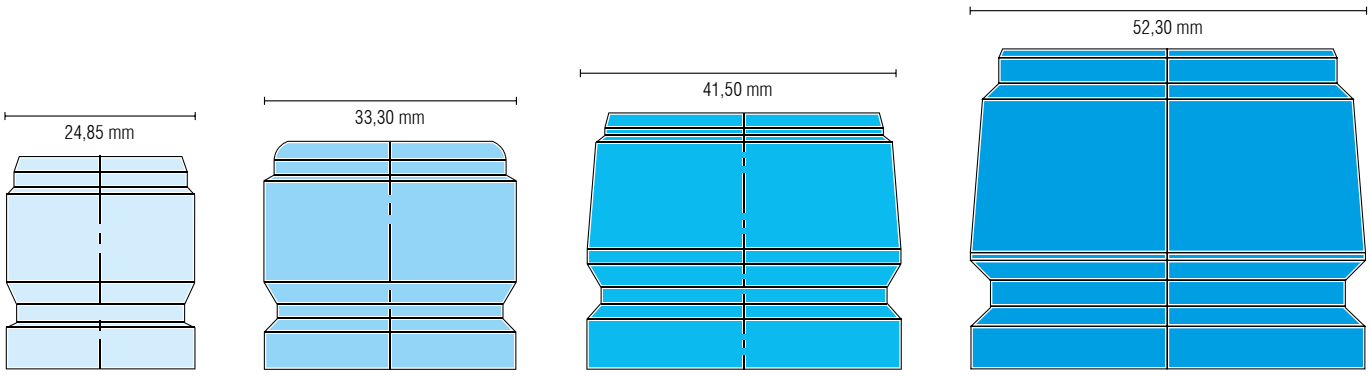
DN	Series	Part No.	A	D	L	d	
18	75	75NR3/4I	3/4" BSP	24,85	49	18	1
23,8	85	85NR1/1I	1" BSP	33,3	59,5	23,8	1
30,3	95	95NR1-1/4I	1-1/4" BSP	41,5	61,9	30,3	1
36,5	105	105NR1-1/2I	1-1/2" BSP	52,3	67	36,5	1

Hosetail Plug





DN	Series	Part No.	A	D	L	d1	d	
18	75	75N19	19	24,85	49	16	18	1
23,8	85	85N25	25	33,3	59,5	21,5	23,8	1
30,3	95	95N32	32	41,5	61,9	28	30,3	1
36,5	105	105N38	38	52,3	99	34	36,5	1



Series 75 | Series 85 | Series 95 | Series 105

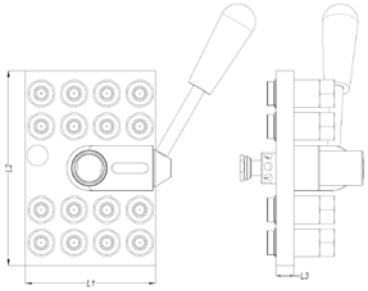


Quick and safe mould changes with our Multi Couplings

Moulds with many cooling connections can be time consuming and may lead to incorrect connections. With our Multi Couplings you can connect all connection in one single operation and eliminate any incorrect connections.

Coupling Plate (Machine Side)







Part No.	# Circuits	# Connections	L1	L2	L3	
MC4	4	8	102	104	14	1
MC6	6	12	154	78	14	1
MC8	8	16	154	104	14	1
MC10	10	20	206	104	14	1
MC12	12	24	240	104	14	1

Supplied without couplings (order separately).

Coupling Plate (Machine Side) French Matic Series 9







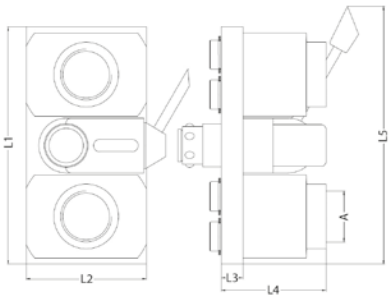
Connection	Part No.	Part No.	Part No.
Ø 10	MC-C10	MC-C10P	
Ø 13	MC-C13	MC-C13P	
G3/8"			MC-C3/8

Locking rings inlcuded.
Couplers are with shut off valves and 9 mm. flow capacity.

MULTI COUPLINGS

Coupling Plate - with Inlet and Outlet Female Manifold

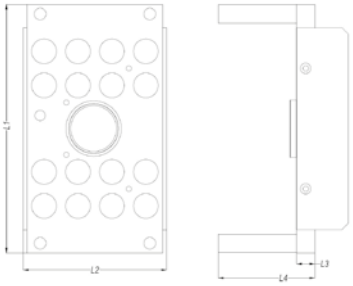




Part No.	# Circuits	# Connection	A	L1	L2	L3	
MC6-1	6	12	G1"	154	78	14	1
MC10-1-1/4	10	20	G1-1/4"	206	103	14	1
MC12-1-1/4	12	24	G1-1/4"	230	103	14	1

Coupling Plate (Mould Side)







Part No.	# Circuits	# Connections	L1	L2	L3	L4	
MM4-P	4	8	140	104	14	60	1
MM6-P	6	12	190	88	14	60	1
MM8-P	8	16	190	110	14	60	1
MM10-P	10	20	206	110	14	90	1
MM12-P	12	24	256	110	14	90	1

Supplied without Nipples.

Nipples for Coupling Plate (Mould Side) French Matic Series 9









Connection	Part No.	Part No.	Part No.	Part No.
Ø 10			NC-C10	NC-C10P
Ø 13			NC-C13	NC-C13P
G3/8"	NC-C3/8V	NC-C3/8		

Locking rings inlcuded.
Nipples are with size 9 mm. flow capacity.

See explanation of symbols on page 268

Hose Selection Guide



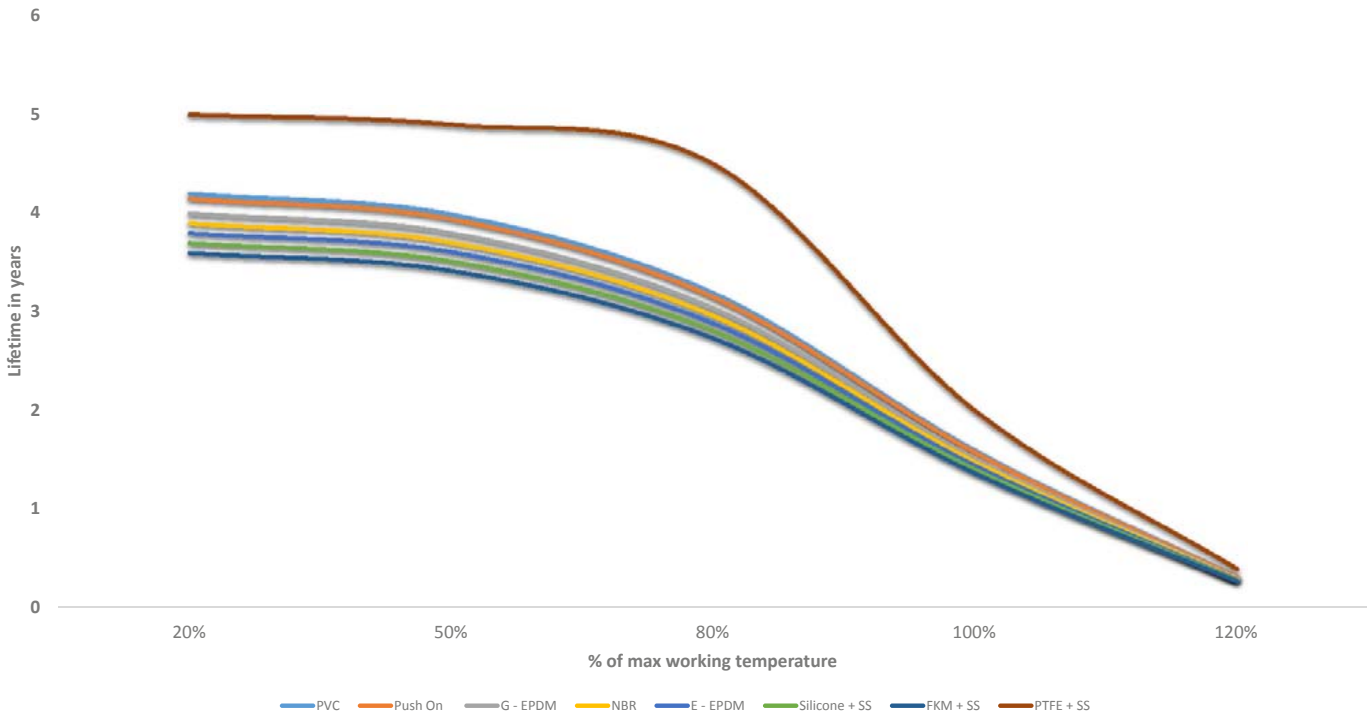
Our Hoses are specially engineered for Mould Cooling applications. We offer a wide range of hoses suitable to match any need for the perfect cooling circuit.

Our hoses are available in most common sizes and in 3 main colours to create logic circuits easy to identify cold and warm transfer connections.

We recommend using Stainless steel crimp ferules which allow you to make profesional and safe assemblies.

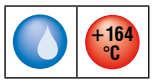
If you require certified hose assemblies then visit our online configurator at **www.hoseconfigurator.net**.

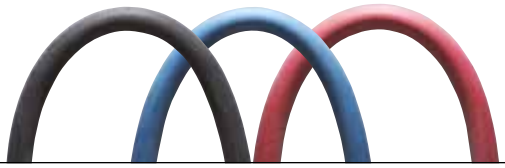
Type	Water	Oil	Working Temperature	Wear Resistance	Chemical Resistance	Pressure Resistance	Flexibility
PVC	✓✓✓	✓	60°C	✓✓	✓✓	✓✓	✓
Push On	✓✓✓	✓	125°C	✓✓✓	✓✓	✓✓	✓✓
G - EPDM	✓✓✓	✓	100°C	✓	✓	✓✓	✓✓
NBR	✓	✓✓✓	135°C	✓✓	✓✓✓	✓✓✓	✓✓
E - EPDM	✓✓✓	✓	140°C	✓	✓	✓✓	✓✓
Silicone + SS	✓✓	✓	170°C	✓✓✓	✓	✓✓	✓✓✓
FKM + SS	✓	✓✓✓	200°C	✓✓✓	✓✓✓	✓✓	✓✓
PTFE + SS	✓✓✓	✓✓✓	260°C	✓✓✓	✓✓✓	✓✓✓	✓✓✓

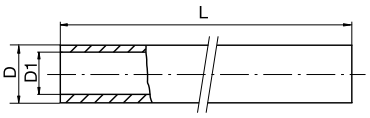


Above figures are only theoritical data, the physical properties are influenced by several factors such as: Pressure, ambient temperatures, wear, additives, sunlight, movement action, bending radius, connection clamping etc. So an individual calculation of lifetime must be based on all variables.

Material EPDM







Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
E10B	10	16,5	50		15	60	60	1
E10R	10	16,5	50		15	60	60	1
E10S	10	16,5	50		15	60	60	1
E13B	13	21	50		15	60	90	1
E13R	13	21	50		15	60	90	1
E13S	13	21	50		15	60	90	1
E19B	19	27	30		15	60	110	1
E19R	19	27	30		15	60	110	1
E19S	19	27	30		15	60	110	1

Tube:
Black, antistatic, smooth EPM Nitrosamine free rubber compound, resistan t to heat, hot water and water Vapour.

Reinforcement:
Synthetic textile yarns.

Cover:
Blue, Red, or Black smooth EPDM Nitrosamine free rubber compound. Resistant to abrasion, ozone, heat, and weather.

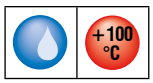
Applications:
Flexible hose designed for hot water and water vapour for mould temperature controlling.

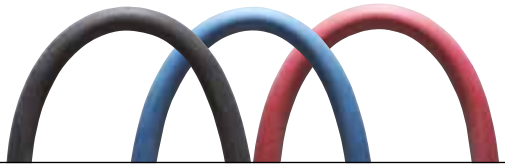
Temperature range:
Working temperature: Up to +140°C (+284°F) peak up to +164°C (+327°F).
Note: Lifetime of this hose will be substantially reduced if operating temperatures exceed +130°C (+266°F).

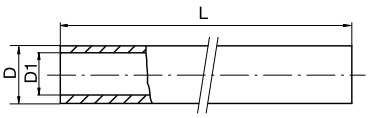
Tolerances:
UNI EN ISO 1307/97 tolerances for inside diameters up to and including 25 mm.

On inside diameter:
for I.D. 5.1 up to 20 mm ± 0.80 mm.
Length tolerance: ± 1%.

Material EPDM







Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
G10B	10	16,5	50		15	60	60	1
G10R	10	16,5	50		15	60	60	1
G10S	10	16,5	50		15	60	60	1
G13B	13	21	50		15	60	90	1
G13R	13	21	50		15	60	90	1
G13S	13	21	50		15	60	90	1
G19B	19	27	30		15	60	110	1
G19R	19	27	30		15	60	110	1
G19S	19	27	30		15	60	110	1
G25B	25	35	20		15	60	130	1
G25R	25	35	20		15	60	130	1
G38B	38	48	20		10	30	200	1
G38R	38	48	20		10	30	200	1

Tube:
Black, antistatic, smooth EPDM Nitrosamine free rubber compound, resistant to water, hot water, air, light-chemical media.

Reinforcement:
Synthetic textile yarns.

Cover:
Red, Blue or Black smooth EPDM Nitrosamine free rubber compound.

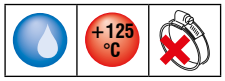
Applications:
Designed for air, cold and hot water, and light-chemical media for mould temperature controlling.

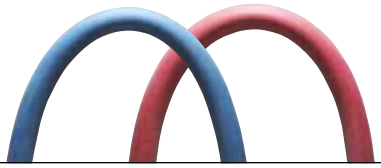
Temperature range:
Working temperature: Up to +100°C (+248°F).

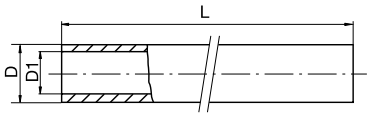
Tolerances:
UNI EN ISO 1307/97 tolerances for inside diameters up to and including 25 mm.

On inside diameter:
for I.D. 5.1 up to 20 mm ± 0.80 mm.
Length tolerance: ± 1%.

Material EPDM - Push On Hose







Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
PL10B-HT	10	16	50		28	112	80	1
PL10R-HT	10	16	50		28	112	80	1
PL13B-HT	13	20	50		28	112	100	1
PL13R-HT	13	20	50		28	112	100	1

Tube:
Black, smooth special rubber for high temperature.
Our Push On fittings are recommended.

Reinforcement:
Hhigh strength synthetic textile braids.

Cover:
Red or blue, abrasion, and weathering resistant.

Surface:
Smooth fabric.

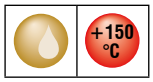
Applications:
Suitable for delivery of air, hot and cold water, and chemical products low with push lock fitting system.

Temperature range:
Up to +125°C (+257°F).

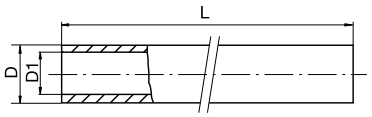
Tolerances:
UNI EN ISO 1307/97 tolerances for inside diameters up to and including 25 mm.

On inside diameter:
For I.D. 5.1 up to 20 mm ± 0.80 mm.
Length tolerance: ± 1%.
Standards: CNOMO E07.21.115.N.

Material NBR







Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
N10S	10	16,5	50		28	110	75	1
N13S	13	20	50		28	110	100	1

Tube:
Black, antistatic, smooth NBR rubber compound, resistant to Oil.

Reinforcement:
Polyvinyl alcohol (PVA).

Cover:
Black smooth CPE rubber compound.

Applications:
Designed for Oil mould temperature controlling.

Temperature range:
Working temperature: Up to +135°C (+275°F) peak up to +150°C (+302°F).

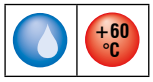
Tolerances:
UNI EN ISO 1307/97 tolerances for inside diameters up to and including 25 mm.

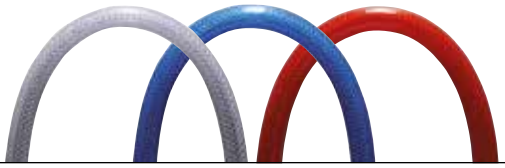
On inside diameter:
for I.D. 5.1 up to 20 mm ± 0.80 mm.
Length tolerance: ± 1%.

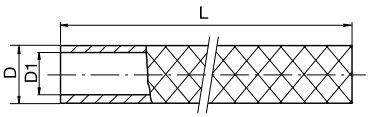
See explanation of symbols on page 268

HOSES

Material PVC







Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
P10T	10	16	30		17	51	65	1
P10B	10	16	30		17	51	65	1
P10R	10	16	30		17	51	65	1
P13T	13	19	30		15	45	85	1
P13B	13	19	30		15	45	85	1
P13R	13	19	30		15	45	85	1
P19T	19	26	30		10	30	125	1
P19B	19	26	30		10	30	125	1
P19R	19	26	30		10	30	125	1

Tube:
Transparent soft PVC hose for low temperature water and air.

Reinforcement:
High-strength PES fiber.

Cover:
Clear, blue or red transparent soft PVC.
Resistant to abrasion, ozone, and weather.

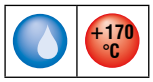
Applications:
Flexible hose designed for cold water for mould temperature controlling.

Temperature range:
Working temperature: Up to +60°C (+140°F)
peak up to +90°C (+194°F).
Note: Lifetime of this hose will be substantially reduced if operating temperatures exceed +60°C (+140°F).

Tolerances:
UNI EN ISO 1307/97 tolerances for inside diameters up to and including 25 mm.

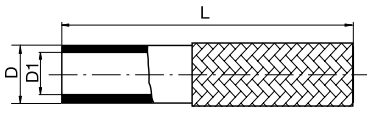
On inside diameter:
for I.D. 5.1 up to 20 mm ± 0.80 mm.
Length tolerance: ± 1%.

Material Silicone - Steam Resistant









Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
S10	10	15	25		15	45	40	1
S10B	10	15	25		15	45	40	1
S10R	10	15	25		15	45	40	1
S13	13	19	25		15	45	60	1
S13B	13	19	25		15	45	60	1
S13R	13	19	25		15	45	60	1
S19	19	29	25		15	45	100	1

Tube:
Clear Silicone Shore 60°.

Reinforcement:
Stainless steel overbraid with colour marking made of textile meta aramid. (high temperature resistant)

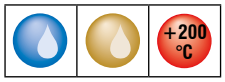
Applications:
Designed for water and light chemical media for mould temperature controlling.

Temperature range:
Working temperature: Max +170°C /+338°F.

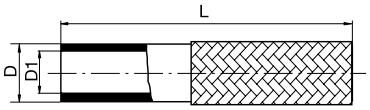
Tolerances:
DIN 7715.

See explanation of symbols on page 268

Material FKM







Part No.	D1	D	L (m)	Colour	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius	
V10	10	16	25		15	45	50	1
V13	13	19	25		15	45	60	1

Tube:
Black Viton shore 65°.

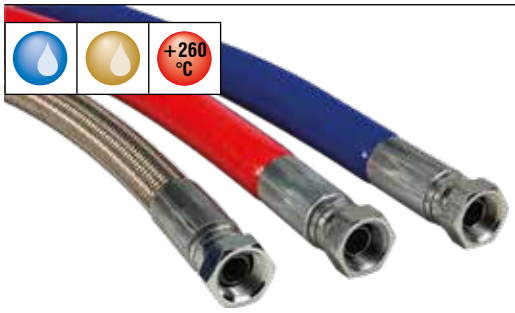
Reinforcement:
Stainless steel overbraid.

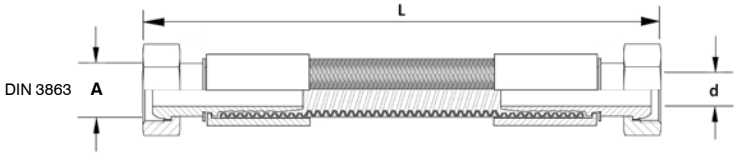
Applications:
Designed for Oil and chemical media for mould temperature controlling.

Temperature range:
Working temperature: Oil Max +200°C (+392°F)
Working temperature: Water Max +140°C (+284°F).

Tolerances:
ISO DIN 3302-1 E2.

High Temperature Water and Oil Hose Assemblies





Stainless Steel Braided	Stainless Steel Braided + Red Silicone Jacket	Stainless Steel Braided + Blue Silicone Jacket	A	L	Hose ID (d)	Working Pressure (Bar)	Burst Pressure (Bar)	Bend Radius
T10300R1/4	T10300R1/4-R	T10300R1/4-B	1/4" BSPP	300	10	20	80	22
T10600R1/4	T10600R1/4-R	T10600R1/4-B		600				
T10800R1/4	T10800R1/4-R	T10800R1/4-B		800				
T101000R1/4	T101000R1/4-R	T101000R1/4-B		1000				
T101250R1/4	T101250R1/4-R	T101250R1/4-B		1250				
T101500R1/4	T101500R1/4-R	T101500R1/4-B		1500				
T102000R1/4	T102000R1/4-R	T102000R1/4-B		2000				
T10300M14	T10300M14-R	T10300M14-B	M14x1,5	300	10	20	80	22
T10600M14	T10600M14-R	T10600M14-B		600				
T10800M14	T10800M14-R	T10800M14-B		800				
T101000M14	T101000M14-R	T101000M14-B		1000				
T101250M14	T101250M14-R	T101250M14-B		1250				
T101500M14	T101500M14-R	T101500M14-B		1500				
T102000M14	T102000M14-R	T102000M14-B		2000				
T13300R3/8	T13300R3/8-R	T13300R3/8-B	3/8" BSPP	300	13	20	80	25
T13600R3/8	T13600R3/8-R	T13600R3/8-B		600				
T13800R3/8	T13800R3/8-R	T13800R3/8-B		800				
T131000R3/8	T131000R3/8-R	T131000R3/8-B		1000				
T131250R3/8	T131250R3/8-R	T131250R3/8-B		1250				
T131500R3/8	T131500R3/8-R	T131500R3/8-B		1500				
T132000R3/8	T132000R3/8-R	T132000R3/8-B		2000				

With 60° Cone Seat swivel fittings DIN 3863.

Tube:
Low profile helically convoluted PTFE (polytetrafluorethylene).

Reinforcement:
Stainless steel overbraid (Red/Blue Silicone cover).

Applications:
Designed for Water, Oil and chemical media for mould temperature controlling.

Temperature range:
Working temperature:
Max +260°C (+500°F)
RED/BLUE: Only +200°C (+392°F).

Tolerances:
ISO DIN 3302-1 E2.

See explanation of symbols on page 268

LEAK FREE HOSE ASSEMBLIES

Order online at: www.hoseconfigurator.net



HOSE PROTECTION

Safety Heat Sleeve



Part No.	Colour	ID (mm)	Length
SHS10		10	20 m
SHS10B		10	20 m
SHS15		15	20 m
SHS15B		15	20 m
SHS20		20	20 m
SHS20B		20	20 m
SHS25		25	20 m
SHS25B		25	20 m
SHS30		30	20 m
SHS30B		30	20 m
SHS40		40	20 m
SHS40B		40	20 m

Protect hoses and cables from heat exposure.
Material: Glass fiber with silicone coating.
Temperature: Up to +260°C continuous heat.

Heat Tape





Part No.	Colour	Thickness (mm)	Width (mm)	Roll Length (mm)
HT-B-3	Blue	0,5	25,4	3000
HT-R-3	Red	0,5	25,4	3000

Material: Silicone.
Resists Temps +260°C (+500°F) to -50°C (-60°F).
No Adhesive Therefore No Residue when Removed.
Conforms to Shape to Create an Air and Water Tight Seal.
Stretches up to 300%.

Safety Sleeve



Part No.	ID (mm)	Flat (mm)	Length (roll)
SS17	17	30	50 m.
SS23	23	40	50 m.
SS30	30	50	50 m.
SS39	39	65	50 m.
SS55	55	90	50 m.

Protect in case of burst hose.
Protect hose from abrasion.
Resistant to chemicals.
Polyester up to +140 degrees.

Safe-Strip, Standard



Part No.	Length (mm)	Bundle max (mm)	Strip Width (mm)
STD70	310	70	40
STD100	435	100	40
STD125	505	125	40
STD155	605	155	40
STD180	680	180	40

Safe-Strip made of polypropylene with Velcro fasteners.

Safe-Strip, with Mounting Eyelet



Part No.	Length (mm)	Bundle max (mm)	Strip Width (mm)
STE70	340	70	40
STE100	455	100	40
STE125	540	125	40
STE155	660	155	40
STE180	765	180	40

Safe-Strip made of polypropylene with Velcro fasteners. With Eyelet.

Safe-Strip with Buckle



Part No.	Length (mm)	Strip Width (mm)
STB50	500	25
STB100	1000	25
STB150	1500	25

Safe-Strip made of polyproylene with quick-release buckle.

Hose Ziptag



Part No.	Type	Colour	Length (mm)	
ZT301R	Plain	Red	300 mm.	10
ZT301B	Plain	Blue	300 mm.	10

Ziptags available in 2 styles:
Plain for individual marking/labelling.

Material: Nylon.
Temperature range: Up to +150°C.

HOSE CUTTING

Hose Cutting Tool



Part No.	Size	
HC025	0-25 mm	1

For PVC and Rubber hoses only.

Spare Blades



Part No.	Size	
HC-SB	One Size	1

Hose Cutter



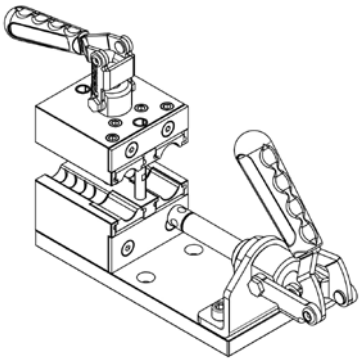


Part No.	Hose size cut	Length	
HC-600	10-13-19 mm	600 mm	1

- For easy and clean cut of stainless steel braided hoses
- Weight: 1700g
- Length: 600mm

Base Tool

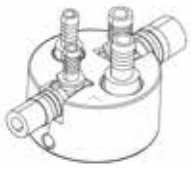
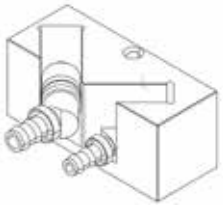
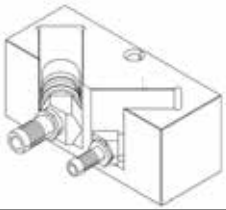


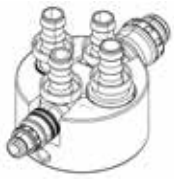
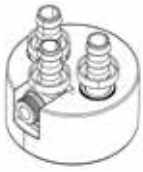
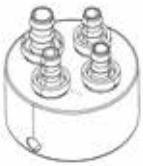


Part No.	Hose range (ID)	Weight KG
HAT-5000	10-13 mm. (3/8" - 1/2")	3,3

Assembly tool ideal for Push-On fittings and standard hose tail couplers, to be perfectly assembled - quick and easy.
Adaptors available for all hosetail fittings and couplers.

Adapters for Hose Assembly Tool

Part No.	Reference	
HAT-01	Series 09/13 European Series 20/30 International	
HAT-02	Safety - Ts Series 09/13 European Series 20/30 International	
HAT-03	45° Series 09/13 European Series 20/30 International	
HAT-04	45° Safety - Ts Series 09/13 Euro-pean Series 20/30 International	

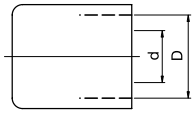
Part No.	Reference	
HAT-05	Series 08/12 French	
HAT-06	Series Mc.. Multi-Couplers	
HAT-07	Threaded Hose Nippels G1/8" - G1/4" - G3/8" - M10 - M14	
HAT-08	Plain Insert For Custom Recess	

HOSE CLAMPING

Ferrule

STAINLESS STEEL





Part No.	D	d		Hose Ref.
C10/15	15,9	10	100	S10
C10/16	16,9	10	100	V10/P10/N10
C10/17	17,5	10	100	G10/E10
C13/19	19	13	100	P13/S13
C13/20	20	13	100	P13/S13
C13/21	20,6	13	100	N13/V13
C13/22	22,5	13	100	G13/E13
C19/29	29	19	100	G19/E19
C19/31*	30,5	19	20	S19

Material: Stainless Steel
* Chrome Plated Steel
Offers perfect and safe connections.

Hand Crimper



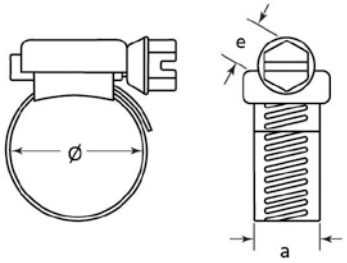




Part No.	Crimp Range (mm)	
X100	10-36	1

Hose Clamps Standard Type





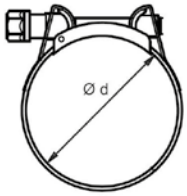
Part No.	Ø	e	a		Hose ref.
K10	11-17	7	9	50	S10/V10/P10/E10/G10/N10
K13	13-20	7	9	50	S13/V13/P13/E13/G13/N13
K19	22-32	7	9	50	S19/P19/E19/G19
K25	32-44	7	9	50	E25/G25

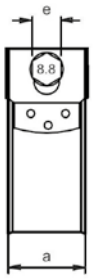
Screw: Electro zinc plated. Band: Galfan/Aluzink. Housing: Painted.

Hose Clamps Heavy Duty

STAINLESS STEEL







Part No.	Ø	e	a		Hose ref.
HDC2527	25-27	8	18	50	P19/E19/G19
HDC3437	34-37	11	20	50	G25
HDC4751	47-51	11	20	50	G38

Material: Stainless Steel.

Flexible Hose Clip Screwdriver



Part No.	A/F
SD01	7

Flexlible screwdriver for hose clips.
7 mm A/F.

Side Pincer

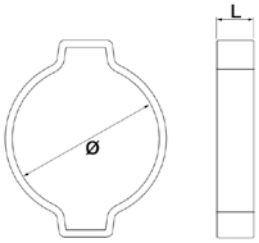


Part No.	Side Pincer	Front Pincer	
PS01	•	•	1

Suitable for Ear Clamps.
Can be used either front or side access.

Two-ear Clip





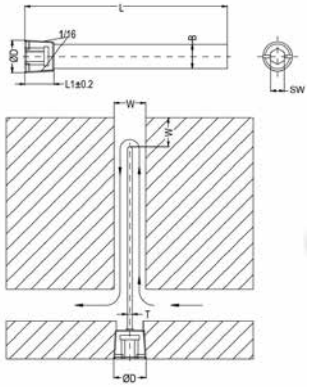
Part No.	ø - ID	L		HOSE Ref
EAR15	13-15	7	100	S10/V10
EAR17	14-17	7	100	P10/N10
EAR18	15-18	7,5	100	E10/G10
EAR20	17-20	7,5	100	S13/V13/P13/N13
EAR23	20-23	8,5	100	E13/G13
EAR27	23-27	8,5	100	P19
EAR28	25-28	9	100	E19/G19

Two-ear clips are an economical solution for simple hose assemblies.
The two ears give the clip extra grip and help to maintain constant pressure around the hose.
Two-ear clips offer great versatility in simple hose assemblies.
Material: St 34 steel : Finish Silver-white Cr3 Zinc-Plated.

Straight Blade Baffles







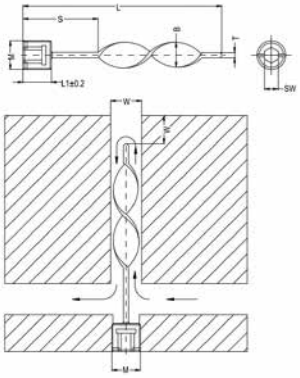
Part No	Thread	SW	W	B	L	L1	T
MB100-1/16	1/16”	4	6,5	6,2	104	8	1,61
MB200-1/16	1/16”	4	6,5	6,2	204	8	1,61
MB100-1/8	1/8”	5	8,5	8,2	104	8	1,61
MB200-1/8	1/8”	5	8,5	8,2	204	8	1,61
MB125-1/4	1/4”	7	11,5	11,2	131	10	2,43
MB250-1/4	1/4”	7	11,5	11,2	258	10	2,43
MB150-3/8	3/8”	8	15	14,2	156	10	2,43
MB300-3/8	3/8”	8	15	14,2	309	10	2,43
MB200-1/2	1/2”	10	18,5	18,2	207	10	2,43
MB400-1/2	1/2”	10	18,5	18,2	410	10	2,43
MB300-3/4	3/4”	12	23,5	23,2	309	12	3,21
MB500-3/4	3/4”	12	23,5	23,2	512	12	3,21

Material: MS58 Brass.

Spiral Blade Baffles





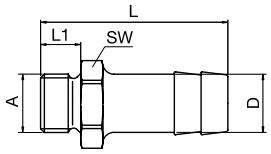


Part No	Thread	S	SW	W	B	L	L1	T
MSB100-1/16	1/16”	51	4	6,5	1/4”	101	8	1,61
MSB200-1/16	1/16”	102	4	6,5	1/4”	203	8	1,61
MSB100-1/8	1/8”	51	5	8,5	5/16”	101	8	1,61
MSB200-1/8	1/8”	102	5	8,5	5/16”	203	8	1,61
MSB125-1/4	1/4”	51	7	11,5	7/16”	127	10	2,43
MSB250-1/4	1/4”	102	7	11,5	7/16”	254	10	2,43
MSB150-3/8	3/8”	51	8	15	9/16”	152	10	2,43
MSB300-3/8	3/8”	102	8	15	9/16”	305	10	2,43
MSB200-1/2	1/2”	76	10	18,5	11/16”	203	10	2,43
MSB400-1/2	1/2”	127	10	18,5	11/16”	406	10	2,43
MSB300-3/4	3/4”	102	12	23,5	15/16”	305	12	3,21
MSB500-3/4	3/4”	153	12	23,5	15/16”	508	12	3,21

Material: MS58 Brass.

Hose Connector with Parallel Thread



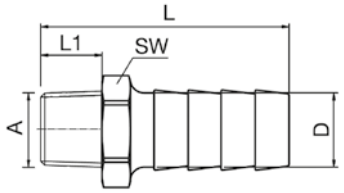


Part No.	A	D	L	L1	SW	
M10M8	M8x0,75	10	33,5	7	11	25
M10M10	M10x1	10	33,5	7	11	25
M10R1/8	1/8" BSP	10	33	7	14	25
M10R1/4	1/4" BSP	10	35	9	17	25
M10R3/8	3/8" BSP	10	37,5	9	17	25
M13M12	M12x1,5	13	40	9	15	25
M13R1/4	1/4" BSP	13	42	9	17	25
M13M14	M14x1,5	13	43	10	17	10
M13M16	M16x1,5	13	40	9	17	10
M13R3/8	3/8" BSP	13	42	9	19	25
M19M24	M24x1,5	19	56	16	27	10
M19R1/2	1/2" BSP	19	54	12	24	10
M19R3/4	3/4" BSP	19	60	16	32	10

Hose Connector with Taper Thread BSPT





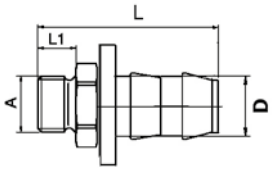


Part No.	A - BSPT	D (Inch)	D (mm)	L	SW	
MH02/04	1/8"	1/4"	6	34	10	25
MH02/06	1/8"	3/8"	10	34	12	25
MH04/04	1/4"	1/4"	6	37	14	25
MH04/06	1/4"	3/8"	10	37	14	25
MH04/08	1/4"	1/2"	13	37	14	25
MH06/06	3/8"	3/8"	10	37	17	25
MH06/08	3/8"	1/2"	13	37	17	25
MH06/10	3/8"	5/8"	16	40	17	25
MH06/12	3/8"	3/4"	19	44	21	25
MH08/06	1/2"	3/8"	10	40,5	21	25
MH08/08	1/2"	1/2"	13	40,5	21	25
MH08/12	1/2"	3/4"	19	46,5	21	25
MH08/16	1/2"	1"	25	50	27	25
MH12/06	3/4"	3/8"	10	42	27	10
MH12/08	3/4"	1/2"	13	42	27	10
MH12/12	3/4"	3/4"	19	48	27	10
MH12/16	3/4"	1"	25	50,5	27	10
MH16/08	1"	1/2"	13	45,5	34	10
MH16/12	1"	3/4"	19	54	34	10
MH16/16	1"	1"	25	54	34	10
MH20/20	1-1/4"	1-1/4"	32	56	48	10
MH20/24	1-1/4"	1-1/2"	38	56	48	10
MH24/20	1-1/2"	1-1/4"	32	58	48	10
MH24/24	1-1/2"	1-1/2"	38	58	48	10

See explanation of symbols on page 268

Push Lock - Hose Connector Parallel Thread

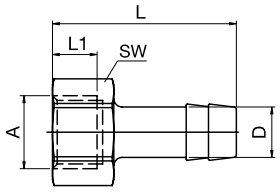




Part No.	A	D	L	L1	
P10R1/8	R1/8	10	39	7	10
P10R1/4	R1/4	10	39	7	10
P10M14	M14x1,5	10	42	7	10
P10R3/8	R3/8	10	43	7	10
P13R1/4	R1/4	13	39	10	10
P13R3/8	R3/8	13	43	10	10
P13R1/2	R1/2	13	43	10	10

Female Hose Connector

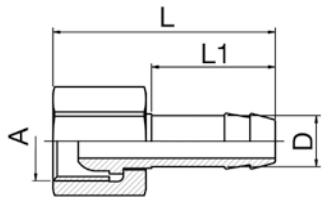




Part No.	A	D	L	L1	SW	
F10R1/8	1/8" BSP	10	33	8	14	25
F10R1/4	1/4" BSP	10	33	8	17	25
F10M14	M14x1,5	10	32	10	17	10
F13R1/4	1/4" BSP	13	39	8	17	25
F13M16	M16x1,5	13	40	10,5	22	10
F13R3/8	3/8" BSP	13	40	8	19	25

Hose Connector - BSPP Thread, Swivel Nut and 60° Cone Seat

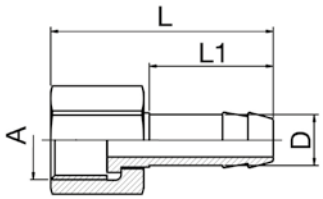




Part No.	A	D	L	L1	SW	
CM14	M14x1,5	10	39,5	22	17	10
CR1/4	G 1/4	10	39,5	22	17	10
CM16	M16x1,5	13	42	25	22	10
CR3/8	G 3/8	13	42	25	22	10
CR1/2	G 1/2	13	45	25	24	10
CM24	M24x1,5	19	52	32	30	10
CR3/4	G 3/4	19	55	32	30	10
CR1	G 1"	25	54	34	38	5

Hose Connector - BSPP Thread, Swivel Nut and Flat Seat



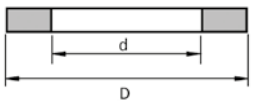


Part No.	A	D	L	L1	SW	
CFR3/8-10	G 3/8	10	39	25	22	10
CFR3/8-13	G 3/8	13	39	25	22	10
CFR1/2-13	G 1/2	13	39	25	24	10
CFR3/4-10	G 3/4	10	34	18	29	5
CFR3/4-13	G 3/4	13	36	22	29	5
CFR3/4-19	G 3/4	19	52	32	32	5
CFR1-19	G 1	19	43	25	37	5
CFR1-25	G 1	25	55	32	38	5
CFR1.1/4-32	G 1-1/4	32	55	32	48	1
CFR1.1/2-38	G 1-1/2	38	55	32	52	1

Supplied without gaskets.

Fiber Gaskets for Flat Seat Hose Connector

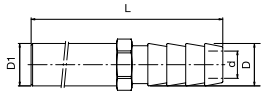




Part No.	D	d	Fit Thread Size	
GK38	14,5	8	G 3/8	1
GK12	18	12,5	G 1/2	1
GK34	24	16	G 3/4	1
GK1	30	25	G 1	1
GK114	38	31	G 1.1/4	1
GK112	44	36	G 1.1/2	1

Extended Hose Connector

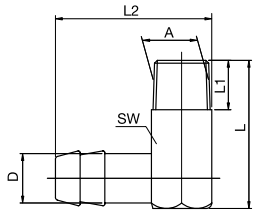




Part No.	D	D1	d	L	SW	
C120/10	10	10	6	120	11	10
C240/10	10	10	8	240	11	10
C150/13	13	14	9	150	15	10
C300/13	13	14	9	300	15	10

90° Hose Connector



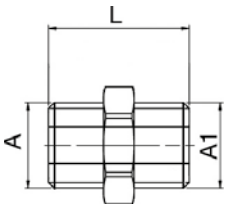


Part No.	A	D	L	L1	L2	SW	
V10M8	M8x0,75	10	27	9	39,5	15	25
V10M10	M10x1	10	27	9	31	11	25
V10R1/8	1/8" BSP	10	24	10	32,5	10	25
V10R1/4	1/4" BSP	10	30	11	38,5	12	25
V13R1/4	1/4" BSP	13	30	10	38,5	13	25
V13M14	M14x1,5	13	34	11	42	17	10
V13R3/8	3/8" BSP	13	37	11	44	19	25
V19M24	M24x1,5	19	47	12	56	24	10
V19R1/2	1/2" BSP	19	47	15	58,5	24	10

Double Nipple with Taper Thread







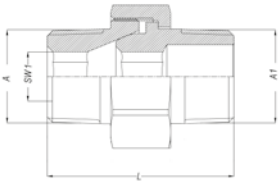
Part No.	A	A1	L	SW	
EC02/02	1/8"	1/8"	23	10	10
EC04/04	1/4"	1/4"	29	14	10
EC06/06	3/8"	3/8"	29	17	10
EC08/08	1/2"	1/2"	35	21	10
EC12/12	3/4"	3/4"	37	27	10
EC16/16	1"	1"	43	34	10
EC20/20	1.1/4"	1.1/4"	46	42	10
EC24/24	1.1/2"	1.1/2"	46	50	10

Double Union Nipple







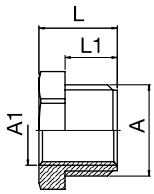


Part No.	A	A1	L	SW	SW1	
DU1/8	1/8" BSPT	1/8" BSPT	27	15	5	10
DU1/8-1/4	1/8" BSPT	1/4" BSPT	30	15	5	10
DU1/4	1/4" BSPT	1/4" BSPT	33,4	19	6	10
DU1/4-3/8	1/4" BSPT	3/8" BSPT	34,1	19	6	10
DU3/8	3/8" BSPT	3/8" BSPT	37	22	8	10
DU1/2	1/2" BSPT	1/2" BSPT	44,4	27	12	10
DU3/4	3/4" BSPT	3/4" BSPT	53	36	14	10
DU1	1" BSPT	1" BSPT	59	50	19	10
DU1-1/4	1-1/4" BSPT	1-1/4" BSPT	68	60	22	10
DU1-1/2	1-1/2" BSPT	1-1/2" BSPT	75	70	24	10

Material: Brass
3-part connector self sealing, Ideal for positioning and connecting non-rotatable parts.

Reducer Nipple



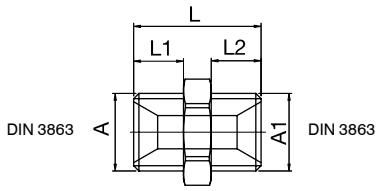


Part No.	A	A1	L	L1	SW	
GR1/4-R1/8	G 1/4”	G 1/8”	11	7	17	10
GM14-M10	M14x1,5	M10X1	11	7	17	10
GR3/8-R1/4	G 3/8”	G 1/4”	13	9	19	10
GM18-M14	M18x1,5	M14x1,5	14	9	22	10
GR1/2-R3/8	G 1/2”	G 3/8”	18	12	24	10
GR3/4-R1/2	G 3/4”	G1/2”	24	16	27	10
GM24-M16	M24x1,5	M16x1,5	24	16	27	10
GR1/1-R3/4*	G 1”	G 3/4”	28	19	34	1
GR11/2-R3/4*	G 1-1/2”	G 3/4”	32	22	50	1
GR11/2-R1/1*	G 1-1/2”	G 1”	32	22	50	1

* Without sealant coating.

Double Nipple with Parallel Thread

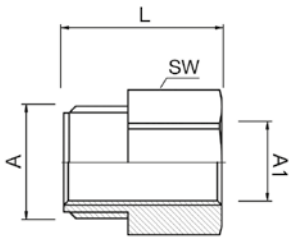




Part No.	A	A1	L	L1	L2	SW	
ZR1/8	G 1/8	G 1/8	21	8	8	17	10
ZM14	M14x1,5	M14x1,5	23	9	9	17	10
ZM14-R1/4	M14x1,5	G 1/4	23	9	9	17	10
ZR1/4	G 1/4	G 1/4	23	9	9	17	10
ZR1/4-R3/8	G 1/4	G 3/8	23	9	9	19	10
ZM16	M16x1,5	M16x1,5	23	9	9	19	10
ZM16-R3/8	M16x1,5	G 3/8	23	9	9	19	10
ZR3/8	G 3/8	G 3/8	23	9	9	19	10
ZR3/8-R1/2	G 3/8	G 1/2	29	9	12	24	10
ZR1/2-M14	G 1/2	M14x1,5	27	12	9	22	10
ZR1/2-M16	G 1/2	M16x1,5	27	12	9	22	10
ZR1/2	G 1/2	G 1/2	30	12	12	24	10
ZR1/2-R3/4	G 1/2	G 3/4	36	12	16	32	10
ZR1/2-R1/1	G 1/2	G 1	40	12	16	36	10
ZM24-R1/2	M24x1,5	G 1/2	36	16	12	27	10
ZR3/4	G 3/4	G 3/4	40	16	16	32	10
ZR3/4-M24	G 3/4	M24x1,5	40	16	16	32	10
ZR3/4-R1/1	G 3/4	G 1	40	16	16	36	10
ZR1/1-R1/1	G 1	G 1	42	16	16	36	10

Converter Nipple

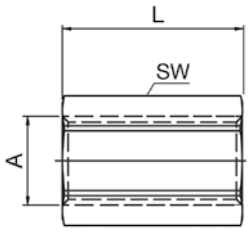




Part No.	A	A1	L	SW	
CN1/8-1/8	G 1/8	G 1/8	16	11	10
CN1/8-1/4	G 1/8	G 1/4	19	17	10
CN1/4-1/8	G 1/4	G 1/8	18	17	10
CN1/4-1/4	G 1/4	G 1/4	21	17	10
CN1/4-3/8	G 1/4	G 3/8	21	19	10
CN3/8-1/4	G 3/8	G 1/4	21	17	10
CN3/8-3/8	G 3/8	G 3/8	21	19	10
CN3/8-1/2	G 3/8	G 1/2	24	24	10
CN1/2-3/8	G 1/2	G 3/8	24	22	10
CN1/2-1/2	G 1/2	G 1/2	25	24	10
CN1/2-3/4	G 1/2	G 3/4	31	32	10

Female Connection Nipple





Part No.	A	L	SW	
FN1/8	G 1/8	22	11	10
FN1/4	G 1/4	26	17	10
FN3/8	G 3/8	26	22	10
FN1/2	G 1/2	30	27	10
FN3/4	G 3/4	36	32	10
FN1/1	G 1	40	41	10

Adaptor Nipple BSPP - NPT



Part No.	BSPP	NPT	
BN1/8	1/8"	1/8"	10
BN1/4	1/4"	1/4"	10
BN3/8	3/8"	3/8"	10

Material: Brass (Nickel Plated).

Adaptor Nipple NPT - BSPP

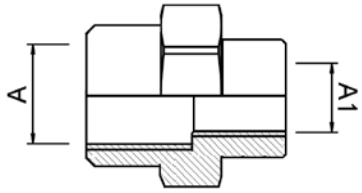


Part No.	BSPP	NPT	
NB1/8	1/8"	1/8"	10
NB1/4	1/4"	1/4"	10
NB3/8	3/8"	3/8"	10
NB1/2	1/2"	1/2"	10

Material: Brass (Nickel Plated).

Female Reduction Nipple



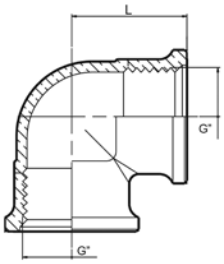


Part No.	A1	A	
FFN1/4-3/8	G1/4"	G3/8"	10
FFN1/4-1/2	G1/4"	G1/2"	10
FFN3/8-1/2	G3/8"	G1/2"	10
FFN1/2-3/4	G1/2"	G3/4"	5
FFN3/4-1	G3/4"	G1"	1

Material: Brass (Nickel Plated).

Elbow - Connector





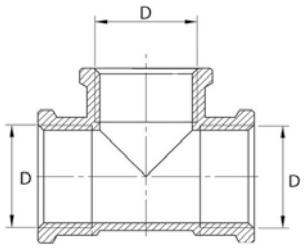
Part No.	G	L	
EL-1/2	1/2"	24,5	1
EL-3/4	3/4"	30	1
EL-1	1"	36	1
EL-1-1/4	1.1/4"	42,5	1
EL-1-1/2	1.1/2"	47,5	1

Material: Brass.

FITTINGS

T-Connector



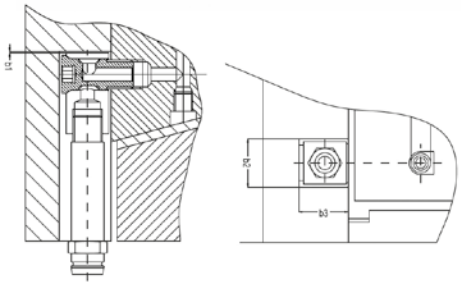


Part No.	D	
FT3/8	G3/8"	10
FT1/2	G1/2"	10
FT3/4	G3/4"	10
FT1	G1"	5
FT1-1/4	G1.1/4"	1
FT1-1/2	G1.1/2"	1

Material: Brass.

Rotatable Connector





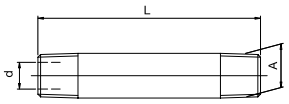
Part No.	Thread	b1	b2	b3	
VS-G1/8	G1/8"	1	16	17,0	1
VS-M10	M10	1	16	17,0	1
VS-G1/4	G1/4"	1	16	23,0	1
VS-M14	M14	1	16	23,0	1
VS-G1/2	G1/2"	1	16	35,5	1

Material: Brass (Nickel Plated).

Barrel Nipple





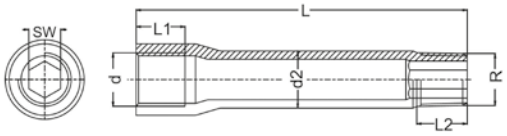


Part No.	A	L	d	
E50R1/8	1/8" BSPT	50	6	10
E100R1/8	1/8" BSPT	100	6	10
E150R1/8	1/8" BSPT	150	6	10
E200R1/8	1/8" BSPT	200	6	10
E50R1/4	1/4" BSPT	50	9	10
E100R1/4	1/4" BSPT	100	9	10
E150R1/4	1/4" BSPT	150	9	10
E200R1/4	1/4" BSPT	200	9	10
E100R3/8	3/8" BSPT	100	12	10
E150R3/8	3/8" BSPT	150	12	10
E200R3/8	3/8" BSPT	200	12	10

Extension Nipple







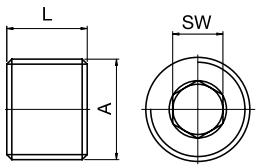
Part No.	d	R	d2	L	L1	L2	SW
EX18050	R1/8	R1/8	10	50	12	10	10
EX18075	R1/8	R1/8	10	75	12	10	10
EX18100	R1/8	R1/8	10	100	12	10	10
EX18125	R1/8	R1/8	10	125	12	10	10
EX14050	R1/4	R1/4	14	50	12	10	10
EX14075	R1/4	R1/4	14	75	12	10	10
EX14100	R1/4	R1/4	14	100	12	10	10
EX14125	R1/4	R1/4	14	125	12	10	10
EX14150	R1/4	R1/4	14	150	12	10	10

Material: Zinc Plated Steel.

Pressure Plug Taper



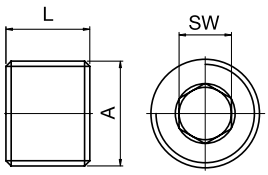




Part No.	A	L	SW	
RM8	M8x0,75	8	4	100
RM10	M10x1	8	5	100
R1/8	1/8" BSPT	8	5	100
RM12	M12x1,5	8	6	100
R1/4	1/4" BSPT	10	7	100
RM14	M14x1,5	10	7	100
R3/8	3/8" BSPT	10	8	100
R1/2	1/2" BSPT	10	10	100

Pressure Plug Parallel

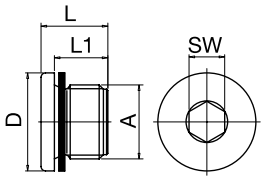




Part No.	A	L	SW	
RM6C	M6x0,75	7	3	100
RM8C	M8x0,75	8	4	100
RM10C	M10x1	8	5	100
R1/8C	1/8" BSP	8	5	100
RM12C	M12x1,5	8	6	100
R1/4C	1/4" BSP	10	7	100
RM14C	M14x1,5	10	7	100
R3/8C	3/8" BSP	10	8	100
R1/2C	1/2" BSP	10	10	100

Hex Plug Parallel



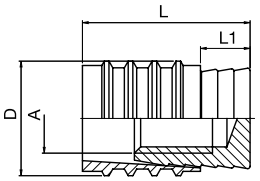


Part No.	A	D	L	L1	SW	
DM10	M10x1	14	11	8	5	25
DR1/8	G 1/8	14	11	8	5	25
DM12	M12x1,5	17	15	12	6	25
DR1/4	G 1/4	18	15	12	6	25
DM14	M14x1,5	19	15	12	6	25
DR3/8	G 3/8	22	15	12	8	25
DR1/2	G 1/2	26	18	14	10	25
DR3/4	G3/4"	32	21	16	12	1
DR1	G1"	40	22,5	16	17	1
DR1-1/2*	G1-1/2"	55	22,5	16	24	1

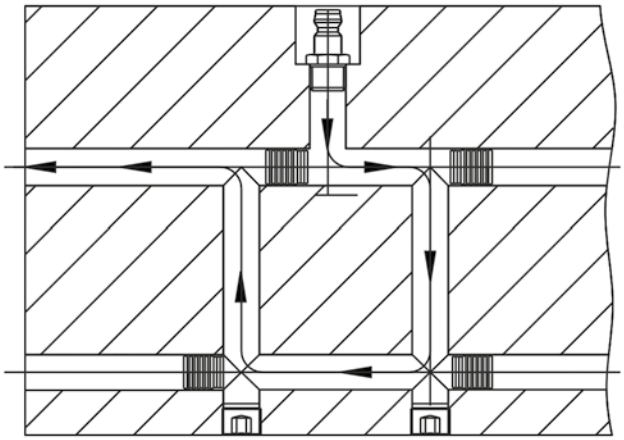
* With O-ring.

Channel Plug



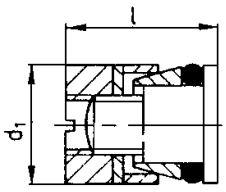


Part No.	A	D	L	L1	
S6	M3	6	11,5	3,5	25
S8	M4	8	11,5	3,5	25
S10-1	M6	10	14	4	25
S12	M6	12	14	4	25
S16	M8	16	16	4	25



Channel Plug



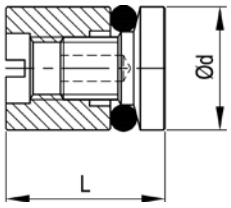


Part No.	d1	Length	
KN105-6	6	10	10
KN105-8	8	11	10
KN105-10	10	11	10
KN105-12	12	11	10
KN105-14	14	13	10
KN105-16	16	13	10

Material: Brass.
O-ring FKM.

Channel Pressure Plug, Threadless





Part No.	L	d	Channel Bore d H13	Installation Key	
CP6	15	6	6	CPT6-..	10
CP8	15	8	8	CPT8-..	10
CP10	15	10	10	CPT10-..	10
CP12	15	12	12	CPT12-..	10

Material: Brass.
O-ring: FKM.

Installation Tool, with Plug Extractor

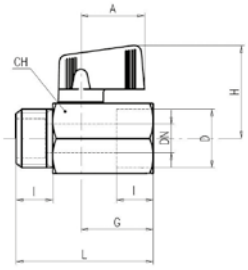


Part No.	Length	Plug diameter	
CPT6-150	150	6	1
CPT6-300	300	6	1
CPT8-150	150	8	1
CPT8-300	300	8	1
CPT10-150	150	10	1
CPT10-300	300	10	1
CPT12-150	150	12	1
CPT12-300	300	12	1

Mini Ball Valve - Male / Female

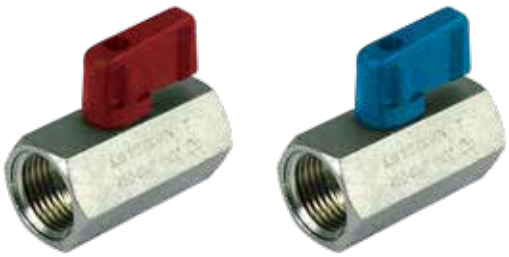


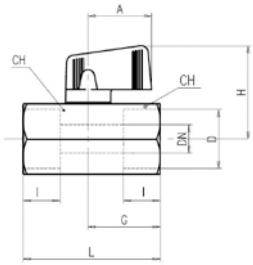




Part No.	Part No.	D	DN	I	L	G	A	H	CH
VMMF02R	VMMF02B	1/8"	5	10	41,5	22	22,5	31	21
VMMF04R	VMMF04B	1/4"	8	11	41,5	22	22,5	31	21
VMMF06R	VMMF06B	3/8"	8	11	41,5	22	22,5	31	21
VMMF08R	VMMF08B	1/2"	10	13	49	22	22,5	31	25

Mini Ball Valve - Female / Female





Part No.	Part No.	D	DN	I	L	G	A	H	CH
VM02R	VM02B	1/8"	6	10	41,5	22	22,5	31	21
VM04R	VM04B	1/4"	8	11	41,5	22	22,5	31	21
VM06R	VM06B	3/8"	8	11	41,5	22	22,5	31	21
VM08R	VM08B	1/2"	10	13	49	26	22,5	31	25

Quality:
- Dual sealing system allows valve to be operated in either direction making installation easier.
- No metal-to-metal moving parts.
- No maintenance ever required.
- Handle clearly shows ball position.
- Silicone-free lubricant on all seals.
- Chrome plated brass ball for longer life.
- Each valve is seal tested for maximum safety.

Body:
- One piece drawn sand blasted brass body with an extreme compact design.
- Finest brass according to EN 12164 specification.
- Patent n. 7011-B/89.

Thread:
- ISO 7/1, BS21 Male thread: BSPT – Female thread: BSPP.

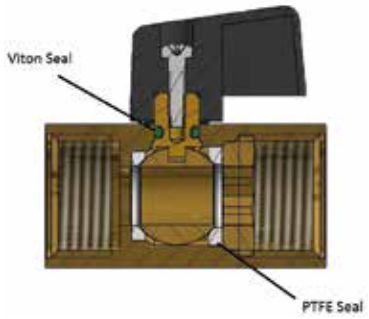
Stem:
- Blowout-proof brass stem with FPM O-ring.

Handle:
- Metal Handle removable with valve in service.

Seals:
- Pure PTFE self-lubricating seats with flexible-lip design.

Working Pressure:
- 30 Bar (450 PSI).

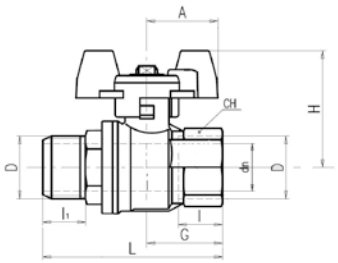
Operating Temperature:
- +120°C (+248°F).



Ball Valve T-handle - Male / Female

Tapered Thread BSPT





Part No.	Part No.	D	DN	I	I1	L	G	A	H	CH
VTMF04R	VTMF04B	1/4"	8	12	13,5	56,5	22,5	25	39	20
VTMF06R	VTMF06B	3/8"	9,5	12	13,5	56,5	22,5	25	39	20
VTMF08R	VTMF08B	1/2"	15	15,5	16,5	70	29,5	25	43	25
VTMF12R	VTMF12B	3/4"	19	17	18	76,5	32	30	49	31
VTMF16R	VTMF16B	1"	24	21	22	92,5	40,5	30	53	40
VTMF20R	VTMF20B	1-1/4"	30	23	24	106	46,5	57	84,5	49
VTMF24R	VTMF24B	1-1/2"	38	23	24	113	51	57	90,5	54

Quality:
- 24h 100% seal test guaranteed.
- Dual sealing system allows valve to be operated in either direction making installation easier.
- No maintenance ever required.
- Chrome plated brass ball for longer life.
- Travel stops on body to avoid stresses at stem.

Body:
- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite or equivalent thread sealant.
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications.

Flow:
- Full port to DIN 3357 for maximum flow .

Thread:
- EN 10226-1, ISO 228 Male thread: BSPT – Female thread: BSPP.

Stem:
- Two FPM O-rings at the stem for maximum safety.

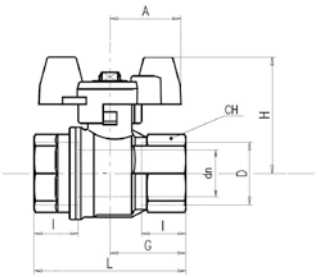
Seals:
- Pure PTFE self-lubricating seats with flexible-lip design .

Working Pressure:
- 40 Bar (600 PSI).
- Non-shock cold working pressure.

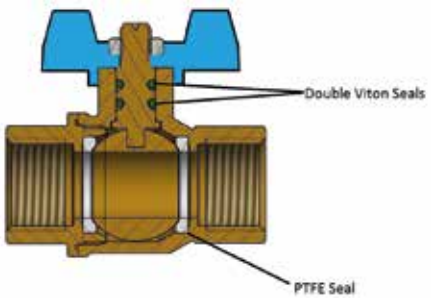
Operating Temperature:
- +170°C (+350°F).

Ball Valve T-handle - Female / Female



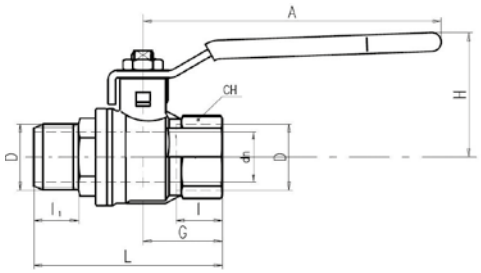


Part No.	Part No.	D	DN	I	L	G	A	H	CH
VT04R	VT04B	1/4"	8	12	45	22,5	25	39	20
VT06R	VT06B	3/8"	9,5	12	45	22,5	25	39	20
VT08R	VT08B	1/2"	15	15,5	59	29,5	25	43	20
VT12R	VT12B	3/4"	19	17	64	32	30	49	31
VT16R	VT16B	1"	24	21	81	40,5	30	53	40
VT20R	VT20B	1-1/4"	30	23	93	46,5	57	84,5	49
VT24R	VT24B	1-1/2"	38	23	102	51	57	90,5	54



Ball Valve Standard Handle - Male / Female

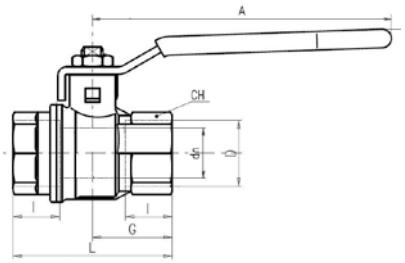




Part No.	Part No.	D	DN	I	I1	L	G	A	H	CH
VLMF04R	VLMF04B	1/4"	8	12	13,5	56,5	22,5	82	38	20
VLMF06R	VLMF06B	3/8"	9,5	12	13,5	56,5	22,5	82	38	20
VLMF08R	VLMF08B	1/2"	15	15,5	16,5	70	29,5	100	43	25
VLMF12R	VLMF12B	3/4"	19	17	18	76,5	32	120	50	31
VLMF16R	VLMF16B	1"	24	21	22	92,5	40,5	120	54	40
VLMF20R	VLMF20B	1-1/4"	30	23	24	106	46,5	158	73	49
VLMF24R	VLMF24B	1-1/2"	38	23	24	113	51	158	79	54

Ball Valve Standard Handle - Female / Female





Part No.	Part No.	D	DN	I	L	G	A	H	CH
VL04R	VL04B	1/4"	8	12	45	22,5	82	38	20
VL06R	VL06B	3/8"	9,5	12	45	22,5	82	38	20
VL08R	VL08B	1/2"	15	15,5	59	29,5	100	43	25
VL12R	VL12B	3/4"	19	17	64	32	120	50	31
VL16R	VL16B	1"	24	21	81	40,5	120	54	40
VL20R	VL20B	1-1/4"	30	23	93	46,5	158	73	49
VL24R	VL24B	1-1/2"	38	23	102	51	158	79	54

Quality:
- 24h 100% seal test guaranteed.
- Dual sealing system allows valve to be operated in either direction making installation easier.
- No maintenance ever required.
- Chrome plated brass ball for longer life.
- Travel stops on body to avoid stresses at stem.

Body:
- Hot forged sand blasted, nickel plated brass body and cap sealed with Loctite or equivalent thread sealant.
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications.

Flow:
- Full port to DIN 3357 for maximum flow.

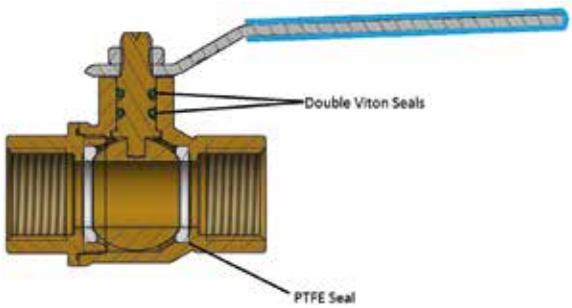
Thread:
- EN 10226-1, ISO 228 Male thread: BSPT – Female thread: BSPP.

Stem:
- Two FPM O-rings at the stem for maximum safety.

Seals:
- Pure PTFE self-lubricating seats with flexible-lip design.

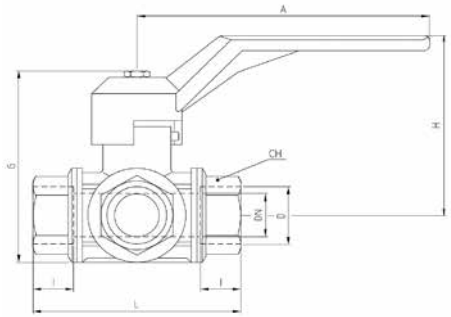
Working Pressure:
- 40 Bar (600 PSI).
- Non-shock cold working pressure.

Operating Temperature:
- +170°C (+350°F).



3 Way Ball Valve - Female (L-Type)





Part No.	D	DN	I	L	G	A	H	CH
V3F04R	1/4"	10	19	77	75	125	65	22
V3F06R	3/8"	12	19	77	75	125	65	22
V3F08R	1/2"	14	19	77	75	125	65	27
V3F12R	3/4"	18	23	92	91	145	83	34
V3F16R	1"	23	25	104	105	170	96	41
V3F20R	1.1/4"	29	27	118	115	170	102	50
V3F24R	1.1/2"	36	31	138	128	170	109	57

Quality:
- Chrome plated brass ball for longer life.
- UNI 8858 cycle and troque test performed.

Body:
- Hot forged sand blasted nickel plated body and caps.
- 3 Way Lever design allows complete range of flow handling applications.
- Copper alloy brass according to EN 12165 and EN 12164 specifications.

Stem:
- Two NBR O-Rings at the stem for maximum safety .

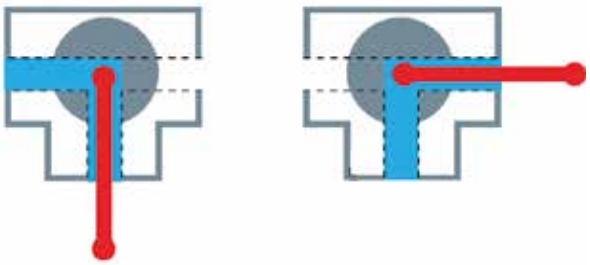
Seals:
- Four seats design limits mixure amoung various fluids in the system.
- PTFE seals.

Threads:
- ISO 228 female threads.

Flow:
- Full port for lowest pressure drops.

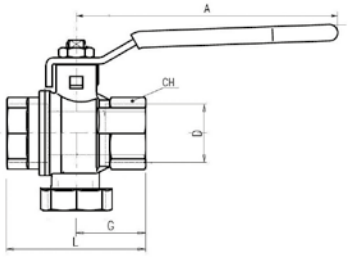
Working pressure:
- 20 Bar.

Working temperature:
- -10°C to + 120°C.



Ball Valve with Integrated Filter



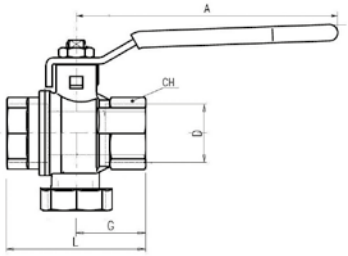




Part No.	D	L	G	A	CH
BVF1/2	1/2"	50,7	26,7	100	25
BVF3/4	3/4"	61,3	32,3	100	31
BVF1	1"	70,1	35,6	100	38
BVF1-1/4	1.1/4"	85	45	158	48
BVF1-1/2	1.1/2"	97,5	52	158	54
BVF2	2"	117	63	158	66

Ball Valve with Integrated Filter and Magnet







Part No.	D	L	G	A	CH
BVFM3/4	3/4"	61,3	32,3	100	31
BVFM1	1"	70,1	35,6	100	38
BVFM1-1/4	1.1/4"	85	45	158	48
BVFM1-1/2	1.1/2"	97,5	52	158	54
BVFM2	2"	117	63	158	66

Quality:
- Substitutes 3 different components (2 ball valves and one filter)
- Reduces leakage risks due to lower sealing points
- Cost saving due to reduced number of components
- Time saving at installation and maintenance
- Built-in vertical filter with cartridge structure in AISI304 + Nylon (filtration degree: 500 microns / 35 mesh). Size ½" has a central rib to ease filter extraction.
- Final test conforming with UNI EN 12266-1 points A3 / A4 (for 1.½" and 2" sizes: acc. to directive 2014/68/UE)
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Chrome plated brass ball for longer life
- Handle stop on body to avoid stress at stem

Body
- Hot forged sand blasted, external nickel plated brass body and cap sealed with L octite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- Bottom plug for an easy filter maintenance

Stem
- Blowout-proof unplated brass stem
- Two O-rings at the stem (FKM + NBR) for maximum safety

Sealing
- Pure PTFE seats

Threads
- ISO 228 parallel female by female threads

Flow
- Nominal port

Handle
- Zinc plated steel handle with plastic dip coating
- WARNING: do not exceed reasonable temperature and/or electrical load

Magnet
- Neodymium (12.000 gauss) NdFeB

Working pressure & temperature
- 30 Bar (450 PSI) non-shock cold working pressure for sizes ½" to 1", 20 Bar (290 PSI) for sizes 1.¼" to 2"
- -20°C / +150°C (-4°F / +300°F)
- WARNING: freezing of the fluid in the installation may severely damage the valve

PED directive
- According to 2014/68/UE, 1.¼" and superior sizes cannot be used with dangerous fluids

Cost Saving Solution

BVF Filter Valve substitues traditional Y Strainers combined with 2 ball valves.



- Full port
- Low pressure drop
- Assembly space and time very limited
- Easy to be cleaned and maintained
- All impurities gather inside the filter
- Maximum pressure 30 bar (PN30)
- Increased filter quality with cartridge structure for all sizes. Filter for size 1/2" will have a central rib to ease filter extraction

PUSH IN FITTINGS

Straight Male







Part No.	Part No.	Tube ØD	Thread
MSM081/8R	MSM081/8B	8	1/8”
MSM081/4R	MSM081/4B	8	1/4”
MSM083/8R	MSM083/8B	8	3/8”
MSM101/4R	MSM101/4B	10	1/4”
MSM103/8R	MSM103/8B	10	3/8”
MSM123/8R	MSM123/8B	12	3/8”
MSM121/2R	MSM121/2B	12	1/2”

Material: Brass, Nickel Plated. Seal: EPDM.

90° Swivel Male







Part No.	Part No.	Tube ØD	Thread
MSW081/8R	MSW081/8B	8	1/8”
MSW081/4R	MSW081/4B	8	1/4”
MSW083/8R	MSW083/8B	8	3/8”
MSW101/4R	MSW101/4B	10	1/4”
MSW103/8R	MSW103/8B	10	3/8”
MSW123/8R	MSW123/8B	12	3/8”
MSW121/2R	MSW121/2B	12	1/2”

Material: Brass, Nickel Plated. Seal: EPDM.

Straight Female





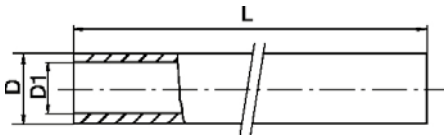
Part No.	Part No.	Tube ØD	Thread
MSF081/8R	MSF081/8B	8	1/8”
MSF081/4R	MSF081/4B	8	1/4”
MSF083/8R	MSF083/8B	8	3/8”
MSF101/4R	MSF101/4B	10	1/4”
MSF103/8R	MSF103/8B	10	3/8”
MSF123/8R	MSF123/8B	12	3/8”
MSF121/2R	MSF121/2B	12	1/2”

Material: Brass, Nickel Plated. Seal: EPDM.

Ether Based Polyurethane Tubing for Push-In Fittings - Temperature max 70°C / Peak 100°C

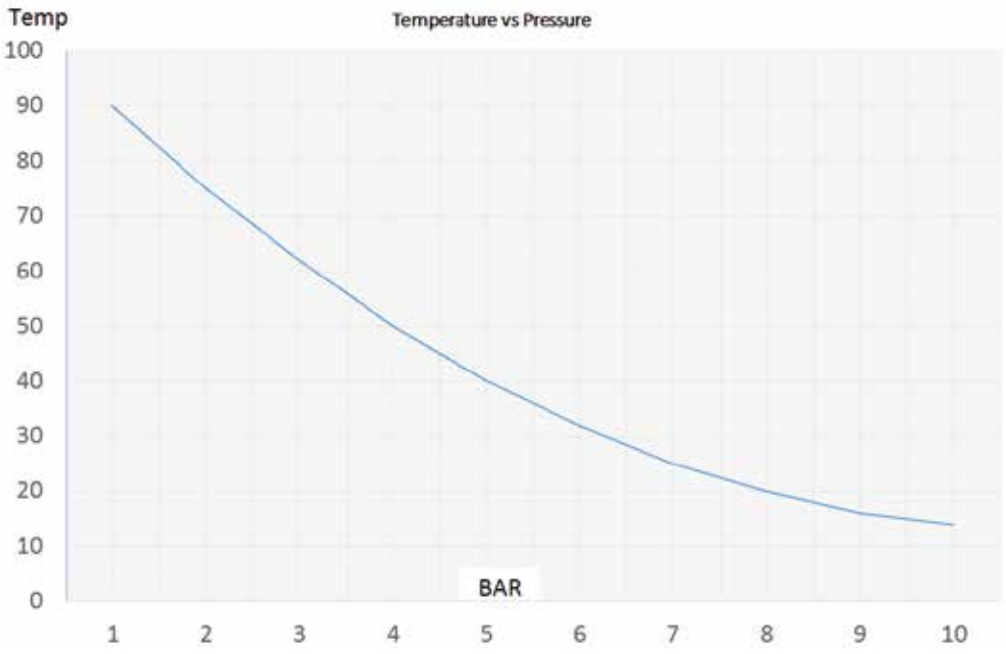






Part No.	Description	D (mm)	D1 (mm)	Working Pressure* PSI	Working Pressure* Bar	Bend Radius (mm)*	Coil Length L	Colour
PPU8B	Pneumatic Polyurethane Tubing 8mm x 5.5mm	8	5.5	116	8	31	30m	
PPU8R	Pneumatic Polyurethane Tubing 8mm x 5.5mm	8	5.5	116	8	31	30m	
PPU10B	Pneumatic Polyurethane Tubing 10mm x 7mm	10	7	116	8	40	30m	
PPU10R	Pneumatic Polyurethane Tubing 10mm x 7mm	10	7	116	8	40	30m	
PPU12B	Pneumatic Polyurethane Tubing 12mm x 8mm	12	8	116	8	43	30m	
PPU12R	Pneumatic Polyurethane Tubing 12mm x 8mm	12	8	116	8	43	30m	

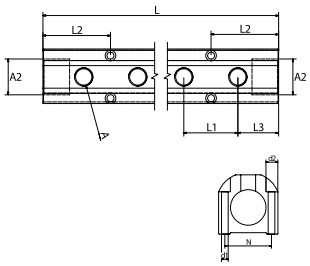
* Working pressure of 8 bar / 116 PSI is based on temperature of 20°C, higher temperature will result in lower pressure resistance. See below graph for details.



MANIFOLDS

3/4” Inline Anodized Manifold



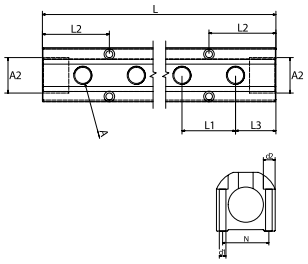


Part No.	Colour	Ports	A (BSPP)	A2 (BSPP)	L2	L3	L1	d1	d2	N	L
IM3-4-1/4-R		4	1/4”	3/4”	57,2	38,1	38,1	4,5	8	31	190,5
IM3-4-1/4-B		4	1/4”	3/4”	57,2	38,1	38,1	4,5	8	31	190,5
IM3-6-1/4-R		6	1/4”	3/4”	57,2	38,1	38,1	4,5	8	31	266,7
IM3-6-1/4-B		6	1/4”	3/4”	57,2	38,1	38,1	4,5	8	31	266,7
IM3-8-1/4-R		8	1/4”	3/4”	57,2	38,1	38,1	4,5	8	31	342,9
IM3-8-1/4-B		8	1/4”	3/4”	57,2	38,1	38,1	4,5	8	31	342,9

Rugged Low Cost Design.
Anodized Aluminium in Blue or Red for easy identification of Flow and Return.
Quick Mould Change.
Eliminates Piping Errors.
Shorter Hose Lengths minimise pressure drops and reduces clutter.
Maximum Unresticted Flow Rates Possible.

1” Inline Anodized Manifold



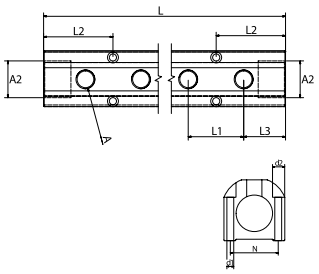


Part No.	Colour	Ports	A (BSPP)	A2 (BSPP)	L2	L3	L1	d1	d2	N	L
IM4-4-1/4-R		4	1/4”	1”	63,5	38,1	38,1	7	10,5	40,6	190,5
IM4-4-1/4-B		4	1/4”	1”	63,5	38,1	38,1	7	10,5	40,6	190,5
IM4-4-3/8-R		4	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	228,6
IM4-4-3/8-B		4	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	228,6
IM4-6-1/4-R		6	1/4”	1”	63,5	38,1	38,1	7	10,5	40,6	266,7
IM4-6-1/4-B		6	1/4”	1”	63,5	38,1	38,1	7	10,5	40,6	266,7
IM4-6-3/8-R		6	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	330,2
IM4-6-3/8-B		6	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	330,2
IM4-8-1/4-R		8	1/4”	1”	63,5	38,1	38,1	7	10,5	40,6	342,9
IM4-8-1/4-B		8	1/4”	1”	63,5	38,1	38,1	7	10,5	40,6	342,9
IM4-8-3/8-R		8	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	431,8
IM4-8-3/8-B		8	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	431,8
IM4-10-3/8-R		10	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	533,4
IM4-10-3/8-B		10	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	533,4
IM4-12-3/8-R		12	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	635,0
IM4-12-3/8-B		12	3/8”	1”	63,5	38,1	50,8	7	10,5	40,6	635,0

Rugged Low Cost Design.
Anodized Aluminium in Blue or Red for easy identification of Flow and Return.
Quick Mould Change.
Eliminates Piping Errors.
Shorter Hose Lengths minimise pressure drops and reduces clutter.
Maximum Unresticted Flow Rates Possible.

1-1/2” Inline Anodized Manifold



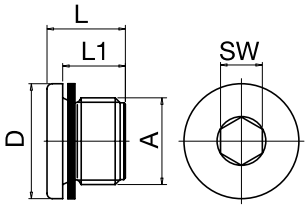


Part No.	Colour	Ports	A (BSPP)	A2 (BSPP)	L2	L3	L1	d1	d2	N	L
IM6-4-1/2-R		4	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	254
IM6-4-1/2-B		4	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	254
IM6-6-1/2-R		6	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	355,6
IM6-6-1/2-B		6	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	355,6
IM6-8-1/2-R		8	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	457,2
IM6-8-1/2-B		8	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	457,2
IM6-10-1/2-R		10	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	558,8
IM6-10-1/2-B		10	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	558,8
IM6-12-1/2-R		12	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	660,4
IM6-12-1/2-B		12	1/2”	1-1/2”	76,2	50,8	50,8	7	10,5	57	660,4

Rugged Low Cost Design.
Anodized Aluminium in Blue or Red for easy identification of Flow and Return.
Quick Mould Change.
Eliminates Piping Errors.
Shorter Hose Lengths minimise pressure drops and reduces clutter.
Maximum Unresticted Flow Rates Possible.

Blanking Plugs





Part No.	A	D	L	L1	SW	
DR3/4	G3/4”	32	21	16	12	1
DR1	G1”	40	22,5	16	17	1
DR1-1/2*	G1-1/2”	55	22,5	16	24	1

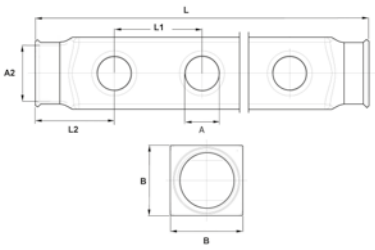
* With O-Ring.

MANIFOLDS

Inline Stainless Steel Manifold

STAINLESS STEEL







Part No.	Ports	A (BSPP)	A2 (BSPP)	L	L1	L2	B
SSIM4-4-1/2	4	1/2"	1"	240	50	45	40
SSIM4-6-1/2	6	1/2"	1"	340	50	45	40
SSIM4-8-1/2	8	1/2"	1"	440	50	45	40
SSIM4-10-1/2	10	1/2"	1"	540	50	45	40
SSIM4-12-1/2	12	1/2"	1"	640	50	45	40
SSIM5-4-1/2	4	1/2"	1-1/4"	240	50	45	50
SSIM5-6-1/2	6	1/2"	1-1/4"	340	50	45	50
SSIM5-8-1/2	8	1/2"	1-1/4"	440	50	45	50
SSIM5-10-1/2	10	1/2"	1-1/4"	540	50	45	50
SSIM5-12-1/2	12	1/2"	1-1/4"	640	50	45	50

Stainless steel AISI 304.
Perfect for agressive water and oil.

Max. pressure 10 bar.
Max temp. 200°C.

Brackets for Stainless Steel Manifolds

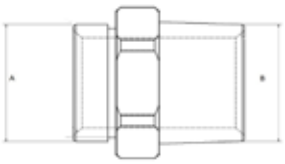


Part No.	Type	
SS-Bracket	1"	1
SS-5-Bracket	1-1/4"	1

Electro plated steel bracket for installation of a single manifold.
2 Brackets needed for correct installation.

Equal Connector for Stainless Manifolds





Part No.	Part No.	A	B
ECM1	1" BSPP	1" BSPT	1
ECM1-1/4	1-1/4" BSPP	1-1/4" BSPT	1

Material: Brass Nickel Plated.
Max temp.: 130°C.

O-Ring: 1" = EPDM.
1-1/4" = SILICONE.

Blanking Plug

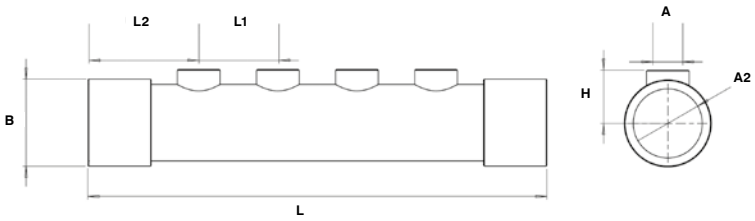


Part No.	Thread	Seal
SSEC1	1"	FKM max. temp. 200°C
SSEC1-1/4	1-1/4"	FKM max. temp. 200°C

Material: Nickel plated brass

Heavy Duty Inline Stainless Steel Manifold





Part No.	Ports	A (BSPP)	A2 (BSPP)	L	L1	L2	B	H
SSIM6-4-1/2	4	1/2"	1.1/2"	290	50	69,5	55	34
SSIM6-8-1/2	8	1/2"	1.1/2"	490	50	69,5	55	34
SSIM6-12-1/2	12	1/2"	1.1/2"	690	50	69,5	55	34

Welded pipe construction
Stainless Steel AISI 304
Perfect for aggressive water and oil

Max. pressure 10 bar.
Max temp. 200°C.

Brackets for heavy duty Stainless Steel Manifolds

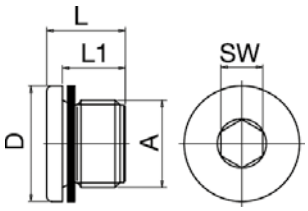


Part No.	Size	
SS-6-Bracket	1.1/2"	1

Electro plated steel bracket for installation of a single manifold
2 Brackets needed for correct installation

Blanking Plugs



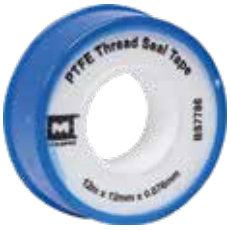


Part No.	A	D	L	L1	SW	
DR1-1/2*	G1-1/2" BSP	55	22,5	16	24	1

Material: Plated Brass
With O-ring

SEALANT AND TAPE

PTFE Tape





Part No.	Size	Length
TEF	12 mm	12 m

Excellent for sealing all thread sizes.
Temperature range: up to 230°C.

Thread Locker





Part No.	Size	Max Thread	Temperature range
77	50 ml.	< M80	-50°C - +150°C

Anaerobic Thread locker for permanent sealing of metal threaded fittings.
Single component, liquid adhesive that cures hard in the absence of air or oxygen.
Maximum Thread Size: M80.
Disassembly strength: High.
Temperature range: -50°C - +150°C.
Breakaway torque: 32 Nm.
Pack sizes: 50ml.

Pipe Sealant



Part No.	Size	Max Thread	Temperature range
542	50 ml.	< 3/4”	-50°C - +150°C

Anaerobic thread sealant for fine metal threaded fittings, especially hydraulic pipes.
Single component, liquid adhesive that cures hard in the absence of air or oxygen.
Maximum pipe size: 3/4”.
Disassembly strength: Medium.
Temperature range: -50°C - +150°C.
Breakaway torque: 15 Nm.
Pack sizes: 50ml.

Pipe Sealant



Part No.	Size	Max Thread	Temperature range
577	50 ml.	< 3”	-50°C - +150°C
577-2	250 ml.	< 3”	-50°C - +150°C

General purpose anaerobic thread sealant for all coarse metal threads.
Single component, liquid adhesive that cures hard in the absence of air or oxygen.
Maximum Pipe Size: 3”.
Disassembly strength: Medium.
Temperature range: -50°C - +150°C.
Breakaway torque: 11 Nm.
Pack sizes: 50ml, 250ml.

02.
THERMAL MANAGEMENT

85 DIGITAL FLOW MONITORS



99 ANALOGUE FLOW METERS



101 DE-SCALING



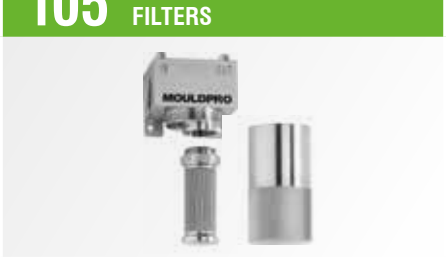
103 PRESSURE TESTING



104 WATER TREATMENT



105 FILTERS



107 VALVES





Flosense; the new affordable, flexible flow monitoring system designed for accurate measuring and monitoring of flow, temperature and pressure variations in cooling circuits

Flosense is designed to be installed in various locations within the cooling circuit including the main water supply, the mould heater, critical cooling channels or distribution manifolds.

Quick to install and easy to set-up, Flosense is a critical component in any injection moulding configuration and should form part of any setup where cost control and quality are key considerations.

Using these values, Flosense provides an indication of the stability of the process and checks the efficiency, identifying wasted energy and variations in pressure which could indicate leaks or blocked waterways.

Flosense is designed to be installed in various locations within the cooling circuit including the main water supply, the mould heater, critical cooling channels or distribution manifolds.





Pressure loss is caused by hoses, fittings and valves and will affect the productivity.

Difference between inlet pressure and return pressure is measured as Delta P.

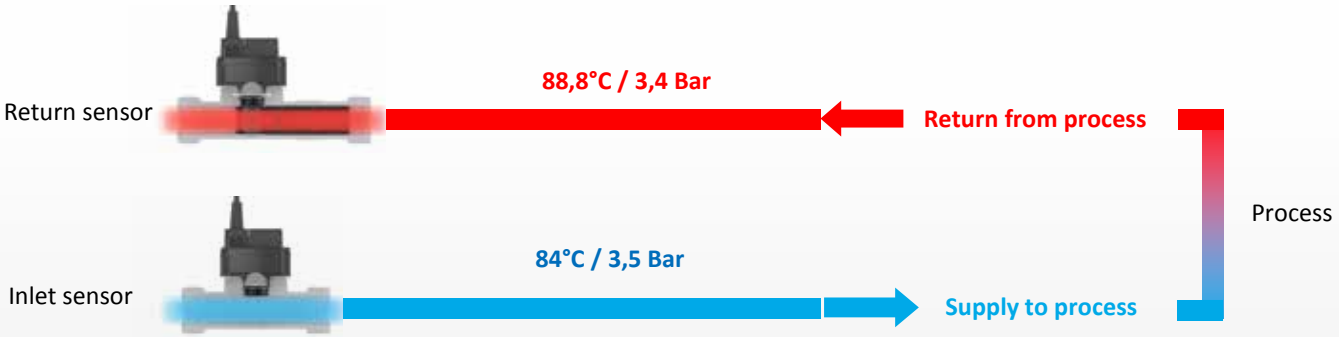
Variation in Delta P could indicate pump failure, blocked waterway, leaks etc.



As the cooling water passes through the mould it transfers heat from the steel into the cooling water. The more turbulent the flow the more efficient this process of cooling.

Difference between inlet temperature and return temperature is measured as Delta T.

Sudden variation in Delta T may be caused by a faulty heater/ cooler, blocked channel, scale build up etc.



Flosense, provides visibility of key cooling circuit metrics, improves efficiency, enhances productivity and profitability.

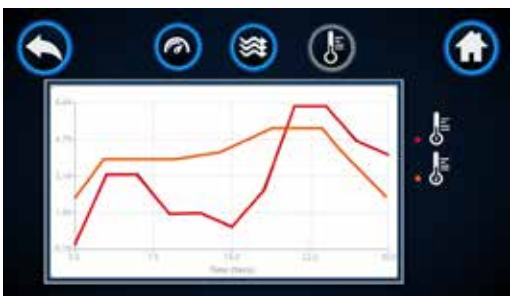


Energy Transfer Indicator
Heat is transfered from the mould through the water channels, Flosense calculates the heat transfer as energy units BTU or kWh. This feature illustrates the effeciency of the process.



Turbolent Flow Indicator
Often regarded as a key indicator in the efficiency of a mould cooling circuit, Flosense is fitted with a turbulent flow indicator. The unit will indicate laminar, transitional and turbulent flow as well as monitoring the Reynolds number, based on flow diameter and percentage glycol in the system.

Improving the flow from laminar to turbulent can increase the heat transfer efficiency by up to 500%.



Flosense, provides features and interfaces to monitor, analyse and verify data, essential for your productivity and quality.



Alarm Output
With programmable alarm limits on flow, temperature and pressure any variation in the values being monitored will trigger an on-screen alarm. An external alarm output signal can be connected to auxiliary equipment which could be a visual or audible beacon, the mould heater or the injection moulding machine.

Even in a 'hose burst' situation the unit will identify a sudden loss of pressure and the unit can either be connected to an alarm or could be used to automatically shut down the mould heater.



DATA RECORDING
Data is recorded and stored in the internal memory enough to display data for the previous 30 days.

Flow, Temperature and Pressure are logged and may be viewed in the graphing screen.

The last 30 days of data is recorded and stored on the internal memory.



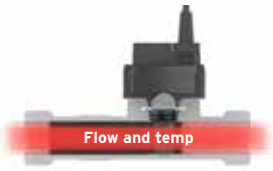
Data Export
It is also possible to download the data to a laptop using the integrated USB port for further analysis.

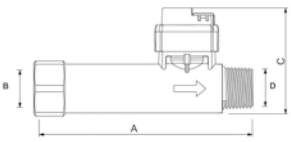
The data is stored as text file and can be analysed using excel or other analysing software.

Single Flow Sensor Kit









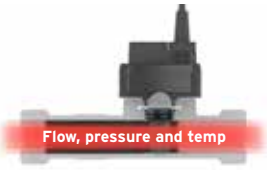
Part No.	Flow capacity l/m	A	B	C	D	Max Temp.
FSE-0510-K	0,5-10	100	G 1/2”	58,8	1/4”	120°C
FSE-0510-K-HT	0,5-10	100	G 1/2”	58,8	1/4”	160°C
FSE-120-K	1-20	100	G 1/2”	58,8	1/4”	120°C
FSE-120-K-HT	1-20	100	G 1/2”	58,8	1/4”	160°C
FSE-240-K	2-40	100	G 1/2”	58,8	1/4”	120°C
FSE-240-K-HT	2-40	100	G 1/2"	58,8	1/4”	160°C

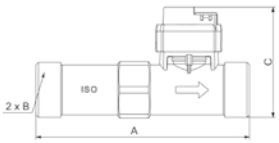
- Touch Screen
- Power Supply
- Sensor (flow+temp)
- Cable (1,2 m.)
- USB Cable

Single Multi Sensor Kit









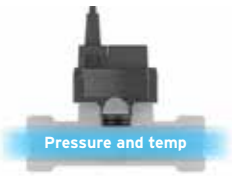
Part No.	Flow capacity l/m	A	Connection B	C	Max Temp.	Pressure Range
FS-115-K	2-20	110	G 3/4”	58,8	120ºC	0-10 Bar
FS-240-K	4-40	110	G 3/4”	58,8	120ºC	0-10 Bar
FS-5100-K	10-100	129	G 1”	66,5	120ºC	0-10 Bar
FS-10200-K	20-200	137,5	G 1-1/4”	74,1	120ºC	0-10 Bar
FS-20400-K*	20-200	180	G 1-1/2”	85	120ºC	0-10 Bar

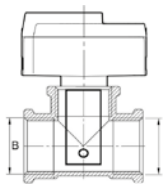
- Touch Screen
- Power Supply
- Sensor (flow+temp+pressure)
- Cable (1,2 m.)
- USB Cable

* Composite (PPS, PA66)

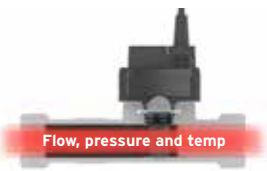
Dual Multi Sensor Kit

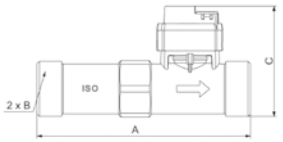












Part No.	Flow capacity l/m	A	Connection B	C	Max Temp.	Pressure Range
FS-115-10-K	2-20	110	G 3/4”	58,8	120ºC	0-10 Bar
FS-240-10-K	4-40	110	G 3/4”	58,8	120ºC	0-10 Bar
FS-5100-10-K	10-100	129	G 1”	66,5	120ºC	0-10 Bar
FS-10200-10-K	20-200	137,5	G 1-1/4”	74,1	120ºC	0-10 Bar
FS-20400-10-K*	40-400	180	G 1-1/2”	85	120ºC	0-10 Bar

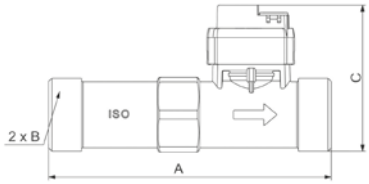
- Touch Screen
- Power Supply
- Sensor (flow+temp+pressure)
- Inlet Sensor (Temp+pressure)
- 2 x Cables (1,2 m.)
- USB Cable

* Composite (PPS, PA66)

Multi Sensor Unit

PRESSURE
FLOW
TEMPERATURE





Part No.	Flow capacity l/m	A	B	C	Max temperature	Hosetail Ref.
FS-115	2-20	110	G 3/4"	58,8	120ºC	CFR3/4-13
FS-240	4-40	110	G 3/4"	58,8	120ºC	HT-316-2 / CFR3/4-19
FS-5100	10-100	129	G 1"	66,5	120ºC	CFR1-25 / CFR1-25
FS-10200	20-200	137,5	G 1-1/4"	74,1	120ºC	HT-316-4 / CFR1.1/4-32
FS-20400	40-400	180	G1-1/2"	80,1	120ºC	1.1/2" / 38 mm. (Included)

Includes Flow Pipe and Multi Sensor (cable not included).

Optional (not included in the Kit) AISI 316

Swivel Hosetail Fitings



Stainless Steel Part No.	Brass Part No.	A1 x D1
	CFR3/4-13	3/4" X 13
HT-316-2	CFR3/4-19	3/4" X 19
HT-316-3	CFR1-25	1" x 25
	CFR1.1/4-32	1.1/4 x 32
	CFR1.1/2-38	1.1/2 x 38

Gaskets

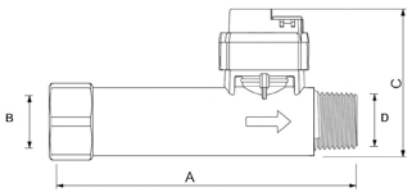


Sensor Ref.	Part No.
FS-115	GK34
FS-240	GK34
FS-5100	GK1
FS-10200	GK114
FS-20400	GK112

Flow Sensor Unit

FLOW
TEMPERATURE

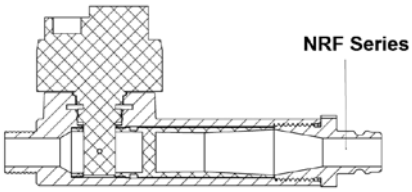


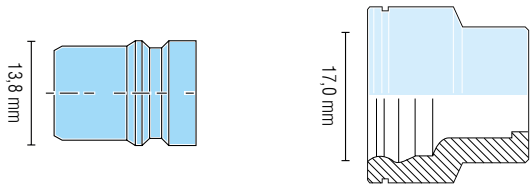
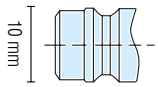
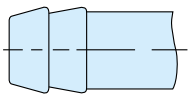


Part No.	Flow capacity l/m	A	B	C	D	Max temperature	B Connection ref.
FSE-0510	0,5-10	100	G 1/2"	58,8	1/4"	120°C	xxNRF
FSE-0510-HT	0,5-10	100	G 1/2"	58,8	1/4"	160°C	xxNRF
FSE-120	1-20	100	G 1/2"	58,8	1/4"	120°C	xxNRF
FSE-120-HT	1-20	100	G 1/2"	58,8	1/4"	160°C	xxNRF
FSE-240	2-40	100	G 1/2"	58,8	1/4"	120°C	xxNRF
FSE-240-HT	2-40	100	G 1/2"	58,8	1/4"	160°C	xxNRF

Includes Flow Pipe and Flow Sensor (cable not included)

Port Connector Plugs



Part No.	Connection	Size/series	
09NRF	R 1/2"	09 EURO Style	
13NRF	R 1/2"	13 EURO Style	
20NRF	R 1/2"	20 Int. Style	
30NRF	R 1/2"	30 Int. Style	
08NRF	R 1/2"	French Type	
F9NRF	R 1/2"	French Matic	
06NRF	R 1/2"	06 Scandinavian Style	
10MF	R 1/2"	10 mm Hosetail	
13MF	R 1/2"	13 mm Hosetail	

Sensor Cable



Part No.	Connection	Length (mm)
FS-SC1200	M8/Molex	1200
FS-SC2900	M8/Molex	2900

Extension Cable 4 pin



Part No.	Connection	Length (mm)
FS-4P-EC1000	M8/M8	1000
FS-4P-EC2000	M8/M8	2000
FS-4P-EC5000	M8/M8	5000

MULTI ZONE MONITORING

Upgrade your moulding machine with a new digital flow monitor to improve your productivity

Digital flow monitors will give you many advantages such as:

- Digital monitoring of Flow, Temperature and Pressure
- Alarm Output
- Higher flow capacity
- Higher temperature range
- Data storage and export
- Faster Mould changeovers
- OPC-UA / Euromap interface



Flosense 2.0

Manifolds - Retrofit Style



Page 90

Flosense 4.0

Compact Dual Line Manifolds
Integrated Sensors and Valves



Page 91

Flosense 3.0

All in One Flow Regulator Style
Integrated Control Screen



Page 92

Touch screen



Touch Screen mounted to the Manifolds.

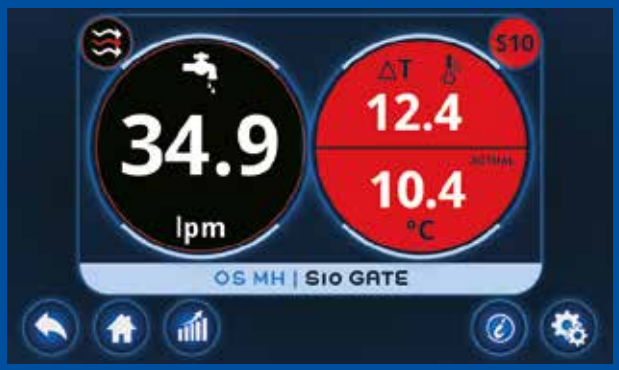
Equipped with power, alarm, USB and Ethernet connections.

Display	
Type	Touch
Size	7,1”
Voltage	12-24 Volt.
Data	USB + Ethernet
Communications	OPC UA
Internal memory	Up to 30 days data (FIFO)

Part No.	Size	Manifold Inputs	Power Connection	Alarm Output	Interface
FS-7100	7.1”	4	12V	Yes	OPC-UA



The main screen will show all circuits with information about flow and temperature. The main inlet and outlet will also show including pressure.



By clicking on a specific circuit you will see detailed information, including delta T (heat transfer) of the specific channel. Also, turbulent flow indicator is included.



Data i stored in the internal memory and can be displayed in graphical view for each circuit. Data can also be exported for external use.

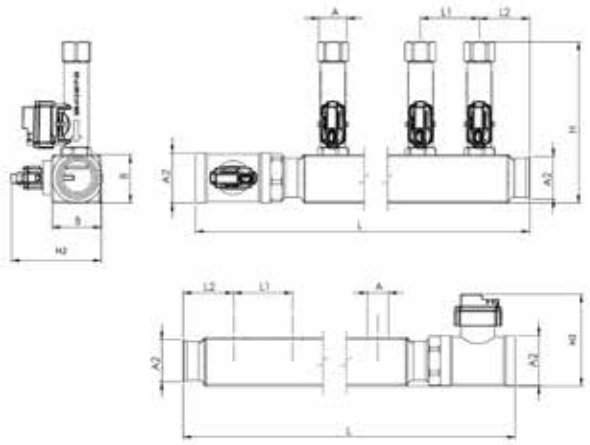


The system is equipped with Audit Log to keep track of all events including user ID tracer.

Flosense 2.0 Manifold

PRESSURE
FLOW
TEMPERATURE





1" Manifold	Flow sensor range option (l/m)												
Part No.	0.5-10	1-20	2-40	Ports	A	A2	B	L	L1	L2	H	H2	Temp.
F2M4-x-xx	•	•	•	4	1/2"	1"	40	315	50	45	140	66,5	120°C
F2M4HT-x-xx	•	•	•	4	1/2"	1"	40	315	50	45	140	66,5	160°C
F2M6-x-xx	•	•	•	6	1/2"	1"	40	415	50	45	140	66,5	120°C
F2M6HT-x-xx	•	•	•	6	1/2"	1"	40	415	50	45	140	66,5	160°C
F2M8-x-xx	•	•	•	8	1/2"	1"	40	515	50	45	140	66,5	120°C
F2M8HT-x-xx	•	•	•	8	1/2"	1"	40	515	50	45	140	66,5	160°C
F2M10-x-xx	•	•	•	10	1/2"	1"	40	615	50	45	140	66,5	120°C
F2M10HT-x-xx	•	•	•	10	1/2"	1"	40	615	50	45	140	66,5	160°C
F2M12-x-xx	•	•	•	12	1/2"	1"	40	715	50	45	140	66,5	120°C
F2M12HT-x-xx	•	•	•	12	1/2"	1"	40	715	50	45	140	66,5	160°C

1.1/4" Manifold	Flow sensor range option (l/m)												
Part No.	0.5-10	1-20	2-40	Ports	A	A2	B	L	L1	L2	H	H2	Temp.
F2M4-L-x-xx	•	•	•	4	1/2"	1.1/4"	50	315	50	45	150	74,1	120°C
F2M4HT-L-x-xx	•	•	•	4	1/2"	1.1/4"	50	315	50	45	150	74,1	160°C
F2M6-L-x-xx	•	•	•	6	1/2"	1.1/4"	50	415	50	45	150	74,1	120°C
F2M6HT-L-x-xx	•	•	•	6	1/2"	1.1/4"	50	415	50	45	150	74,1	160°C
F2M8-L-x-xx	•	•	•	8	1/2"	1.1/4"	50	515	50	45	150	74,1	120°C
F2M8HT-L-x-xx	•	•	•	8	1/2"	1.1/4"	50	515	50	45	150	74,1	160°C
F2M10-L-x-xx	•	•	•	10	1/2"	1.1/4"	50	615	50	45	150	74,1	120°C
F2M10HT-L-x-xx	•	•	•	10	1/2"	1.1/4"	50	615	50	45	150	74,1	160°C
F2M12-L-x-xx	•	•	•	12	1/2"	1.1/4"	50	715	50	45	150	74,1	120°C
F2M12HT-L-x-xx	•	•	•	12	1/2"	1.1/4"	50	715	50	45	150	74,1	160°C

1.1/2" Manifold	Flow sensor range option (l/m)												
Part No.	0.5-10	1-20	2-40	Ports	A	A2	B	L	L1	L2	H	H2	Temp.
F2M4-XL-x-xx	•	•	•	4	1/2"	1.1/2"	50	365	50	70	161,5	85	120°C
F2M4HT-XL-x-xx	•	•	•	4	1/2"	1.1/2"	50	365	50	70	161,5	85	160°C
F2M8-XL-x-xx	•	•	•	8	1/2"	1.1/2"	50	565	50	70	161,5	85	120°C
F2M8HT-XL-x-xx	•	•	•	8	1/2"	1.1/2"	50	565	50	70	161,5	85	160°C
F2M12-XL-x-xx	•	•	•	12	1/2"	1.1/2"	50	765	50	70	161,5	85	120°C
F2M12HT-XL-x-xx	•	•	•	12	1/2"	1.1/2"	50	765	50	70	161,5	85	160°C

Comes in pairs of 2 manifolds
- One feed Manifold with Pressure and Tempature Sensor
- One return Manifold with Flow, Temperature and Pressure Sensor

Supplied without connector nipples (see page 93)
Ordering Example: Part No. + Flow sensor range (F2M4-1-20)

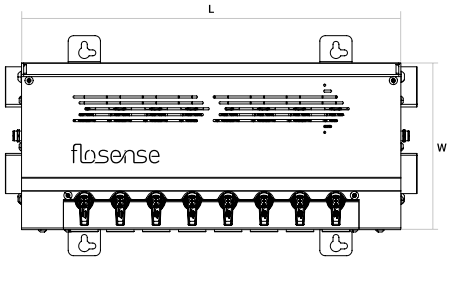
HT = High Temperature.
Complete unit with Pressure sensor installed on main inlet / return. Connect up to 4 manifolds to the touch screen in order to monitor uo to 48 separate cooling circuits.
Use the alarm limits (and output) on flow and temperature to control the process stability and part quality.

Material:
Stainless Steel

Flosense 4.0 Manifold

PRESSURE
FLOW
TEMPERATURE







	Flow sensor range option (l/m)							
Part No.	0.5-10	1-20	2-40	Ports	L	W	H	Temp.
F4M4-x-xx	•	•	•	4	220	155	72	120°C
F4M4HT-x-xx	•	•	•	4	220	155	72	160°C
F4M6-x-xx	•	•	•	6	287	155	72	120°C
F4M6HT-x-xx	•	•	•	6	287	155	72	160°C
F4M8-x-xx	•	•	•	8	354	155	72	120°C
F4M8HT-x-xx	•	•	•	8	354	155	72	160°C
F4M10-x-xx	•	•	•	10	421	155	72	120°C
F4M10HT-x-xx	•	•	•	10	421	155	72	160°C
F4M12-x-xx	•	•	•	12	488	155	72	120°C
F4M12HT-x-xx	•	•	•	12	488	155	72	160°C

Ordering Example: Part No. + Flow sensor range (F4M4-1-20)

HT = High Temperature.
Complete unit with Pressure sensor installed on main inlet / return. Connect up to 4 manifolds to the touch screen in order to monitor uo to 48 separate cooling circuits.
Use the alarm limits (and output) on flow and temperature to control the process stability and part quality.

Material:
Flow modules: DZR Brass / nickel plated / Cover: stainless steel.

Flow	Standard Sensor	HT Sensor
Measuring range	0.5-10 l/min (0.13-2.64 gpm)	0.5-10 l/min (0.13-2.64 gpm)
	1-20 l/min (0,27-5,2 gpm)	1-20 l/min (0,27-5,2 gpm)
	2-40 l/min (0,53-10,4 gpm)	2-40 l/min (0,53-10,4 gpm)
Accuracy	(± 1 o) in water, ± 1% FS	(± 1 o) in water, ± 1% FS

FLOW

Temperature	Standard Sensor	HT Sensor
Measuring range	0-120°C (32-248°F)	0-160°C (32-320°F)
Accuracy	15-90°C (59-194°F) ± 0.5 K	15-90°C (59-194°F) ± 0.5 K
	0-120°C(32-248°F) ± 1 K	0-120°C (32-248°F) ± 1 K
		120-160°C (248-320°F) ± 2 K

TEMPERATURE

Pressure	Standard Sensor	HT Sensor
Measuring range	0-10 bar (0-145 psi)	
Accuracy	± 2.5% FS	

PRESSURE

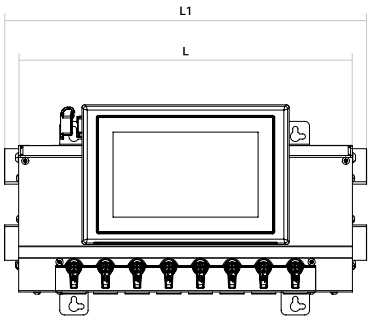
Digital Flow Regulator

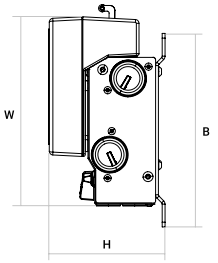
Replace analogue water flow regulators with the new digital industry 4.0 ready monitors



PRESSURE
FLOW
TEMPERATURE







Part No.	Ports	Length mm	Length 1 mm	Width mm	Height mm	B mm	Flow	Temp.
FFRM4-0.5-10	4	220	250	200	123	205	0,5-10 l/m	120°C
FFRM4-1-20	4	220	250	200	123	205	1-20 l/m	120°C
FFRM4-2-40	4	220	250	200	123	205	2-40 l/m	120°C
FFRM6-0.5-10	6	287	317	200	123	205	0,5-10 l/m	120°C
FFRM6-1-20	6	287	317	200	123	205	1-20 l/m	120°C
FFRM6-2-40	6	287	317	200	123	205	2-40 l/m	120°C
FFRM8-0.5-10	8	354	384	200	123	205	0,5-10 l/m	120°C
FFRM8-1-20	8	354	384	200	123	205	1-20 l/m	120°C
FFRM8-2-40	8	354	384	200	123	205	2-40 l/m	120°C
FFRM10-0.5-10	10	421	451	200	123	205	0,5-10 l/m	120°C
FFRM10-1-20	10	421	451	200	123	205	1-20 l/m	120°C
FFRM10-2-40	10	421	451	200	123	205	2-40 l/m	120°C
FFRM12-0.5-10	12	488	518	200	123	205	0,5-10 l/m	120°C
FFRM12-1-20	12	488	518	200	123	205	1-20 l/m	120°C
FFRM12-2-40	12	488	518	200	123	205	2-40 l/m	120°C

Complete unit with Pressure sensor installed on main inlet. Retrofit your existing flow regulators with FloSense today.

Material:
Flow modules: DZR Brass / nickel plated / Cover: stainless steel.

Flow	Standard Sensor
Measuring range	0.5-10 l/min (0.13-2.64 gpm)
	1-20 l/min (0,27-5,2 gpm)
	2-40 l/min (0,53-10,4 gpm)
Accuracy	(± 1 o) in water, ± 1% FS

FLOW

Temperature	Standard Sensor
Measuring range	0-120°C (32-248°F)
Accuracy	15-90°C (59-194°F) ± 0.5 K
	0-120°C(32-248°F) ± 1 K

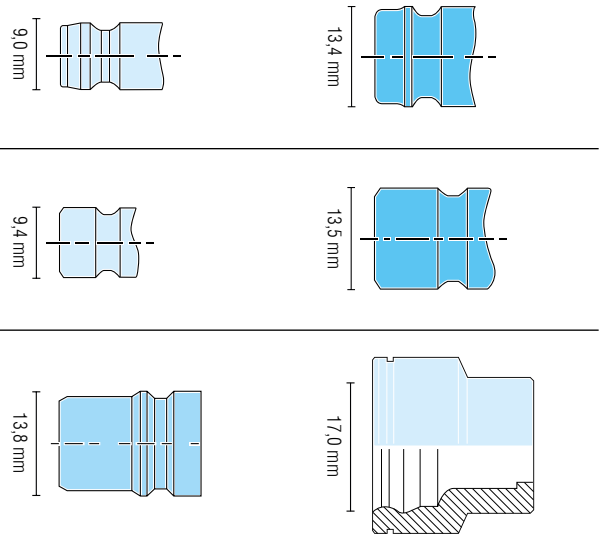
TEMPERATURE

Pressure	Standard Sensor
Measuring range	0-10 bar (0-145 psi)
Accuracy	± 2.5% FS

PRESSURE

Port Connector Plugs

Part No.	Connection	Size/series
09NRF	R 1/2"	09 EURO Style
13NRF	R 1/2"	13 EURO Style
20NRF	R 1/2"	20 Int. Style
30NRF	R 1/2"	30 Int. Style
08NRF	R 1/2"	French Type
F9NRF	R 1/2"	French Matic
06NRF	R 1/2"	06 Scandinavian Style
10MF	R 1/2"	10 mm Hosetail
13MF	R 1/2"	13 mm Hosetail
19MF	R 1"	19 mm Hosetail
25MF	R 1"	25 mm Hosetail
38MF	R 1"	38 mm Hosetail



Extension Cable



Part No.	Connection	Length (mm)
FS-3P-EC1000	M8/M8/3P	1000
FS-3P-EC2000	M8/M8/3P	2000
FS-3P-EC5000	M8/M8/3P	5000
FS-3P-EC10000	M8/M8/3P	10000

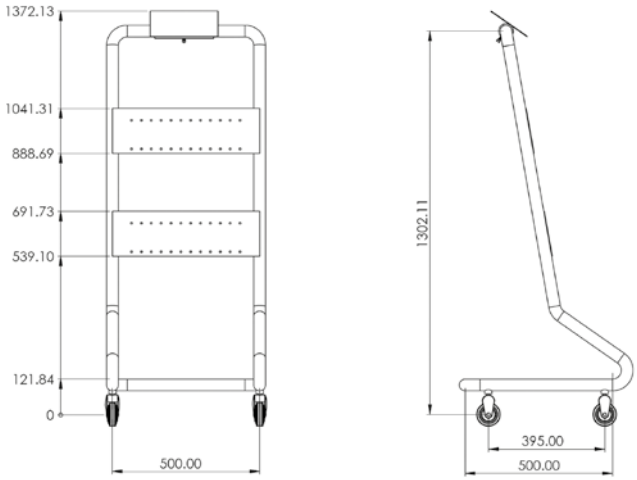
Blanking Plug



Part No.	Connection	Seal
SSEC1	1" BSPP	FKM
SSEC1-1/4	1/4" BSPP	FKM
DR1-1/2	1/2" BSPP	FKM

Flosense Cart





Part No.	# Manifolds	# Zones	Height (mm)	Width (mm)
FS-C-100	2	24	1400	500

Description
Flosense Cart ideal for flexible termal diagnostics. Equipped with wheels for easy mobility.
Material: Stainless Steel.

Note: The Cart is supplied without Flosense manifolds or Touch Screen.



FLOSENSE CART

DIGITAL FLOW METERS

Vortex Digital Single Zone Monitor





Part No.	Flow capacity	Connection	Voltage
SZ-120	1-20 l/m	G 1/2	18..30DC
SZ-240	2-40 l/m	G 1/2	18..30DC
SZ-5100	5-100 l/m	G 3/4	18..30DC

- Integrated temperature measurement
- Flow measurement
- Limit setting of flow and temperature
- Alarm output signal
- Rotatable display
- Temperature range from -10ºC to 90ºC

Material: Stainless steel body and connection
Pressure: 12 bar
Temperature: from -10 to +90 C°
Protection class: IP 65/IP67.

Wall Plug Power Supply



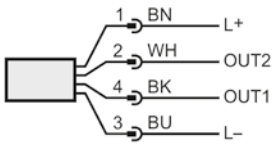


Part No.	Voltage input	Voltage output
SZ-P230	100-240V.	24 V.

Kit including: wall plug cable, power supply and M12 Connector cable.

Power and Data Cable M12

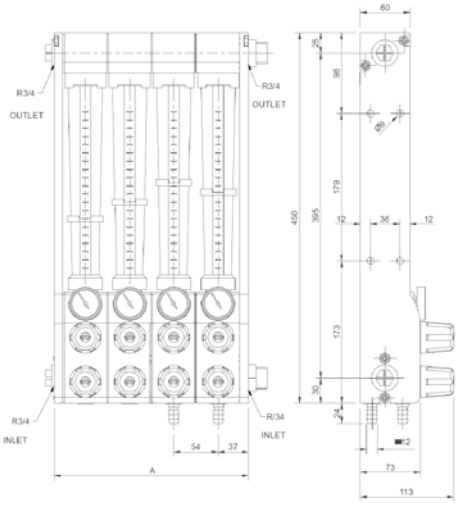




Part No.	Length	Connection	Voltage range
SZC-3000	3 m.	M12	24DC

Waterflow Regulator





Part No.	Main Connections inlet / oulet	Max.Temp.	Zones	Zone Connection	A (mm)
MPR02R	R 3/4"	90°C*	2	R 3/8"	126
MPR04R	R 3/4"	90°C*	4	R 3/8"	231
MPR06R	R 3/4"	90°C*	6	R 3/8"	339
MPR08R	R 3/4"	90°C*	8	R 3/8"	444
MPR10R	R 3/4"	90°C*	10	R 3/8"	552
MPR12R	R 3/4"	90°C*	12	R 3/8"	659

* Temperature vs Pressure: 8 bar 40ºC, 7 bar 60ºC, 5 bar 80ºC, 4 bar 90ºC

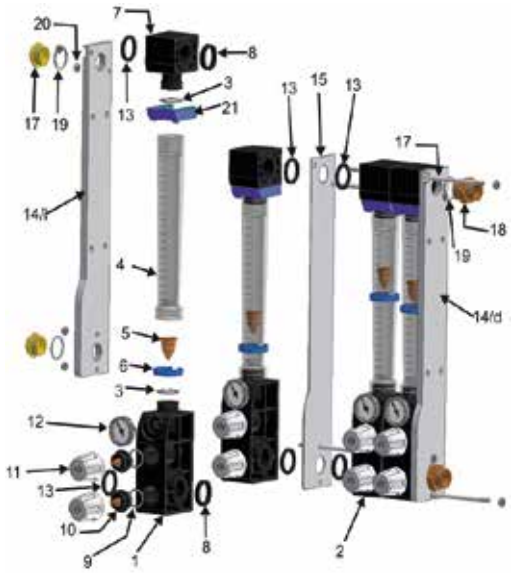
Water flow regulators are ideal for regulating the flow rate of water passing through them as well as the water outlet temperature.
The high quality construction and design make the unit one of the most competitive.

Note! Supplied without fittings

Technical characteristics

- The tube is made of Polyamide (standard).
- Zone Flow Capacity 0-18 L/M
- Interior and exterior bodies are made of PA 6 with 30% fibre glass.
- Brass regulating taps.
- Thermometers (standard).
- Stainless steel interior tie-rods.
- Vitrilic rubber o-rings (hardness: 70 SHA).

Spare Part List



No	Part No.	Description
1	MPR-S-1	Inferior body 3/8 BSP connections
2	MPR-S-2	Inferior body with pipes
3	MPR-S-3	Tube O-ring
4	MPR-S-4	Polyamide tube
5	MPR-S-5	Brass
6	MPR-S-6	Level clip
7	MPR-S-7	Superior body
8	MPR-S-8	Intermediate o-ring
9	MPR-S-9	Tap O-ring 21x3
9.1	MPR-S-9.1	Tap O-ring Ø6x2
10	MPR-S-10	Tap
11	MPR-S-11	Knob
12	MPR-S-12	Thermometer
13	MPR-S-13	End O-ring / left 28x35x3,5
14 d	MPR-S-14d	Right aluminium end plate
14 i	MPR-S-14i	Left aluminium end plate
15	MPR-S-15	Intermediate plate
17	MPR-S-17	Plastic cap
18	MPR-S-18	3/4" brass connector (optional)
20	MPR-S-20	Nut
21	MPR-S-21	Tube security clip
22	MPR-S-22	End O-ring / right 28x35x5,5

ANALOGUE FLOW METERS

Flow Indicator



Part No.	Flow Rate H^2O LPM Min	Max	Length	Ø mm	Thread	AF	Max Pressure (bar)
CFV1BN	1	10	59	25	1/4"	19	10
CFV2BN	2	20	71	30	3/8"	24	8
CFV3BN	3	30	71	30	1/2"	24	8
CFV4BN	4	40	106	47	3/4"	40	5
CFV5BN	6	60	106	47	1"	40	5

Use:
The CFV impeller flow indicators are generally used to monitor the correct flowing and circulation of a fluid into a pipeline. They are ideal for cooling and heating circuits, water treatment, and plastics processing equipment.

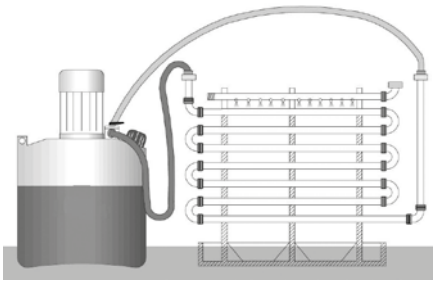
Note:
Flow rates refer to a vertical mounting with fluid inlet upwards.

Specifications:

Body:	Nickel-plated brass
Impeller:	Red Hostaform
Glass:	Pirex
Seals:	NBR
Max temperature:	90°C

De-Scaling Pump - With Flow Reverser





Part No.	Tank Capacity	Flow Rate	Reverse system	Fittings	HP
DP15M	15 l.	48 l/min.	Manual	1/2"	0,2
DP15A	15 l.	40 l/min	Automatic	1/2"	0,17
DP30M	24 l.	90 l/min.	Manual	1/2"	0,45
DP30A	24 l.	91 l/min.	Automatic	1/2"	0,45

Used for clearing blocked or badly corroded heating and cooling circuits on Injection Moulding Machines and Moulds. Even when not blocked a relatively thin layer of scale or corrosion can act as an insulator and have a huge impact on the efficiency of your circuit. Simply fill up the pump with the descaling fluid, connect the pump to the inlet and outlet of the circuit and turn on the pump. Regular reversal of flow direction, either manual or automatic, speeds up operation and assists in dislodging any solid matter present in pipework and cooling circuits.

By using the pump together with the recommended range of descaling fluids to remove both rust and limescale deposits. The descaling fluid contains a colour change indicator to monitor performance; the translucent tank means that the user can see when the red colour runs clear and is no longer effective. Use the neutralising fluid to create a pH neutral fluid which can be easily disposed of.

Easy, safe and professional maintenance of mould cooling circuits and temperature controllers

- Compact and portable
- Safe and easy to use
- Flow reversing system
- Full range of cleaning products available
- 4 models available to suit your application

Mould Cooling circuits which are corroded or partly blocked by scale cause:

- Reduced flow
- Reduced efficiency
- Longer cycle times
- Temperature problems
- Increased maintenance
- Faulty parts



Automatic Reverser



Manual Reverser



Cooling pipe with Scale build-up



Fig. 1 Clockwise circulation



Fig. 2 Counterclockwise circulation

DE-SCALING

De-Scaling Solution



Part No.		kg	Weight	Copper	Steel	Stainless Steel	Aluminium	Brass	Tin	Light alloys	Galvanised Iron
Descaling Chemicals											
RL10	Remover Liquid	10	10 kg	•	•			(•)			
RL10P	Remover Plus Liquid	10	10 kg	•	•			(•)			
RP10	Remover Plus Powder	10	10 kg			•	•	•	•	•	
Neutralizing Chemicals											
NP10	Neutralizer	10	10 kg	•	•	•	•	•	•	•	•

Remover Liquid
Concentrated descaling liquid with powerful reaction for systems and heat exchangers.

Remover Plus Liquid
Concentrated descaling liquid (non-fuming), with degreasing action, for systems and heat exchangers.

Remover Plus Powder
Concentrated descaling powder (non-corrosive, non-fuming) for systems and heat exchangers.

Neutralizer
Neutralizing powder to remove residual acidity after descaling systems and heat exchangers. Also suitable for neutralizing descaling chemicals after use, thus making it possible to drain them.

Pressure Test Unit



Part No.	Pressure (BAR)	Connection	Weight
MP-60	0-60	1/2 Female BSPP	5,5 kg

Pressure test unit - for easy leakage test of Mould circuits.
Supplied with connecting hose and water tank.

Corrosion, Scale and Biological Inhibitors



Performance Properties

Mouldpro Inhibitors have been specially formulated with Ethylene Glycol for use as an Industrial Grade additive for use in Mould Cooling and Heating systems.



ThermaFlo
DTX-25
Ethylene based

Optimum Flow:	Improved heat transfer characteristics, including; lower Dynamic Viscosity and higher Thermal Conductivity.	☒
Protection:	Contains synergistic corrosion inhibitors to protect metals commonly found in mould cooling systems.	☒
Biodegradable:	Mixtures are readily biodegradable (90% over ten days) and will not remain in the environment or bio-accumulate.	☒
Scale Protection:	Contains scale and biological inhibitors to help prevent fouling - thus promoting long operational life and high thermal efficiency.	☒
Non Toxic:	Has an toxicity rating: "Relatively Harmless" as confirmed by the Hodge & Sterner Scale.	☒

Part No.	Type	Temperature range	Container size
DTX-25	Ethylene	-50 to +140°C	25 Ltr

Refractometer



Part No.	Scale	Ethylen Glycol	Propylene Glycol	Accuracy
RFM-200ATC	Brix	Yes	Yes	±0,1%

Includes
Ethylene Glycol: -60°C - 0°C / 0-66.6%.
Propylene Glycol: -50°C - 0°C / 0-62.4%.
Simple, accurate and repeatable measurement of concentration of glycol antifreeze with Automatic. Temperature Compensation (ATC).
Includes calibration screwdriver, and case.

PH Test Paper - Alkaline Acid Indicator



Part No.	PH scale	Length	
DP-PH-PAPER	1-14	5 m.	1

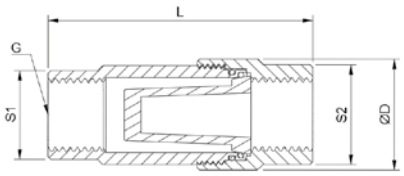
Alkaline Acid Indicator Meter- Ph Test Paper.
FEATURES: With Distinct Color PH Scale for Result Comparisons. The Test Strip Color Changes Must Be Matched with the PH Scale Color Chart Within About 15 Seconds. Quick and Easy to Use. Provides Reliable and Accurate PH Readings. Easy to Carry. Appropriate for Testing Alkaline or Acid Level of Any Liquid.
Scale Reads From 0 to 14: 0 - 3 Indicates a Very Acidic Substance 4 - 6 Indicates an Acidic Substance 7 Indicates Neutral 8 - 11 Indicates Alkalinity 12 - 14 Indicates a Very High Level of Alkalinity

Inline filters specially designed for cooling channels or core cooling channels. The filter cartridge removes dirt particles, rust, or scale deposits.
The temperature filter is made of stainless steel and brass.
Easy maintenance of the filter:

1. Separate the 2 housing parts
2. Clean filter in an ultrasonic bath
3. Re-assemble the 2 housing parts

Inline Filter





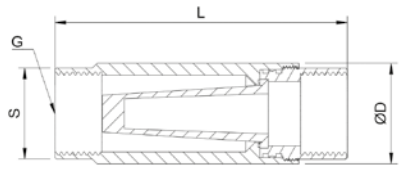


Part No.	Ø D	G	S1	S2	L	Filter area mm²
ILF-R1/4	20	1/4" BSP	16	18	48	660

Spare filter: SF-R1/4

Inline Filter



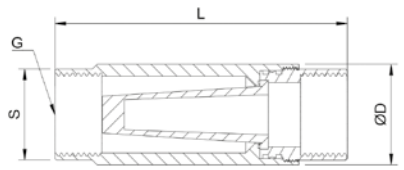


Part No.	Ø D	G	S	L	Filter area mm²
ILF-R3/4	32	3/4" BSP	29	93,5	2500

Spare filter: SF-R3/4

Inline Filter - with Maintenance Indicator







Part No.	Ø D	G	S	L	Filter area mm²
ILF-R3/4-M	32	3/4" BSP	29	93,5	2500

Spare filter:	SF-R3/4
Pressure loss:	10-15%
Operating temperature:	Max 140 degrees
Max. Pressure:	8 bar
Pore size (filter):	100 μm
Material:	Stainless steel
Seals:	FKM

Stainless Steel In-Line FIlter - MPF-80-200

Base Unit

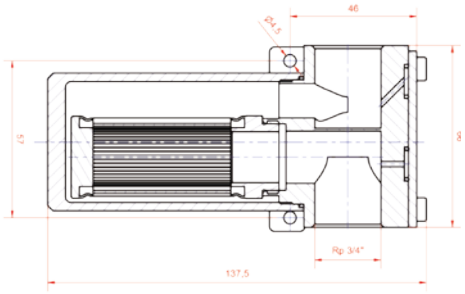
Part No.
MPF-80-200



Maintenance indicator (optional)

Part No.
MPF-M





Dirt particles in coolants often result in blockages in small cooling channels and can render mould inserts useless. This maintenance friendly Mouldpro stainless steel in-line filter MPF-80-200 offers superior low cost protection against foreign body particles, in particular for conformal cooling channel of injection moulding tools.

The filter can be flanged to the mould or operated in conjunction with temperature control units.

Sure protection of your temperature cooling channels

High filter performance is based on a starshaped folded stainless steel sieve that prevents the ingress of all particles of >200 μm into the cooling channel.

Versatile use

The filter is suitable for use with water- or oil-based coolants with a flow volume of up to 80 l/min and offers versatile application possibilities within a temperature range of -10 to 260°C.

Simple maintenance

A maintenance friendly concept allow easy removal of the filter insert, which can be cleaned with compressed air, in an ultrasound bath or by means of a high pressure cleaner. The filter housing remains in the system circuit.

The MPF-80-200 can be supplied with an optional maintenance indicator.

All advantages at a glance:

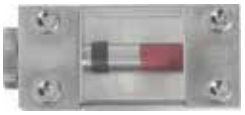
- Low cost with high filter performance
- Simple maintenance and cleaning
- Suitable for high flow volumes
- Large temperature range





Filter insert

Part No.
MPF-F



Maintenance indicator

Part No.
MPF-M

O-Ring

Part No.
MPF-O

Technical data	
Material	Stainless steel 1.4305
Connection thread	G 3/4“
Coolant	Water / oil
Pressure range	PN 16
Operating temperature	-10°C / 260°C
Seal	PTFE
Dimensions	76 x 56 x 131 mm (L x W x H)
Weight	approx. 1.3 kg

Design according to:
Pressure Equipment Directive 97/23/EU, pressure equipment type acc. to Art.
1: container, fluid acc. to Art. 9: group
2: others acc. to Art. 3, para.
3: good engineering practice, suitable for max. 1,000 full cycle motions.

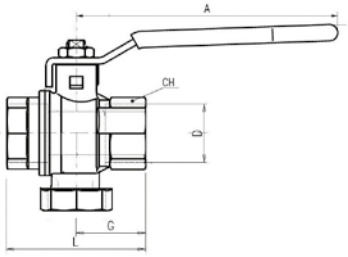
Filter insert	
Material	Stainless steel 1.4305, adhesive-free, rolled
Mesh width	200 μm
Filter surface	approx. 150 cm²
Connection	Thread connector
Dimensions	Ø 32 X 76 mm

Maintenance indicator (optional)	
Principle	Differential pressure measurement
Seal	PTFE O-ring
Dimensions	45 x 30 x 66 mm (L x W x H)

O-Ring	
Material	PTFE
Dimensions	Ø 45 X 1.5 mm

Ball Valve with Integrated Filter



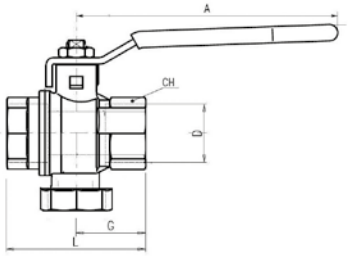




Part No.	D	L	G	A	CH
BVF1/2	1/2"	50,7	26,7	100	25
BVF3/4	3/4"	61,3	32,3	100	31
BVF1	1"	70,1	35,6	100	38
BVF1-1/4	1.1/4"	85	45	158	48
BVF1-1/2	1.1/2"	97,5	52	158	54
BVF2	2"	117	63	158	66

Ball Valve with Integrated Filter and Magnet







Part No.	D	L	G	A	CH
BVFM3/4	3/4"	61,3	32,3	100	31
BVFM1	1"	70,1	35,6	100	38
BVFM1-1/4	1.1/4"	85	45	158	48
BVFM1-1/2	1.1/2"	97,5	52	158	54
BVFM2	2"	117	63	158	66

Quality:
- Substitutes 3 different components (2 ball valves and one filter)
- Reduces leakage risks due to lower sealing points
- Cost saving due to reduced number of components
- Time saving at installation and maintenance
- Built-in vertical filter with cartridge structure in AISI304 + Nylon (filtration degree: 500 microns / 35 mesh). Size ½" has a central rib to ease filter extraction.
- Final test conforming with UNI EN 12266-1 points A3 / A4 (for 1.½" and 2" sizes: acc. to directive 2014/68/UE)
- No metal-to-metal moving parts
- Handle clearly shows ball position
- Chrome plated brass ball for longer life
- Handle stop on body to avoid stress at stem

Body
- Hot forged sand blasted, external nickel plated brass body and cap sealed with L octite® or equivalent thread sealant
- Finest brass according to EN 12165 and EN 12164 (formerly DIN 17660 and UNI 5705-65) specifications
- Bottom plug for an easy filter maintenance

Stem
- Blowout-proof unplated brass stem
- Two O-rings at the stem (FKM + NBR) for maximum safety

Sealing
- Pure PTFE seats

Threads
- ISO 228 parallel female by female threads

Flow
- Nominal port

Handle
- Zinc plated steel handle with plastic dip coating
- WARNING: do not exceed reasonable temperature and/or electrical load

Magnet
- Neodymium (12.000 gauss) NdFeB

Working pressure & temperature
- 30 Bar (450 PSI) non-shock cold working pressure for sizes ½" to 1", 20 Bar (290 PSI) for sizes 1.¼" to 2"
- -20°C / +150°C (-4°F / +300°F)
- WARNING: freezing of the fluid in the installation may severely damage the valve

PED directive
- According to 2014/68/UE, 1.¼" and superior sizes cannot be used with dangerous fluids

Cost Saving Solution

BVF Filter Valve substitues traditional Y Strainers combined with 2 ball valves.



- Full port
- Low pressure drop
- Assembly space and time very limited
- Easy to be cleaned and maintained
- All impurities gather inside the filter
- Maximum pressure 30 bar (PN30)
- Increased filter quality with cartridge structure for all sizes. Filter for size 1/2" will have a central rib to ease filter extraction

03.
CONSUMABLES

110 MOULD CLEANING



114 MOULD RELEASE



116 MOULD PROTECT



118 MOULD LUBRICANT



120 NANO MOLD COATING



122 PURGING COMPOUND



123 ABSORBENTS





MOULD CLEANERS

MOULD CLEANING

Mould Cleaner/Degreaser



CLEAN

Part No.	Description	Size	
MCD501	Mould Clean - Fast drying	500 ml / 18 oz	12

Cleaning agents remove plastic residue from moulds and dies including residues caused by cracking, for example. They provide for time-saving production processes, for dimensional accuracy of plastic parts and mouldings, for flawless surface structure and also preserve machine components.

Features
- Degreaser for removing oil, grease and wax residues from moulds.
- Supplied in aerosol form, all aerosols are free of fluorocarbons.

Mould Cleaner/Degreaser



CLEAN

Part No.	Description	Size	
MCD501FG	Mould Clean - Fast drying	500 ml / 18 oz	12

Cleaning agents remove plastic residue from moulds and dies including residues caused by cracking, for example. They provide for time-saving production processes, for dimensional accuracy of plastic parts and mouldings, for flawless surface structure and also preserve machine components.

Features
- Degreaser for removing oil, grease and wax residues from moulds.
- Supplied in aerosol form, all aerosols are free of fluorocarbons.

Mould Citrus Cleaner/Degreaser



CLEAN

Part No.	Description	Size	
MCD551	Citrus Degreaser - Slow drying	500 ml / 18 oz	12

Citrus Based Solvent Degreaser. High performance citrus based cleaning solvent. An ideal alternative to traditional chlorinated or highly volatile solvent cleaners. Slow drying which allows maximum cleaning results.

Features
- Natural based, high performance cleaner/ degreaser.
- Fully biodegradable.
- Deep penetrating action.
- Classified as non-flammable.
- Safe on metals and most plastics.
- Effective on a wide range of soiling such as oil, grease, tar, bitumen, silicones, rubber-based adhesives, oil-based paints, inks and dye.
- Pleasant orange Citrus odour.

Mould Cleaner/Polymer Remover



CLEAN

Part No.	Description	Size	
MPR501	Mould Clean Polymer Remover	500 ml / 18 oz	12

Cleaning agents remove plastic residue from moulds and dies including residues caused by cracking, for example. They provide for time saving production processes, for dimensional accuracy of plastic parts and mouldings, for flawless surface structure and preserve machine components.

Features
- Designed to remove polymer deposits, plastic, antisoluble resins, grease and oils.
- Water soluble.
- Highly active organic cleaner.
- Supplied in aerosol form, all aerosols are free of fluorocarbons.

Heavy Duty Polymer Remover



CLEAN

Part No.	Description	Size	
MPR502FG	Heavy Duty Mould Clean Polymer Remover	500 ml / 18 oz	12

Heavy Duty Cleaning agents remove plastic residue from moulds and dies including residues caused by cracking, for example. They provide for time saving production processes, for dimensional accuracy of plastic parts and mouldings, for flawless surface structure and preserve machine components.

Features

- Designed to remove polymer deposits, plastic, antisoluble resins, grease and oils.
- Water soluble.
- Highly active organic cleaner.
- Supplied in aerosol form, all aerosols are free of fluorocarbons.

Anti-Static Surface Foam Cleaner



CLEAN

Part No.	Description	Size	
MFC501	Foam Cleaner	500 ml / 18 oz	12

Mouldpro Foam Cleaner is a unique anti-static foaming cleaner based on a blend of surfactants, solvents, inhibitors and water.

Features

- Unrivalled in performance.
- Quickly and easily removes all types of dirt, grease, stains, soiling and other contamination from hard surfaces.

Anti-Static Surface Foam Cleaner



CLEAN

Part No.	Description	Size	
MFC502FG	Foam Cleaner	500 ml / 18 oz	12

Mouldpro Foam Cleaner is a unique anti-static foaming cleaner based on a blend of surfactants, solvents, inhibitors and water.

Features

- Unrivalled in performance.
- Quickly and easily removes all types of dirt, grease, stains, soiling and other contamination from hard surfaces.

Mould Polish



POLISH

Part No.	Description	Size	
MCP080	Mould Polish Paste	80 ml.	1

This superior, quality Mould polish is perfect for cleaning and polishing steel moulds. It safely and easily removes oxidation, corrosion, stains, and rust. It produces a brilliant reflective luster and leaves an invisible protective coating to ensure a long-lasting shine.

CLEANING WIPES

Mould Cleaner Wipes



Part No.	
WMC80	1

Mould Cleaner Wipes are specifically developed for cleaning and degreasing of mould surfaces.

Features
- Ultra-low linting non-abrasive wipe.
- Leaves no residues.
- Supplied in tub of 80 wipes.

Rust Remover Wipes



Part No.	
WRR80	1

A tough textured wipe impregnated with citric acid cleaners to remove rust and other oxides from ferrous metal surfaces. Using a non-hazardous chemical and a tough, textured wipe material the product provides an effective alternative to traditional hazardous nitrate based chemicals used for rust removal.

Features
- Supplied in tub of 80 wipes.

Multi Wipes



Part No.	
WMW100	1

Ideal for the quick and easy clean-up of hands, tools and machine surfaces. The heavy duty Multi Wipe material is impregnated with a hi-tech cleaning solution that contains antibacterial properties for fast removal of dirt, oil, grease, adhesives, varnishes, scuff marks, wet paint, mastic and expanding foam. Multi Wipes combine high performance with minimal hazard to the user and the environment.

Features
- Contains no white spirits or other harmful solvents.
- Wipes contain antibacterial properties certified to BSEN1276 Standard.
- Supplied in tub of 100 wipes.



MOULD RELEASE

MOULD RELEASE

Mould Release, Silicone Free



RELEASE

Part No.	Description	Size	
MRN501	Mould Release Silicone free	500 ml / 18 oz	12

Universal release agent on a base of synthetic oils.

Features
- A high quality proven release agent that ensures trouble free moulding.
- Saves time, shortens cycle times, reduces scrap and is gentle on dies and moulds.
- Suitable for thermoplastic or thermoset moulding.

Mould Release, Silicone



RELEASE

Part No.	Description	Size	
MRS501	Mould Release Silicone	500 ml / 18 oz	12

Universal release agent on a base of silicone.

Features
- A high quality proven release agent that ensures trouble free moulding.
- Saves time, shortens cycles times, reduces scrap and is gentle on dies and moulds.
- Suitable for thermoplastic or thermoset moulding.

Mould Release, Silicone Free



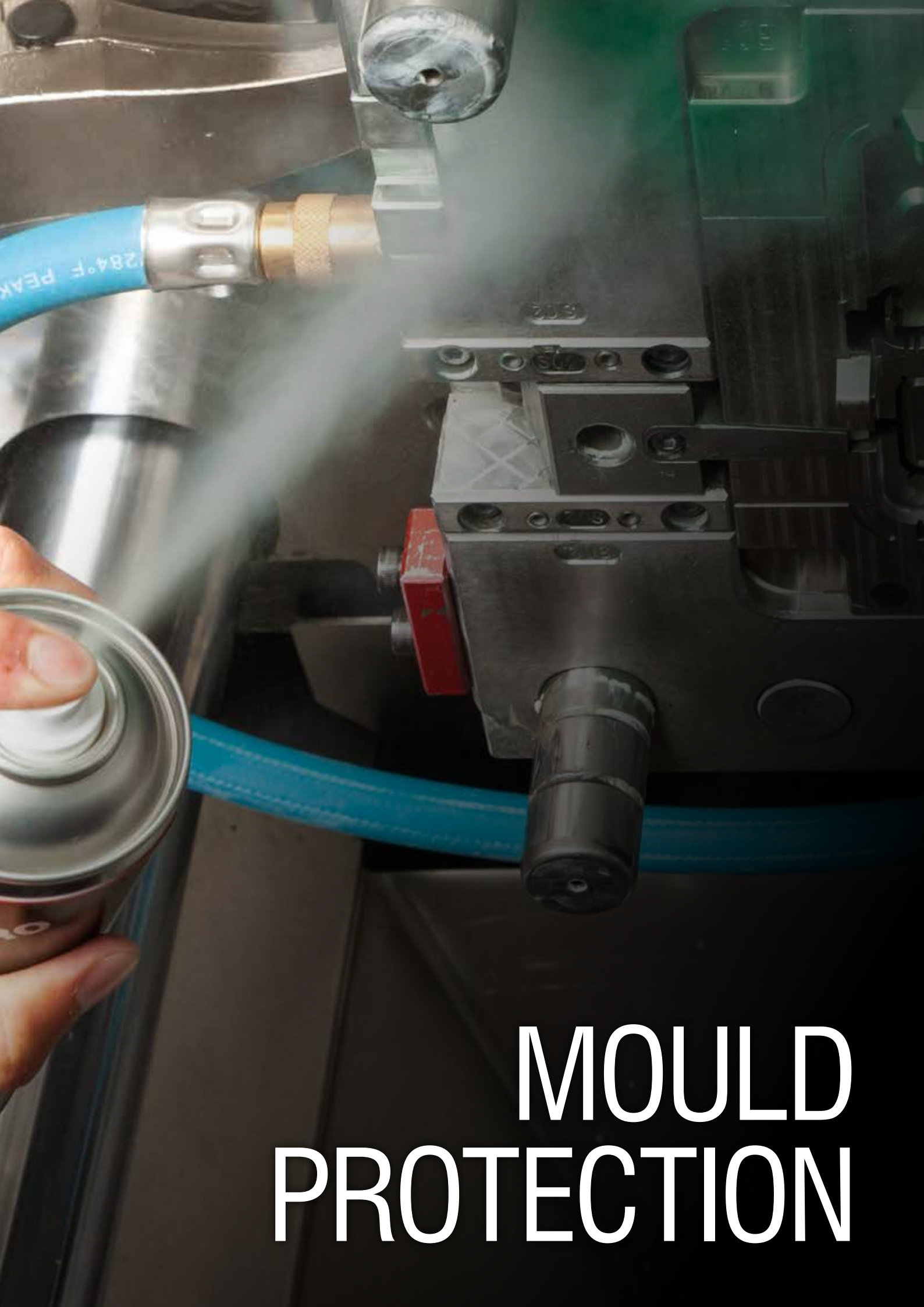
RELEASE

NSF

Part No.	Description	Size	
MRN501FG	Mould Release Silicone free	500 ml / 18 oz	12

Universal release agent on a base of silicone.

Features
- A high quality proven release agent that ensures trouble free moulding.
- Saves time, shortens cycles times, reduces scrap and is gentle on dies and moulds.
- Suitable for thermoplastic or thermoset moulding.



MOULD PROTECTION

MOULD PROTECTION

Mould Protect, Green



PROTECT

Part No.	Description	Size	
MPG501	Mould Protect Green	500 ml / 18 oz	12

Anti-corrosion agents provide dismantled dies, moulds and parts with long-term protection against corrosion. This ensures that your mould is always ready for use, maintaining value and efficiency.

Features
- Wax-type anti-corossion agents - it is not necessary to remove the protective film prior to use.
- This agent does not creep.
- Supplied in aerosol form, free from fluorocarbons.

Mould Protect Wax, Clear



PROTECT

Part No.	Description	Size	
MPW501	Mould Protect Clear	500 ml / 18 oz	12

Anti-corrosion agents provide dismantled dies, moulds and parts with long-term protection against corrosion. This ensures that your mould is always ready for use, maintaining value and efficiency.

Features
- Wax-type anti-corrossion agents - it is not necessary to remove the protective film prior to use.
- This agent does not creep.
- Supplied in aerosol form, free from fluorocarbons.

Mould Protect, Blue



PROTECT NSF

Part No.	Description	Size	
MPB501FG	Mould Protect Blue	500 ml / 18 oz	12

Anti-corrosion agents provide dismantled dies, moulds and parts with long-term protection against corrosion. This ensures that your mould is always ready for use, maintaining value and efficiency.

Features
- Wax-type anti-corossion agents - it is not necessary to remove the protective film prior to use.
- This agent does not creep.
- Supplied in aerosol form, free from fluorocarbons.

Mould Protect Wax, Clear



PROTECT NSF

Part No.	Description	Size	
MPW501FG	Mould Protect Clear	500 ml / 18 oz	12

Anti-corrosion agents provide dismantled dies, moulds and parts with long-term protection against corrosion. This ensures that your mould is always ready for use, maintaining value and efficiency.

Features
- Wax-type anti-corossion agents - it is not necessary to remove the protective film prior to use.
- This agent does not creep.
- Supplied in aerosol form, free from fluorocarbons.



MOULD LUBRICANTS

MOULD LUBRICANTS

Ejector Pin Lubricant



LUBRICATE

Part No.	Description	Size	
MEL501	Ejector Pin Lubricant	500 ml / 18 oz	12

Non-soiling lubricants that keep moving parts running smoothly and prevent damage due to breakage and seizing. For Slides and Ejector Pins.

Features
- Thin-film lubrication, long-term action, good protection from corrosion.
- Application temperature range : -30ºC - +150ºC.
- Supplied in aerosol or paste form, all aerosols are free of fluorocarbons.

Maintenance Lubricant



LUBRICATE

Part No.	Description	Size	
MWD501	Maintenance Lubricant	500 ml / 18 oz	12

A multi-purpose product for lubricating, cleaning, dewatering, penetrating and corrosion protection. Can be used in endless applications on all metallic surfaces including moulds, chains, gears, tools, etc.

Features
- Long lasting lubrication moisture displacement.
- Forms a temporary anti-corrosion coating.
- Penetrates rust and corrosion.
- Contains PTFE for improved lubrication and load resistance.

Ejector Pin Lubricant



LUBRICATE

NSF

Part No.	Description	Size	
MLF501FG	Ejector Pin Lubricant	500 ml / 18 oz	12

Non-soiling lubricants that keep moving parts running smoothly and prevent damage due to breakage and seizing.

Features
- For Slides and Ejector Pins.
- Thin-film lubrication, Food Grade, long term action, good protection from corrosion.
- Operating Temperature - up to 260°C.

Spray Can Holder



Part No.	Number of cans	Length	
MCH02	2	170 mm	1
MCH03	3	250 mm	1
MCH04	4	330 mm	1

Material: Stainless Steel

Ejector Pin Lubricant - Food Grade



LUBRICATE

NSF

Part No.	Description	Size	
MLF500FG	Ejector Pin Grease	0,5 kg	1

Non-soiling lubricants that keep moving parts running smoothly and prevent damage due to breakage and seizing.
For Slides and Ejector Pins. Thin-film lubrication, Food Grade, long term action, good protection from corrosion.
Operating Temperature - up to 260 C.

Ejector Pin Lubricant - Food Grade



LUBRICATE

NSF

Part No.	Description	Size	
MLF080	Ejector pin Grease	80 ml.	1

Non-soiling lubricants that keep moving parts running smoothly and prevent damage due to breakage and seizing.

Features
- For Slides and Ejector Pins.
- Thin-film lubrication, Food Grade, long term action, good protection from corrosion.
- Operating Temperature - up to 260°C.

Copper Anti-Seize Assembly Compound



LUBRICATE

Part No.	Description	Size	
MCS500	Copper Assembly Compound	0,5 kg	1

Mouldpro Copper Anti-Seize ensures rapid and easy assembly of threaded parts. It allows correct torque to be applied by eliminating thread interference.
Mouldpro Copper Anti-Seize paste prevents seizing and galling and gives quick and easy breakout of threads, gaskets and packings even after long exposure to high temperature, corrosive conditions or extreme surface pressures. It also reduces wear in areas of high friction. Temperature up to 1.100°C.

Copper Anti-Seize Assembly Compound



LUBRICATE



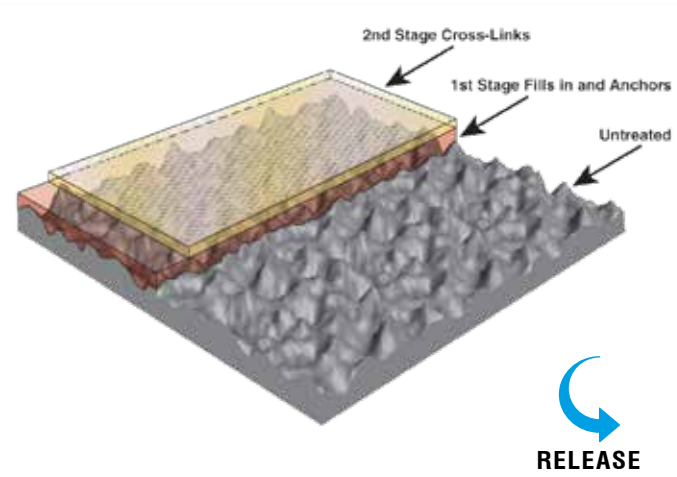
Part No.	Description	Size	
MCS080	Copper Assembly Compound	80 ml.	1

Mouldpro Copper Anti-Seize ensures rapid and easy assembly of threaded parts. It allows correct torque to be applied by eliminating thread interference.

Features
- Prevents seizing and galling.
- Gives quick and easy breakout of threads, gaskets and packings even after long exposure to high temperature, corrosive conditions or extreme surface pressures.
- Reduces wear in areas of high friction.

NANO MOULD COATING

NanoMoldcoating®





Type	HC-Heat Cure	"HCF-Heat Cure FDA Compliant"	QC-Quick Cure	"QCru-Quick Cure Rubber"	"QCsi-Quick Cure Silicone"
Part No.	HC-5ml	HCF-5ml.	QC	QCRU	QCSI
Excellent Release	•	•	•	•	•
Thermoplastics all grades	•	•	•		
Rubber				•	
Silicone					•
Cure time 10-15 min.			•	•	•
Cure time 3-4 hours.	•	•			
Cured with hot air	•	•			
Cured by heating mould			•	•	•
Application on cold surface	•	•			
Application on heated surface			•	•	•
Bonds on pre-treated surfaces			•	•	•
Multiple coats are possible	•	•	•	•	•
Solvent Carrier	•	•			
Water Carrier			•	•	•
Polymer film	•	•			
Flouropolymer film			•	•	•
Up to 500K Cycles	•	•	•	•	•
May require frequent reapplication			•	•	•
Temperatures up to 250°C	•	•	•	•	•
Temperatures up to 540°C	•	•			
Bottle net volume	5ml.	5ml.	60ml.	60ml.	60ml.

Benefits for your Production

- Up to 500,000 cycles per coating
- Reduces cycle times, increases productivity & eliminates sticking
- In-house/Self applied application
- Improves part quality
- Improves part finish by eliminated dragging and stretching
- Reduces moulding pressure and temperature
- Reduction in part weight due to lower packing pressures
- Does not migrate to part surface
- Can be used for virtually any moulded material
- Kits include everything for the application
- Non-toxic



Changing Colour?

MOULDPRO PURGING COMPOUNDS

Benifits:

Universal Application
Mouldpro offers cleaning compounds for any polymer application. Choose between Ready-to-use or pure Concentrate.

Econonmical and Effecient
All our cleaning compounds offer best cleaning process and lowest cleaning price.

ASK ONE OF OUR PURGING EXPERTS TODAY FOR MORE INFORMATION

PURGING COMPOUND

Purging Compound





Part No.	Product	Size	Injection Moulding	Blow Moulding	Pass filter	Hot runner suitable	NSF registered	Polyolefins	PS	SAN, ABS, ASA	PVC	PTFE, PVDF	PMMA	POM	PA6, PA66, PA610, PA11, PA12	PC, PC/ABS	PET, PBT	PPO, PEEK, PPS, PES, PSU, LCP	CA, CAB, CP	TPU,TPE	Temperature range high 300C	Temperature range 120-300C
MC200	MasterClean	20 kg	•	□	•	•	•	•	•	•	○	•	•	•	•	○	•		•	•	□	•
MP1X	MultiPurge	1 kg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MP5X	MultiPurge	5 kg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MP10X	MultiPurge	10 kg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MP20X	MultiPurge	20 kg	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Ready to use Compounds. Safe and fast cleaning of screws, cylinders and nozzles.

• Highly recommended
○ Medium recommended
□ Suitable

MasterClean

Ready-to-use granular purging compound for the cleaning of screws, cylinders, machine nozzles and hot runners.

Features

- Quick Colour Changes
- Quick Material Changes
- Effective removal of Carbon (Black Spots)
- Effective Shut Down Medium for Heat Sensitive Materials

Benefits

- Easy to Use – Follow the simple Instructions.
- Reduced Downtime – Fast and Effective Operation means faster changeovers.
- Non Abrasive – Our purging compound is a high grade polymer with additives containing no abrasives.
- Clean – A high quality product that generates No Smoke, Vapour or Odours during operation.
- Economical – Only a small amount of purging compound is required this combined with Fast and Effective Operation means lower downtime and increases productivity.
- NSF registered.

MultiPurge

MultiPurge is a cleaning compound concentrate in pellets, which can be mixed (10%) with any type of virgin thermoplastics, especially engineered to clean barrel, screw, nozzle and hot runners from carbon residuals, deposits, incrustations in changing colour and material.

ONE Purge Agent for ALL Polymers!
By mixing with virgin materials, the original temperature settings can be used to ensure optimized cleaning conditions.

- Temperature range: 80°C up to 420°C.
- MultiPurge is odorless, non-toxic; it doesn't contain solvents and it isn't abrasive.
- All components of MultiPurge are qualified as Generally Recognized as Safe (GRAS) by FDA.
- MultiPurge is environmentally safe.
- MultiPurge is EXTREMELY economical.
- NSF registered.

Maintenance Socks





Part No.	Size	Pack Absorbency	
MMS120DB	8cm x 120cm	75L	1

Features
- Suitable for oil and water
- Size, 8cm x 120cm
- Pack absorbency, 75l
- 15 Socks

Maintenance Roll





Part No.	Size	Pack Absorbency	
MMR46DB	38cm x 46m	76L	1

Features
- Suitable for oil and water
- Size 38cm x 46m
- Pack absobency 76l
- 1 roll

Maintenance Pads





Part No.	Size	Pack Absorbency	
MMP100DB	40cm x 50cm	85L	1

Features
- Suitable for oil and water
- Size, 40cm x 50cm
- Pack absorbency, 85l
- 100 Pads

04.
TEMPERATURE CONTROL

125 HOT RUNNER CONTROLLER



126 HEATER BANDS



129 THERMOCOUPLES



131 CONNECTORS



142 CABLE GLANDS



143 CABLES



145 CABLE CUTTER AND STRIPPER



146 THERMOMETERS



148 THERMAL CAMERAS



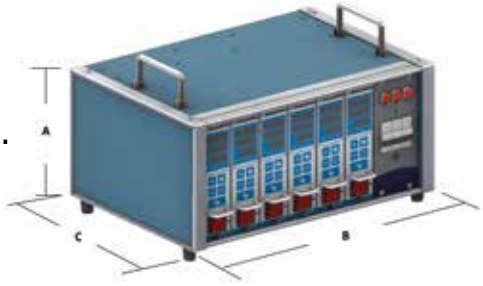
The advanced modules which include current monitoring as standard have the following features:



- Dehumidying Soft Start
- Triple-line LED display
- Auto / Manual Output Function
- PID Auto Tune Temperature Control
- Max Current Output 15A
- Current Measurement Display
- Power Output Percentage Display
- Thermocouple J/K Type
- Temperature scale °F/°C Switchable
- Selectable Alarm Modes
- Phase Angle Output Mode
- Zero Cross output Mode
- Fuse Failure Indicator
- Heater Break Detection
- Power Frequency Auto-Detection (50/60Hz)
- Thermocouple Failure Detection
- Thermocouple Reverse Detection
- Current Monitoring Display
- Alarm Output Option
- RS485 Output Option

Hot Runner Controller Units

Modular Hot Runner Controllers comprising a range of robust steel mainframe cabinets supplied complete with Industry Standard control modules.





- 380-400VAC/3Phase/N/Earth
- CE Marked
- Supplied Complete with 3m Cable Set

Part No.	Number Zones	Cabinet Dimensions A	B	C	Cable/Connector	Connectors Lever Type
HRC001	Single Zone	188	96	248	1 x 4 pin	Single
HRC002	2 Zones	215	224	299	1 x 16 pin	Double
HRC004	4 Zones	215	325	299	1 x 16 pin	Double
HRC006	6 Zones	215	427	299	1 x 24 pin	Double
HRC008	8 Zones	215	529	299	2 x 16 pin	Double
HRC012	12 Zones	215	733	299	2 x 24 pin	Double

Module



Part No.	Number Zones	A	B
HRM15C	Single Zone	176	50

HEATER BANDS

Nozzle Heater Selection Guide



Mouldpro offers two types of nozzle band heaters, for reliable and powerful heating of the nozzles on injection moulding machines.
Both heater types are CE marked and made of premium quality materials.

	NHB Type	Z17 Type
		
Application		
Wattage Load	6 W/cm²	8 W/cm²
Working Temperatures	370°C	400°C
Standard Voltage feeding	230 V.	230 V.
Cable Type	SS-Bipolar	SS-Bipolar+ Earth
Cable Length	1000 mm.	1000 mm.
Cable Exit	Super Flex	45°
Insulation	Mica	Mica
Sealed construction	No	Yes
Lifetime	√	√√√

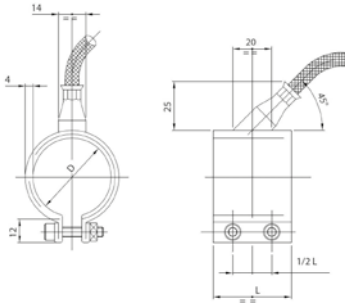
The NHB Type is normally used when space around the nozzle is limted (near gate or hotrunners) and the flexible cables allows compact installation.The electric connection between the heater and the feeding cables is integrated into the internal heating element.

The high quality Stainless Steel sealed heater is the perfect solution, when high performance and power is required. The Z17 heaters are made of Stainless Steel Tube which ensures a solid construction and is resistant to corrosive action and and hermetically sealed to avoid any plastic seepage.

Stainless Steel Nozzle Heaters

STAINLESS STEEL





Part No.	Ø ID	Length	Watt
Z17025030	25	30	130
Z17030020	30	20	100
Z17030025	30	25	130
Z17030030	30	30	170
Z17030035	30	35	200
Z17030040	30	40	230
Z17035025	35	25	160
Z17035030	35	30	200
Z17035035	35	35	240
Z17035040	35	40	270
Z17035045	35	45	310
Z17040020	40	20	160
Z17040025	40	25	190
Z17040030	40	30	230
Z17040035	40	35	270
Z17040040	40	40	310
Z17040045	40	45	350
Z17045025	45	25	210
Z17045030	45	30	260
Z17045035	45	35	310
Z17045040	45	40	350
Z17045045	45	45	400
Z17045050	45	50	450
Z17045055	45	55	490
Z17050020	50	20	190
Z17050025	50	25	240
Z17050030	50	30	290
Z17050035	50	35	340
Z17050040	50	40	390
Z17050050	50	50	500
Z17050060	50	60	600
Z17055020	55	20	210
Z17055025	55	25	270
Z17055030	55	30	320
Z17055035	55	35	380
Z17055040	55	40	430
Z17055050	55	50	540
Z17060020	60	20	230
Z17060025	60	25	290
Z17060030	60	30	350
Z17060035	60	35	410
Z17060040	60	40	470
Z17060050	60	50	600
Z17060060	60	60	720
Z17065020	65	20	250
Z17065025	65	25	320
Z17065030	65	30	380
Z17065035	65	35	450
Z17065040	65	40	520
Z17065050	65	50	650

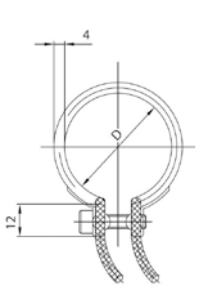
Part No.	Ø ID	Length	Watt
Z17070020	70	20	270
Z17070025	70	25	340
Z17070030	70	30	410
Z17070035	70	35	490
Z17070040	70	40	560
Z17070050	70	50	700
Z17070060	70	60	840
Z17075020	75	20	290
Z17075025	75	25	370
Z17075030	75	30	440
Z17075035	75	35	520
Z17075040	75	40	560
Z17075050	75	50	750
Z17075060	75	60	900
Z17080020	80	20	310
Z17080025	80	25	390
Z17080030	80	30	470
Z17080035	80	35	560
Z17080040	80	40	640
Z17080050	80	50	800
Z17080060	80	60	960
Z17085020	85	20	330
Z17085025	85	25	420
Z17085030	85	30	500
Z17085035	85	35	590
Z17085040	85	40	680
Z17085050	85	50	850
Z17085060	85	60	1020
Z17090020	90	20	350
Z17090025	90	25	440
Z17090030	90	30	540
Z17090035	90	35	630
Z17090040	90	40	720
Z17090050	90	50	900
Z17090060	90	60	1080
Z17095020	95	20	370
Z17095025	95	25	470
Z17095030	95	30	570
Z17095035	95	35	660
Z17095040	95	40	760
Z17095050	95	50	950
Z17095060	95	60	1150
Z17100020	100	20	380
Z17100025	100	25	500
Z17100030	100	30	600
Z17100035	100	35	700
Z17100040	100	40	800
Z17100050	100	50	1000
Z17100060	100	60	1200

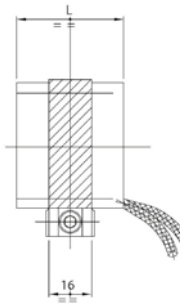
Sealed nozzle heater high Wattage.
Supplied with 1000 mm Lead.
230 V. Working Temperature max 380/400°C.

HEATER BANDS

Mica Nozzle Heaters





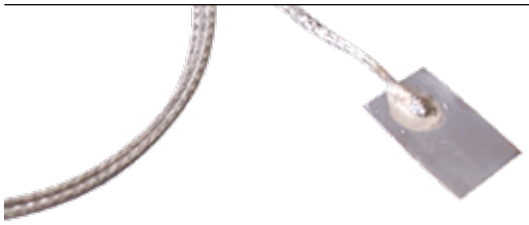


Part No.	Ø ID	Length	Watt
NHB25x25	25	25	120
NHB25x30	25	30	120
NHB25x32	25	32	120
NHB25x35	25	35	130
NHB25x38	25	38	140
NHB25x40	25	40	150
NHB25x45	25	45	165
NHB25x50	25	50	180
NHB30x25	30	25	120
NHB30x30	30	30	130
NHB30x32	30	32	140
NHB30x35	30	35	150
NHB30x38	30	38	160
NHB30x40	30	40	175
NHB30x45	30	45	200
NHB30x50	30	50	220
NHB32x25	32	25	115
NHB32x30	32	30	140
NHB32x32	32	32	150
NHB32x35	32	35	160
NHB32x38	32	38	175
NHB32x40	32	40	180
NHB32x45	32	45	200
NHB32x50	32	50	230
NHB35x25	35	25	130
NHB35x30	35	30	150
NHB35x32	35	32	160
NHB35x35	35	35	175
NHB35x38	35	38	190
NHB35x40	35	40	200
NHB35x45	35	45	225
NHB35x50	35	50	250

Part No.	Ø ID	Length	Watt
NHB38x25	38	25	140
NHB38x30	38	30	160
NHB38x32	38	32	170
NHB38x35	38	35	190
NHB38x38	38	38	200
NHB38x40	38	40	225
NHB38x45	38	45	270
NHB38x50	38	50	275
NHB40x25	40	25	140
NHB40x30	40	30	175
NHB40x32	40	32	180
NHB40x35	40	35	200
NHB40x38	40	38	220
NHB40x40	40	40	230
NHB40x45	40	45	250
NHB40x50	40	50	280
NHB45x25	45	25	160
NHB45x30	45	30	185
NHB45x32	45	32	200
NHB45x35	45	35	225
NHB45x38	45	38	200
NHB45x40	45	40	250
NHB45x45	45	45	275
NHB45x50	45	50	325
NHB50x25	50	25	180
NHB50x30	50	30	220
NHB50x32	50	32	235
NHB50x35	50	35	250
NHB50x38	50	38	280
NHB50x40	50	40	300
NHB50x45	50	45	325
NHB50x50	50	50	375

Mica insulated heater, Supplied with 1000 mm Lead 230 V.
Working Temperature max 350/370°C.

Thermocouple Leaf Type



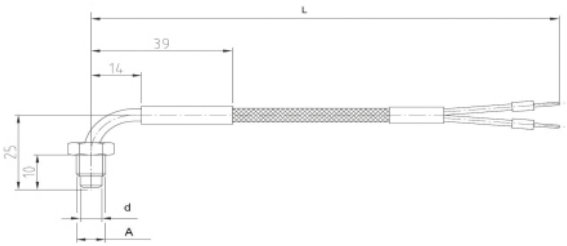


Part No.	Length	Width	Type	Leads
TLC	20	10	J	1000 mm

Thermocouple leaf type, ideal for nozzle bands.
Leads: 1000 mm.

Threaded Type



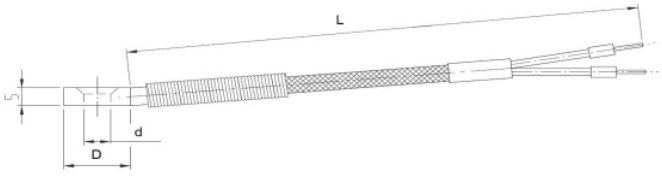


Part No.	d	D	L
MTT602000	6	M8x1	2500

Fe-CuNi, Type J, max temperature 400°C.

Surface Washer Type



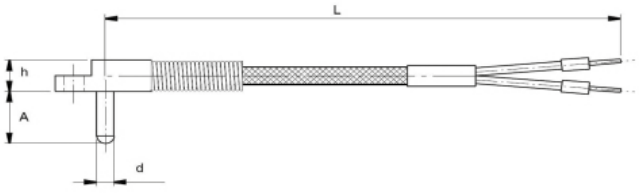


Part No.	d	D	L
MTS602000	6,5	16	2500

Fe-CuNi, Type J, max temperature 400°C.

Pin Type





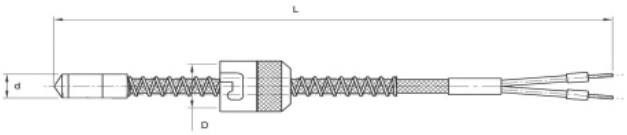
Part No.	d	A	h	L
MTP402000	4	12	8	2500

Fe-CuNi, Type J, max temperature 400°C.

THERMOCOUPLES

Bayonet - 2 pins



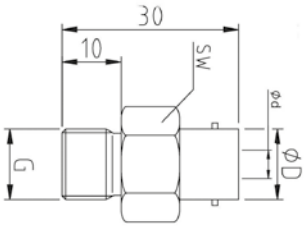


Part No.	d	D	L
MTB48102000	4,8	11	2500
MTB60102000	6	11	2500
MTB60122000	6	12,8	2500
MTB60142000	6	15	2500
MTB80122000	8	12,8	2500
MTB80142000	8	15	2500

Fe-CuNi, Type J, max temperature 400°C.

Adaptors

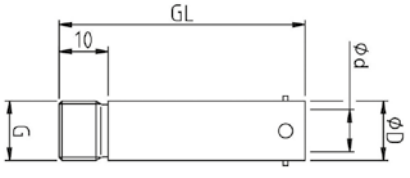




Part No.	øD	ød	SW	G
MTA12M10X1	12	7,1	17	M10x1
MTA12M12X1	12	8,2	16	M12x1
MTA12M12X1,75	12	8,2	16	M12x1,75
MTA12M14x1,5	12	8,2	16	M14x1,5
MTA12G3/8	12	8,2	17	G3/8
MTA14M10X1	14	7,1	17	M10x1
MTA14M12X1	14	8,2	17	M12x1
MTA14M12X1,75	14	8,2	17	M12x1,75
MTA14M14X1,5	14	8,2	17	M14x1,5
MTA14G1/4	14	8,2	17	G1/4
MTA14G3/8	14	8,2	17	G3/8

Extended Adaptors





Part No.	øD	ød	G	GL
MTG10M10X1	10	7,1	M10x1	30
MTG10M10X1,5	10	7,1	M10x1,5	30
MTG10G1/8	11	6,3	G1/8	30
MTG12M10X1	12	7,1	M10x1	50
MTG12M10X1,5	12	7,1	M10x1,5	50
MTG12M12X1	12	8,2	M12x1	50
MTG12M12X1,75	12	8,2	M12x1,75	50
MTG12M14X1,5	12	8,2	M14x1,5	50
MTG14M12X1	14	9	M12X1	50
MTG14M14x1,5	14	9	M14x1,5	50

Multipole Connectors



131 SQUARE CONNECTORS



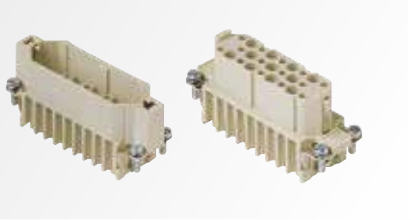
132 NARROW CONNECTORS



135 STANDARD CONNECTORS



139 HIGH DENSITY CONNECTORS



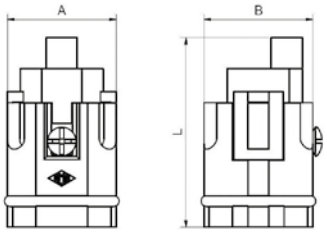
High quality connectors, compatible with Industry Standard (equivalent products from other manufacturers)

- CE marked
- UL/CSA approved
- Quality Screw terminals
- Cost efficient
- Full range
- Protection standard: IP20
- Seals: NBR
- Temperature range: 125°C (CK type only 100°C)

SQUARE CONNECTORS

Inserts Male

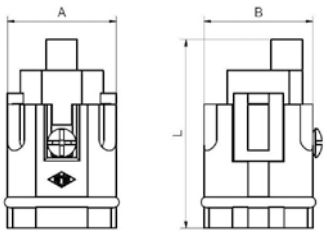




Part No.	# Poles	A	B	L
CKM03	3+E	21	21	30,5
CKM04	4+E	21	21	36,5

Inserts Female

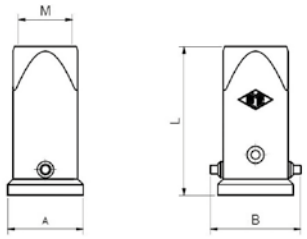




Part No.	# Poles	A	B	L
CKF03	3+E	21	21	30,5
CKF04	4+E	21	21	36,5

Straight Hood

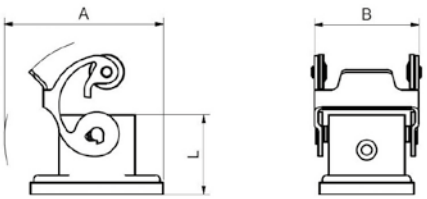




Part No.	# Poles	Levers	A	B	L	M
MKAV20	3/4+E	Single	28	33,5	60,5	M20

Panel Mount Base

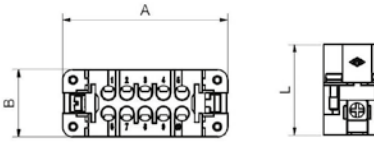


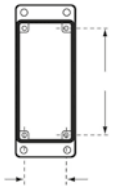


Part No.	# Poles	Levers	A	B	L
CKAX03I	3/4+E	Single	57,5	32	24

Inserts Male, Screw Terminals



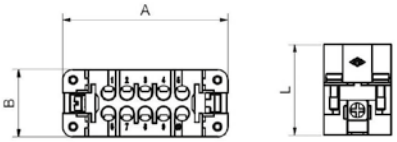


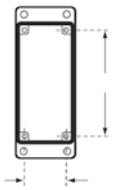


Part No.	# Poles	A	B	L	Size
CDAM10	10 Pole	56,5	23	31	49.16
CDAM16	16 Pole	73	23	31	66.16

Inserts Female, Screw Terminals



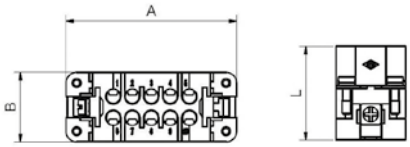


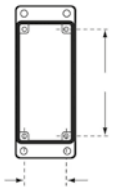


Part No.	# Poles	A	B	L	Size
CDAF10	10 Pole	56,5	23	31	49.16
CDAF16	16 Pole	73	23	31	66.16

Inserts Male, Screw Terminals



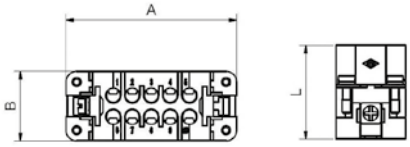


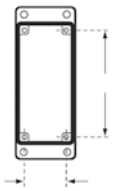


Part No.	# Poles	Pin #	A	B	L	Size
CDAM16	16 Pole	1-16	73	23	31	66.40
CDAM16N	16 Pole	17-32	73	23	31	

Inserts Female, Screw Terminals





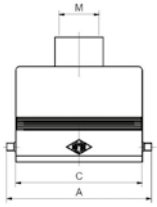


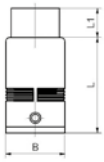
Part No.	# Poles	Pin #	A	B	L	Size
CDAF16	16 Pole	1-16	73	23	31	66.40
CDAF16N	16 Pole	17-32	73	23	31	

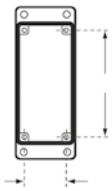
NARROW CONNECTORS

Top Entry Hood, Single Lever





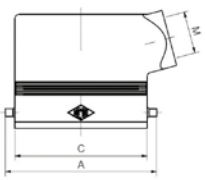


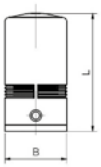


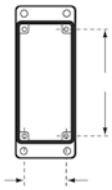
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MZAV15L20	10 Pole	Single	72	36	63	64,5	14,5	M20	49.16
MZAV25L20	16/25 Pole	Single	88,5	36	79,5	70,5	14,5	M20	66.16
MZAV25L25	16/25 Pole	Single	88,5	36	79,5	70,5	14,5	M25	66.16

Side Entry Hood, Single Lever





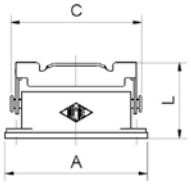


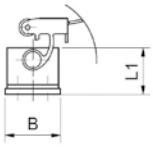


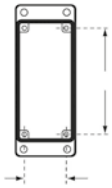
Part No.	# Poles	Levers	A	B	C	L	M	Size
MZO15L20	10 Pole	Single	72	29,4	63	55,9	M20	49.16
MZO25L25	16 Pole	Single	88,5	29,4	79,5	55,9	M25	66.16

Panel Mount Housing, Single Lever





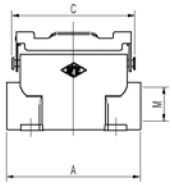


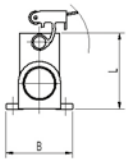


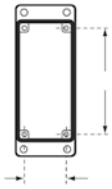
Part No.	# Poles	Levers	A	B	C	L	Size
CZI15L	10 Pole	Single	83	32	76	44	49.16
CZI25L	16/25 Pole	Single	98	32	93	44	66.16

Surface Mount Housing, Single Lever





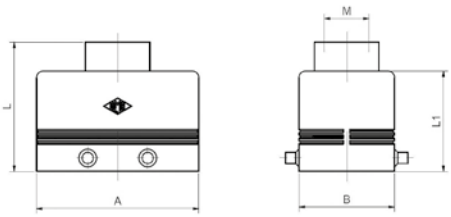


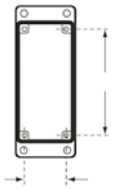


Part No.	# Poles	Levers	A	B	C	L	M	Size
MZP15L25	10 Pole	Single	85	50	76	52	M25	49.16
MZAP25L25	16/25 Pole	Single	101	50	93	57	M25	66.16

Top Entry Hood, Double Lever



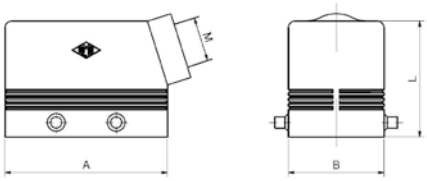


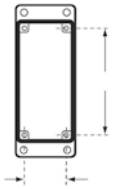


Part No.	# Poles	Levers	A	B	L	L1	M	Size
MAV50.32	32 Pole	Double	82	56	90,5	75	M32	66.40

Side Entry Hood, Double Lever



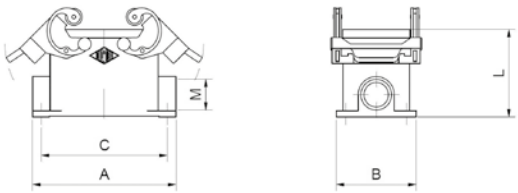


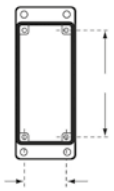


Part No.	# Poles	Levers	A	B	L	M	Size
MAO50.32	32 Pole	Double	82	56	75	M32	66.40

Surface Mount Base, Double Lever



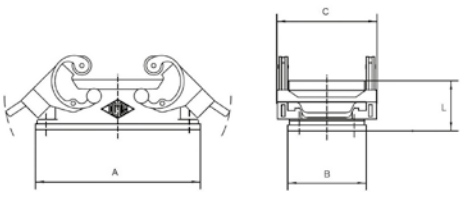


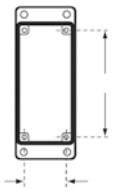


Part No.	# Poles	Levers	A	B	C	L	M	Size
MHP50.32	32 Pole	Double	106	57,3	94	82	M32	66.40

Panel Mount Base, Double Lever





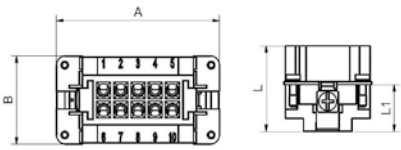


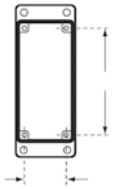
Part No.	# Poles	Levers	A	B	C	L	Size
CHI50	32 Pole	Double	104	58,5	71	29	66.40

STANDARD CONNECTORS

Inserts Male



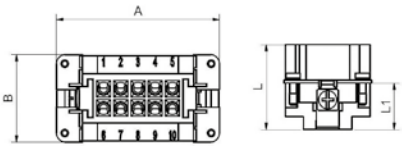


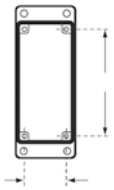


Part No.	# Poles	A	B	L	L1	Size
CNEM06T	6 Pole	50	34	33	18	44.27
CNEM10T	10 Pole	63,4	34	33	18	57.27
CNEM16T	16 Pole	83,5	34	33	18	77.27
CNEM24T	24 Pole	110,3	34	33	18	104.27

Inserts Female



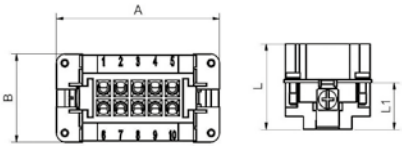


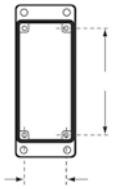


Part No.	# Poles	A	B	L	L1	Size
CNEF06T	6 Pole	50	34	33	18	44.27
CNEF10T	10 Pole	63,4	34	33	18	57.27
CNEF16T	16 Pole	83,5	34	33	18	77.27
CNEF24T	24 Pole	110,3	34	33	18	104.27

Inserts Male



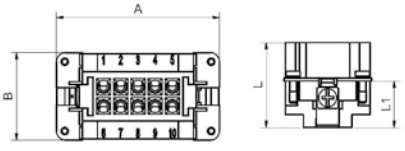


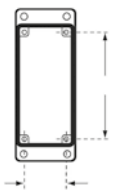


Part No.	# Poles	Pin #	A	B	L	L1	Size
CNEM16T	16 Pole	1-16	83,5	34	33	18	77.62
CNEM16TN	16 Pole	17-32	83,5	34	33	18	
CNEM24T	24 Pole	1-16	110,3	34	33	18	104.62
CNEM24TN	24 Pole	17-32	110,3	34	33	18	

Inserts Female



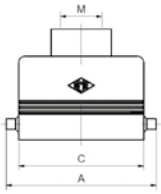


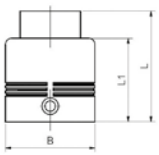


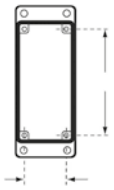
Part No.	# Poles	Pin #	A	B	L	L1	Size
CNEF16T	16 Pole	1-16	83,5	34	33	18	77.62
CNEF16TN	16 Pole	17-32	83,5	34	33	18	
CNEF24T	24 Pole	1-24	110,3	34	33	18	104.62
CNEF24TN	24 Pole	25-48	110,3	34	33	18	

Top Entry Hood, Single Lever





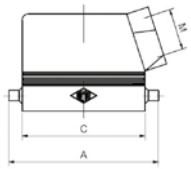


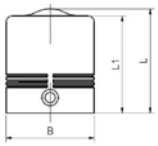


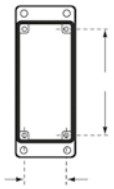
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MHV06L20	6 Pole	Single	72	43	60	53	40	M20	44.27
MHV10L20	10 Pole	Single	87	43	73	58	45	M20	57.27
MHV16L25	16 Pole	Single	108	43	93,5	58	45	M25	77.27
MHV24L32	24 Pole	Single	135	43	120	68	55	M32	104.27
MHV48L32	48 Pole	Single	150,5	90	121	121	98	M40	104.62

Side Entry Hood, Single Lever





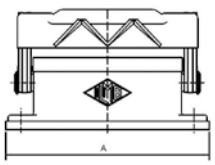


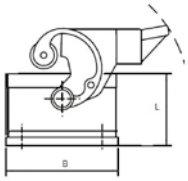


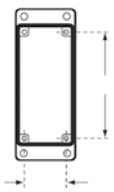
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MHO06L20	6 Pole	Single	73	43	60	50,4	47	M20	44.27
MHO10L20	10 Pole	Single	87	43	73	52	49	M20	57.27
MHO16L25	16 Pole	Single	108	43	93,5	63	60	M25	77.27
MHO24L32	24 Pole	Single	135	43	120	63	60	M32	104.27
MHO48L32	48 Pole	Single	150,5	90	121	98	118	M40	104.62

Panel Mount Base, Single Lever







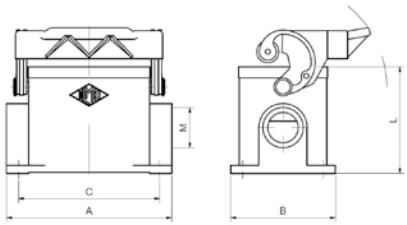


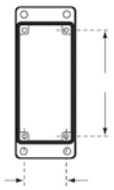
Part No.	# Poles	Levers	A	B	L	Size
CHI06L	6 Pole	Single	82,5	45,5	29	44.27
CHI10L	10 Pole	Single	95,5	45,5	29	57.27
CHI16L	16 Pole	Single	115,5	45,5	29	77.27
CHI24L	24 Pole	Single	142,5	45,5	29	104.27
CHI48L	48 Pole	Single	167,5	93	42	104.62

STANDARD CONNECTORS

Surface Mount Base, Single Lever



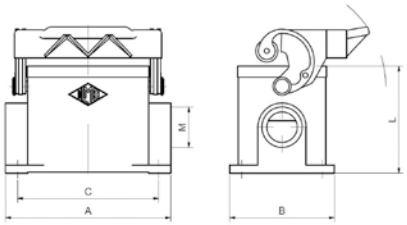


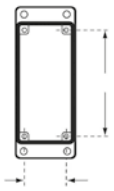


Part No.	# Poles	Levers	A	B	C	L	M	Size
MHP06L20	6 Pole	Single	82	52	70	53	M20	44.27
MHP10L20	10 Pole	Single	93,5	52	82	57	M20	57.27
MHP16L25	16 Pole	Single	117	57	105	63	M25	77.27
MHP24L25	24 Pole	Single	144	57	132	63	M25	104.27

Surface Mount Base, Single Lever and Cover



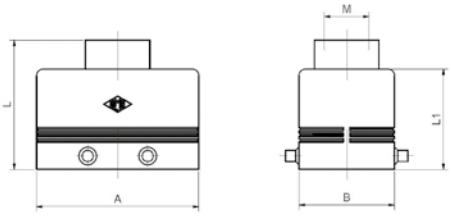


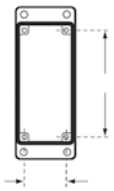


Part No.	# Poles	Levers	A	B	C	L	M	Size
MHP48LS40	48 Pole	Single	141	120	111	99	M40	104.62

Top Entry Hood, Double Lever



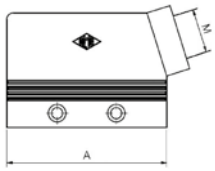


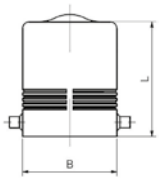


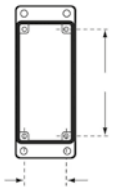
Part No.	# Poles	Levers	A	B	L	L1	M	Size
MHV10.20	10 Pole	Double	73	43	58	45	M20	57.27
MHV16.25	16 Pole	Double	93,5	43	58	45	M25	77.27
MHV24.32	24 Pole	Double	120	43	68	55	M32	104.27
MHV32.32	32 Pole	Double	93,5	82,5	117	94	M32	77.62

Side Entry Hood, Double Lever





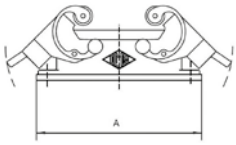


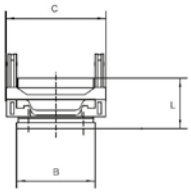


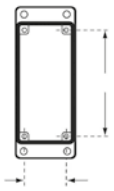
Part No.	# Poles	Levers	A	B	L	M	Size
MHO10.20	10 Pole	Double	73	43	52	M20	57.27
MHO16.25	16 Pole	Double	93,5	43	63	M25	77.27
MHO24.32	24 Pole	Double	120	43	63	M32	104.27
MHO32.32	32 Pole	Double	93,5	82,5	94	M32	77.62

Panel Mount Base, Double Lever





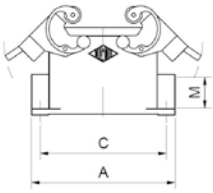


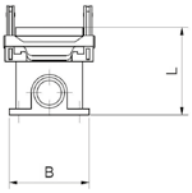


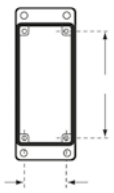
Part No.	# Poles	Levers	A	B	C	L	Size
CHI10	10 Pole	Double	95,5	45,5	58	29	57.27
CHI16	16 Pole	Double	115,5	45,5	58	29	77.27
CHI24	24 Pole	Double	142,5	45,5	58	29	104.27
CHI32	32 Pole	Double	126	45,5	98,5	35	77.62

Surface Mount Base, Double Lever





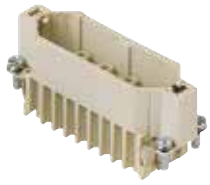


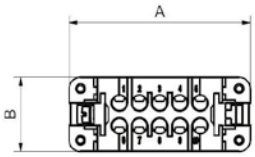


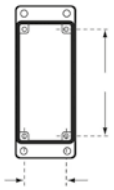
Part No.	# Poles	Levers	A	B	C	L	M	Size
MHP10.20	10 Pole	Double	93,5	52	82	57	M20	57.27
MHP16.25	16 Pole	Double	117	57	105	63	M25	77.27
MHP24.25	24 Pole	Double	144	57	132	63	M25	104.27
MHP32.40	32 Pole	Double	125	84	112	90	M40	77.62

HIGH DENSITY CONNECTORS

Inserts Male, 3 Row, High Density Crimp Terminal



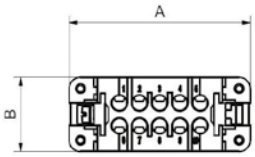


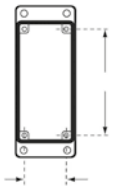


Part No.	# Poles	A	B	L	Size
CDM25	25 Pole	73	23	31	66.16

Inserts Female, 3 Row, High Density Crimp Terminal



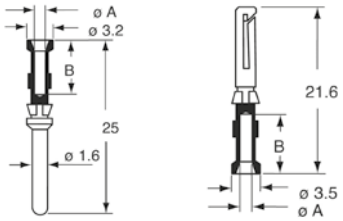




Part No.	# Poles	A	B	L	Size
CDF25	25 Pole	73	23	31	66.16

Crimp Pins

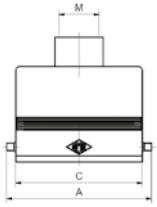


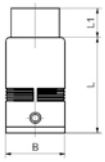


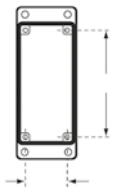
Part No.	Type	Wire Size	ø-A	ø-B
CDMA0.5	Male	0,5 mm²	1,1	8
CDFA0.5	Female	0,5 mm²	1,1	8
CDMA1.5	Male	1,5 mm²	1,8	8
CDFA1.5	Female	1,5 mm²	1,8	8

Top Entry Hood, Single Lever





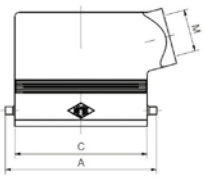


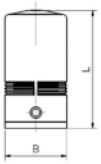


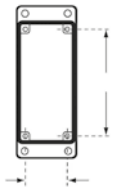
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MZAV25L20	16/25 Pole	Single	88,5	36	79,5	70,5	14,5	M20	66.16
MZAV25L25	16/25 Pole	Single	88,5	36	79,5	70,5	14,5	M25	66.16

Side Entry Hood, Single Lever





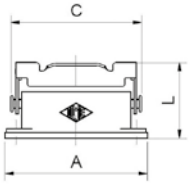


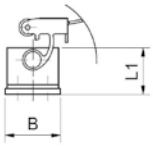


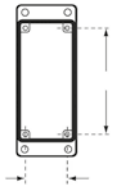
Part No.	# Poles	Levers	A	B	C	L	M	Size
MZO25L25	16/25 Pole	Single	88,5	29,4	79,5	55,9	M25	66.16

Panel Mount Housing, Single Lever





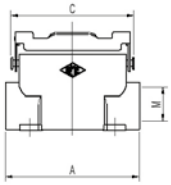


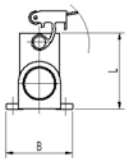


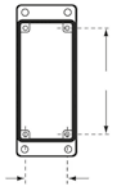
Part No.	# Poles	Levers	A	B	C	L	Size
CZI25L	16/25 Pole	Single	98	32	93	44	66.16

Surface Mount Housing, Single Lever







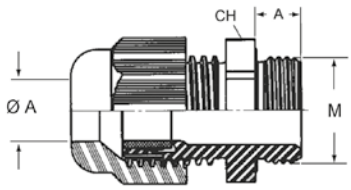


Part No.	# Poles	Levers	A	B	C	L	M	Size
MZAP25L25	16/25 Pole	Single	101	50	93	57	M25	66.16

CABLE GLANDS

Cable Glands Polyamide





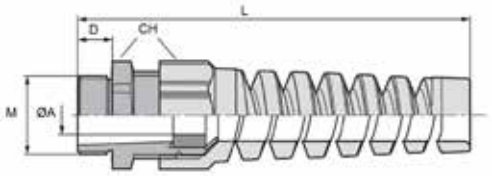
Part No.	Ø A (mm)	M	CH	A	
ASM20I	5-12,5	M20	24	10	1
ASM25I	9-18	M25	33	10	1
ASM32I	14-25	M32	42	10	1

A Polyamide based cable gland, designed for universal use.

Benefits
High oil-resistance for maximum reliability.
Permanent vibration protection.
Wide, variable clamping ranges.
Optimum strain relief.

Cable Glands Polyamide - with Spiral Strain Relief





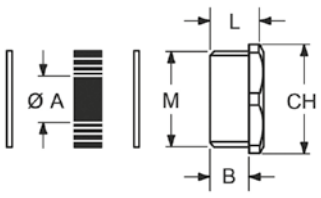
Part No.	Ø A (mm)	M	CH	L	D	
CGSS20	7-13	M20	24	101	8	1
CGSS25	9-17	M25	33	125	9	1
CGSS32	11-22	M32	42	149	10	1

Plastic cable gland with bending and anti-kink protection, to protect flexible cables, for moving machine parts.

Benefits
Reliable bending and anti-kink protection.
Cable conservation.
Functional reliability.
To protect flexible cables.

Cable Glands





Part No.	Ø A (mm)	M	CH	L	B	
AGM20T	6-10	M20	20	10,5	7,5	1
AGM25T	11-17	M25	25	11,5	8	1
AGM32T	19-24	M32	32	12	8	1

Metal cable gland with gasket to ensure sealed connection between cable and connector.

Benefits
IP65.
Temperature range: -25°C - +100°C.
Nickel plated brass gland.
Anti-ageing rubber gaskets.
Galvanised steel washers.

Powerflex Cable



Part No.	Zones	Cores	Coil Length
PF08	8	16+E	20m
PF12	12	24+E	20m

Multicore Power Cable.
1.5mm² 16A Cable.
Numbered Cores, Green/Yellow Earth.

Thermoflex Cable



Part No.	Zones	Cores	Coil Length
TF08	8	8 Pair+E	20m
TF12	12	12Pair+E	20m

Multi-core Thermocouple Cable.
Type J Fe/Cu-Ni, Twisted Pairs.
DIN Standard Colours (Black/White), Numbered Cores.
Screen and Earth.

Multiflex Cable



Part No.	Zones	Cores	Coil Length
MF06	6	12+E PWR / 6 Pair T/C	20m

6 Zone Combination power and thermocouple cable.
Extremely Flexible.
1.5mm² 16A Power Cable.
Type J Fe/Cu-Ni Thermocouple Cable, Twisted Pairs.
DIN Standard Colours (Black/White), Numbered Cores.
Screen and Earth.

CABLES

High Temperature Cable



Part No.	Zones	Cores	Coil Length
CAB-P325	1	2+E	25m

Power Cable for high temperature applications including extension of heater cables.
3 x 0,75 mm^2.
Nickel conductors, insulated with fiberglass impregnated in silicone resin.
Galvanized steel braiding.
Working Temperature: Max 320°C.

Thermocouple Cable Type J



Part No.	Zones	Cores	Coil Length
CAB-T225	1	2	25m

Thermocouple Cable Type J FeCuNi.
2 x 0,5 mm2 Black/White.
Stainless steel braiding.
Working Temperature: Max 250°C.

Cable Cutter





Part No.	Max Cut	Length	
CC-2200	60mm²	230 mm / 9”	1

- Made of high carbon steel
- Can cut 60mm² copper wire
- Heavy duty cable cutter
- Easy to cut hard cable
- Precision cutting edge
- Drop forged and heat treated, easy to hold
- Can crimp terminal
- Length: 230mm

Wire Stripper





Part No.	Max Cut	Length	
WS-1020	0,8-2,6	156 mm	1

- Length: 156mm
- Weight: 129g
- Material of stripper: SK7 High carbon steel
- Hardness: 48-51
- Material of handle: PVC
- For wires 0.8, 1, 1.3, 1.6, 2, 2.6 mm (AWG 20#, 18#, 16#, 14#, 12#, 10#)

THERMOMETERS

Thermometer Kit





Part No.	Temperature range
826-32	-50°C to + 1300°C

Single Input K-Type thermometers offer high accuracy and fast response times; ideal for plastics processors.
-50° to +1300°.
°C / °F Selectable.
Resolution: 0.1°C / 0.1°F.
Sampling rate of 2.5 times per second.
Auto Power Off.
Supplied with carry case, rubber holster & battery.
Kit Includes: Thermometer (Single Input), Case, Needle Point Penetration Probe, Right Angle Surface probe, Batteries.

Deluxe Thermometer Kit



Part No.	Temperature range
826-33	-50°C to + 480°C/1300°C

Dual Input K-Type thermometers offer high accuracy and fast response times; ideal for plastics processors.
50° to 1300°.
°C / °F Selectable.
Resolution: 0.1°C / 0.1°F.
Sampling rate of 2.5 times per second.
Auto Power Off.
Supplied with carry case, rubber holster & battery.
Kit Includes: Thermometer (Single Input), Case, Needle Point Penetration Probe, Right Angle Surface probe, Magnetic Surface Probe, Batteries.

Thermometer



Part No.	Input	Temperature range
DT6102K	Dual	-50°C to + 1300°C

Dual Input K-Type thermometers offer high accuracy and fast response times; ideal for plastics processors.
-50° to +1300°.
°C / °F Selectable.
Resolution: 0.1°C / 0.1°F.
Sampling rate of 2.5 times per second.
Auto Power Off.
Supplied with carry case, rubber holster, bead probe & battery.

Infrared and Probe Thermometer Kit





Part No.	Temperature range
826-31	-60°C to +480°C

Ideal for all temperature measurement requirements around the mouldshop this dual purpose infrared thermometer also has a Type K thermocouple input socket.
The kit is supplied in a case complete with penetration probe and 90° ribbon surface probe. Ideal for measuring surface temperature of moulded parts, mould surface temperature or melt temperature.
Range (Infrared) -60°C to +480°C.
Range (Thermocouple) -60°C to +480°C.
Backlit LCD display.
Laser Pointer.
Auto power off (60 secs).
Adjustable Emissivity.

Handheld 90 Degree Ribbon Surface Probe



Part No.	Type	Max Temp	Lead Type
TCP-RS90-K	K	500°C	Flexible

Handheld Pentration Probe



Part No.	Type	Max Temp	Lead Type
TCP-P-K	K	500°C	Flexible

Magnetic Surface Probe





Part No.	Type	Max Temp	Lead Type
TCP-R-M	K	500°C	Flexible

THERMAL CAMERAS

Used for a multitude of temperature related applications, you can use our highly durable, fast capturing imager to help troubleshoot any possible heating and cooling problems.

Point the camera at polymer melt to get an almost instantaneous reading or even take an image of the cooling hoses and quickly identify a 'cold' hose and a possible cooling issue.



DT-870

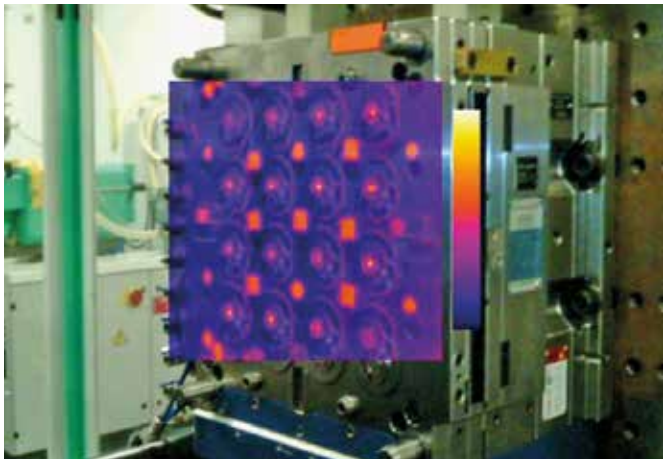
Bluetooth



DT-980

Bluetooth and WiFi





Specifications	DT-870	DT-980
Imaging and optical data		
IR resolution	80×80 pixels	80×80 pixels
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 8–14 μm	Uncooled microbolometer / 8–14 μm
Focal length	7.5mm.	9mm
Field of View (FOV)	21x 21°	17x17°
Minimum focus distance	0.5m	0.2m
Spatial resolution	4.53mrad	3.77mrad
Thermal sensitivity/NETD	<0.1°C/100mK	< 0.08°C /80mK
Image frequency	50Hz	50Hz
Focus	Focus Free	Manual
Zoom	-	1-32x continuous, digital zoom
Image presentation		
Display	2" TFT LCD, 240x320 pixels	2" TFT LCD, 240x320 pixels
Image modes	IR image	IR image, visual image, picture in picture, AUF
Picture in Picture	-	IR area on visual image
Color palettes	IRON/Rainbow/Grey/Grey Inverted	IRON/Rainbow/Grey/Grey Inverted
Measurement		
Object temperature range	–20 to 150°C 0 to 350°C extended to –20 to 650°C	–20 to 150°C 0 to 350°C extended to –20 to 650°C
Accuracy	±2°C or ±2% of reading	±2°C or ±2% of reading
Measurement analysis		
Spotmeter	Center Spot	Center Spot,Auto hot or cold markers
Set-up		
Language selection	English, Chinese, French, German, Spanish	
Storage of videos/images		
Inside Memory / Storage media	Internal Storage	100M bytes, 80pictures or one minute video record / 8G Micro SD card
Video storage format	-	Standard MPEG-4, 1280x960@30fps, on memory card > 60 minutes
Image storage format	Bitmap (BMP)	Standard JPEG, including measurement data, on memory card > 1000 pictures
Digital camera		
Built-in visible light digital camera	-	5 Megapixels; 59°
Data communication interfaces		
Interfaces &Video output	USB-micro	USB-micro, audio, HDMI
USB	Data	Data & Live video transform between camera and PC or smartphone
Bluetooth	Yes	Yes
WiFi		
Live video between device and PC	No	Yes
Transfer images and data to mobile devices	(Bluetooth only)	Yes
Battery / Input voltage / Laser		
	Li-ion battery, 4 hours operating time / DC 5V / < 1mW	

D-870 / D-980

Hand-held thermal imaging camera is designed to make your work easier by providing accurate, fast and reliable temperature measurement. Simple and easy to operate the camera uses point and shoot infrared technology to produce high-quality thermal images that are displayed on the TFT screen. 50Hz fast frame rate enables fast capture of temperature variation where critical temperature conditions are directly displayed with automatic hot/cold spot recognition. The camera has the ability for datalogging via the internal memory while Bluetooth connectivity allows the for easy transfer of data to the user's smartphone or Bluetooth device. The smart design is robust, compact and lightweight with the camera being able to withstand drops from up to 2m.

Thermal imaging cameras may be used for a multitude of temperature related applications; use the camera around the mouldshop to measure part ejection temperature, check heater-band temperatures and also troubleshoot possible cooling problems or dryer temperatures simply by measuring the hose temperature; these may not give exact readings but, are a great way to quickly identify possible problems and are an invaluable aid to process verification. The camera will quickly identify the temperature of polymer melt temperature – giving an almost instantaneous reading – in comparison a melt probe can take up to 30 seconds for the reading to stabilise.

The built-in LED flashlight is convenient when working in dark and unlit inspection environments.
8 hour battery life with the rechargeable battery and automatic shutdown.
Easy-to-use interface, this unit is ideal for monitoring process parameters, predictive maintenance, equipment troubleshooting and verification.
The compact, rugged and lightweight design allows for optimum portability and performance, even in harsh working conditions.

D-980

5 Megapixel built-in digital camera enables the overlaying of digital and thermal images as well as the more advanced fusion mode.
100Mb internal memory (80 Pictures JPEG / 1 minute of live video MPEG-4) or up to 60 minutes video using the 8GB micro SD Card,
Video output via USB or HDMI.
8 hour battery life with the rechargeable battery and automatic shutdown.
Easy-to-use interface, this unit is ideal for monitoring process parameters, predictive maintenance, equipment troubleshooting and verification.
The compact, rugged and lightweight design allows for optimum portability and performance, even in harsh working conditions.

Supplied with adaptor, battery, App software, USB cable and convenient carry case.

05.
MATERIAL HANDLING

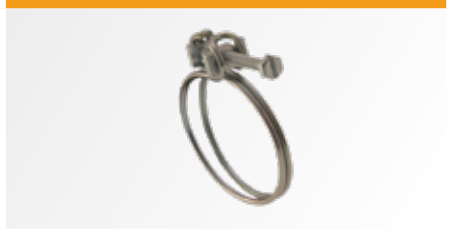
151 LOADER HOSES



153 HOT AIR HOSES



154 HOSE CLAMPS



155 CAMLOCK COUPLINGS ALUMINUM



159 HOPPER MAGNETS



159 MATERIAL SCOOPS

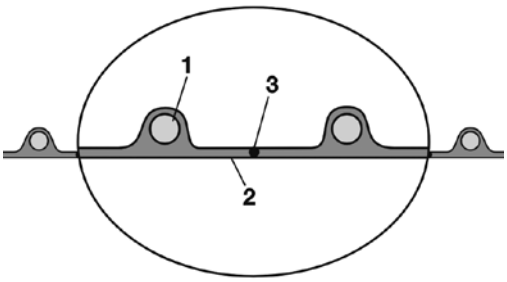


160 BALANCES AND MOISTURE ANALYSER



Anti-Static PU Hose/PVC Helix





Part No.	Ø ID (mm)	Ø OD (mm)	Min Wall thickness (mm)	Bending Radius (mm)	Roll Length (m)	Wire Clip Ref
PUP25	25	31	0.5	17,5	10	3030200
PUP32	32	38	0.5	19	10	3030218
PUP38	38	44	0.5	31,0	10	3030242
PUP40	40	47	0.5	40,0	10	3030242
PUP45	45	51	0.5	42,5	10	3030250
PUP50	50	58	0.5	45,0	10	3030285
PUP60	60	71	0.5	50,0	10	3030306
PUP64	64	74	0.5	49	10	3030306

Applications:
Flexible hose/ ducting for abrasive granulate and powder.

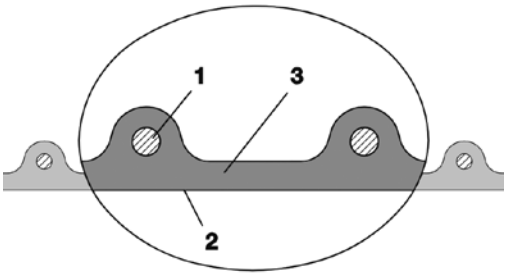
Properties:
- Light weight.
- Abrasion-resistant.
- Microbe resistant.
- Good resistance to chemicals.
- Phthalate-free.
- Grounding wire for discharging of electrostatic charging.

Temperature range:
-20°C to 70°C.
Short time to 80°C.

Design, Material:
1. hard plastic spiral integrated in wall, spiral: rigid PVC.
2. smooth interior, wall: permanently antistatic premium ester-polyurethane (Pre-PUR®).
3. grounding wire.

PU Hose/Steel Helix





Part No.	Ø ID (mm)	Ø OD (mm)	Min Wall thickness (mm)	Roll Length (m)	Wire Clip Ref
PURH32	32	39	1,5	10	3030242
PURH38	38	49	1,5	10	3030250
PURH40	40	51	1,5	10	3030250
PURH45	45	55	1,5	10	3030269
PURH50	50	58	1,5	10	3030285
PURH60	60	70	1,5	10	3030306
PURH64	64	75	1,5	10	3030306

Applications:
- Flexible hose/ ducting for high throughput of abrasive powder, bulk material, granulate and for gases.
- Plastic industry, conveying of granulates and powders: granulate conveying device, vacuum hopper/ conveyor, suction conveyor, dosing system, bulk-bag (big bag)-charging and discharging, shredder, mill, extruder, injection moulding machine.

Properties:
- Heavy duty.
- Highly abrasion resistant.
- Increased pressure and vacuum resistance.
- Microbe resistant.
- Good resistance to oil, gasoline and chemicals.
- Very good low temperature flexibility.

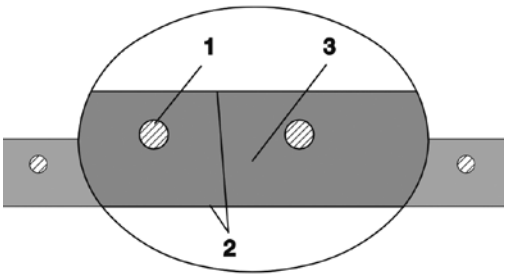
Temperature range:
-40°C to 90°C.
short time to 125°C.

Design, Material:
1. copper coated spring steel wire firmly embedded in wall.
2. wall: permanently antistatic premium esterpolyurethane (Pre-PUR®).
3. wall thickness 1,4 - 1,5 mm approx.

LOADER HOSES

PVC Hose





Part No.	Ø ID (mm)	Ø OD (mm)	Bending Radius	Roll Length	Clamp Ref.
PAPVC19	20	27	41	30	HDC2325
PAPVC25	25	33	73	30	HDC3134
PAPVC31	32	40,4	79,0	30	HDC3740
PAPVC38	38	47	91	30	HDC4347
PAPVC40	40	49	100	30	HDC4751
PAPVC45	45	54	118	30	HDC5155
PAPVC50	50	60	135	30	HDC5963
PAPVC64	64	74,8	228,0	30	HDC7379
PAPVC75	76	88,2	262,0	30	HDC8591

Applications:
Plastic industry, conveying of granulates and powders: granulate conveying device, vacuum hopper/ conveyor, suction conveyor, dosing system, bulk-bag (big bag)-charging and discharging, shredder, mill, extruder, injection moulding machine.

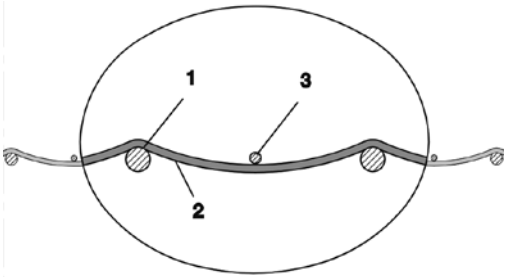
Properties:
- Heavy duty.
- Very high pressure, vacuum and compression resistance.
- Food grade wall, complies with: EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, according to FDA 21 CFR, according to FDA 21 CFR, 177.1210.
- Good resistance to alkalis and acids.
- Good resistance to chemicals.
- Phthalate-free.

Temperature range:
-20°C to 70°C.
Short time to 80°C.

Design, Material:
1. spring steel wire spiral embedded in wall.
2. smooth interior and exterior, wall: high grade soft PVC.
3. wall thickness 3 to 8 mm approx., depending on diameter.

Silicon Dryer Hose





Part No.	Ø ID (mm)	Ø OD (mm)	Bending Radius	Roll Length	Clamp Ref.
SIL132	32	35	19	4	3030200
SIL138	38	42	23	4	3030226
SIL141	41	45,0	25,0	4	3030234
SIL151	51	55	30	4	3030269
SIL160	63	67	36	4	3030285
SIL170	70	74	39	4	3030306

Applications:
- Flexible hose/ ducting for hot and cold gases.
- Granulate/ plastic dryer, hot air dryer.
- Film blowing machine, cooling air at the extrusion tool.
- Air supply: UV dryer, IR dryer.
- Clean room ventilation, semiconductor production machine.

Properties:
- Fibre reinforced.
- Highly flexible.
- Very good heat resistance.
- Conforms to RoHS guideline.

Temperature range:
-70°C to 260°C.
short time to 280°C.

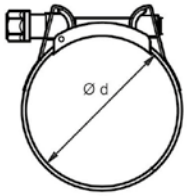
Design, Material:
Silicon hose.
1. spring steel wire.
2. fabric-reinforced tape, wall: Silicon coated glass fabric.
3. cord as reinforcement.

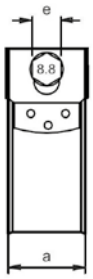
HOSE CLAMPS

Hose Clamps Heavy Duty

STAINLESS STEEL







Part No.	Ø	e	a		Hose ref.
HDC2325	23-25	8	18	50	PAPVC19
HDC3134	31-34	11	20	50	PAPVC25
HDC3740	37-40	11	20	50	PAPVC31
HDC4347	43-47	11	20	50	PAPVC38-40
HDC5155	51-55	11	20	25	PAPVC45
HDC5963	59-63	11	20	25	PAPVC50
HDC7379	73-79	13	25	25	PAPVC64
HDC8591	85-91	13	25	25	PAPVC75

Wire Clip with Screw - Ideal for Loader Hoses with Outer Helix



Part No.	Size range mm
3030200	33-37
3030218	35,5-40
3030226	38,5-43
3030234	41-46
3030242	43,5-49
3030250	46,5-53
3030269	50,5-56
3030277	53,5-60
3030285	56,5-64
3030293	60-68
3030306	64-72

Wire: Steel wire B-UNI 3823
Screw: 6.6 grade steel Cr3 zinc-plated

This clip was specially designed for use with hoses incorporating an outer helix. It is generally used when installing ventilation ducting. The double-wire construction of this clip means that it sits comfortably on either side of the helix and can then be clamped down firmly thanks to the screw-tightening system.

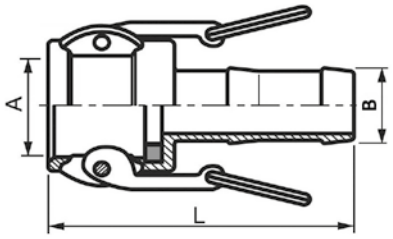
Camlock Couplings Aluminium

A range of Camlock couplings made according to A-A-59326, DIN 2828
Camlock is a safe coupling for use with hoses and pipes for many different media such as dry goods, polymer granules, cooling water, chemicals etc.
The coupling connects easily by opening the wings, inserting the male part and then closing the wings by hand.

Body material: Aluminium A356 or A104
Handle material: Brass
Sealing: NBR

Hose Tail Lever Coupling Type C

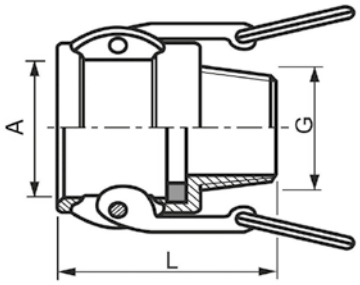




Part No.	Size	B	A	L	Max pressure
MPC-HC19	75	3/4"|19 mm.	32,4	91	17 bar
MPC-HC25	100	1"|25 mm.	37,2	105	17 bar
MPC-HC32	125	1.1/4"|32 mm.	46	112	17 bar
MPC-HC38	150	1.1/2"|38 mm.	53,9	118	17 bar
MPC-HC50	200	2"|50 mm.	63,7	135	17 Bar
MPC-HC64	250	2.1/2"|64 mm.	76,4	147	10 bar
MPC-HC75	300	3"|75 mm.	92,1	162	8 bar

Male Threaded Lever Coupling Type B



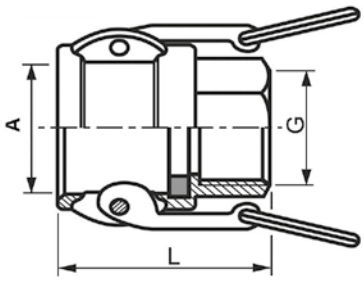


Part No.	Size	G	A	L	Max pressure
MPC-MC3/4	75	3/4"	32,4	47	17 bar
MPC-MC1	100	1"	37,2	56	17 bar
MPC-MC1-1/4	125	1.1/4"	46	64	17 bar
MPC-MC1-1/2	150	1.1/2"	53,9	66	17 bar
MPC-MC2	200	2"	63,7	76	17 Bar
MPC-MC2-1/2	250	2.1/2"	76,4	83	10 bar
MPC-MC3	300	3"	92,1	87	8 bar

CAMLOCK COUPLINGS ALUMINIUM

Female Threaded Lever Coupling Type D

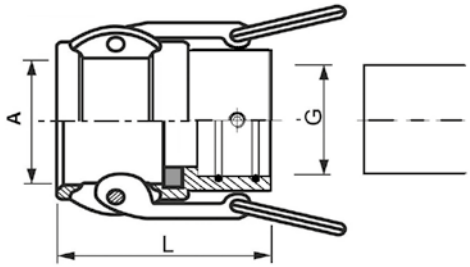




Part No.	Size	B	A	L	Max pressure
MPC-FC3/4	75	3/4"	32,4	47	17 bar
MPC-FC1	100	1"	37,2	56	17 bar
MPC-FC1-1/4	125	1.1/4"	46	64	17 bar
MPC-FC1-1/2	150	1.1/2"	53,9	67	17 bar
MPC-FC2	200	2"	63,7	76	17 Bar
MPC-FC2-1/2	250	2.1/2"	76,4	83	10 bar
MPC-FC3	300	3"	92,1	87	8 bar

Pipe Connection Lever Coupling Type D

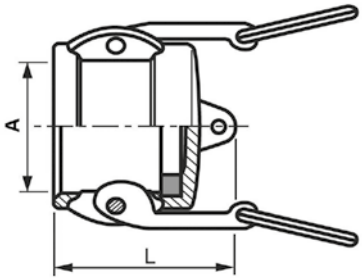




Part No.	Size	G	A	L	Max pressure
MPC-FC40	150	40	53,9	67	17 bar
MPC-FC45	200	45	63,7	76	17 Bar
MPC-FC50	200	50	63,7	76	17 Bar
MPC-FC60	250	60	76,4	83	10 bar

Dust Cap Lever Coupling Type DC





Part No.	Size	A	L	Max pressure
MPC-DC3/4	75	32,4	32	17 bar
MPC-DC1	100	37,2	40	17 bar
MPC-DC1-1/4	125	46	46	17 bar
MPC-DC1-1/2	150	53,9	48	17 bar
MPC-DC2	200	63,7	55	17 Bar
MPC-DC2-1/2	250	76,4	57	10 bar
MPC-DC3	300	92,1	59	8 bar

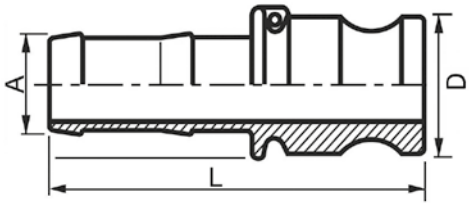
Gaskets for Camlock Couplers



Part No. NBR	Part No. Viton	Size	Dimension (mm)
G3/4 NBR	G3/4 FKM	3/4”	35 x 22 x 5.5
G1NBR	G1FKM	1”	40 x 27 x 6.4
G1-1/4NBR	G1-1/4FKM	1-1/4”	50 x 35 x 6.4
G1-1/2NBR	G1-1/2FKM	1-1/2”	56 x 41 x 6.4
G2NBR	G2FKM	2”	67 x 51 x 6.4
G2-1/2NBR	G2-1/2FKM	2-1/2”	80 x 64 x 6.4
G3NBR	G3FKM	3”	95 x 76 x 6.4

Hosetail Plug Type E

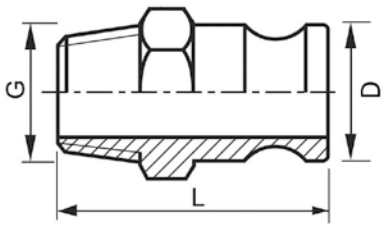




Part No.	Size	A	D	L	Max pressure
MPC-HP3/4	75	3/4"|19 mm.	32,1	86	17 bar
MPC-HP1	100	1"|25 mm.	36,7	103	17 bar
MPC-HP1-1/4	125	1.1/4"|32 mm.	45,5	107	17 bar
MPC-HP1-1/2	150	1.1/2"|38 mm.	53,4	114	17 bar
MPC-HP2	200	2"|50 mm.	63,1	131	17 Bar
MPC-HP2-1/2	250	2.1/2"|64 mm.	75,8	142	10 bar
MPC-HP3	300	3"|75 mm.	91,5	168	8 bar

Male Threaded Plug Type F



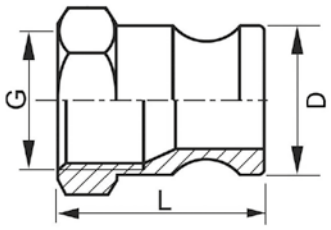


Part No.	Size	G	D	L	Max pressure
MPC-MP3/4	75	3/4"	32,1	55	17 bar
MPC-MP1	100	1"	36,7	67	17 bar
MPC-MP1-1/4	125	1.1/4"	45,5	74	17 bar
MPC-MP1-1/2	150	1.1/2"	53,4	76	17 bar
MPC-MP2	200	2"	63,1	87	17 Bar
MPC-MP2-1/2	250	2.1/2"	75,8	97	10 bar
MPC-MP3	300	3"	91,5	100	8 bar

CAMLOCK COUPLINGS ALUMINIUM

Female Threaded Plug Type A

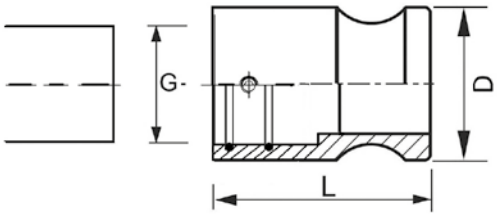




Part No.	Size	G	D	L	Max pressure
FPC-FP3/4	75	3/4"	32,1	40	17 bar
FPC-FP1	100	1"	36,7	48	17 bar
FPC-FP1-1/4	125	1.1/4"	45,5	54	17 bar
FPC-FP1-1/2	150	1.1/2"	53,4	56	17 bar
FPC-FP2	200	2"	63,1	63	17 Bar
FPC-FP2-1/2	250	2.1/2"	75,8	68	10 bar
FPC-FP3	300	3"	91,5	69	8 bar

Pipe Connection Plug Type A

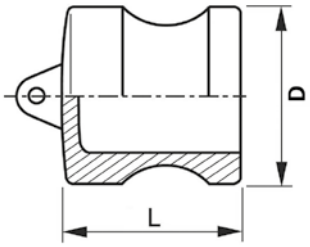




Part No.	Size	G	D	L	Max pressure
MPC-PP40	150	40	53,4	76	17 bar
MPC-PP45	200	45	63,1	87	17 Bar
MPC-PP50	200	50	63,1	87	17 Bar
MPC-PP60	250	60	75,8	97	10 bar

Dust Plug Type DP





Part No.	Size	D	L	Max pressure
DPC-DP3/4	75	32,1	28	17 bar
DPC-DP1	100	36,7	35	17 bar
DPC-DP1-1/4	125	45,5	38	17 bar
DPC-DP1-1/2	150	53,4	40	17 bar
DPC-DP2	200	63,1	49	17 Bar
DPC-DP2-1/2	250	75,8	50	10 bar
DPC-DP3	300	91,5	51	8 bar

Hopper Magnets

STAINLESS STEEL





Part No.	Dia ø	Height	# Bars	Type	Strength (Gauss)	Weight(Kg)
D100	100	40	2	Standard	2500	0.9
D100-ES	100	40	2	Extra Strong	10000	0.9
D150	150	40	3	Standard	2500	1.5
D150-ES	150	40	3	Extra Strong	10000	1.5
D200	200	40	4	Standard	2500	2.5
D200-ES	200	40	4	Extra Strong	10000	2.5
D250	250	40	5	Standard	2500	3.7
D250-ES	250	40	5	Extra Strong	10000	3.7
D300	300	40	6	Standard	2500	5.5
D300-ES	300	40	6	Extra Strong	10000	5.5

Materials:
Standard: Samarium - Cobalt
Extra Strong: Neodymium Iron-Boron
Stainless Steel encased

Place direct in the Hopper to separate metal from polymers and avoid damage of nozzle and hotrunners etc.

Material Scoop





Part No.	Size
2885	2,0 ltr

2,0 ltr Material Scoop.
Ideal for scooping granules and tipping into material hoppers.
Colour and design may differ.

BALANCES AND MOISTURE ANALYSER

Compact Balance



Part No.	Capacity	Readability	Platform Size
MCB500	500 g	0,1 g	Ø 120 mm
MCB2000	2000 g	0,1 g	Ø 120 mm

Compact balance for weighing parts up to 2000 g.

Features:
Backlit LCD display.
Stainless steel pan.
ShockProtect™ overload three-point protection.
Can be stacked for storage.
Lock down mounting slot for Kensington™ type lock and cable.
Dual tare keys.
Lightweight and portable.
Colour coded, sealed keypad.
Modern low profile design.
Low cost and simple to use.
External calibration.
Auto sleep / power down function to save battery life.
Auto power off.
Low battery indication.
AC Adaptor.

Applications:
Weighing.
Percentage weighing.
Parts counting.
Below balance weighing.
Weight accumulation.

Precision Balance



Part No.	Capacity	Readability	Platform Size
MPB410	410 g	0,001 g	Ø 120 mm

Precision Balance for weighing parts with very accurate tolerance.

Features:
Backlit LCD display.
Colour coded keys.
Level indicator with adjustable levelling feet.
Removable draft shield supplied.
Robust metal housing.
Sealed keypad.
External calibration.
Pan lifter to easily.
remove samples.

Applications:
Weighing.
Net / Total.
Check weighing.
Percentage weighing.
Weight accumulation.
Parts counting.
Animal / dynamic weighing.
Density determinatio.
Below balance weighing.

Moisture Analyser





Part No.	Capacity	Readability	Platform Size
MMB65	65 g	0,001 g	Ø 100 mm

The MMB Moisture Analyser makes moisture analysis of plastic granules easy for fast and accurate results.
The moisture analyzer comprises of a balance and an integrated heater.
The analyser will first weigh the material sample in a foil tray at the start of the process; it will then heat the sample up, removing the moisture, and continue heating sample until it stops losing weight. This data is then used to calculate the moisture content based on the moisture loss rate, known as a drying curve.

Features:
USB port for memory card and USB I/O interface.
RS-232 interface.
Built-in memories for storing products and settings.
3 settings for heating sample, ramp up, step and standard.
Automatic test start setting for when the lid is closed.
Pan lifter to easily remove samples.
Large backlit display with dual text prompts.

Disposable Sample Pans



Part No.	Deep (mm)	
MMB-P50	10 mm	50

Aluminum sample pans are ideal for moisture analysis testing. The disposable pans fit neatly on the MMB moisture analysers pan holder.
They are 10mm deep to keep the items being weighed in place. This pack holds 50 disposable pans.

Calibration Weights



Part No.	Weight
CALW20G	20 g
CALW50G	50 g
CALW200G	200 g
CALW1000G	1000 g

Ideal for calibrating Scales and moisture analyser.

Thermal Printer



Part No.	Power Supply	Paper Width
ATP-100	110/230 VAC - 8,5 VDC	57,5

Mouldpro's ATP thermal printer is compact and ideally suited for use with balances and scales.
Simple-to-use features combined with quick set-up makes for a truly versatile printer.

Features:
- A single positive push-button feed key and three easy-to-read LED indicators make operation simple.
- Combined with the compact design, which takes little space on the bench, this makes the ATP the right choice for any printing applications.

Spare Paper:
No. ATP-100-1 Thermal paper.
No. ATP-100-10 Thermal paper (10pk).

06.
END OF ARM TOOLING

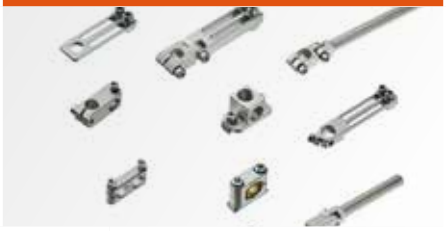
163 QUICK CHANGE



165 FRAMES & FRAME CONNECTORS



170 MOUNTING CLAMPS



175 VACUUM CUP ADAPTORS



182 VACUUM CUPS



189 PNEUMATIC GRIPPERS



197 PNEUMATIC GATE CUTTERS

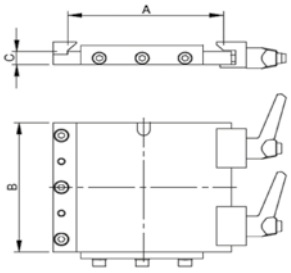


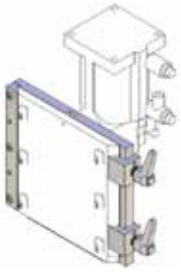
200 PNEUMATIC PUSH-IN FITTING



Quick Change Plates "Robot Side"



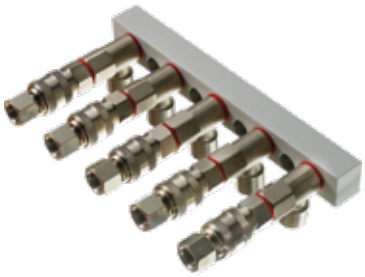


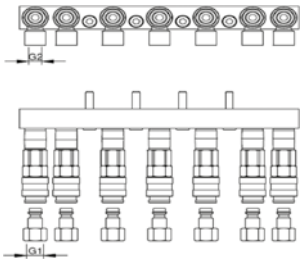


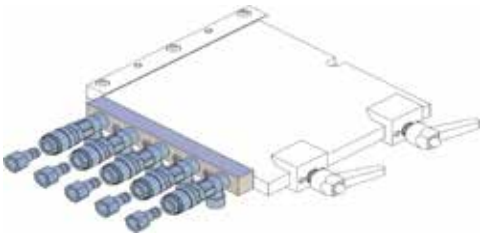
Part No.	A	B	C	Max load	Reference	Weight
QC-RSW-60-00	60	60	10	5 kg	QC-SSW-60	140 g
QC-RSW-100-00	100	100	10	10 kg	QC-SSW-100	442 g
QC-RSW-160-00	160	160	10	20 kg	QC-SSW-160	1132 g
QC-RSW-250-00	250	250	10	40 kg	QC-SSW-250	2963 g

Material: Aluminium.
Surface silver anodized.

Pneumatic Manifold Connection





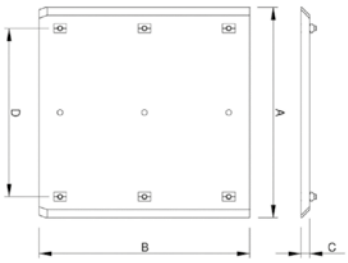


Part No.	G1	G2	No. of Connections	Reference	Weight
CA.LAL.1.5	M5	M5	5	QC-RSW-100	154 g
CA.LAL.1.7	M5	M5	7	QC-RSW-100	225 g
CA.LAL.2.5	G 1/8	G1/8	5	QC-RSW-160	631 g
CA.LAL.2.7	G 1/8	G 1/8	7	QC-RSW-160	742 g
CA.LAL.3.6	G 1/4	G 1/4	6	QC-RSW-250	902 g
CA.LAL.3.8	G 1/4	G 1/4	8	QC-RSW-250	1504 g

Couplers are Standard "Rectus 21" series.

Quick Change Plates "Gripper Side"







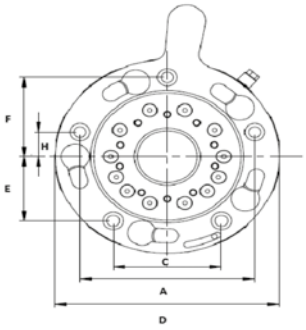
Part No.	A	B	C	D	Weight
QC-SSW-60	60	60	8	35	93 g
QC-SSW-100	100	100	8	70	242 g
QC-SSW-160	160	160	10	120	695 g
QC-SSW-250	250	250	10	200	1641 g

Material: Aluminium.
Surface silver anodized.

QUICK CHANGERS

Quick Changer Robot Side



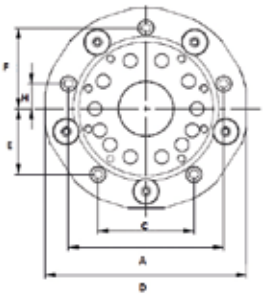


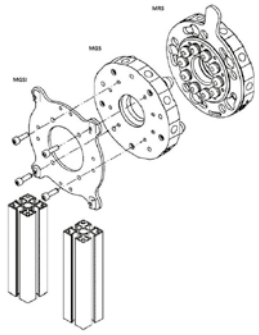
Part No.	D	A	C	E	F	H	G	B	Weight
MRS-90	90	-	53,6	22,5	35	-	G1/8 (8x)	18,3	318 g.
MRS-150	150	116,03	71,7	49,35	61	18,85	G1/4 (10x)	25,95	1123 g.
MRS-160	160	116,03	71,7	49,35	61	18,85	G1/8 (12X)	25,95	1200 g.
MRS-200	200	175	87,5	75,8	75,8	25	G1/4(12X)	30,6	2496 g.

- Quick changer for easy replacement of EOAT on the robot.
- Suitable for vacuum connectors as well.
- Avoids mistakes in pneumatic/electrical connections.
- Available with 8 ,10 or 12 pneumatic interface.
- 15 pins D-SUB electrical interface.
- Robot side and Gripper side part are supplied separately.

Quick Changer Gripper Side



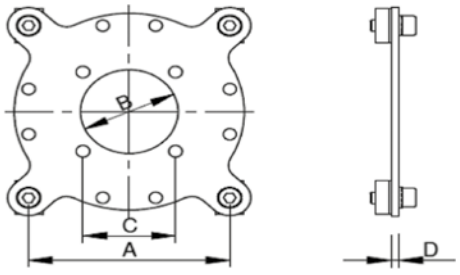


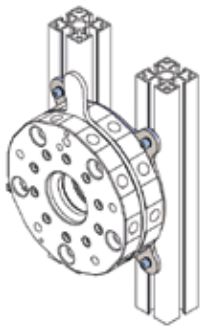


Part No.	D	A	C	E	F	H	G	B	Weight
MGS-90	90	-	-	-	-	-	G1/8 (8x)	15,9	227 g.
MGS-150	150	114,13	70,53	48,54	60	18,54	G1/4 (10x)	21,2	827 g.
MGS-160	160	114,13	70,53	48,54	60	18,54	G1/8 (12X)	21,2	900 g.
MGS-200	200	175	87,5	75,8	75,8	25	G1/4(12X)	25	1798 g.

Interface for Quick Change



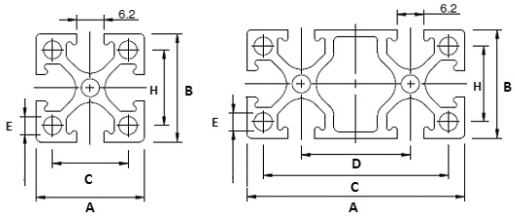




Part No.	A	B	C	D	Reference	Weight
MGSI-90	76	37	35	3	MGS-90	174 g
MGSI-150	110	70	52	4	MSG-150/MSG-160	502 g
MGSI-200	192	140	151,6	8	MGS-200	850 g.

Profiles

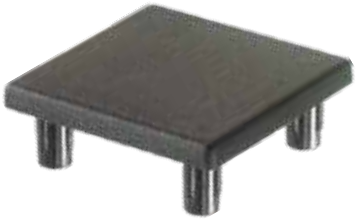


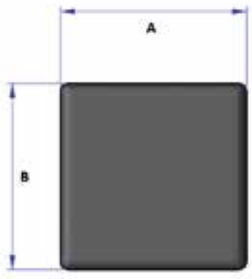


Part No.	A	B	C	D	E	H	Length
APX25-25-1000	25	25	17,5	-	4,2	17,5	1000
APX25-50-1000	25	50	42,5	25	4,2	17,5	1000
APL40-40-1000	40	40	32	-	5	32	1000
APL40-80-1000	40	80	72	40	5	32	1000

Material: Aluminium.
Surface silver anodized.

Cap for Profile

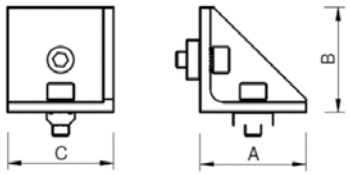




Part No.	A	B	
MPP-25-25	25	25	10
MPP-25-50	25	50	10
MPP-40-40	40	40	10
MPP-40-80	40	80	10

Corner Connector



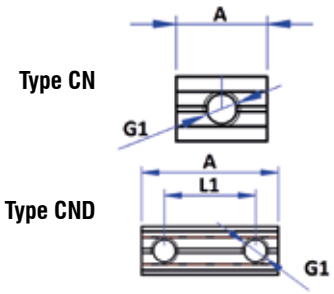


Part No.	A	B	C	Profile
MP.WIV.X.25.0	25	25	16	X
MP.WIV.X.50.25	51	51	16	X
MP.WIV.L.40	40	40	40	L
MP.WIV.L.40.E	38	38	38	L

FRAME CONNECTORS

Nuts for Profile

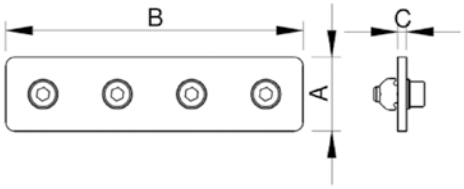




Part No.	G1	A	L1
CN-M3	M3	15	
CN-M4	M4	15	
CN-M5	M5	15	
CN-M6	M6	15	
CND-M4	M4	24	16
CND-M5	M5	30	20
CND-M6	M6	30	20

Profile Connector - Straight

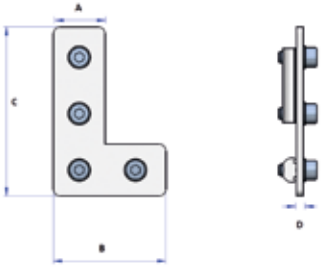




Part No.	A	B	C	Profile
MP.VBG.X.25.50	25	50	3	X
MP.VBG.X.50.50	50	50	3	X
MP.VBG.L.40.80	40	80	3	L

Profile Connector L-Style

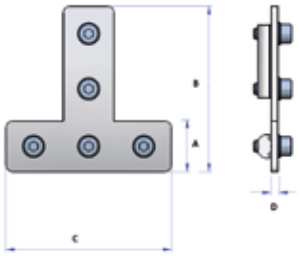


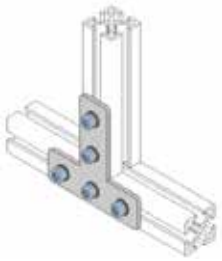


Part No.	A	B	C	D
MA.VBL.50.50	25	50	50	3
MA.VBL.50.75	25	50	75	3
MA.VBL.80.80	40	80	80	3
MA.VBL.80.120	40	80	120	3

Profile Connector T-Style



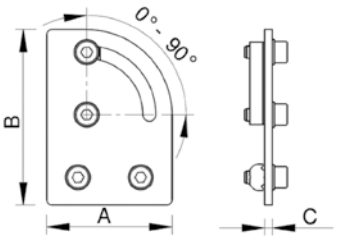




Part No.	A	B	C	D
MA.VBT.50.75	25	50	75	3
MA.VBT.75.100	25	75	100	3
MA.VBT.120.80	40	120	80	3

Adjustable Connector 0-90 Degree

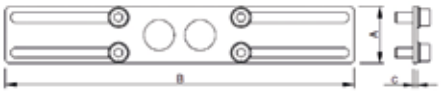


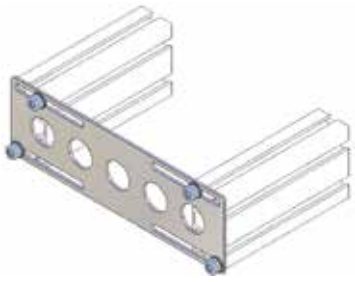


Part No.	A	B	C	Profile
MP.VBW.X.0.90	50	70	3	X
MP.VBW.L.0.90	80	120	3	L

End Plate for Profile







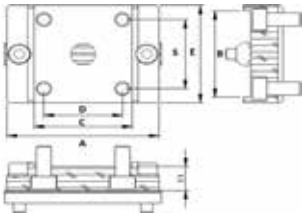
Part No.	A	B	C	Reference	Weight
EP.25.170	25	170	2	APX25-25..	48 g
EP.25.220	25	220	2	APX25-25..	60 g
EP.25.270	25	270	2	APX25-25..	69 g
EP.25.320	25	320	2	APX25-25..	85 g
EP.50.25.170	50	170	2	APX25-50..	100 g
EP.50.25.220	50	220	2	APX25-50..	130 g
EP.50.25.270	50	270	2	APX25-50..	162 g
EP.50.25.320	50	320	2	APX25-50..	192 g

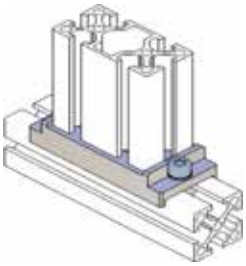
Material: Steel.

FRAME CONNECTORS

Profile End Connector





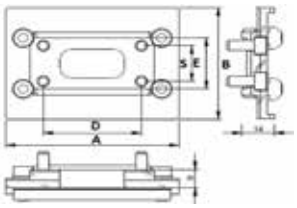


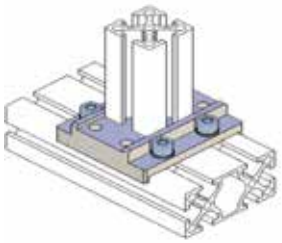
Part No.	A	B	C	D	S	E	Reference	Weight
PE.25.25	50	25	25	17,5	17,5	30	APX25-25..	69 g
PE.25.50	70	25	50	42,5	17,5	30	APX25-50..	87 g
PE.40.40	62	40	40	32	32	45	APX40-40..	128 g

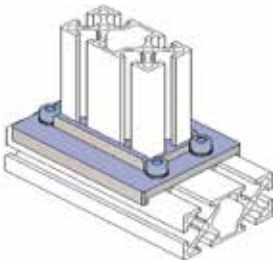
Material: Aluminium.
Surface silver anodized.

Profile End Connector Double







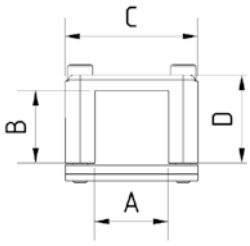


Part No.	A	B	D	S	E	Reference	Weight
PED.25.50	55	50	17,5	17,5	25	APX25-25../APX25-50	69 g
PED.50.50	75	55	42,5	17,5	25	APX25-50/APX25-50..	87 g

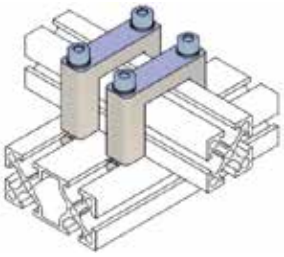
Material: Aluminium.
Surface silver anodized.

Cross Connector Bridge





Thickness = E

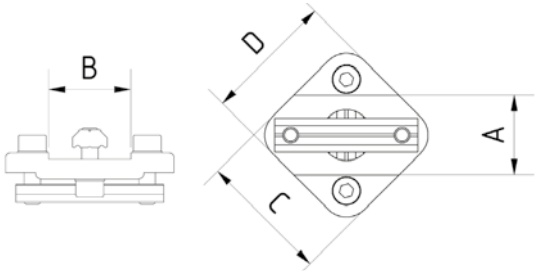


Part No.	A	B	C	D	E	Profile
CCB25-25-X	25	25	45	30	15	X
CCB50-25-X	50	25	45	55	15	X
CCB25-50-X	25	50	70	30	15	X
CCB40-40-L	40	40	60	48.5	15	L
CCB80-40-L	80	40	100	50	15	L

- Cross connecting bridges for.
- Connecting of two sections.
- It does not have to be drilled.
- Secure connection between two profiles.

Cross Connector





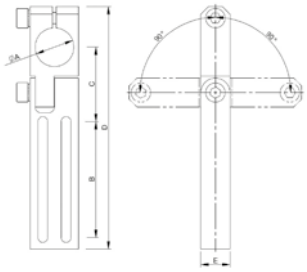
Part No.	A	B	C	D	Profile
CC25-25-X	25	25	41	41	X
CC50-25-X	50	25	70	50	X
CC50-50-X	50	50	70	70	X
CC40-40-L	40	40	60	60	L
CC80-40-L	80	40	100	60	L
CC80-80-L	80	80	100	100	L
CC40-25-L	40	25	70	41	L

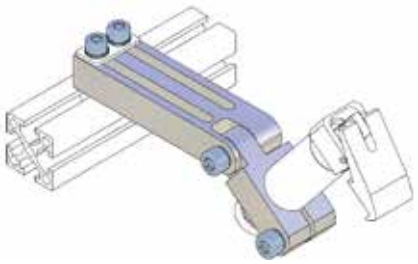
- Cross connecting plates for connecting of two sections diagonally.
- It does not have to be drilled.
- Secure connection between two profiles.
- Ideal connectivity through guide.

MOUNTING CLAMPS

Long Angle Clamp - Swivel Head





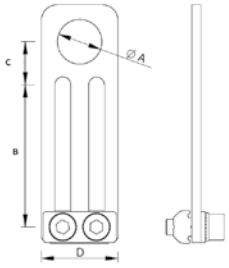


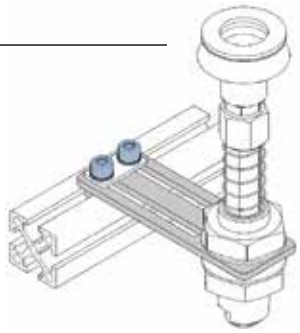
Part No.	A	B	C	D	E	Reference	Weight
LA.GA.10.X	10	40	26,6	85,3	10	APX25..	57 g
LA.GA.14.X	14	40	27,8	88,3	10	APX25..	57 g
LA.GA.20.X	20	60	38,5	125,5	15	APX25../APL40..	122 g
LA.GA.30.X	30	82	53	168,5	20	APL40..	266 g

Material: Aluminium.
Surface silver anodized.

Mounting Bracket





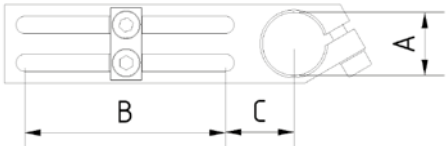


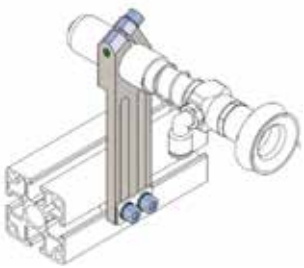
Part No.	A	B	C	D	Weight
MB.04.20.10.X	10	40	11	20	35 g
MB.04.20.14.X	14	46	14	25	45 g

Material: Aluminium.
Surface silver anodized.

Adjustable Clamp





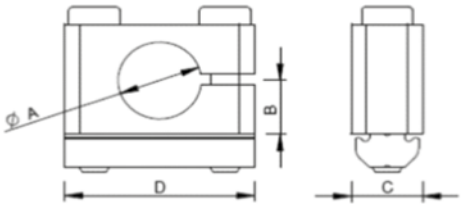


Part No.	A	B	C	Profile
AC10-40-X	10	40	24	X
AC14-40-X	14	40	19	X
AC20-60-X	20	60	22	X
AC20-70-L	20	70	25	L
AC30-70-L	30	70	27	L

- Adjustable clamp - strong version.
- The clamping of components.
- The device can be mounted in very close range.
- Perfect accessibility of individual screws.

Round Clamp



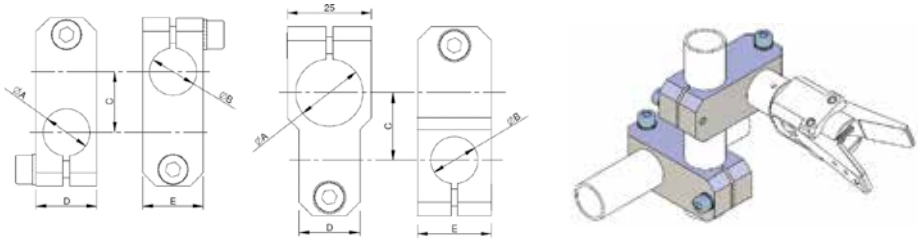


Part No.	A	B	C	D
RC10	10	8	12	15
RC14	14	10	12	32
RC20	20	13	12	40
RC30	30	18	20	52

- Very robust and accurately fitting construction.
- The inside threads are formed.
- All edges are rounded.

Cross Connector



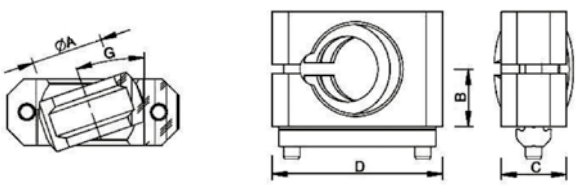


Part No.	A	B	C	D	E	Weight
CCT.10.10	10	10	16	14	14	17 g
CCT.14.14	14	14	18	18	18	35 g
CCT.20.20	20	20	26	25	25	71 g
CCT.20.10	20	10	20	14	20	41 g
CCT.20.14	20	14	20	18	22	48 g

Material: Aluminium.
Surface silver anodized.

Cross Connector with Ball Joint



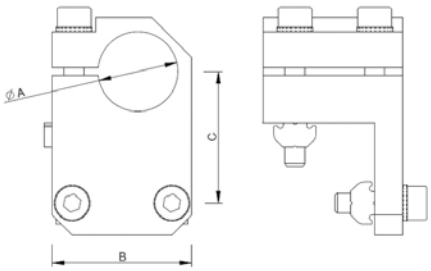


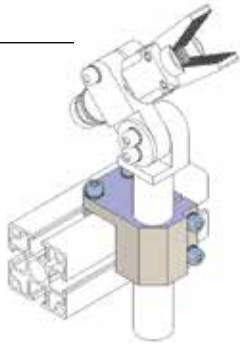
Part No.	A	B	C	D	G	Profile
MP.KVB.KG.X10	10	10	12	32	0-13°	X
MP.KVB.KG.X14	14	12,5	15	40	0-17°	X
MP.KVB.KG.L20	20	17,5	20	52	0-19°	L

MOUNTING CLAMPS

Angle Clamp





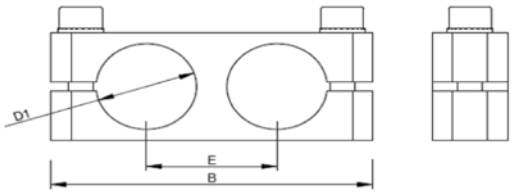


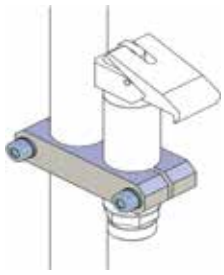
Part No.	A	B	C	Weight
CA.10.X	10	25	19,5	57 g
CA.14.X	14	25	21,5	60 g
CA.20.X	20	32	24,5	80 g
CA.20.JU	20	35	33	105 g
CA.30.JU	30	45	39	178 g

Material: Aluminium.
Surface silver anodized.

Parallel Clamp





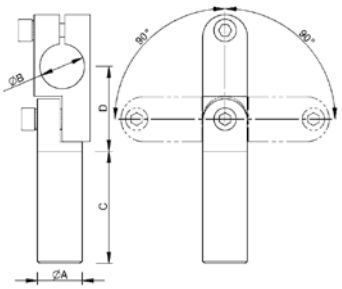


Part No.	D1	B	E	Weight
CA.1010.15	10	38	15	12 g
CA.1414.20	14	52	20	27 g
CA.2020.26	20	64	26	47 g
CA.3030.38	30	88	38	104 g

Material: Aluminium.
Surface silver anodized.

Elbow Gripper Arm - Adjustable

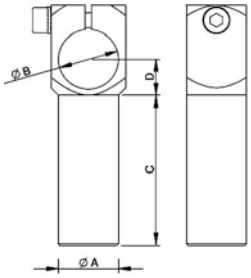


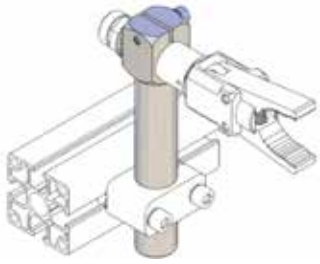


Part No.	A	B	C	D
MA.GLA.1010.90	10	10	90	22
MA.GLA.1414.120	14	14	120	30
MA.GLA.2020.150	20	20	150	38

Angle Gripper Arm - Extended



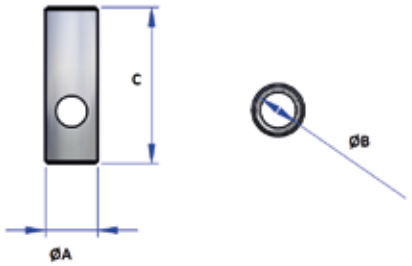




Part No.	A	B	C	D
MA.WKA.1010.90	10	10	90	8
MA.WKA.1414.120	14	14	120	10
MA.WKA.2020.150	20	20	150	12

Extension Tube

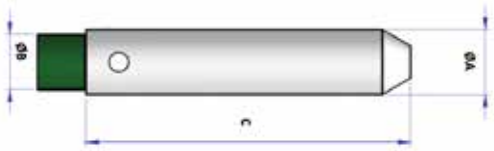




Part No.	A	B	C
MA.VLR.10.90	10	M8X1	90
MA.VLR.14.120	14	M12X1	120
MA.VLR.20.150	20	M17X1	150

Centering Pin



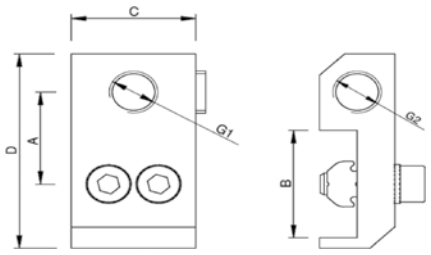


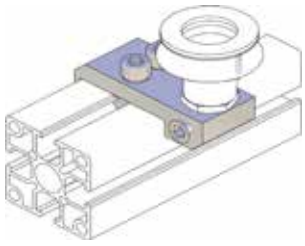
Part No.	A	B	C
CA.ZTB.1060	10	M8X1	60
CA.ZTB.1480	14	M12X1	80
CA.ZTB.20100	20	M17X1	100

MOUNTING CLAMPS

Thread Clamp Fixed





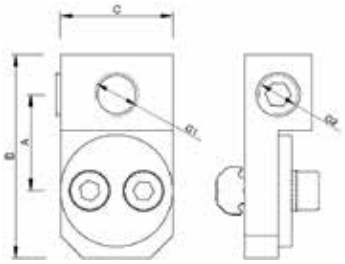


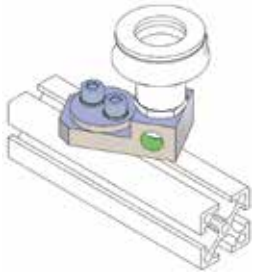
Part No.	A	B	C	D	G1	G2	Weight
TC.X.18.18	22	25	25	46	G 1/8	G 1/8	49 g
TC.X.14.18	22	25	25	46	G 1/4	G 1/8	49 g
TC.JU.14.18	29	40	25	60	G 1/4	G 1/8	49 g

Material: Aluminium.
Surface silver anodized.

Adjustable Clamp





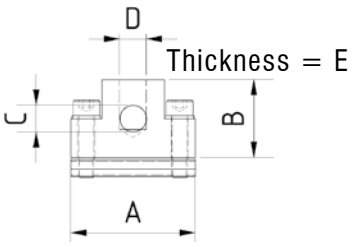


Part No.	A	B	C	G1	G2	Profile	Weight
CA.WSD.X.18.18	21	46	25	G 1/8	G 1/8	X	44 g
CA.WSD.X.14.18	21	46	25	G 1/4	G 1/8	X	44 g

Material: Aluminium.
Surface silver anodized.

Vacuum Adaptor for Profiles



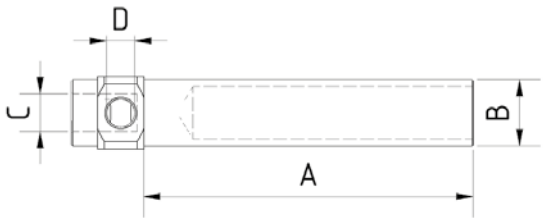


Part No.	A	B	C	D	E	Profile
VCAP-G1/8-G1/8-X	40	25	G1/8	G1/8	20	X
VCAP-G1/4-G1/4-X	40	25	G1/4	G1/4	20	X

- For the direct connection of a vacuum cup.
- Compact design.

Vacuum Cup Adaptor



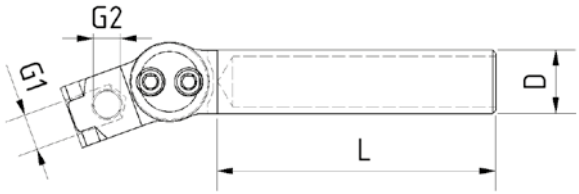


Part No.	A	B	C	D
VCAF10-60-M5-M5	60	10	M5	M5
VCAF14-80-G1/8-G1/8	80	14	G1/8	G1/8
VCAF20-100-G1/8-G1/4	100	20	G1/4	G1/8
VCAF20-150-G1/8-G1/4	150	20	G1/4	G1/8

- Used for the optimum positioning of a vacuum cup.
- Extremely flexible when positioning the vacuum suction cup.

Swivel Vacuum Cup Adaptor





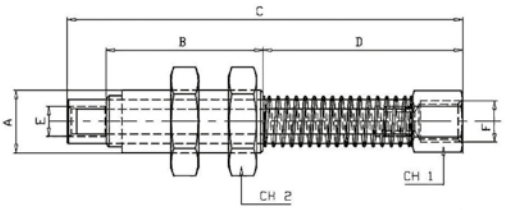
Part No.	D	L	G1	G2
VCAS10-60-M5-M5	10	60	M5	M5
VCAS14-80-G1/8-G1/8	14	80	G1/8	G1/8
VCAS20-100-G1/4-G1/8	20	100	G1/4	G1/8
VCAS20-150-G1/4-G1/8	20	150	G1/4	G1/8

- To optimise position and angle of a vacuum cup.
- Very robust and accurate fitting construction.
- Safe and stable mounting of the angle by two screws.

VACUUM CUP ADAPTORS

Spring Loaded Level Compensator - Non Rotational - Threaded Body







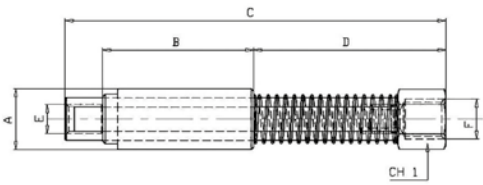


Part No.	A	B	C	D	E	F	CH1	CH2	Stroke Hub (mm)
LC.M10.20	M10x1.00	26	71	42	M5	M5	13	14	20
LC.M12.20	M12x1.25	26	61	32	M5	1/8”	10	17	20
LC.M14.38	M14x1.5	30	94	61	M5	1/8”	13	19	38
LC.M20.48	M20x1.5	50	126	73	1/8”	1/4”	17	27	48

Spring: Steel.
Sliding Parts: Chrome-plated Brass.
Terminal Parts: Anodized Aluminium.

Spring Loaded Level Compensator - Non Rotational - Smooth Body









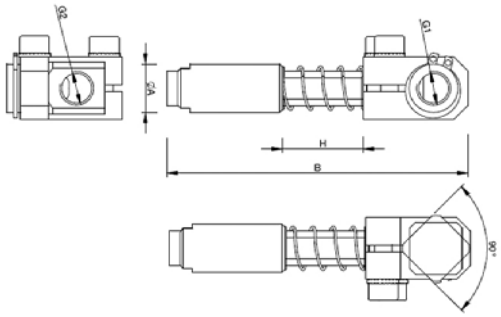


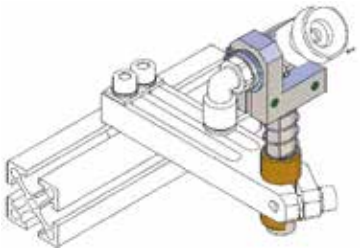
Part No.	A	B	C	D	E	F	CH1	Stroke Hub (mm)
LC.10.20	ø10	26	71	42	M5	M5	13	20
LC.12.20	ø12	26	71	42	M5	M5	13	20
LC.14.38	ø14	30	94	61	M5	1/8”	13	38
LC.20.48	ø20	50	126	73	1/8”	1/4”	17	48

Spring: Steel.
Sliding Parts: Chrome-plated Brass.
Terminal Parts: Anodized Aluminium.

Spring loaded Vaccum Cup Arm - Non Rotative





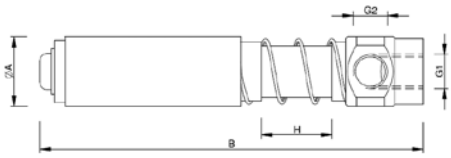


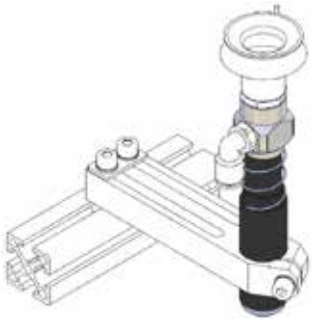
Part No.	A	B	G1	G2	H	F(N)	Weight
MPGGS100515	10	69	M5	M5	10	3.6	37 g
MPGGS100520	10	79	M5	M5	20	6	40 g
MPGGS100530	10	98	M5	M5	30	8.6	45 g
MPGGS141815	14	86	G 1/8	G 1/8	17	20.7	82 g
MPGGS141840	14	110	G 1/8	G 1/8	38	23.3	89 g
MPGGS201425	20	116	G 1/8	G 1/4	23	18.4	196 g
MPGGS201445	20	141	G 1/8	G 1/4	45	16.7	206 g

H= Spring deflection / F= Spring force.
Material: Aluminium.
Guide (tube): Hard coated.

Spring Loaded Level Compensator - Smooth Body - Rotatable







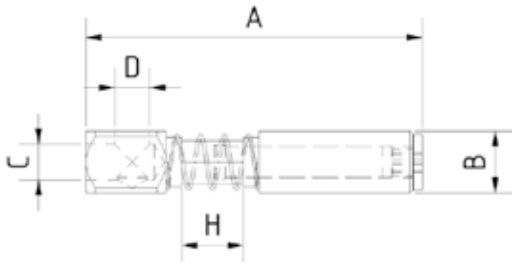
Part No.	A	B	G1	G2	H	F(N)	Weight
MA.GGD.10050510	10	59	M5	M5	10	8	11g
MA.GGD.10050530	10	85	M5	M5	30	11	15g
MA.GGD.14181815	14	84	G1/8	G1/8	15	9	33g
MA.GGD.14181840	14	109	G1/8	G1/8	40	14,6	38g
MA.GGD.20141820	20	109	G1/4	G1/8	20	11,7	76g
MA.GGD.20141850	20	147	G1/4	G1/8	50	16,8	92g

H= Spring deflection / F= Spring force.
- Rotational.
- Extremely light weight Aluminium.
- Tube and shaft hard coated anodizing.

VACUUM CUP ADAPTORS

Spring Loaded Level Compesator - Smooth Body - Non Rotative



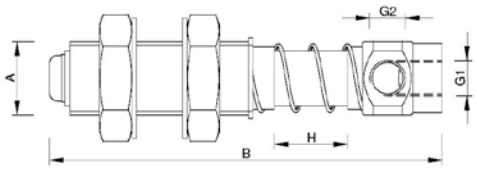


Part No.	A	B	C	D	H
VCASL10-76-H20-M5-M5	76	10	M5	M5	20
VCASL14-80-H15-G1/8-G1/8	80	14	G1/8	G1/8	15
VCASL14-105-H35-G1/8-G1/8	105	14	G1/8	G1/8	35
VCASL20-115-H20-G1/4-G1/4	115	20	G1/4	G1/4	20
VCASL20-139-H40-G1/4-G1/4	139	20	G1/4	G1/4	40

- Non-Rotational.
- Compensates the differential movement during the removal from the mould.
- Fixed Head.
- The component is hard anodized and has excellent gliding properties.

Spring Loaded Level Compensator - Threaded Body



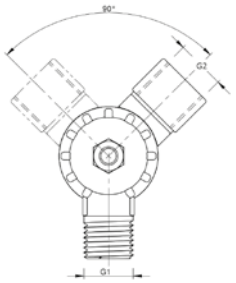


Part No.	A	B	G1	G2	H
MA.GGDG.10050510	M10X1	59	M5	M5	10
MA.GGDG.10050530	M10X1	85	M5	M5	30
MA.GGDG.14181815	M14X1,5	86	G1/8	G1/8	15
MA.GGDG.14181840	M14X1,5	111	G1/8	G1/8	40
MA.GGDG.20141820	M20X1,5	109	G1/8	G1/8	20
MA.GGDG.20141850	M20X1,5	147	G1/8	G1/8	50

- Non-Rotational.
- Compensates the differential movement during the removal from the mould.
- Fixed Head.
- The component is hard anodized and has excellent gliding properties.

Elbow - Adjustable

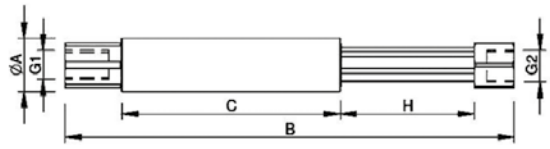




Part No.	G1	G2
MP.07.01.001	1/8	1/8
MP.07.01.002	1/4	1/4

Smooth Body Non-Rotational Telescopic Level Compensator

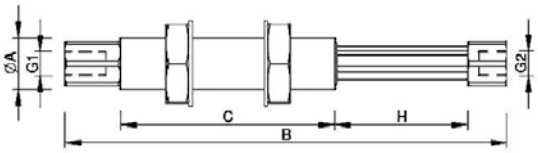




Part No.	A	B	C	G1	G2	H
MP.SDN.1010	10	60,5	26,5	M5	M5	10
MP.SDN.1025	10	59,5	41,5	M5	M5	25
MP.SDN.1420	14	102,5	42	G1/8	G1/8	20
MP.SDN.1435	14	132,5	60	G1/8	G1/8	35
MP.SDN.2025	20	114,5	55	G1/8	G1/8	25
MP.SDN.2050	20	169	82,5	G1/8	G1/8	50

Threaded Body Non-Rotational Telescopic Level Compensator



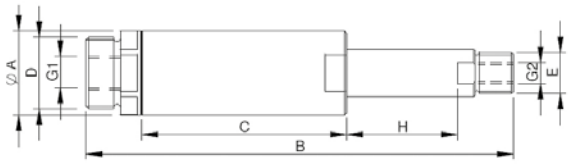


Part No.	A	B	C	G1	G2	H
MP.SDNG.1010	M10X1	60,5	26,5	M5	M5	10
MP.SDNG.1025	M10X1	59,5	41,5	M5	M5	25
MP.SDNG.1420	M14X1,5	102,5	42	G1/8	G1/8	20
MP.SDNG.1435	M14X1,5	132,5	60	G1/8	G1/8	35
MP.SDNG.2025	M20X1,5	114,5	55	G1/8	G1/8	25
MP.SDNG.2050	M20X1,5	169	82,5	G1/8	G1/8	50

VACUUM CUP ADAPTORS

Telescopic Self-Retracting Suspension





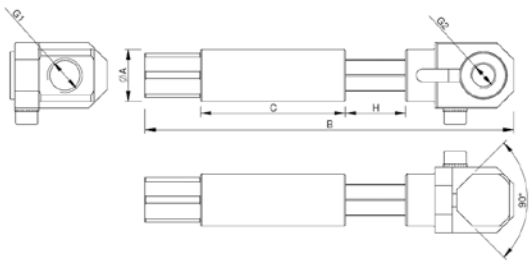
Part No.	A	B	C	D	E	G1	G2	H	F(N)	Weight
MPTSS2025	20	100	48	M17x1	G 1/8	G 1/8	M5	25	3.6	42 g
MPTSS2050	20	150	73	M17x1	G 1/8	G 1/8	M5	50	4.2	68 g

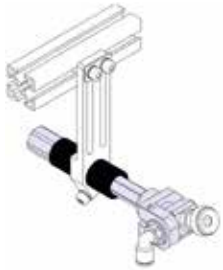
Extremely leight weight (Material Aluminium).
Guide (Tube and shaft) hard coated.
Sealing with no seals.
Only for vacuum applications.

When the cup takes a part, the vacuum on the internal piston overtakes the spring force and moves the rod up.
The speed of the retraction movement can be adjusted by a standard throttle valve.
When the vacuum is removed the part is released and the internal spring resets the rod.
Pressure range: -1 ÷ 0 bar.

Smooth Body Non-Rotative Telescopic Suspension

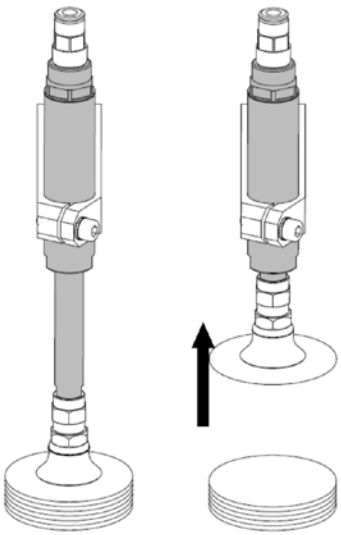






Part No.	A	B	C	G1	G2	H	F(N)	Weight
MPSSN10100505	10	56	21	M5	M5	10	3.6	19 g
MPSSN10250505	10	90.5	40.5	M5	M5	25	3.7	22 g
MPSSN14201818	14	98.5	38.5	G 1/8	G 1/8	20	8.9	45 g
MPSSN14351818	14	148	60	G 1/8	G 1/8	35	9.5	51 g
MPSSN20251418	20	110	49	G 1/4	G 1/8	25	11	105 g
MPSSN20501418	20	167.5	81.5	G 1/4	G 1/8	50	11.4	110 g

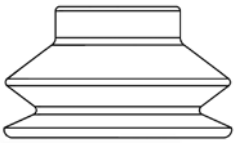
H= Spring deflection.
Material: Aluminium /Brass .

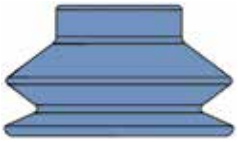


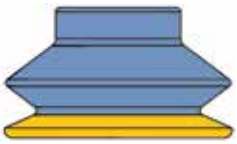
Type Selection Guide

Type		
Flat Cups	The flat suction cups provide accurancy in load gripping and speeds up the cycle process. Flat cups are used only on flat surfaces.	
1,5 Bellow Cups	The 1,5 bellow cups combine the advantages of the flat suction cups (precision and positioning) with the freedom of belows (angle and flexibility). They provide flexibility, precision and low internal volume suitable for high-speed applications.	
2,5 Bellow Cups	The suction cups with 2,5 bellow are recommended for gripping products with un-even surfaces (large deflection). The 2,5 bellow allow objects to be gripped from an angle (ball-joint effect).	

Material Properties







Application	Silicone	FlexTemp HT	Multiflex
Ozone resistance	√√√	√√	√√√
Oil resistance	√	√√√	√√
Wear resisitance	√√	√√	√√√
Tensile strength (lifting force)	√	√	√√√
Leaves marks on products	√	√√	√√√
Temperature resistance	-70 to + 200°C	-40 to + 160°C	-20 to + 80°C
Shore hardness	30-60°	60°	30-60°

The holding force of the suction cups increases proportionally with the difference between the ambient pressure and the pressure inside the cup.

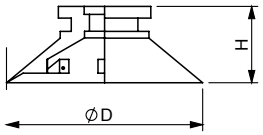
The holding force of a suction pad is calculated with the formula:
F = Δp x A.
F = Holding force.
Δp = Difference between ambient pressure and pressure of the system.
A = Effective suction area (the effecive area of a suction pad under vacuum).

This means the holding force is proportional to the pressure difference and the suction area. The greater the difference between ambient pressure and pressure in the suction cup or the larger the effective suction area, the greater the holding force.
The force can vary depending on a change of the pressure difference and area parameters.

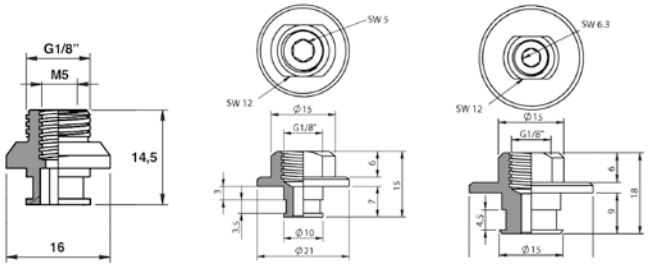
VACUUM CUPS

Flat Vacuum Cups Ø22-Ø 53 mm





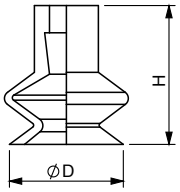




Part No. Silicone	Part No. TempFlex HT		ØD	H	Retaining Ring No.	Part No.	Part No.	Part No.
F20S	F20HT	0,5	22	8	R.011	F250		
F25S	F25HT	1	28	9	R.011	F250		
F30S	F30HT	1,5	32	10	R.011	F250		
F40S	F40HT	2	42	13	R.012		F251	
F50S	F50HT	3	53	17,5	R.013			F252

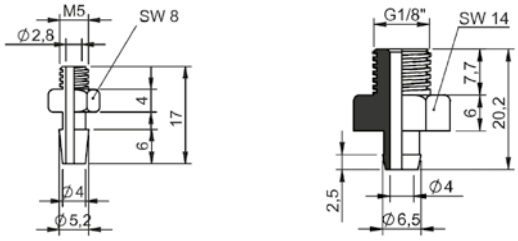
Bellow Vacuum Cups - 1,5 Bellow, Ø11 and Ø16 mm







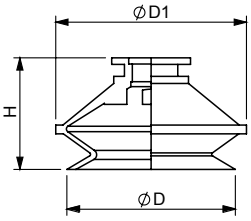




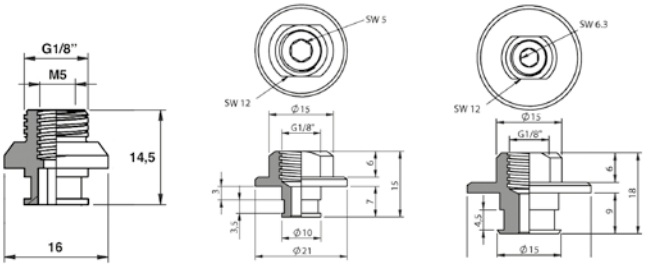
Part No. Silicone	Part No. TempFlex HT		ØD	H	Part No.	Part No.
B11S	B11HT	5	11	17	F134	130.003
B16S	B16HT	7	16	19	F134	130.003

Bellow Vacuum Cups - 1,5 Bellow, Ø20-Ø52 mm







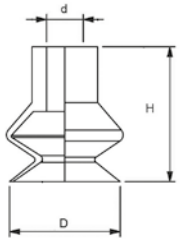


Part No. Silicone	Part No. TempFlex HT		ØD	Ø D1	H	Part No.	Part No.	Part No.
B20S	B20HT	9 mm	21,5	24	20	F250		
B30S	B30HT	9 mm	33	36	26	F250		
B40S	B40HT	9 mm	42	46	28		F251	
B50S	B50HT	12 mm	52	58	35			F252

VACUUM CUPS

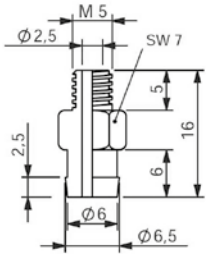
Bellow Vacuum Cups - 1,5 Bellow, Ø11-Ø25 mm

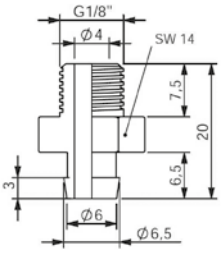








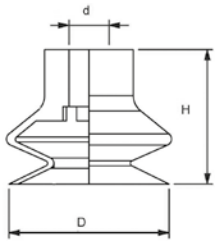




Part No. Silicone	Part No. TempFlex HT	Bellow	D	d	H	M5 Fitting	1/8 Fitting
CL-1.5-11-S	CL-1.5-11-HT	1,5	11	5	16	130.013	130.003
CL-1.5-14-S	CL-1.5-14-HT	1,5	14	5	16	130.013	130.003
CL-1.5-16-S	CL-1.5-16-HT	1,5	16	5	19	130.013	130.003
CL-1.5-20-S	CL-1.5-20-HT	1,5	20	5	16	130.013	130.003
CL-1.5-25-S	CL-1.5-25-HT	1,5	25	5	23	130.013	130.003

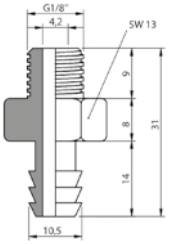
Bellow Vacuum Cups - 1,5 Bellow, Ø33-Ø53 mm

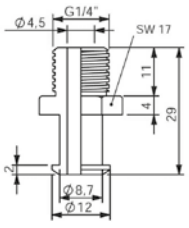








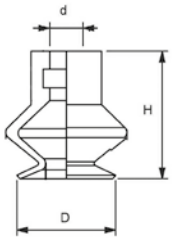




Part No. Silicone	Part No. TempFlex HT	Bellow	D	d	H	1/8 Fitting	1/4 Fitting
CL-1.5-30-S	CL-1.5-30-HT	1,5	33	8	28	130.132	130.190
CL-1.5-43-S	CL-1.5-43-HT	1,5	43	8	28	130.132	130.190
CL-1.5-53-S	CL-1.5-53-HT	1,5	53	8	34	130.132	130.190

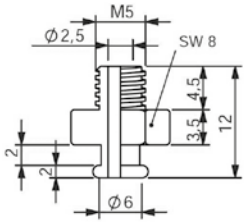
Bellow Vacuum Cups - 1,5 Bellow, Ø15 mm

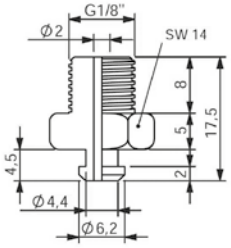








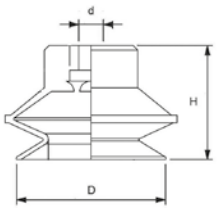




Part No. Silicone	Part No. TempFlex HT	Bellow	D	d	H	M5 Fitting	1/8 Fitting
CM-1.5-15-S	CM-1.5-15-HT	1,5	15	4	16	130.301	130.009

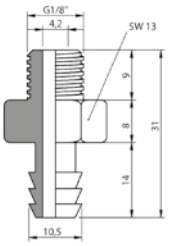
Bellow Vacuum Cups - 1,5 Bellow, Ø20-Ø40 mm

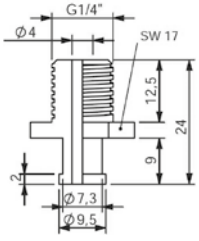










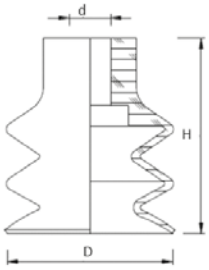


Part No. Silicone	Part No. TempFlex HT	Bellow	D	d	H	1/8 Fitting	1/4 Fitting
CM-1.5-20-S	CM-1.5-20-HT	1,5	20	6	20	130.030	130.274
CM-1.5-30-S	CM-1.5-20-HT	1,5	30	6	30,5	130.030	130.274
CM-1.5-40-S	CM-1.5-20-HT	1,5	40	6	30,5	130.030	130.274

VACUUM CUPS

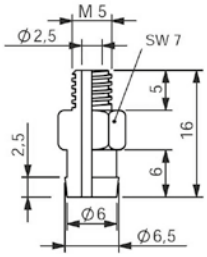
Bellow Vacuum Cups - 2,5 Bellow, Ø5-Ø25 mm

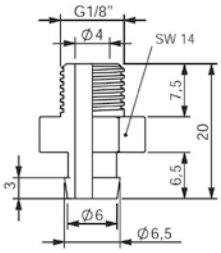








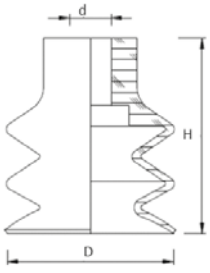




Part No. Silicone	Part No. TempFlex HT		Bellow	D	d	H	M5 Fitting	1/8 Fitting
CL-2.5-5	CL-2.5-5-HT	3	2,5	5	4	14	130.013	130.003
CL-2.5-7	CL-2.5-7-HT	3	2,5	7	3,8	14	130.013	130.003
CL-2.5-9	CL-2.5-9-HT	2	2,5	9	4,2	15	130.013	130.003
CL-2.5-12	CL-2.5-12-HT	8,5	2,5	12	5	21	130.013	130.003
CL-2.5-14	CL-2.5-14-HT	11	2,5	14	4	23	130.013	130.003
CL-2.5-20	CL-2.5-20-HT	8	2,5	20	5	22	130.013	130.003
CL-2.5-25	CL-2.5-25-HT	19	2,5	25	5	34	130.013	130.003

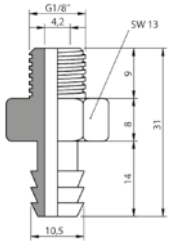
Bellow Vacuum Cups - 2,5 Bellow, Ø32-Ø42 mm

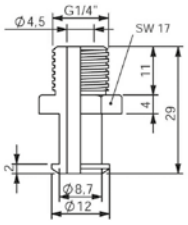












Part No. Silicone	Part No. TempFlex HT		Bellow	D	d	H	1/8" Fitting	1/4" Fitting
CL-2.5-32	CL-2.5-32-HT	13	2,5	32	8	37	130.132	130.190
CL-2.5-42	CL-2.5-42-HT	13	2,5	42	8	46	130.132	130.190

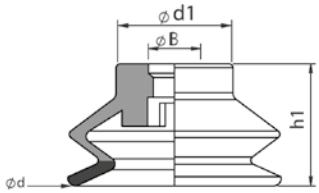


Mouldpro Multiflex vacuum cups offer outstanding advantages

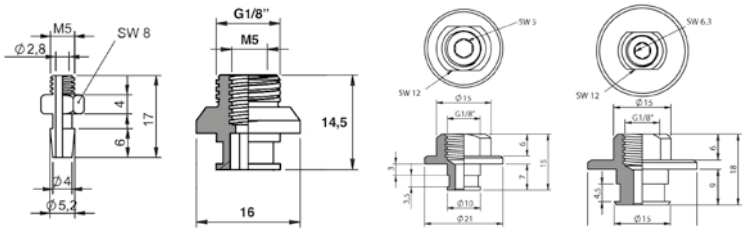
- Extremely high wear resistance
- Very high lifting force
- Best static friction qualities
- No sticking tendency
- Elasticity remains unchanged for minus temperatures
- Working temperatures from -20°C to + 80°C
- Antimarking

Vacuum Cups - 1,5 Bellow, Ø10-Ø50 mm







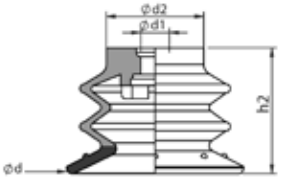


Part No.		d	B	d1	h1	Hardness	Part No.	Part No.	Part No.	Part No.
B15-10MF	5,5	10	3,9	9	16,5	40	F134			
B15-16MF	5,5	16	3,9	9	19	30/60	F134			
B15-20MF	7,6	21	5,2	12	18	30/60		F250		
B15-30MF	7,5	31	6,5	16,8	17	30/60			F251	
B15-40MF	9,3	41	6,3	22,4	22,4	30/60			F251	
B15-50MF	14,4	51	10,5	28	29,2	30/60				F252

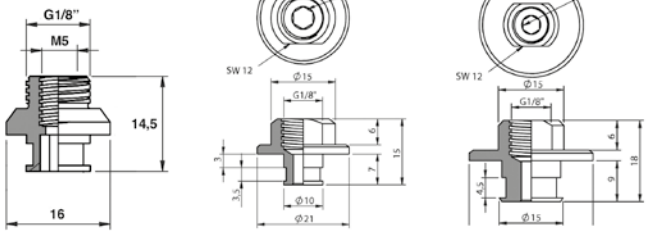
VACUUM CUPS

Vacuum Cups - 2,5 Bellow, Ø20-Ø50 Mm





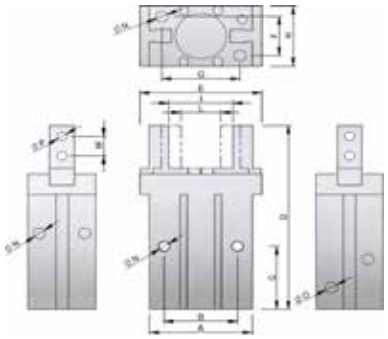




Part No.		d	d1	d2	h2	Hardness	Part No.	Part No.	Part No.
B25-20MF	6,5	20,5	5	12	14,8	30/60	F250		
B25-25MF	8	26	5	15,4	18,9	30/60	F250		
B25-30MF	11	30	5	16,5	21,3	30/60	F250		
B25-35MF	11	35	6,5	21	25,63	30/60		F251	
B25-40MF	14,7	40	6,5	22	28,4	30/60		F251	
B25-50MF	20	50	10,5	27,5	35,5	30/60			F252

Parallel Gripper

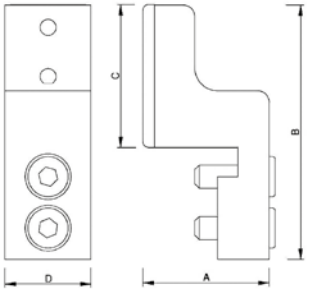




Part No.	Bore size	A	B	C	D	E	F	G	H	I open	L closed	Stroke	M	N	O	P	Force (N) Open/Close	Weight
PG-10	10	23	16	23	57	29	12	18	16.4	16,5	11	4	5.7	M3	M3	M2.5	22 / 34	55 g
PG-10L	10	23	16	25	57	35	12	18	16.4	20,3	11	8	5.7	M3	M3	M2.5	22 / 34	60 g
PG-16	16	30.6	24	24.5	67.3	38	15	22	23.6	22	14.5	6	7	M4	M5	M3	68 / 90	135 g
PG-16L	16	30.6	24	31	70	47	15	22	23.6	28	14.7	12	7	M4	M5	M3	68 / 90	135 g
PG-20	20	42	30	29	84.8	50	18	32	27.6	27.5	16	10	9	M5	M5	M4	84 / 132	235 g
PG-20L	20	42	30	36	90	62	18	32	27.6	35.5	16.1	18	9	M5	M5	M4	84 / 132	270 g
PG-25	25	52	36	30	102.7	63	22	40	33.6	33,3	19	14	12	M6	M5	M5	130 / 208	430 g
PG-25L	25	52	36	40	106	75	22	40	33.6	42.6	19.3	22	12	M6	M5	M5	130 / 208	470 g
PG-32	32	60	46	40	113	97	26	46	40	46.75	26	22	14	M6	M5	M6	316 / 386	715 g
PG-40	40	72	56	49	139	119	32	56	48	61.35	30	30	17	M8	M5	M8	508 / 636	1275 g

Jaws for Gripper





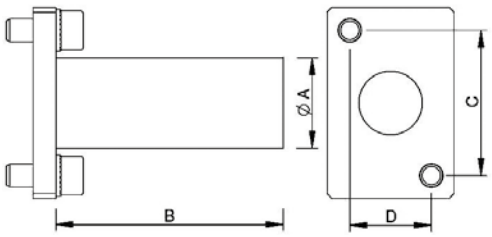
Part No.	Insert	A	B	C	D	Gripper Ref.	Weight
MA.KB.10	TPU/FKM-10	15.5	27	14	10	PG-10	14 g
MA.KB.16	TPU/FKM-16	18.5	35	20	15	PG-16	28 g
MA.KB.20	TPU/FKM-20	22	44.5	25	15	PG-20	41 g
MA.KB.25	TPU/FKM-25	29	55	25	20	PG-25	73 g
MA.KB.32	-	36	65,5	36,5	25	PG-32	166 g

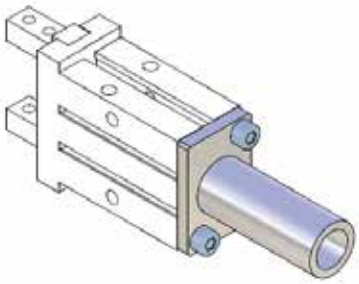
Extremely leight weight (Material Aluminium).

PNEUMATIC GRIPPERS

Gripper Adaptor



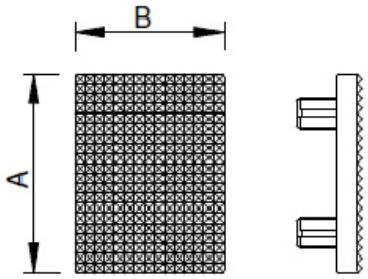




Part No.	A	B	C	D	Gripper Ref.	Weight
GA-10	10	30	18	12	PG-10	11 g
GA-16	14	40	22	15	PG-16	21 g
GA-20	20	50	32	18	PG-20	38 g
GA-25	20	50	40	22	PG-25	55 g
GA-32	20	50	46	26	PG-32	102 g
GA-40	20	50	56	32	PG-40	140 g

Jaw Rubber Pads



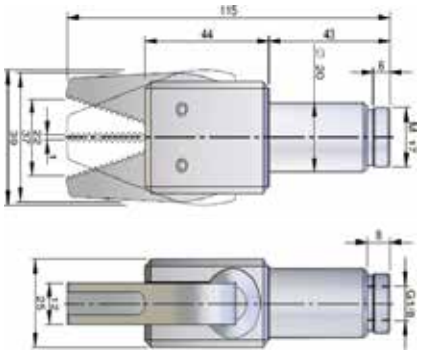


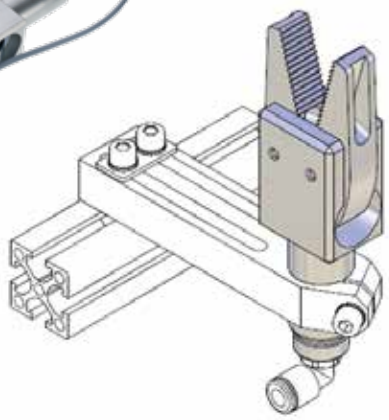
Part No.		Color	A	B	Jaw Ref.	Weight
TPU-10	TPU		14	10	MA.KB.10	1 g
TPU-16	TPU		20	15	MA.KB.16	2 g
TPU-20	TPU		30	15	MA.KB.20	3 g
TPU-25	TPU		30	15	MA.KB.25	1 g
FKM-10	FKM		14	10	MA.KB.10	3 g
FKM-16	FKM		20	15	MA.KB.16	1 g
FKM-20	FKM		30	15	MA.KB.20	2 g
FKM-25	FKM		30	15	MA.KB.25	3 g

Description
TPU = Thermoplastic Polyurethane.
FKM = VITON (Fluoroelastomer).

Sprue Grippers GZ20



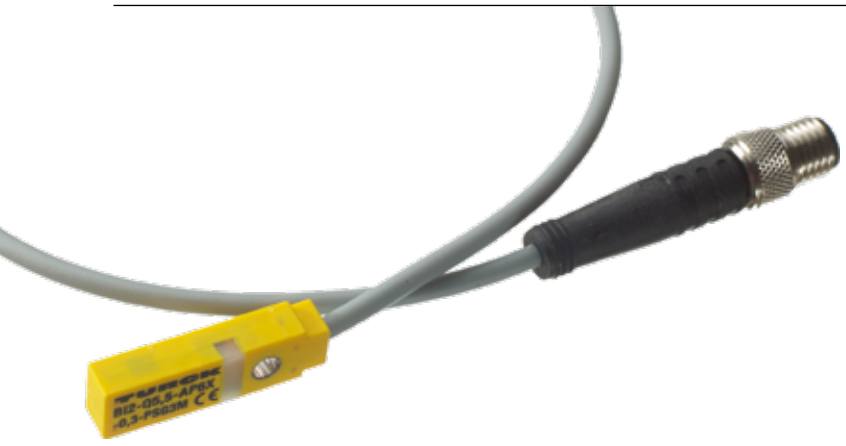


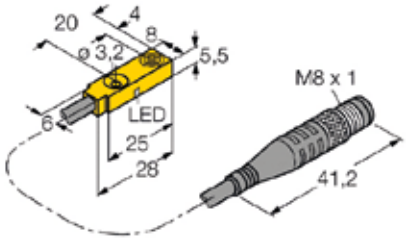


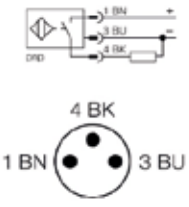
Part No.	Jaw Type	Sensor Type	Grip Force (6 bar)	Weight (g)
GZ20-10-10	Standard Cut		90 N	121
GZ20-10-10-S	Standard Cut	PNP (M8)	90 N	127
GZ20-10-E	Curved - Standard cut		90 N	85
GZ20-10-W-S	Curved / Straight std. Cut	PNP (M8)	90 N	107
GZ20-10-L	Curved - Smooth		90 N	85

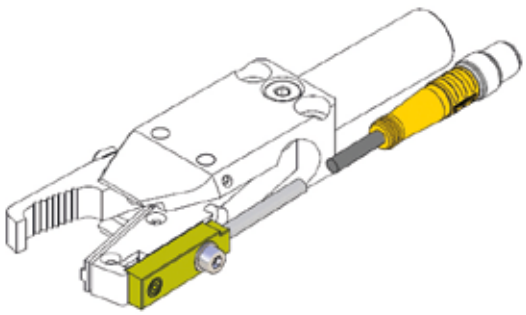
Work principle: Single acting.
Working pressure: 6 bar clean and dry air.
Material: Jaws made of hard-coated Aluminium. Body made of anodized Aluminium.

Replacement Sensors







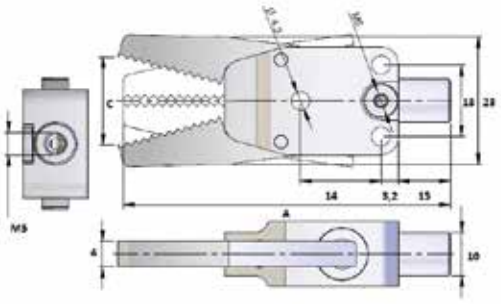


Part No.	Type	Cable length	Connection
GZ20-SM8-PNP	PNP	300	M8
GZ20-SM8-NPN	NPN	300	M8

Sprue Gripper GZ12-10-8..(Short)



GZ12-10-8 GZ12-10-8-G GZ12-10-8-S



Part No.	C	A	Jaw Type	Sensor Type	Grip Force (6bar)	Weight (g)
GZ12-10-8	14	63,9	Standard Cut		19N	30
GZ12-10-8-G	14	63,9	Viton Rubber		19N	30
GZ12-10-8-S	11	61,8	Standard Cut	PNP (M8)	19N	30

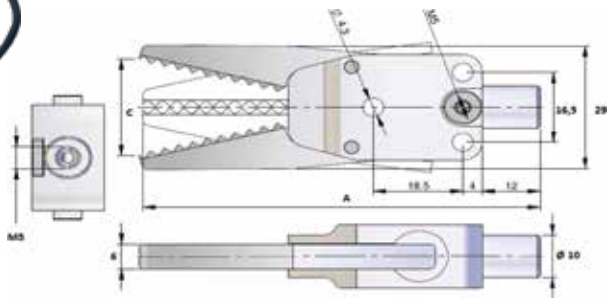
Work principle: single acting.
2 different fastening possibilies:
Clamp- Ø 10 mm on shaQ / Through-Thread in the gripper body.
Working pressure: 6 bar clean and dry air.
Material: Jaws made of hardcoated Aluminium. Body made of anodized Aluminium.

Sprue Gripper GZ12-10-10..(Standard)



GZ12-10-10-M GZ12-10-10-C GZ12-10-10-CS

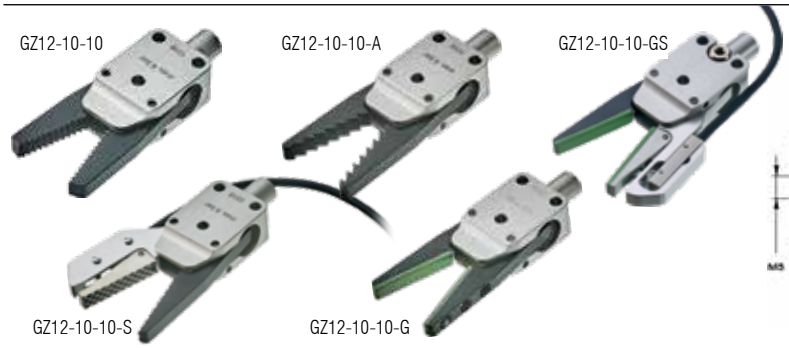
GZ12-10-10-L GZ12-10-10-W

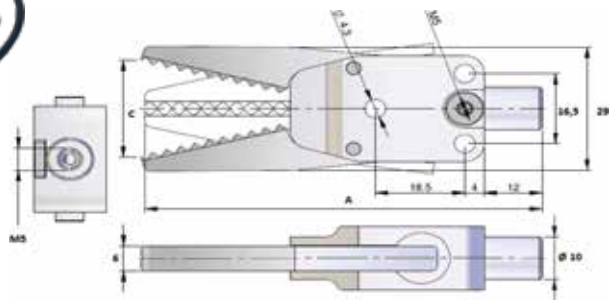


Part No.	C	A	Jaw Type	Sensor Type	Grip Force (6bar)	Weight (g)
GZ12-10-10-M	19,5	75,3	Standard Cut	-	30N	40
GZ12-10-10-L	20,5	75,3	Diamond Cut	-	30N	36
GZ12-10-10-C	17,9	75,3	Curved	-	30N	36
GZ12-10-10-W	20,1	75,3	Wide	-	30N	39
GZ12-10-10-CS	19	75,3	Curved	PNP (M8)	30N	60

Work principle: single acting.
2 different fastening possibilies:
Clamp- Ø 10 mm on shaQ / Through-Thread in the gripper body.
Working pressure: 6 bar clean and dry air.
Material: Jaws made of hardcoated Aluminium. Body made of anodized Aluminium.

Sprue Gripper GZ12-10-10..(Long)





Part No.	C	A	Jaw Type	Sensor Type	Grip Force (6bar)	Weight (g)
GZ12-10-10	22,85	82	Standard		30N	40
GZ12-10-10-S	25	82	Diamond Cut	PNP (M8)	30N	50
GZ12-10-10-A	22	82	Saw Cut		30N	40
GZ12-10-10-G	24	82	Viton Rubber		30N	40
GZ12-10-10-GS	22,7	82	Viton Rubber	PNP (M8)	30N	61

Work principle: single acting.
2 different fastening possibilies:
Clamp- Ø 10 mm on shaQ / Through-Thread in the gripper body.
Working pressure: 6 bar clean and dry air.
Material: Jaws made of hardcoated Aluminium. Body made of anodized Aluminium.

PNEUMATIC GRIPPERS

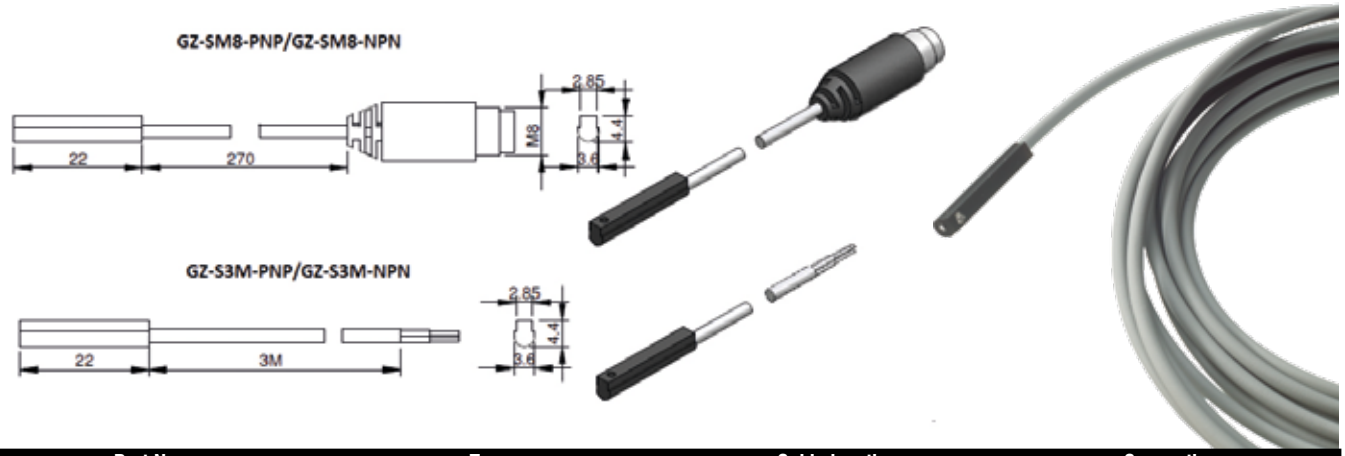
Jaw Rubber Pads



Part No.	Type	Fit Gripper Model	Colour
GZ-TPU-4	TPU	GZ12-10-8-G	
GZ-VIT-4	FKM	GZ12-10-8-G	
GZ-TPU-6	TPU	GZ12-10-10-G	
GZ-VIT-6	FKM	GZ12-10-10-G	

TPU = Thermoplastic Polyurethane.
FKM = VITON (Fluoroelastomer).

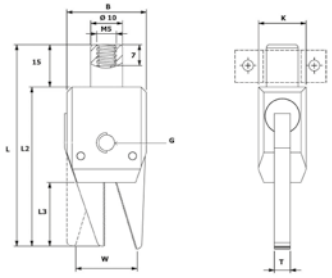
Sensors



Part No.	Type	Cable length	Connection
GZ-SM8-PNP	PNP	270	M8
GZ-S3M-PNP	PNP	3000	-

Sprue Gripper



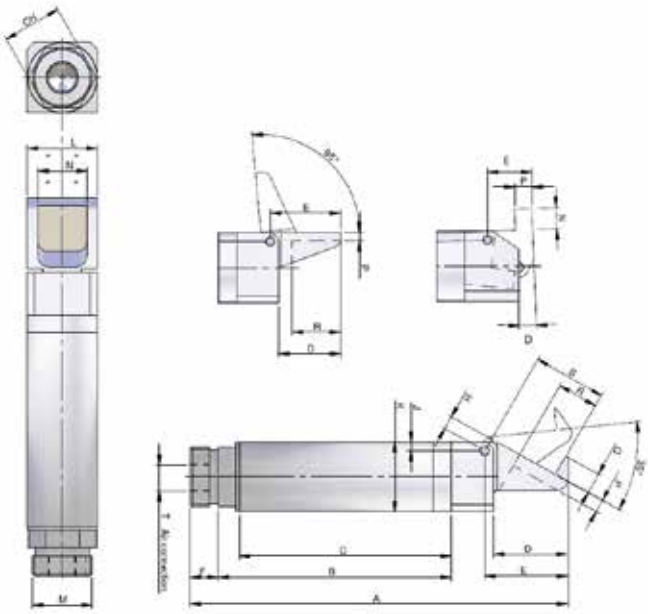


Part No.	W	T	L3	L2	G	L	K	Grip Force	B
MSG30	6,0	3	12	30	M4	45	8	10 N	15
MSG40	9,4	4	16	40	M6	55	10	15 N	20
MSG50	14,0	5	20	50	M6	66	12	23 N	25
MSG60	16,3	6	24	60	M6	76	14	31 N	30

Compressed air supply: max. 6 bar.
Temperature range: +5°C to +70°C.

Finger Gripper Type GF





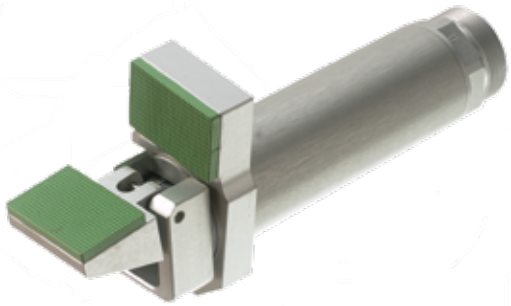
Work principle:
Single acting.

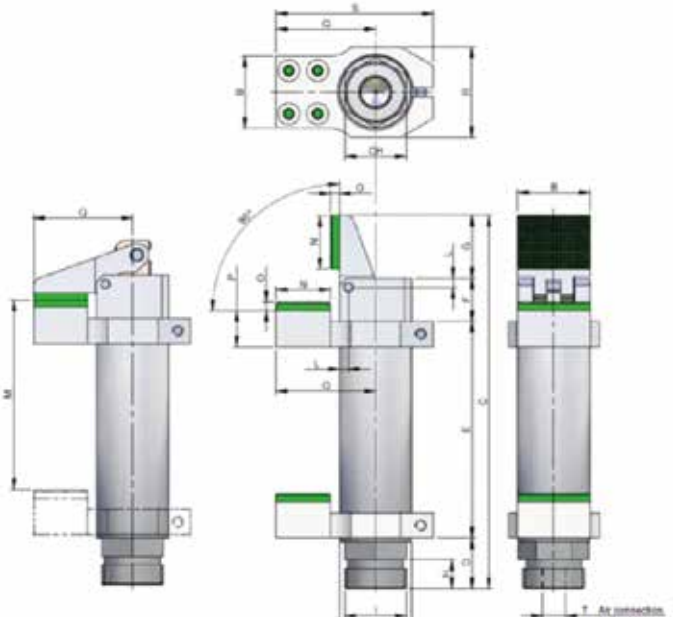
Working pressure:
6 bar clean and dry air.

Material:
Silver anodized Aluminium.

Part No.	Movement angle	Grip force	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	CH
GF14-35	35°	26 N	77	47,5	43,5	14	16	5,5	4,5	3,4	2	Ø14	14	M12X1	10	2	6	13,5	M5	12
GF20-35		100 N	107	66	60	21	23,5	8	6	3,8	2,5	Ø20	20	M17X1	14	3	11,5	20,7	G1/8	17
GF30-35		430 N	156	100	92	30	34	11	8	6	4	Ø30	30	M27X1	22	5	17	30,8	G1/8	27
GF14-90	90°	19 N	69	45,5	41,5	2°	8	5,5			2	Ø14	14	M12X1	10	4			M5	12
GF20-90		70 N	92,5	61	55	2°	13	8			2,5	Ø20	20	M17X1	14	5			G1/8	17
GF30-90		300 N	135	91	83	2°	20	11			4	Ø30	30	M27X1	22	6			G1/8	27
GF14-95	95°	19 N	75,5	47,5	43,5	12	14	5,5			2	Ø14	14	M12X1	10	2	9		M5	12
GF20-95		70 N	103,5	66	60	17,5	20	8			2,5	Ø20	20	M17X1	14	3	14		G1/8	17
GF30-95		300 N	148	100	90	25	29	11			4	Ø30	30	M27X1	22	5	21		G1/8	27

Finger Gripper Type GFR





Work principle:
Single acting.

Working pressure:
6 bar clean and dry air.

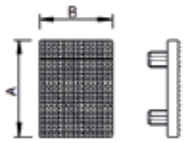
Material:
Silver anodized Aluminium
Viton Pads

Part No.	Grip force	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	CH
GFR1495	19 N	Ø 14	14	75,5	9,5	43,5	10,5	12	5,5	M12X1	2	38,5	10	2,5	6,5	19	17,5	30	M5	12
GFR2095	70 N	Ø 20	20	103,5	14	60	12	17,5	8	M17X1	2,5	52,5	15	2,5	10	27,5	25	43,5	G 1/8	17
GFR3095	300 N	Ø 30	30	148	20	90	15	25	11	M27X1	4	81	20	3	9	40	37	60	G 1/8	27

PNEUMATIC GRIPPERS

Rubber Pads for Finger Gripper



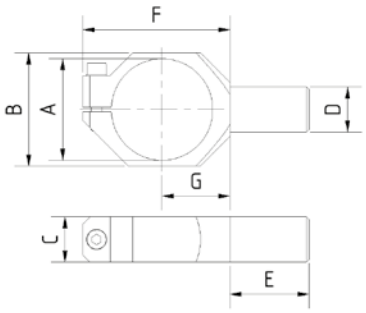


Part No.	Material	Color	A	B	M	Weight
GFR149508	TPU		14	10	GFR14..	1 g
GFR209508	TPU		20	15	GFR20..	2 g
GRF309508	TPU		30	20	GFR30..	3 g
GFR149508V	FKM		14	10	GFR14..	1 g
GFR209508V	FKM		20	15	GFR20..	2 g
GFR309508V	FKM		30	20	GFR30..	3 g

TPU = Thermoplastic Polyurethane.
FKM = VITON (Fluoroelastomer).

Holder for Sprue Cutter





Item	A	B	C	D	E	F	G
SCH-10	36	43	20	20	48	60	28
SCH-20	45	52	20	20	48	68	33
SCH-30	56	54	20	20	48	80	38

- Strong version.
- For securely holding the sprue cutter ASZ.

Pneumatic Gate Cutters

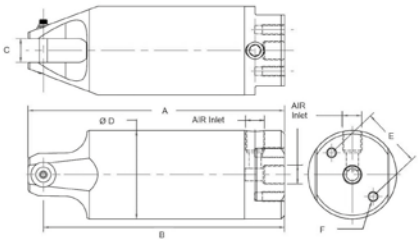


Mouldpro nippers are top quality and perform reliably.

The nipper body housings are made of aluminum, and are lighter than comparable Nile® or OEM® nippers. Mouldpro nippers have two available input ports for compressed air. Use one while the other is plugged. Mouldpro nippers also have bottom mounting holes for mounting possibilities in addition to body clamps.

Cylinder / Pneumatic Nipper Body

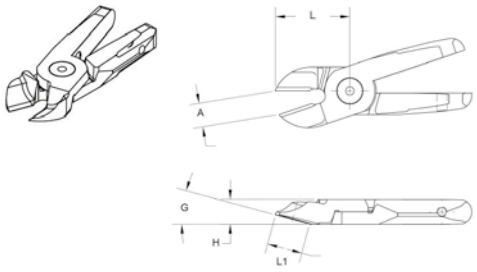




Part No.	Sprue Ø Cut	A	ØD	B	C	E	F	Cutting Pressure	Working Air Pressure	Air Port	Weight
SPT-20R	7mm	130	45	126	12	30	M5x12	140 kg	5-6 Bar	G 1/8"	272 g
SPT-30R	10mm	166	56	163	17	40	M6x12	280 kg	5-6 Bar	G 1/8"	508 g

Standard Blade, 15 Degree Angle

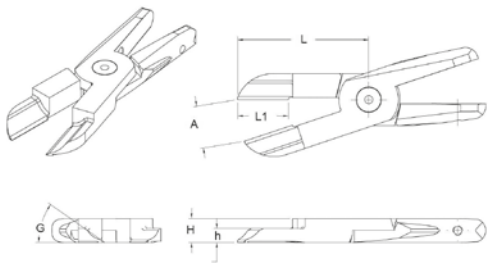




Part No.	Size	A	L	L1	H	G
GPT-20-ST	20	11	36	17	12	15°
GPT-30-ST	30	18	63	36	17	15°

Inline, Straight Blade



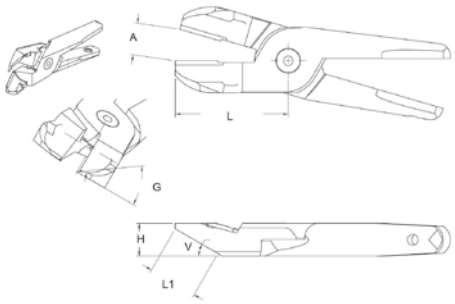


Part No.	Size	A	L	L1	H	h	G
GPT-20-LI	20	21	66	25	12	7	35°
GPT-30-LI	30	22	77	29	17	8	35°

PNEUMATIC GATE CUTTERS

Standard Blade Deep Angle 40/30 Degree

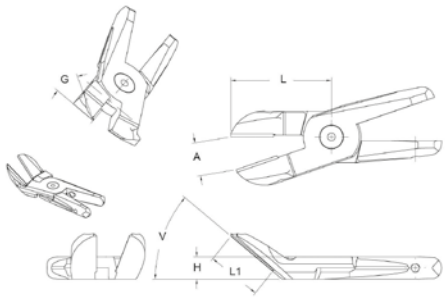




Part No.	Size	A	L	L1	H	V	G
GPT-20-DA	20	11	36	15	12	40°	35°
GPT-30-DA	30	16	58	25	17	30°	35°

Long Blade Deep Angle 40/30 Degree

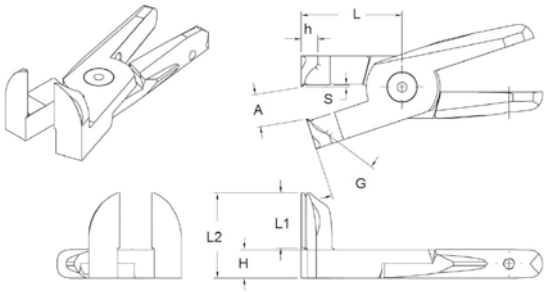




Part No.	Size	A	L	L1	H	V	G
GPT-20-LA	20	17	53	29	12	40°	30°
GPT-30-LA	30	23	83	53	17	30°	30°

Long Blade 90 Degree Angle

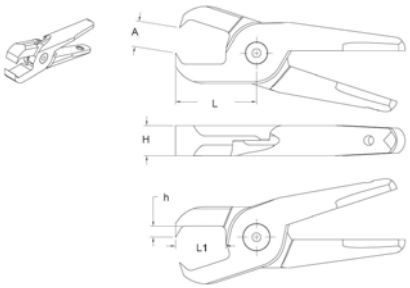




Part No.	Size	A	L	L1	L2	G	H	h	S
GPT-20-DA90	20	13	42	23	35	35°	12	7	1
GPT-30-DA90	30	11	39	33	52	35°	17	8	2

Perpendicular End Cut

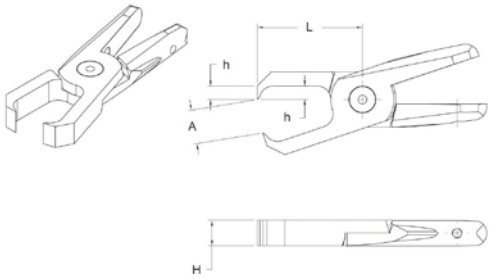




Part No.	Size	A	L	L1	H	h
GPT-20-PE	20	9	28	12	12	4
GPT-30-PE	30	14	46	28	17	6

Long Perpendicular End Cut



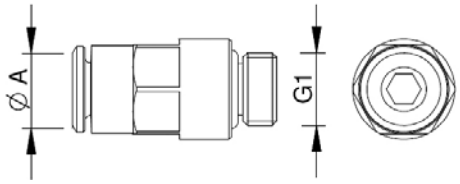


Part No.	Size	A	L	H	h
GPT-20-PELA49	20	16	49	12	6

PNEUMATIC PUSH-IN FITTINGS

Pneumatic Push-In Fitting



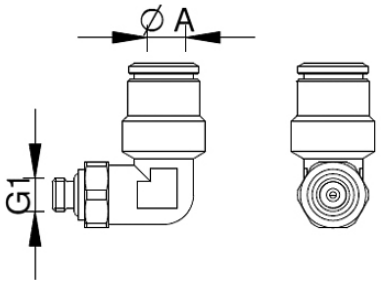


Part No.	Ø A	G1	
MSM04M5	4	M5	10
MSM04G1/8	4	G 1/8	10
MSM06M5	6	M5	10
MSM06G1/8	6	G 1/8	10
MSM06G1/4	6	G 1/4	10
MSM08G1/4	8	G 1/4	10
MSM08G3/8	8	G 3/8	10

Material: Technopolymer / Brass (Nickel Plated).
Pressure: Max 10 bar.
Temperature: 0°C to +60°C.

Swivel Angle Connector

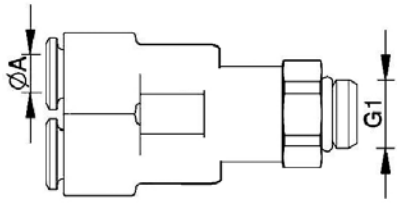




Part No.	Ø A	G1	
MSW04M5	4	M5	10
MSW06M5	6	M5	10
MSW06G1/8	6	G 1/8	10
MSW08G1/4	8	G 1/4	10

Threaded Y Connector

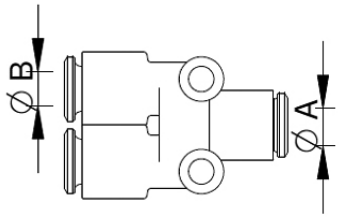




Part No.	Ø A	G1	
MSTY04G1/8	4	G 1/8	10
MSTY06G1/8	6	G 1/8	10
MSTY08G1/4	8	G1/4	10

Y Connector

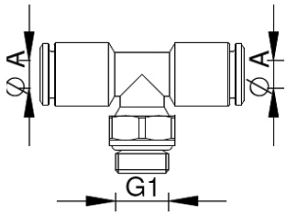




Part No.	Ø A	Ø B	
MSY04	4	4	10
MSY06	6	6	10
MSY08	8	8	10

Threaded T-Connector

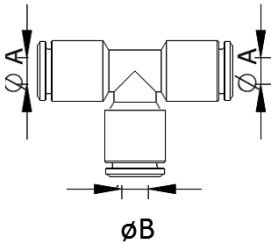




Part No.	Ø A	G1	
MSA04M5	4	M5	10
MSA04G1/8	4	G 1/8	10
MSA06M5	6	M5	10
MSA06G1/8	6	G 1/8	10
MSA08G1/4	8	G 1/4	10

T-Connector

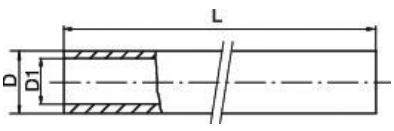




Part No.	Ø A	Ø B	
MST04	4	4	10
MST06	6	6	10
MST08	8	8	10

Push-In Tube - Polyurethane





Part No.	D (mm)	D1 (mm)	Working pressure	Bend radius	Coil Length L
PPU4B	4	2,5	Max 10 bar	20 mm.	30 m.
PPU6B	6	4	Max 10 bar	30 mm.	30 m.
PPU8B	8	6	Max 10 bar	31 mm.	30 m.

07.
END OF BARREL

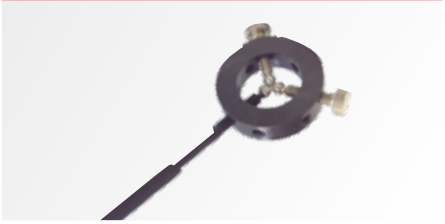
203 REMOVABLE NOZZLE TIPS



204 SCREW TIPS



204 TIP SPANNER



206 NOZZLE BODY ADAPTORS



The MOULDPRO Removable Nozzle Tip System saves Time and Money!

The Quick Change nozzle tip system was developed to offer a fast an economical solution for injection moulders to adapt their moulding machines to different tools and materials.

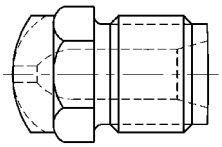
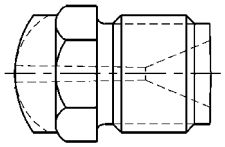
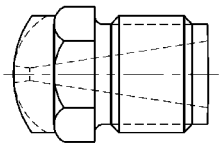
By replacing the manufacturers nozzle body with the MOULDPRPO replaceable tip design the moulder can benefit from using MOULDPRO standard 'quick change' replaceable tips.

The tips are available in different lengths, with different tip radius and orifice; the tips are available as General Purpose / Nylon Reverse Taper or ABS Full Taper.

- High Quality
- Hardened Tool Steel
- All Standard Sizes in Stock
- Standardise your factory and Save Money
- Standardise Size of Nozzle Heater Bands
- Custom designs available



Removable Nozzle Tips

General Purpose Type	Nylon Type	Full Taper				
						
Part Number	**Part Number**	**Part Number**	**Thread Type**	**Total Length**	**Radius**	**Orifice Ø**
GP1-R12.7-1.5			7/8" UNF	38	12,7	1,5
GP1-R12.7-2						2
GP1-R12.7-2.5						2,5
GP1-R12.7-3	NRT1-R12.7-3	FT1-R12.7-3				3
GP1-R12.7-4	NRT1-R12.7-4	FT1-R12.7-4				4
GP1-R12.7-5	NRT1-R12.7-5	FT1-R12.7-5				5
GP1-R12.7-6.5	NRT1-R12.7-6.5	FT1-R12.7-6.5				6,5
GP1-R12.7-8	NRT1-R12.7-8	FT1-R12.7-8				8
GP1-R15-1.5					15	1,5
GP1-R15-2.5						2,5
GP1-R15-3	NRT1-R15-3	FT1-R15-3				3
GP1-R15-4	NRT1-R15-4	FT1-R15-4				4
GP1-R15-5	NRT1-R15-5	FT1-R15-5				5
GP1-R15-5.5	NRT1-R15-5.5	FT1-R15-5.5				5,5
GP1-R15-6.5	NRT1-R15-6.5	FT1-R15-6.5				6,5
GP1-R15-7	NRT1-R15-7	FT1-R15-7				7
GP1-R15-8	NRT1-R15-8	FT1-R15-8				8
GP1-R15-9.5	NRT1-R15-9.5	FT1-R15-9.5				9,5
GP1-R19-3	NRT1-R19-3	FT1-R19-3			19	3
GP1-R19-4	NRT1-R19-4	FT1-R19-4				4
GP1-R19-5.5	NRT1-R19-5.5	FT1-R19-5.5			30	5,5
GP1-R30-3	NRT1-R30-3	FT1-R30-3				3
GP1-R30-7	NRT1-R30-7	FT1-R30-7				7
GP2-R12.7-3	NRT2-R12.7-3			70	12,7	3
GP2-R19-3	NRT2-R19-3				19	3
GP3-R12.7-3	NRT3-R12.7-3			95	12,7	3
GP4-R12.7-3	NRT4-R12.7-3			127		3

Removeable Nozzle tips, Heat Treated Tool Steel, Polished Radius and Bore.

SCREW TIPS / TIP SPANNER

Screw Tip Assembly



Part No.	Diameter
STA-18	18mm
STA-20	20mm
STA-22	22mm
STA-25	25mm
STA-27	27mm
STA-28	28mm
STA-30	30mm
STA-32	32mm
STA-33	33mm
STA-35	35mm
STA-37	37mm
STA-38	38mm
STA-40	40mm
STA-42	42mm
STA-43	43mm
STA-45	45mm
STA-47	47mm
STA-48	48mm
STA-50	50mm
STA-52	52mm
STA-55	55mm
STA-60	60mm
STA-62	62mm
STA-65	65mm

Part No.	Diameter
STA-67	67mm
STA-70	70mm
STA-72	72mm
STA-75	75mm
STA-78	78mm
STA-80	80mm
STA-85	85mm
STA-90	90mm
STA-95	95mm
STA-100	100mm
STA-105	105mm
STA-110	110mm
STA-120	120mm
STA-125	125mm
STA-130	130mm
STA-135	135mm
STA-140	140mm
STA-150	150mm
STA-155	155mm
STA-160	160mm
STA-170	170mm
STA-180	180mm
STA-190	190mm
STA-200	200mm

For all popular makes of moulding machine.
Complete nitrided screw tip assembly including Screw Tip, Check Ring and Pressure Ring.
Please advise machine make / model / tonnage and screw size when ordering.

Screw Tip Spanner



Part No.	Screw tip Size
123894	Max 75 mm

Tip spanner, ideal for fast and safe Screw tip replacement.
Adjustable for Screw Tips up to 75mm, 3, 4, 5 Flute.
Foam Grip.

Leather Gloves



Part No.	Size
WG08/R8	MULTI

Ideal for handling hot machine parts.
Rated up to 200°C EN-407.

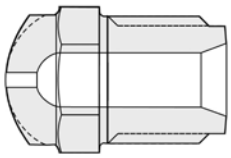
CUSTOM NOZZLE TIP FORM

SPECIFY

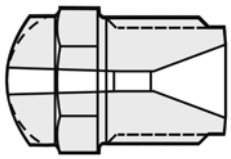
1. External Style of Nozzle Tip:

☐ Standard ☐ Flat Face*

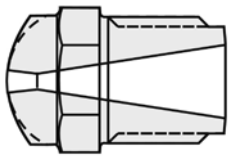
2. Internal Design of Nozzle Tip:



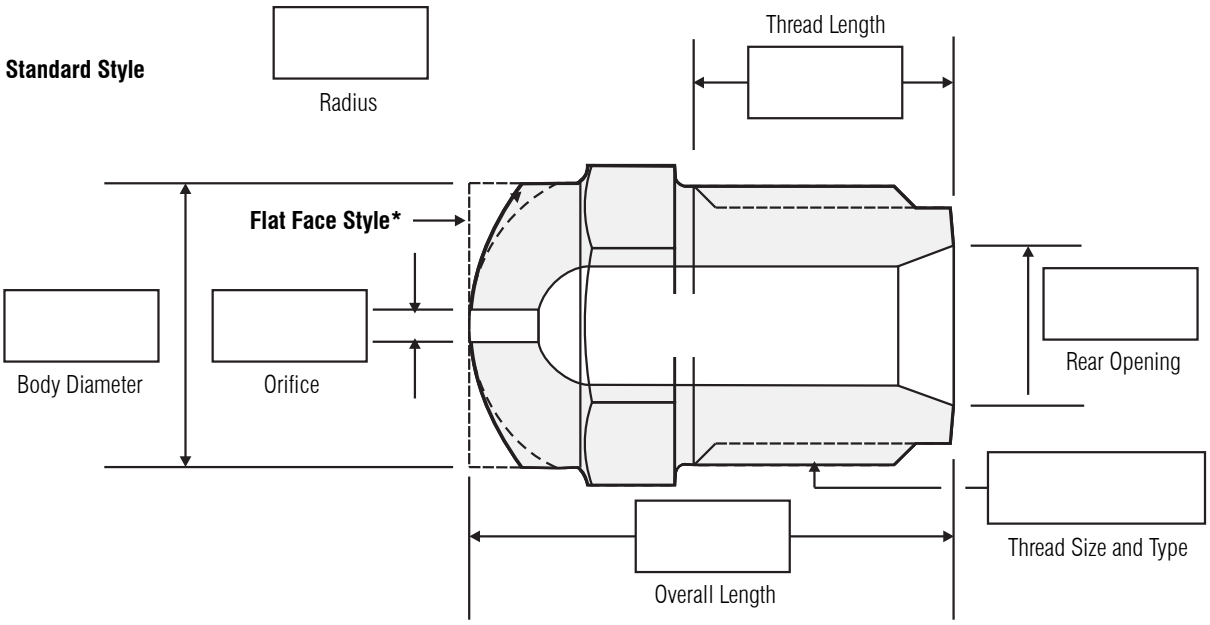
☐ General Purpose Internal Design



☐ Nylon Internal Design



☐ Full Taper Internal Design



Date: _____ Quantity: _____ Phone: _____

Name _____ Title _____

Company _____ Email _____

Address _____

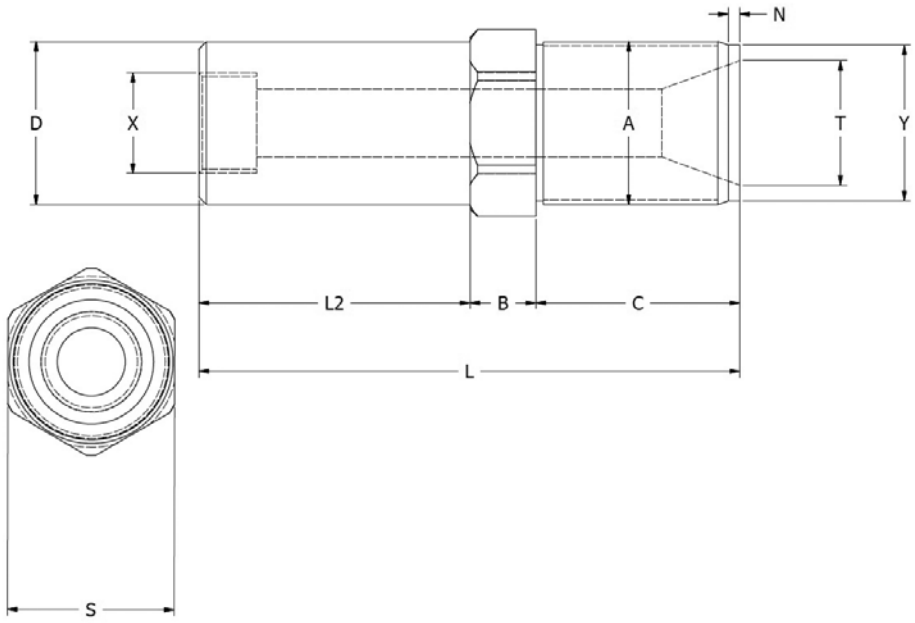
City _____ Zip _____

Country _____

ORDER FORM

Nozzle Body





L	L2	B	C	D	X	T	Y	A	N	S

Metric only (mm)

Machine/Model _____

Company _____

Contact _____

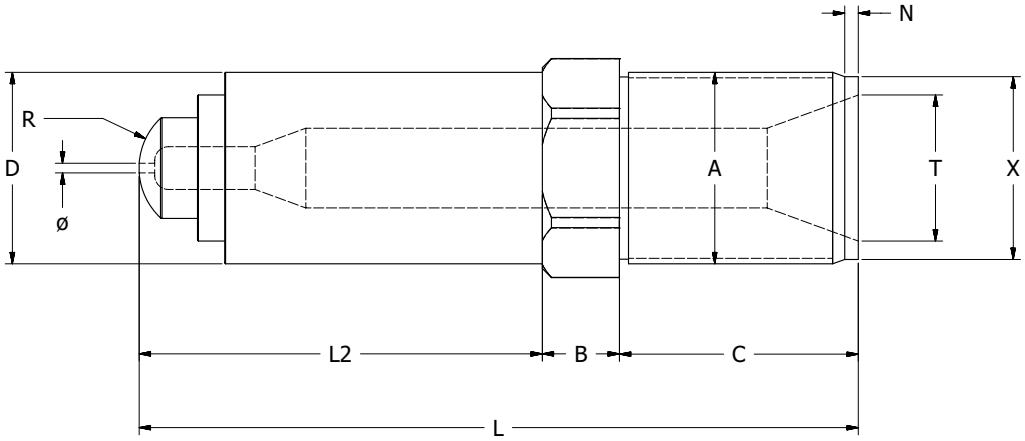
Telephone _____

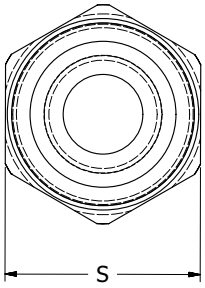
Contact e-mail _____

ORDER FORM

Solid Nozzle







L	L2	B	C	D	X	R	Ø	T	A	N	S

Metric only (mm)

Machine/Model _____

Company _____

Contact _____

Telephone _____

Contact e-mail _____

08.
TOOLS & ACCESSORIES

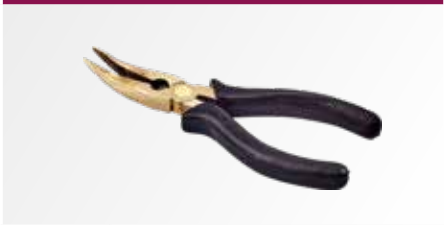
209 GATE CUTTERS



212 DEBURRING TOOLS



213 SOFT TOOLS



215 PRY BARS



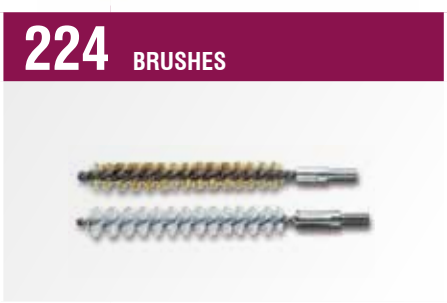
216 ACCESSORIES



219 POLISHING & ABRASIVES



224 BRUSHES



226 COMPRESSED AIR BLOW GUNS



227 MEASURING TOOLS



229 MAGNIFYING GLASSES



Gatecutter 15° Flush Cut



Flat Back





Part No.	Cut Type	Size	Handle Type
P40	15° - flush cut	4" / 100 mm	Plastic Grip
P50	15° - flush cut	5" / 125 mm	Plastic Grip
P60	15° - flush cut	6" / 150 mm	Plastic Grip
P70	15° - flush cut	7" / 175 mm	Plastic Grip

Gatecutter 15° Flush Cut



Curved Back



Part No.	Cut Type	Size	Handle Type
P55	15° - flush cut	5" / 125 mm	Plastic Grip
P65	15° - flush cut	6" / 150 mm	Plastic Grip

Gatecutter 40° Flush Cut



Flat Back





Part No.	Cut Type	Size	Handle Type
P60-40	40° - flush cut	6" / 150 mm	Plastic Grip

Gatecutter 90° Flush Cut



Flat Back



Part No.	Cut Type	Size	Handle Type
P60-90	90° - flush cut	6" / 150 mm	Plastic Grip

High quality alloy steel.
Coil spring return provides fast smooth action and improves productivity.
Induction hardened cutting edge.
Black oxide, anti-glare finish reduces visual fatigue and corrosion.

GATE CUTTERS

Heated Gate Cutters



Part No.	Blade Length (mm)	Blade Type	Size (mm)	Cut capacity (mm)	Weight	
HT-120	10	End Cut	150	ø 4	270 g	
HT-130	27	Long	165	ø 4	270 g	
HT-140	22	Flat	160	ø 4	265 g	
HT-160	16	Narrow	150	ø 4	240 g	
HT-170	22	Angle	150	ø 4	250 g	
HT-180	16	Standard	190	ø 4	250 g	
HT-200	23	Heavy Duty 29 Watt	190	ø 7	375 g	

Transformer for Heated Gate Cutters



Part No.	Power Input	Voltage output	Size (mm)
MHN-PS01	110-240V.	24 V.	45x110x165

Spare Heating Element



Part No.	Power input	Heat Effect
W-19	24 V	19 Watt
W-29	24 V	29 Watt



PREMIUM TOOLS FOR PROFESSIONALS

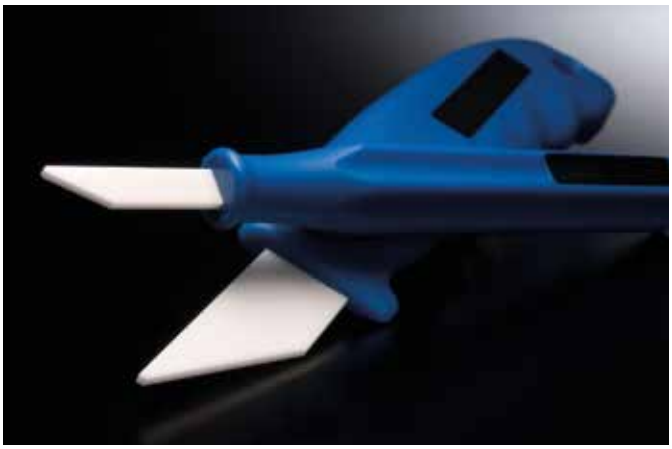
DEBURRING TOOLS

Ceramic Knife

Ideal for curved and complicated shapes;
Excels on ultra-hard resins like Glass-fiber, carbon-fiber and talc filled plastics.

Also it can be used on soft metals like aluminum, copper and brass.

- Space age ceramics make safe deburring possible because of Work-finisher's unique non-blade like edge. (No sharp edge)
- Deburrs hard plastics effortlessly without the fear of cutting your hand or fingers in the process. (Very safe knife)
- Can be used for surface finishing the plastics moulding parts, very small, very confined areas, narrow, concave area or complex portion.



Ceramic Knife



Part No.	Blade material	Length	Blade dimension	Blade Profile	
MWF133	Ceramic 1250 HV	133 mm	25 x 5 mm	Convexed	1

Ceramic Knife



Part No.	Blade material	Length	Blade dimension	Blade Profile	
MWF175	Ceramic 1250 HV	175 mm	40 x 14 mm	Convexed	1

De-burring Tool





Part No.	Type	Blade Material	No. of blades	Blade size ø	
E02000	Handle	Steel	1	3,2	1
BS1010	Replacement blades	Steel	10	3,2	1

Bronze Pliers Angled, Short



Part No.	Description	Size	
BC60	60° Needle Nose	6"/ 150 mm	1

Bronze Pliers Angled, Long





Part No.	Description	Size	
BC90	60° Needle Nose	9"/ 230 mm	1

Bronze Pliers Straight, Short



Part No.	Description	Size	
BL60	Straight Needle Nose	6"/ 150 mm	1

Bronze Pliers Straight, Long



Part No.	Description	Size	
BL90	Straight Needle Nose	9"/ 230 mm	1

Bronze Side Cutter



Part No.	Description	Size	
BD60	Side Cutter	6"/ 150 mm	1

High quality Bronze Pliers, reduce risk of damaging the mould.

SOFT TOOLS

Bevelled Blade Scraper



Part No.	Blade Width	Blade Length	Total Length	Material	
BSC125L	25 mm	177 mm	273 mm	Brass	1
BSC125	32 mm	100 mm	200 mm	Brass	1
BSC200	50 mm	100 mm	200 mm	Brass	1

Angled Scraper no Bevel



Part No.	Blade Width	Material	
BSC125A	32 mm	Brass	1

Knock Out Bar



Part No.	Description	Size	
704-31	Knock out Bar	ø 8	1
705-31	Replacement Bar	ø 8	1

Simple but effective tool that combines a tough steel rod with threaded brass replaceable tips that prevent damage to the mould surface.
The quickly replaced threaded brass tip ensures that the rod never gets too short or wears out and minimises the risk of burning.
The steel rod never wears out and the end will not 'mushroom' like a solid brass rod.

- Steel Rod has an anti-rust finish.
- Steel Rod has 10mm Flat for simple removal of used tips.
- Brass Tip is machined to fine point.
- Supplied complete with one replacement tip.

Steel Rod: 13mm dia. / 420mm length.
Brass Tip: 8mm dia. / 105mm length.

Brass Tools



Part No.	Description	Length	
BRT5	5mm Diameter	350mm	1
BRT5/90	5mm Diameter / 90 Degree	350mm	1
BRT8	8mm Diameter	400mm	1
BRTK	Kit Comprising BRT5 / BRT5/90 / BRT8		1

A range of brass hand tools manufactured from high grade brass for safely working on mould tools without damaging the mould surface; ideal for removing frozen sprues or stuck parts.
The tips are supplied blunt and may be shaped to suit specific requirements.

Premium Aluminium Bronze Pry Bars



Pry Bar, Radius Head



Part No.	Length	Hex	Weight (kg)	
MPB-500	18" - 460 mm.	5/8"	0,8	1

Pry Bar, Rolling Head



Part No.	Length	Hex	Weight (kg)	
MPB-600	18" - 460 mm.	5/8"	0,75	1

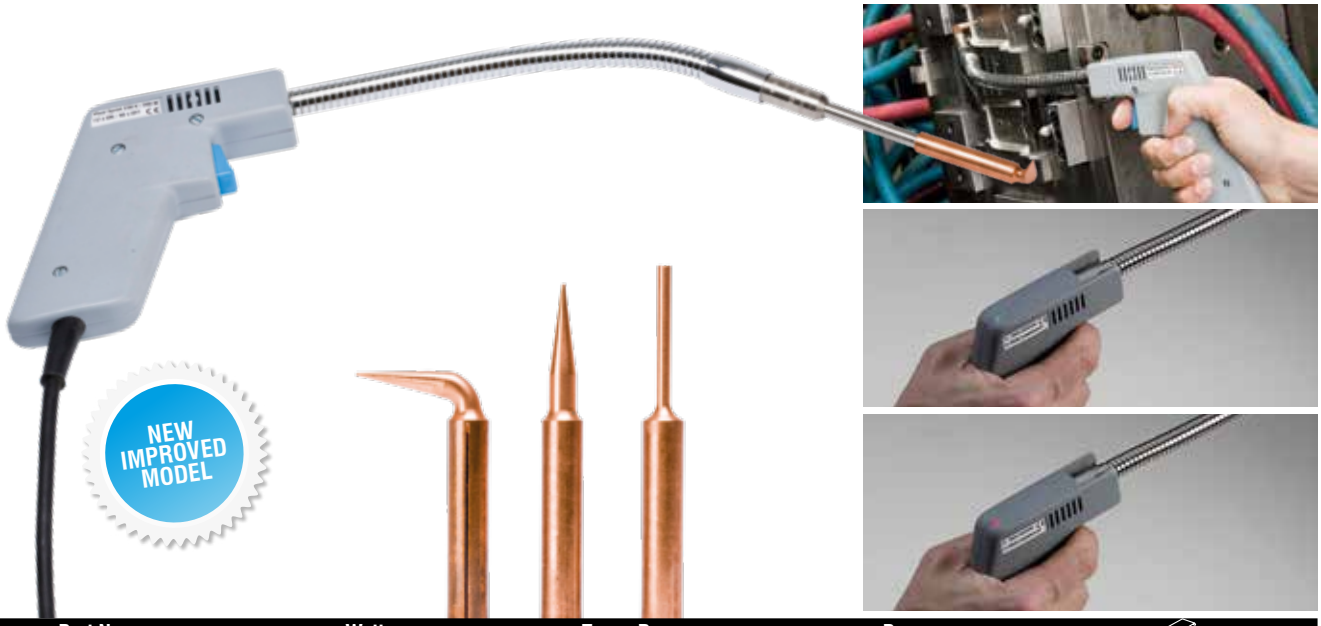
Pry Bar, Angle Head



Part No.	Length	Hex	Weight (kg)	
MPB-700	18" - 460 mm.	5/8"	0,7	1

Description
Premium Alu-Bronze Alloy Pry Bars ideal for alignment and assemble/disassemble mould bases without risk of surface damages or scratches.

Hot Tip Sprue Cleaner-Automatic



Part No.	Watt	Temp. Range	Power	
PS6-5AUTO	200	350°C	230V.	1

The Hot Tip Sprue Cleaner is a quick heating flexible tool for melting thermoplastics from plugged sprues and nozzles.
When you squeeze the trigger the powerful heater immediately heats the tip to 350°C.

- 3 Copper Tips included.
- Flexible Arm.
- 2,5 meter cord.
- Automatic timer: The integrated timer heats up the tip for approx. 10 seconds and then wait 50 seconds before next cycle is possible. A light will indicate heating action (green) and pause (red).

Replacement Tips for Sprue Cleaner



Part No.	Number	Description	Material
PS6-8	8	Straight Cone	
PS6-9	9	Straight Blade	
PS6-10	10	90° Cone	
PS6-11	11	Straight Cylinder	Copper
PS6-12	12	45° Cone	
PS6-13	13	45° Blade	
PS6-14	14	Straight Cylinder Slim	

Copper and Rawhide Mallet



Part No.	Size	Ø	Weight	Length	
THO208	A	25 mm	355 g	230 mm	1
THO210	1	32 mm	710 g	270 mm	1
THO212	2	38 mm	1070 g	305 mm	1
THO214	3	44 mm	1600 g	305 mm	1
THO216	4	50 mm	2380 g	355 mm	1

Malleable-iron head fitted with one face of pure copper, the other highly compressed buffalo rawhide.
Wooden Handle.

Nylon Hammer



Part No.	Face diameter	Weight	Length	
THO710	32 mm	445 g	280 mm	1
THO712	38 mm	650 g	305 mm	1
THO714	44 mm	850 g	305 mm	1
THO716	50 mm	1230 g	305 mm	1

- Worn faces can be quickly replaced BY HAND providing minimum down time.
- All faces are one piece mouldings.
- There are no metal pegs or inserts which can damage the workpiece when worn.
- Serrations in the metal head prevent faces loosening in use.
- Faces have a shoulder for extra strength and to prevent fracture from misdirected blows.
- To suit a wide range of hammering applications 5 alternative hardness of screw-in faces are available – colour coded for easy identification.

Dead Blow Nylon Hammer



Part No.	Face diameter	Weight	Length	
THO1010	32 mm	550 g	275 mm	1
THO1212	38 mm	700 g	305 mm	1
THO1414	44 mm	900 g	310 mm	1
THO1616	50 mm	1150 g	325 mm	1
THO2020	63 mm	1850 g	370 mm	1

Thorace dead blow hammers are a coated die-cast head and handle of aluminium alloy with shock absorbent rubber grip.
The hollow head is partially filled with steel shot which adds to the weight, prevents rebound and delivers 'dead' blows of maximum impact.

ACCESSORIES

Spare Faces



Face Diameter		Soft Grey Shore A 63-73	Medium Red Shore D 45-55	Tough Brown PU Shore D 58-62	Hard White Nylon Shore D 57-61	Extra Hard Yellow Rockwell R103
32	10	THO-SG10	THO-MR10	THO-TB10	THO-HW10	THO-HY10
38	10	THO-SG12	THO-MR12	THO-TB12	THO-HW12	THO-HY12
44	10	THO-SG14	THO-MR14	THO-TB14	THO-HW14	THO-HY14
50	10	THO-SG16	THO-MR16	THO-TB16	THO-HW16	THO-HY16
63	10	-	-	THO-TB20	THO-HW20	-

Ballpoint L-Hex Key Sets



Part No.	Pieces in set	Sizes	Type	
BLX9	9	1.5-2-2.5-3-4-5-6-8-10 mm.	Metric	1
BLX13	13	3/64-1/16-5/64-3/32-7/64-1/8-5/32-9/64-3/16-7/32-1/4-5/16-3/8	Imperial	1

Protanium® steel and are up to 20% stronger than competitor tools.
BriteGuard premium chrome-like finish is attractive, professional quality, and easy to clean.

Mini Grinding Machine



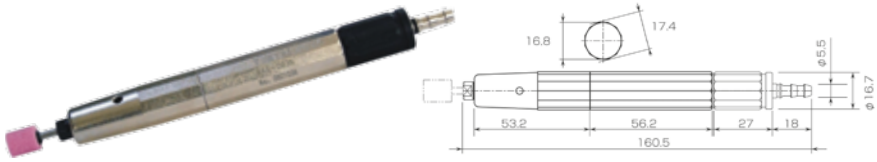
Part No.	Speed	Voltage	Collet	Foot Control	
PP35SET	0-35.000 rpm	115/230 V.	3 mm	Yes	1

Spare Collets



Part No.	Collet	
PP35C235	2,35 mm	1
PP35C300	3,00 mm	1
PP35C3175	3,175 mm	1

Straight Air Micro Grinder





Part No.	RPM	Collet size	Weight nt.	Weight Gross
MSG-3BSN	65.000	ø 3,0 mm	130 g	340 g

Outstanding accuracy and durability.
Low air consumption at 0.4 Mpa.

Set of Package

- Air hose 1.5m.
- Hose band 2 pcs.
- Quick joint.
- Over hose set pin.
- Wrench.
- Ø 10 Mounted point.
- Ø13 Mounted NSL 2 pcs.
- Lap shaft.
- Ø 25 disk type NSL 7 pcs.



Linear Air Polisher





Part No.	Collet	Strokes /min	Linear Stroke	Noise level	Weight nt.	Weight Gross
TLL-07	Ø3 / 0.5-3 x 4-10 mm	22-25.000	0,7 mm.	64 dB (A)	180 g	340 g

Linear reciprocating stroke filing for polishing narrow areas and corners of precision parts.
Ideal for Mould Finishing Super Stones.

Set of Package

- Turbolap (Body).
- Super collet.
- Air hose 1.5m.
- Hose band 2 pcs.
- Quick joint.
- Over hose.
- TL Wrench.
- Ceramic stone 1pc.

POLISHING & ABRASIVES

Diamond Points Set



Part No.	Grit size	Shank	
DP2030	D100	3 mm	1 (set of 30 pcs)

Carbide Burrs Set



Part No.	Cut type	Shank	
CB10S	Double cut	3 mm	1 (set of 10 pcs)

Diamond Needle File Set



Part No.	Description	Size	Grit Size	
DIAZ-5	Diamond Needle files	140 mm	D126	1

Quality Diamond File Set, useful for working with steel, hardened steel, carbide and ceramic/glass materials.

Mould Finishing Super Stones

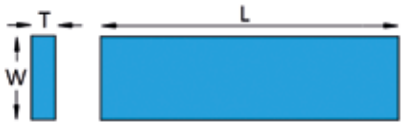


New SuperStone offers an improved cutting ability, longer life and an increased heat resistance of approximately 45% over the conventional type. New SuperStone can be used in ultrasonic polishing machines, electric micro grinders, reciprocating profilers, or by hand use with holder.

SuperStone can also be used on soft metals such as aluminium, copper and brass.

- Incredible strength and flexibility. It will offer excellent polishing ability even under every strenuous condition.
- Non-clogging. Beautiful polishing result on all types of metals in small and detailed areas.
- Available in any dimensions in flat/round profiles upon your demand.
- Available in grit 120 to 1200. Easy to identify by colour-coding.

Flat Type





Size (mm) T x W x L	VIOLET (#80)	EMERALD (#120)	GOLD (#180)	L.BROWN (#300)	ORANGE (#400)	BROWN (#600)	BLUE (#800)	WHITE (#1000)	RED (#1200)	
0.8 x 4 x 100	NSV084	NSE084	NSG084	NSL084	NSO084	NSP084	NSB084	NSW084	NSR084	1
0.8 x 6 x 100	NSV086	NSE086	NSG086	NSL086	NSO086	NSP086	NSB086	NSW086	NSR086	1
1.0 x 4 x 100	NSV104	NSE104	NSG104	NSL104	NSO104	NSP104	NSB104	NSW104	NSR104	1
1.0 x 6 x 100	NSV106	NSE106	NSG106	NSL106	NSO106	NSP106	NSB106	NSW106	NSR106	1
1.5 x 4 x 100	NSV154	NSE154	NSG154	NSL154	NSO154	NSP154	NSB154	NSW154	NSR154	1
1.5 x 6 x 100	NSV156	NSE156	NSG156	NSL156	NSO156	NSP156	NSB156	NSW156	NSR156	1

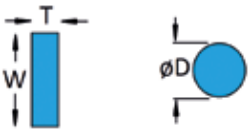
Round Type



Size (mm) D x L	VIOLET (#80)	EMERALD (#120)	GOLD (#180)	L.BROWN (#300)	ORANGE (#400)	BROWN (#600)	BLUE (#800)	WHITE (#1000)	RED (#1200)	
3,0 x 100	NSVD3B	NSED3B	NSGD3B	NSLD3B	NSOD3B	NSPD3B	NSBD3B	NSWD3B	NSRD3B	1

Stone Holders





Part No.	W (mm)	T (mm)	D (mm)	
SSH-4	4	0,5 - 3	-	1
SSH-6	6	0,5 - 3	-	1
SNH-30	-	-	ø3	1

Diamond Paste



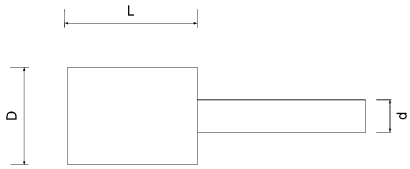


Part No.	Micron	Size	
MPD1	1	5 gr.	1
MPD3	3	5 gr.	1
MPD6	6	5 gr.	1
MPD8	8	5 gr.	1
MPD14	14	5 gr.	1
MPD25	25	5 gr.	1

High concentration diamond paste for rapid polishing and repair of moulds.
Use with felt stick, wood sticks or points.

Felt Bobs - Cylindrical

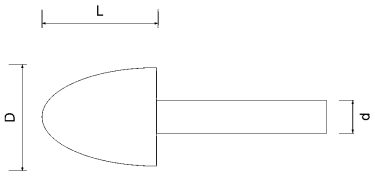




Part No.	D	L	d1	
FIL612C	6	12	3	1 (bag of 10 pcs)
FIL1012C	10	12	3	1 (bag of 10 pcs)
FIL1219C	12	19	3	1 (bag of 10 pcs)
FIL1632C	16	32	3	1 (bag of 10 pcs)
FIL1932C	19	32	6	1 (bag of 10 pcs)
FIL3238C	32	38	6	1 (bag of 10 pcs)

Felt Bobs - Cone Shape





Part No.	D	L	d1	
FIL616K	6	16	3	1 (bag of 10 pcs)
FIL1012K	10	12	3	1 (bag of 10 pcs)
FIL1219K	12	19	3	1 (bag of 10 pcs)
FIL1625K	16	25	3	1 (bag of 10 pcs)
FIL1925K	19	25	6	1 (bag of 10 pcs)

Felt Sticks - Hardened

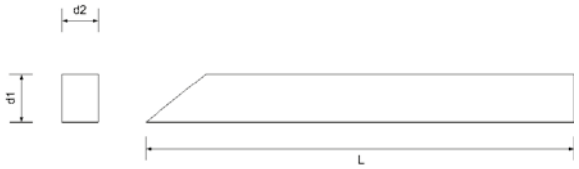




Part No.	d1	d2	L	
FIL66100	6	6	100	1 (bag of 10 pcs)
FIL1010150	10	10	150	1 (bag of 10 pcs)

Hard Wood Lapping Sticks





Part No.	Shape	d1	d2	L	
LS3	Rectangular	3	4,5	150	1 (bag of 10 pcs)
LS6	Rectangular	6	4,5	150	1 (bag of 10 pcs)
LSS3	Square	3	3	150	1 (bag of 10 pcs)
LSS6	Square	6	6	150	1 (bag of 10 pcs)
LSR3	Round	ø3	ø3	150	1 (bag of 10 pcs)
LSR6	Round	ø6	ø6	150	1 (bag of 10 pcs)

Handpads



Part No.	Size	Grade	Colour	
NHP021	155x225 mm	Fine	Green	1 (Bags of 10 pcs)
NHP006	155x225 mm	Very Fine	Maroon	1 (Bags of 10 pcs)
NHP008	155x225 mm	Ultra Fine	Light Grey	1 (Bags of 10 pcs)

A range of general purpose handpads designed for cleaning and finishing applications.

Copper Gauze



Part No.	Width	Length	
CG30	130	30m.	1

Knitted Copper, Reversible Soft Copper perfect for cleaning Screws etc.

BRUSHES

Small Bore Cleaning Brush (Brass / Nylon) With Loop Handle



Part No. Brass	Part No. Nylon	Diameter	Brush Length	Total length	
-	SN2	2	100	300	1
SB3	SN3	3	100	300	1
SB4	SN4	4	100	300	1
SB5	SN5	5	100	300	1
SB6	SN6	6	100	300	1
SB8	SN8	8	100	300	1
SB10	SN10	10	100	300	1
SB12	SN12	12	100	300	1
SB15	SN15	15	100	300	1
SB20	SN20	20	100	300	1
SB25	SN25	25	100	300	1

Condenser Brush

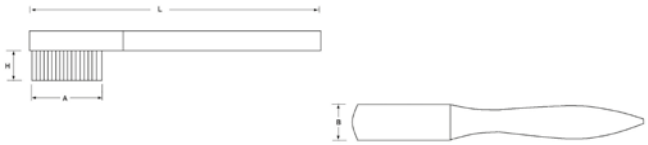


Part No. Brass	Part No. Nylon	Diameter mm	Thread	Brush Length	Total Length	
CBB6	CBN6	6	M4	80	115	1
CBB8	CBN8	8	M6	80	115	1
CBB10	CBN10	10	M6	80	115	1
CBB12	CBN12	12	M6	80	115	1
CBB14	CBN14	14	M6	80	115	1
CBB16	CBN16	16	M6	80	115	1
CBB18	CBN18	18	M6	80	115	1
CBB20	CBN20	20	M6	80	115	1

Single Spiral Brush with thread, ideal for cleaning inside bores.

Hand Brush





Part No.	Material	Rows	L	B	A	H	
HBM3-5	Brass	3 x 5	150	15	35	15	1
HBM5-10	Brass	5 x 10	190	24	55	12	1
HBM4-15	Brass	4 x 15	290	40	140	25	1

Allround brushes with wooden handle. Perfect for cleaning surfaces without damaging the Mould parts.

Barrel Cleaning Brushes





Part No.	Diameter mm	Diameter Inch	Thread	Brush Length	Total Length	
BC20	20	3/4”	W 3/8”	100	150	1
BC22	22	7/8”	W 3/8”	100	150	1
BC25	25	1”	W 3/8”	100	150	1
BC28	28	1-1/8”	W 3/8”	100	150	1
BC30	30	1-1/4”	W 1/2”	100	160	1
BC35	35	1-1/4”	W 1/2”	100	160	1
BC40	40	1-1/2”	W 1/2”	100	160	1
BC44	44	1-1/4”	W 1/2”	100	160	1
BC50	50	2”	W 1/2”	100	160	1
BC57	57	2-1/4”	W 1/2”	100	160	1
BC63	63	2-1/2”	W 1/2”	100	160	1
BC69	69	2-3/4”	W 1/2”	100	160	1
BC75	75	3”	W 1/2”	100	160	1
BC82	82	3-1/4”	W 1/2”	100	160	1
BC88	88	3-3/8”	W 1/2”	100	160	1
BC94	94	3-5/8”	W 1/2”	100	160	1
BC101	101	4”	W 1/2”	100	160	1
BC125	125	5”	W 1/2”	100	160	1
BC150*	150	6”	W 1/2”	100	160	1
BC200*	200	8”	W 1/2”	100	160	1

* Single Spiral.
Heavy Duty Double Spiral Steel Brush ideal for cleaning Barrel Cylinders of Injection Moulding Machines.

Handles and Extensions



Part No.	Thread	Type	Length	
HD1000	M4	Handle	1000 mm	1
ED1000	M4	Extension	1000 mm	1
HC1000	M6	Handle	1000 mm	1
EC1000	M6	Extension	1000 mm	1
HA1000	W 3/8”	Handle	1000 mm	1
EA1000	W 3/8”	Extension	1000 mm	1
HB1000	W 1/2”	Handle	1000 mm	1
EB1000	W 1/2”	Extension	1000 mm	1

COMPRESSED AIR BLOW GUNS

Blow Gun in Forged Aluminium



Part No.	Working Pressure	Tube size	Tube Extended Length	Tube Block Length	Connection	
MBG-S	15 Bar	6,5x10	6 m.	490 mm	R 1/4”	1

- Blow gun sets with Polyurethane Spiral Hose.
- Polyamide bend - and scratch protection.
- High quality, robust and handy design.
- Useful for all applications.

Blow Gun in Plastic

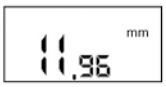


Part No.	Working Pressure	Tube size	Tube Extended Length	Tube Block Length	Connection	
MBG-P	15 Bar	6,5x10	6 m.	490 mm	R 1/4”	1

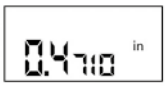
- Blow gun sets with Polyurethane Spiral Hose.
- Polyamide bend - and scratch protection.
- High quality, robust and handy design.
- Useful for all applications.

Digital Caliper 0-150 mm



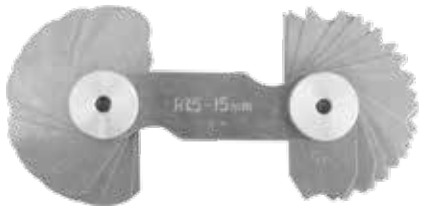






Part No.	Range (mm)	Resolution	Battery	
DC150	0-150	0,01 mm	1,55V (SR44W)	1

Radius Gauge - Concave and Convex Form



Part No.	Range (mm)	# Blades	
RG17	1,0-7,0	17	1
RG715	7,5-15,0	16	1
RG1525	15,5-25,0	15	1
RG2550	25,0-50,0	20	1

Thread Pitch Gauge - Metric, Whitworth, Pipe Thread



Part No.	Metric 60° Pitch/mm	Whitworth 55° Pitch/Inch	Pipe Thread 55° Pitch/Inch	# Blades	
SPG58	0,25-6,00	62-4	28RG-8RG	58	1

Steel Ruler 300x30x1,0 mm/Inch - Chrome Plated



Part No.	Length (mm)	Width (mm)	Thickness (mm)	
SR300	300	30	1	1

Mouldpro Tape Measure



Part No.	Coil length (m)	Width (mm)	
MPT5	5	19	1
MPT8	8	25	1

Professional Quality Tape Measure with chrome plated tough ABS plastic case and integrated thumb lock.
High visibility anti-glare blade with polymer coating to extend blade life. Class 2 Blade 19mm (5m) / 25mm (8m) Wide Blade Metric / Imperial Scale. Compact & Durable Case.
3-Rivet True-Zero End Hook Belt Clip.

Handheld Magnifier 2,5x Ø90 mm - Glass Lens and 12 x Leds

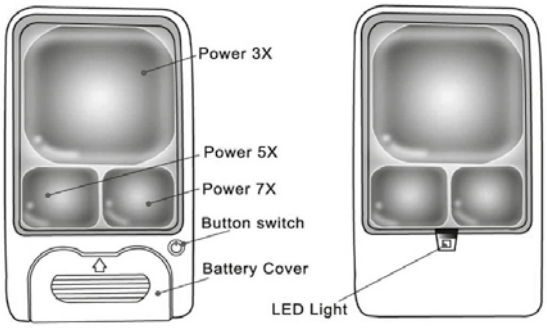


Part No.	Magnification	Lens diamenter	# LED lights	dimensions	
HM90	2,5 X	Ø 90 mm	12 pcs.	241 x 110 x 14 mm	1

Material (lens): Glass.
Material (body): Metal (Zinc alloy).
Battery: 2 x AA 1,5 V (NOT included).
Packing: Black padded case.

Handheld Magnifier 3X/5X/7X - with LED Light





Part No.	Magnification	Lens diameter	# LED lights	dimensions	
HM50	3X/5X/7X	50x50/20x25	1	117x61x9 mm	1

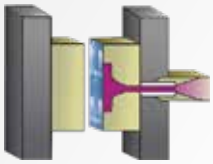
Material (body): ABS plastic.
Battery: 2 x CR2032 (included).
Battery life: Approx. 40-50 hours.

09.
MACHINE ACCESSORIES

231 MOULD SCREENS



231 MOULD ALIGN



232 EJECTOR COUPLING



236 MACHINE MOUNTS



237 LINEAR TRANSDUCER



239 HYDRAULIC ISO COUPLERS



Mouldscreens





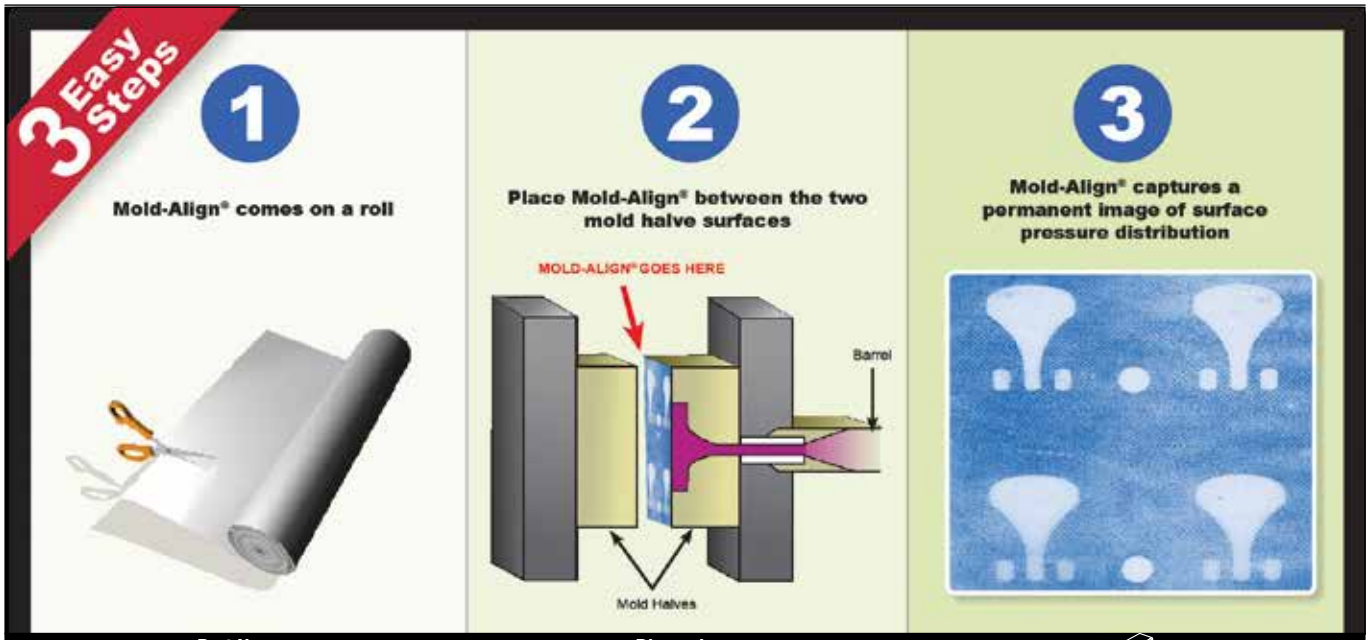
Tested up to 3 million cycles

Part No.	Mould Height	Max Width	
SG-1	200 mm	550 mm	1 (set of 2 pcs)
SG-2	300 mm	550 mm	1 (set of 2 pcs)
SG-3	400 mm	550 mm	1 (set of 2 pcs)
SG-4	500 mm	550 mm	1 (set of 2 pcs)
SG-5	600 mm	550 mm	1 (set of 2 pcs)

Prevent Plastic Parts scattering around the moulding machine with Scatterguard. The patented new design contains the Ejected Parts within the Mould Area whilst the roller blind action allows a completely unrestricted view of the Mould Face.
Scatterguard allows easy access to the mould with the Ultra Low Profile Design meaning that the mould screens can be installed even when there are lots of water connectors on the side of the mould. Supplied as a kit Scatterguard is simply installed with Magnetic Anchors and is easily movable to other Moulding Machines.

- Ultra Low Profile Design.
- Crystal Clear Mould Screen.
- Reduce Scrap by Eliminating Contamination and Increase Profits.
- Ideal for Cleanroom Applications.

Mold-Align® - A unique, affordable and easy to use tool that reveals pressure distribution between mould platens



Part No.	Dimensions	
MA26-1	26,7 cm x 1 m. (Sheet)	1
MA26	26,7 cm x 15.25 m. (Roll)	1
MA76-1	76,2 cm x 1 m. (Sheet)	1
MA76	76,2 cm x 15.25 m. (Roll)	1

Specifications:

Thickness	4 mils (0.1016 mm).
Usable Humidity Range	10-90% RH.
Pressure Range	200 - 6,000 PSI (14 - 422 kg/cm2).
Temperature Limit	93°C.

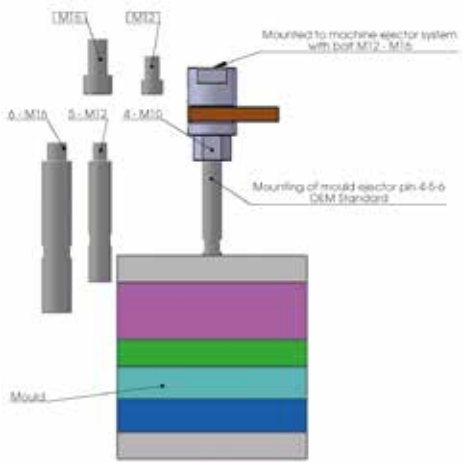
Parting Line aligned and Uniform:
One way to ensure proper mating of the tool halves at the parting line is simply by having a level moulding machine and parallel platens. Levelling a machine requires three machinist levels.
If you have shorts and flash, you could have a mould or clamping alignment problem. This may not be the case if you are running a high-speed, thin-wall product—the problem may be simply not enough clamp force. To help establish whether flash stems from a mould or clamp alignment issue, check parting-line mating. In one typical check for uniform clamp pressure at the parting line, blueing agent applied to one mould half will transfer to the other if there is contact at the parting line, but it will not distinguish between low or high touch force. More detailed information can be obtained with Mold-Align® paper, which changes color relative to the amount of contact force. Mold-Align® is an extremely economical and practical solution for determining proper mould alignment. Mold-Align® is a self contained (single sheet) paper that is quickly implemented, requires no training, and reveals a high resolution image of pressure distribution and void spots between mould plates.

EJECTOR COUPLINGS

Description
The UKM is a mechanical ejector coupling for plastic injection moulding machines. Its function is to lock the ejector bars of the injection moulding tool.

- The coupling process "locking or unlocking" takes place in only seconds.
- Simple construction - easy to install
- Available with M10 – M12 and M16 thread.

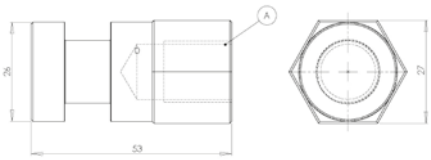
Material:
Steel Type: 1.2510





Connector Nipple

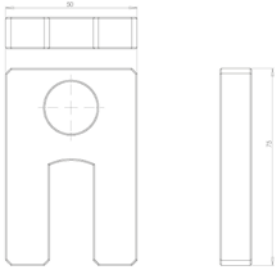




Part No.	A	
UKM10HAN	M10	1
UKM12HAN	M12	1
UKM16HAN	M16	1

Locking Slide

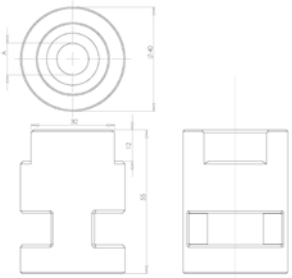




Part No.	SIZE	
UKKILE	ONE SIZE	1

Coupling





Part No.	A	
UKM12HUN	12	1
UKM16HUN	16	1



Ideal for use with: Quick Mould Change systems and Two-stage Ejection

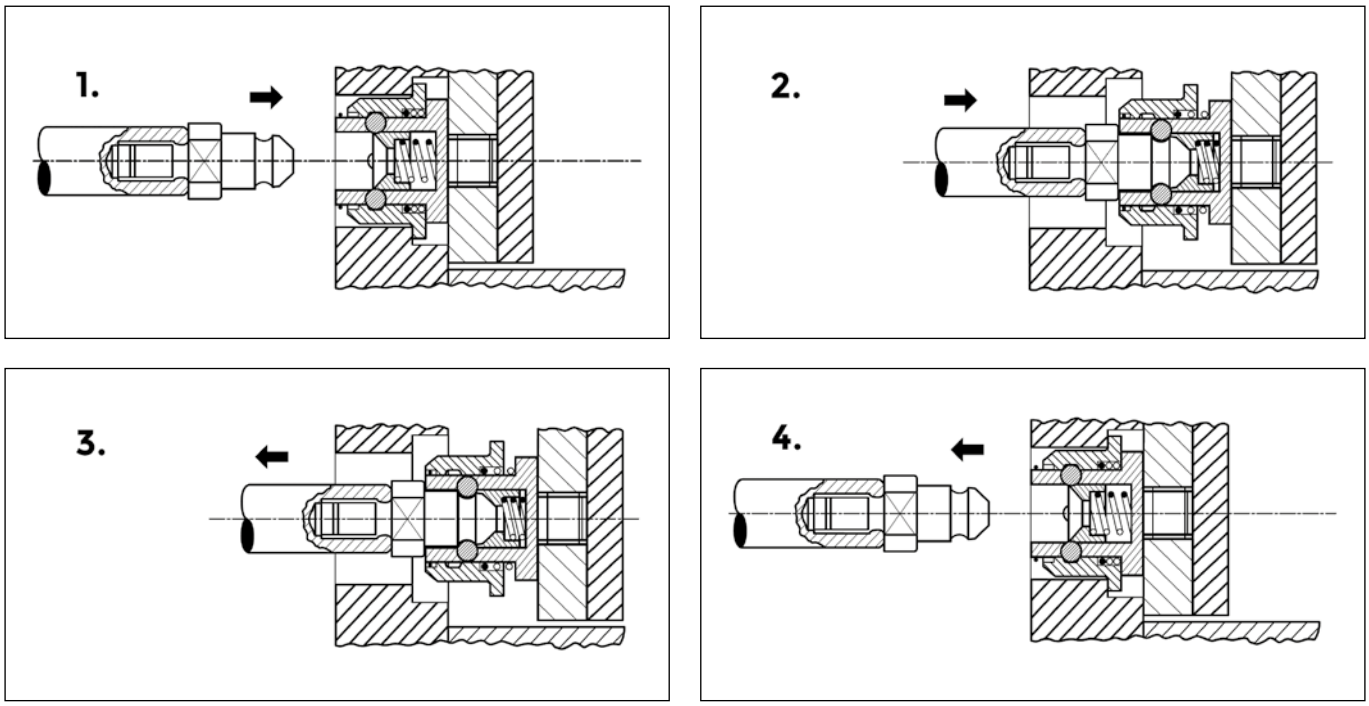
Designed to provide a quick method of attaching the ejector plate in your mould to the ejection system in your moulding machine. Provides positive ejector plate return while greatly reducing set-up time.

Perfectly suited for those moulding machines where the ejector plate on the machine is difficult to reach. Ideal when center ejection is desired, but impossible to "tie-in". Works with either hydraulic or mechanical ejection.

Uses and Advantages

- Quick and easy installation (even on existing moulds). Return of the ejector plate is assured.
- Part ejector plate is assured.
- Coupling is obtained in any position, disconnecting is after the ejector plate is fully returned.
- Fast acting up to 30 strokes/minute. No wearing parts.
- Can be used on all injection machines equipped with hydraulic or mechanical ejection.
- Set-up time can be greatly reduced.
- Reduce noise on machines with mechanical knockouts. Especially suited for injection machines that do not have easy access to the ejector plate.
- Allows for center ejection to be tied in.
- No Grease should be applied to these Products.

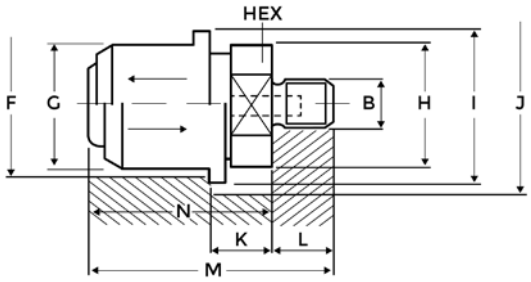
Sequence of operation



EJECTOR COUPLINGS

Ejector Coupling



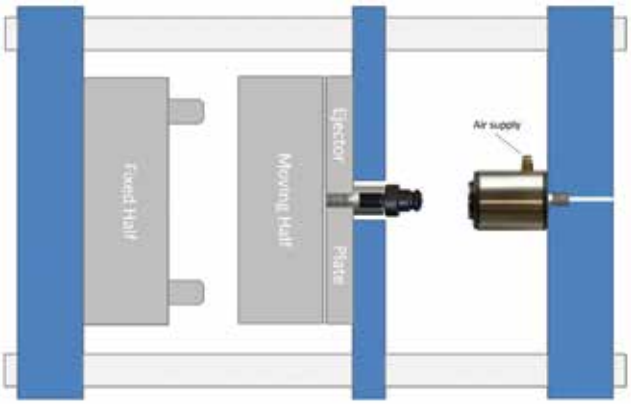


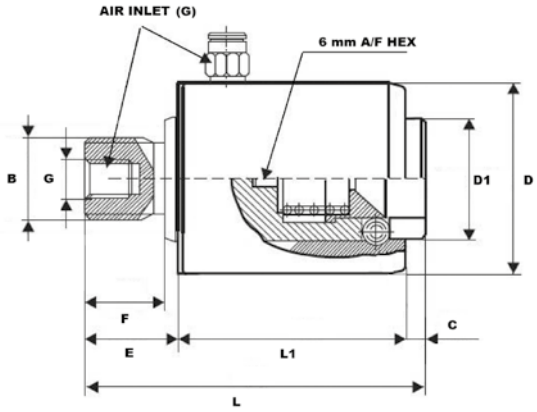
Part No.	B	F	G	H	I	J	K	L	M	Pull Force	Size	
EJC-F-1-1	M12X1,75	34	34	32	39	43	9	15	42,5	1500 kg	1	1
EJC-F-1-2	M16X1,5	34	34	32	39	43	9	15	42,5	1500 kg	1	1
EJC-F-1-3	M16X2	34	34	32	39	43	9	15	42,5	1500 kg	1	1
EJC-F-2-1	M16X1,5	40	40	38	48	53	13	15	52	2400 kg	2	1
EJC-F-2-2	M16X2	40	40	38	48	53	13	15	52	2400 kg	2	1
EJC-F-3-1	M16X1,5	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-2	M16X2	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-3	M18X1,5	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-4	M20X1,5	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-5	M20X2,5	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-6	M24X1,5	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-7	M27X1,5	58	58	56	65	70	17	18	68	3200 kg	3	1
EJC-F-3-8	M30X1,5	58	58	56	65	70	17	18	68	3200 kg	3	1

Material: 1.7147 - 60 HRC.

Pneumatic Ejector Coupling





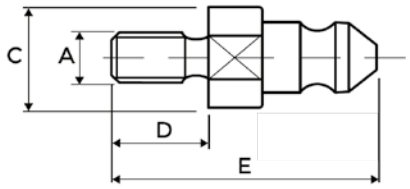


Part No.	D	D1	L	L1	E	F	B	G 4-6 Bar	Pull Force	Size	
EJC-FP-200	48	39	68	28,5	21	15	M16x2	R1/8"	2700 kg	2	1
EJC-FP-205	48	39	68	28,5	21	15	M18x1,5	R1/8"	2700 kg	2	1
EJC-FP-300	58	36	94	66	22,5	20	M20X1,5	R1/8"	3400 kg	3	1
EJC-FP-305	58	36	94	66	22,5	20	M20X2,5	R1/8"	3400 kg	3	1

Ejector Coupling to ensure rapid and safe mould changes designed to fit with standard EJC-M connectors.
The EJC-FP coupling is air operated. The coupling connects mechanical to the plug EJC-M, and disconnected using air in one of the 2 ports.
The Unit EJC-FP is installed on the machine and the plug EJC-M is installed on the mould/rod.

Ejector Nipple





Part No.	A	C	D	E	Pull Force	Size	
EJC-M-1-1	M10X1,5	22,8	20	45,5	1500 kg	1	1
EJC-M-1-2	M12X1,75	22,8	20	45,5	1500 kg	1	1
EJC-M-1-3	M14X2	22,8	20	45,5	1500 kg	1	1
EJC-M-1-4	M16X2	22,8	20	45,5	1500 kg	1	1
EJC-M-2-1	M10X1,5	25,8	20	55	2400 kg	2	1
EJC-M-2-2	M12X1,75	25,8	20	55	2400 kg	2	1
EJC-M-2-3	M14X2	25,8	20	55	2400 kg	2	1
EJC-M-2-4	M16X2	25,8	20	55	2400 kg	2	1
EJC-M-3-1	M16X2	35	25	68	3200 kg	3	1
EJC-M-3-2	M18X2,5	35	25	68	3200 kg	3	1
EJC-M-3-3	M20X2,5	35	25	68	3200 kg	3	1
EJC-M-3-4	M24X3	35	25	68	3200 kg	3	1
EJC-M-3-5	M27X3	35	25	68	3200 kg	3	1
EJC-M-3-6	M30X3,5	35	25	68	3200 kg	3	1

Material: 1.7147 - 60 HRC.

MACHINE MOUNTS

Standard Machine Mounts - Supplied with Adjusting Screws



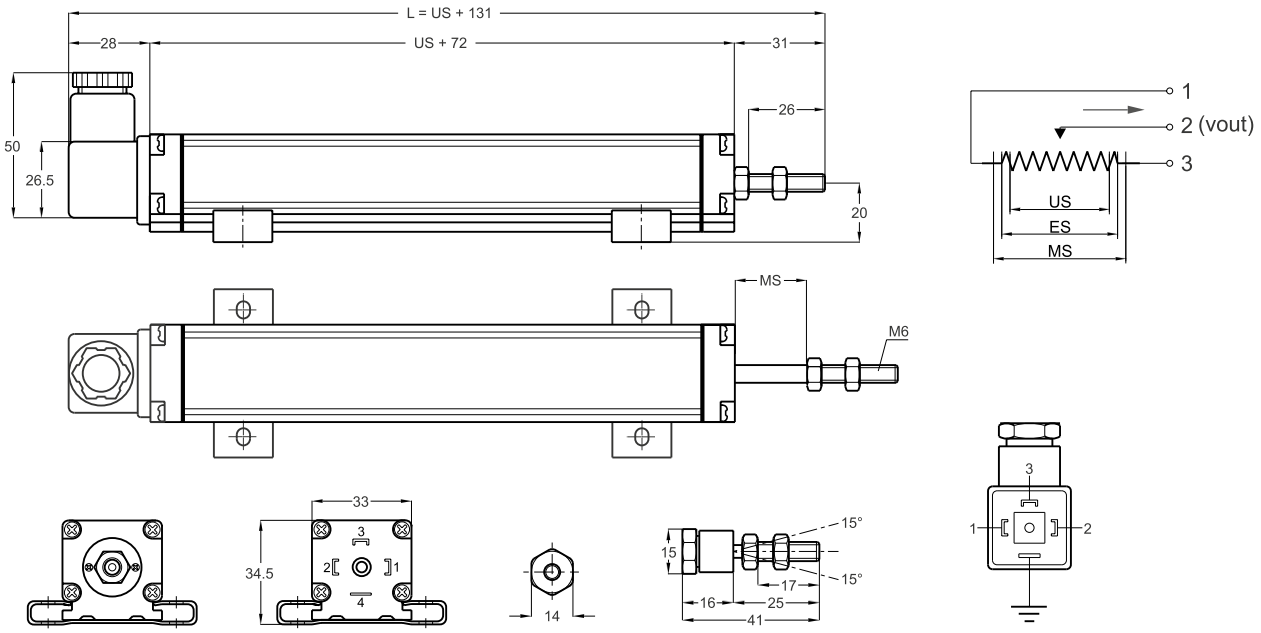
Part No.	Diameter	Load (kg)	Adjusting Screw	Height	
SMM01	80mm	200 kg	M12x1.25x120	38-50mm	1
SMM02	120mm	400 kg	M16x1.5x120	46-59mm	1
SMM03	160mm	1000 kg	M20x1.5x170	53-68mm	1
SMM04	160mm	2500 kg	M20x1.5x170	54-69mm	1
SMM05	200mm	3800 kg	M20x1.5x170	56-71mm	1

Up to 15 mm Adjustment.
Galvanised Steel Finish.
Supplied Complete with Adjusting Screw.

Transducer with Rod



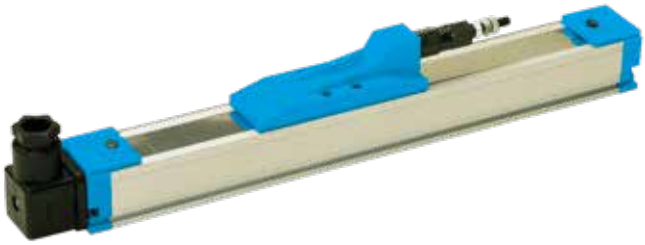
Technical data	
Measurement Stroke	30 to 1250 mm
Linearity	± %0,05
Repeatability	< 0,01 mm
Resolution	Infinite
Resistance	5 kOhm
Resistance Tolerance	±%20
Load Resistance	100 kOhm min.
Recommended Cursor Current	< 1 μA
Permissible Applied Voltage	28VDC max.
Electrical Connections	4 pole hydraulic type connector
Displacement Speed	<5 m/s
Mechanical Life	100 million cycles
Case Dimensions	33 mm x 33 mm
Case Material	Anodized aluminium
Rod Material	Stainless Steel
Rod Diameter	Ø 6 mm
Mechanical Fixing	Variable brackets
IP Degree	IP 65
Operating Temperature	-20°C ... +80°C
Storage Temperature	-30°C ... +90°C



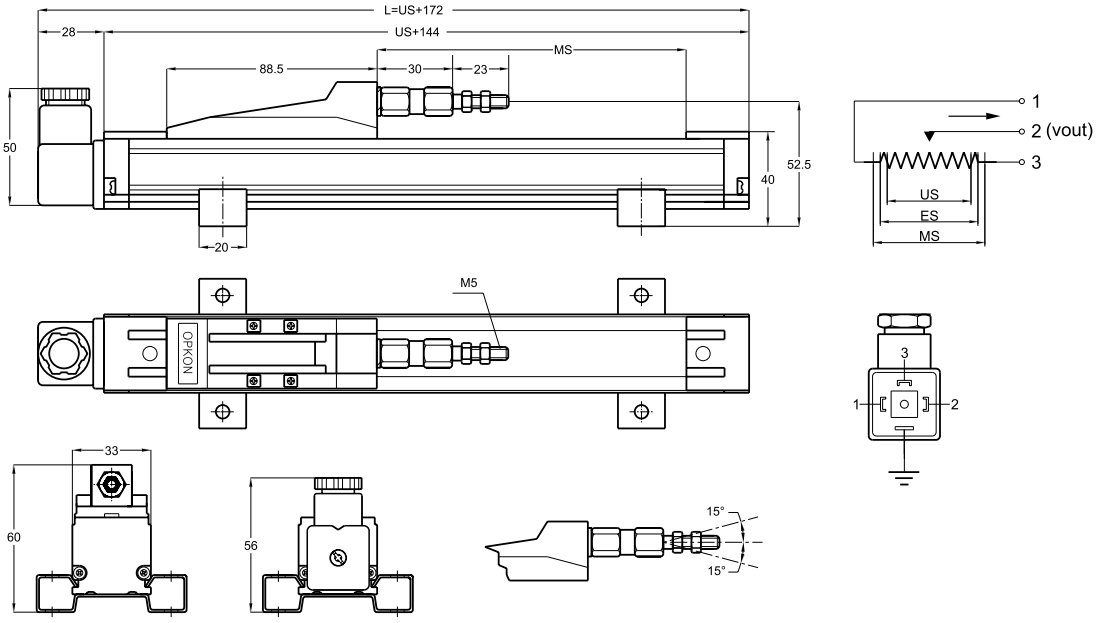
Part No.	US (usefull stroke)	MS (Mechanical stroke)	L (total length)	
MPT100	100	103	231	1
MPT150	150	153	281	1
MPT175	175	178	306	1
MPT200	200	203	331	1
MPT300	300	303	431	1
MPT400	400	403	531	1
MPT500	500	503	631	1

LINEAR TRANSDUCERS

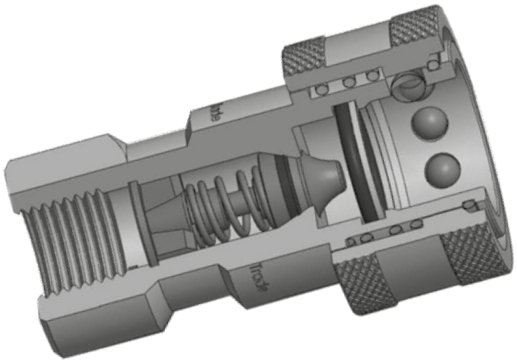
Transducer without Rod

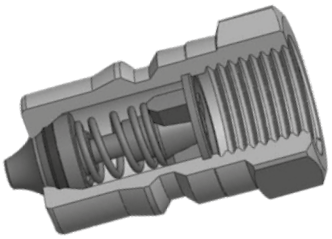


Technical data	
Measurement Stroke	100 to 1500 mm
Linearity	± %0,05
Repeatability	< 0,01 mm
Resolution	Infinite
Resistance	5 kOhm
Resistance Tolerance	±%20
Load Resistance	100 kOhm min.
Recommended Cursor Current	< 1 μA
Permissible Applied Voltage	28VDC max.
Electrical Connections	4 pole hydraulic type connector
Displacement Speed	<1,5 m/s
Mechanical Life	100 million cycles
Case Dimensions	33 mm x 33 mm
Case Material	Anodized aluminium
Mechanical Fixing	Variable brackets
IP Degree	IP 40 /If mounted upside down IP 53
Operating Temperature	-20°C ... +80°C
Storage Temperature	-30°C ... +90°C



Part No.	US (usefull stroke)	MS (Mechanical stroke)	L (total length)	
MPH150	150	154	322	1
MPH200	200	204	372	1
MPH225	225	229	397	1
MPH300	300	304	472	1
MPH400	400	404	572	1
MPH500	500	504	672	1





ISO A Couplers



Part No.	Thread size	Pressure Bar	
FISO-A14BSP	1/4" BSP	350	1
FISO-A38BSP	3/8" BSP	300	1
FISO-A12BSP	1/2" BSP	250	1
FISO-A34BSP	3/4" BSP	250	1
FISO-A100BSP	1" BSP	230	1

Material:
Steel (plated).

ISO A Plugs



Part No.	Thread size	Pressure Bar	
MISO-A14BSP	1/4" BSP	350	1
MISO-A38BSP	3/8" BSP	300	1
MISO-A12BSP	1/2" BSP	250	1
MISO-A34BSP	3/4" BSP	250	1
MISO-A100BSP	1" BSP	230	1

ISO B Couplers



Part No.	Thread size	Pressure Bar	
FISO-B14BSP	1/4" BSP	350	1
FISO-B38BSP	3/8" BSP	300	1
FISO-B12BSP	1/2" BSP	250	1

Material:
Steel (plated).

ISO B Plugs



Part No.	Thread size	Pressure Bar	
MISO-B14BSP	1/4" BSP	350	1
MISO-B38BSP	3/8" BSP	300	1
MISO-B12BSP	1/2" BSP	250	1

10.
MOULD CLAMPING

241 POWER CLAMPS



243 MECHANICAL CLAMPS



245 NUTS & WASHERS



246 STRAIGHT STUDS

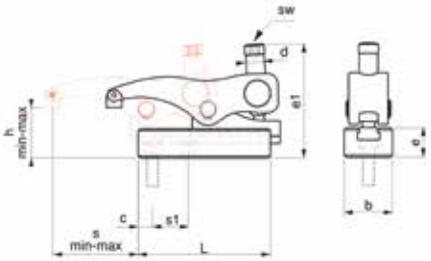


247 T-NUTS



Power Sliding Clamp – Supplied without Inbus Bolt







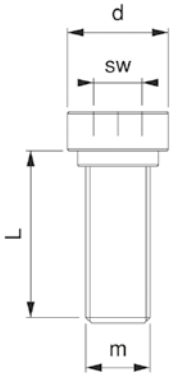
Part No.	Inbus Bolt Size (m) (not included)	h-Min	h-Max	s	e1	d	sw	L	e	b	c	"Clamping force Kgf"	
SC-100	M10-M12	0	50	12-66	100	M14	8	104	35,5	38	13	1600	1
SC-200	M12-M16	0	60	15-83	113	M18	10	128	38	48	16	2000	1
SC-250	M16-M20	0	65	18-96	125	M20	12	140	42	55	18	2500	1
SC-300	M20-M24	20	80	22-95	175	M24	12	178	55	74	24	5500	1

Used to facilitate quicker mould changes the Power Sliding Clamp offers an incredibly cost effective solution.
Features:

- Can accommodate a range of different back-plate sizes and thicknesses
- Perfect for clamping of injection moulds
- Use in threaded platens or t-slot platens
- Clamp slides by virtue of Integral t-slot

Inbus Bolt For Power Clamps



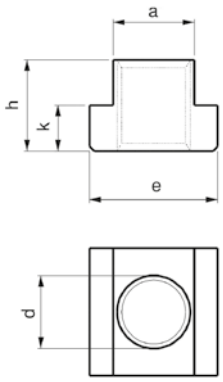


Part No.	m	L	d	SW	Clamp Ref	
1120-310	M10	29	16,5	8	SC-100	1
1120-312	M12	29	16,5	8	SC-100	1
1130-412	M12	30	20,5	10	SC-200	1
1130-416	M16	34	20,5	10	SC-200	1
1150-516	M16	34	24,5	12	SC-250	1
1150-518	M18	38	24,5	12	SC-250	1
1150-520	M20	38	24,5	12	SC-250	1
1160-620	M20	45	34	12	SC-300	1
1160-624	M24	45	34	12	SC-300	1
1160-724	M24	55	34	12	SC-300	1

Material: 41 Cr 4 DIN
Quality: 10.9
Surface: Black Coating

T-Nut For Inbus Bolt



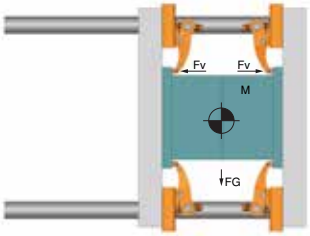




Part No.	D x Nut	a	e	h	k	
508-10x12	M10X12	11,7	18	14	7	1
508-12x14	M12X14	13,7	22	16	8	1
508-12x16	M12X16	15,7	25	18	9	1
508-12x18	M12X18	17,7	28	20	10	1
508-16x20	M16X20	19,7	32	24	12	1
508-16x22	M16X22	21,7	35	28	14	1
508-16x24	M16X24	23,7	40	32	16	1
508-16x28	M16X28	27,7	44	36	18	1
508-20x22	M20X22	21,7	35	28	14	1
508-20x24	M20X24	23,7	40	32	16	1
508-24x28	M24X28	27,7	44	36	18	1
508-24x36	M24X36	35,6	54	44	22	1

Clamp Calculation Guide

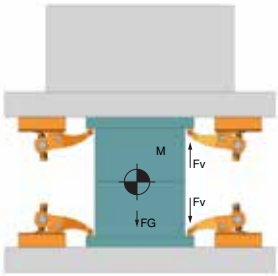
Power Clamp For Injection Moulding



Formula Calculator

$\frac{M \times FG}{1000}$ = kN		$\frac{2500 \times 9.81\ \text{kg}}{1000}$ = 24.52 kN
$\frac{kN}{\mu}$ = Result		$\frac{24.52}{0.14}$ = 175.14 kN
$\frac{Result}{Fv}$ =Number of Clamp		$\frac{175.14\ kN}{25\ kN}$ = 7 Clamp (use 8 pcs)

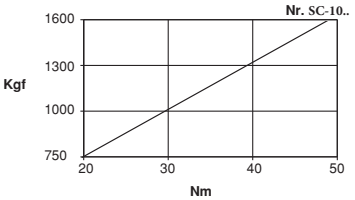
Power Clamp For Press Moulding

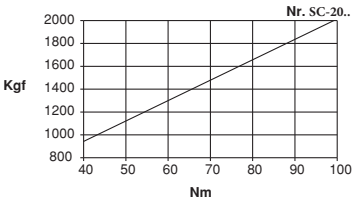


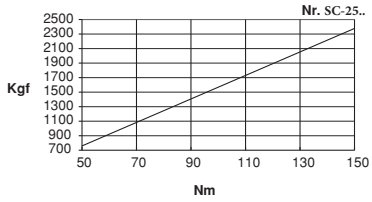
Formula Calculator

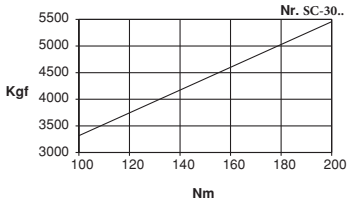
$\frac{M \times FG}{1000}$ = kN		$\frac{5000 \times 9.81\ \text{kg}}{1000}$ = 49.050 kN
$\frac{kN}{\mu}$ = Result	(upper %60) (lower % 40)	$\frac{49.05}{0.14}$ = 350.35 kN (% 60 upper = 210.21) (% 40 lower = 140.14)
$\frac{Result}{Fv}$ = Number of Clamp		$\frac{210.21\ kN}{(upper)\ 25\ kN}$ = 8 Number of Clamp
$\frac{Result}{Fv}$ = Number of Clamp		$\frac{140.14\ kN}{(lower)\ 25\ kN}$ = 5.6 Clamp (use 6 pcs)

Force Diagram



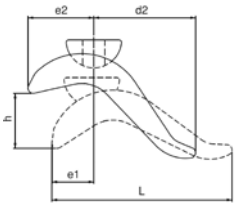


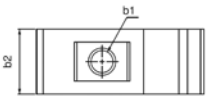


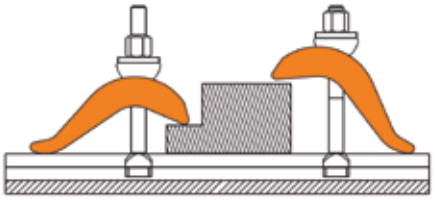


S-Clamp







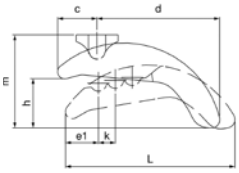


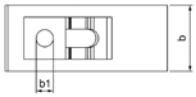
Part No.	b1	For Clamp Screw	b2xL	d	e1	e2	h	Weight (g)	
S200-17	17	M12-M16	50x140	60	30	55	75	900	1
S200-21	21	M20	60x175	80	40	70	85	1600	1

Materials:
Forged Steel, Hardened, Zinc Coated

Stepped Clamp









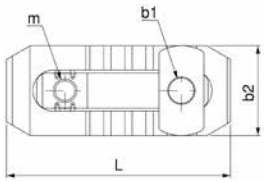
Part No.	b1	For Clamp Screw	m	h	b x L	c	d	e1	k x3	Weight (Kg)	
SP200-17	17	M16	93	15-50	65x165	39	128	30	17	2,1	1
SP200-21	21	M20	111	20-65	75x189	43	146	33	19	3,2	1
SP200-25	25	M24	126	20-75	85x213	49	164	39	21	4,5	1
SP200-31	31	M30	143,5	20-85	95x238	56	182	46	23	6,3	1

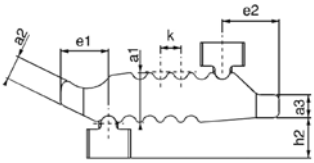
Supportless Clamp for clamping hights 15-85 mm.

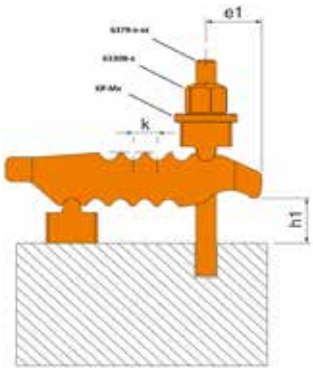
Materials:
Forged Steel, Hardened, Zinc Coated

"Crocodile" Clamp - Double Sided









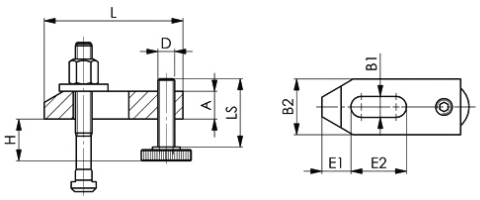
Part No.	b1	For Clamping Screw	M	a1	a2	a3	h2	k	b2	L	b3	h1	e1	e2	kgf (force)	Weight (g)	
C200-13	13	M10-M12	M12	27	12,5	12	21	11	44	115	30	0-55	25	30	3000	506	1
C200-17	17	M12-M16	M16	36	18	17	23	12	55	150	41	0-70	35	36	4000	1382	1
C200-21	21	M16-M20	M20	42	25	20	32,5	14	63	187	30	0-80	44	44	6000	2241	1
C200-25	25	M20-M24	M20	51	36,5	24	34	17	70	235	30	0-100	60	47	7500	3550	1

Materials:
Forged Steel, Hardened, Black Coating

STANDARD CLAMPS

Straight Clamp with Support Hole - Supplied without Adjusting Screw

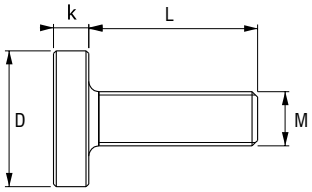




Part No.	Nut	DIN6314 B1xL	D	A	B2	E1	E2	
1330-11x80	10	11x80	M10	15	30	15	30	1
1330-14x100	12+14	14x100	M12	20	40	21	40	1
1330-14x125	12+14	14x125	M12	20	40	21	50	1
1330-18x125	16+18	18x125	M16	25	50	26	45	1
1330-18x160	16+18	18x160	M16	25	50	26	65	1
1330-22x160	20+22	22x160	M20	30	60	30	60	1
1330-22x200	20+22	22x200	M20	30	60	30	80	1
1330-26x160	24+26	26x160	M24	30	70	35	60	1
1330-26x200	24+26	26x200	M24	35	70	35	80	1
1330-26x250	24+26	26x250	M24	35	70	35	100	1
1330-26x315	24+26	26x315	M24	40	70	35	100	1
1330-33x315	30+33	33x315	M24	50	80	45	130	1
1330-43x400	36+43	43x400	M30	60	100	100	150	1

Adjusting Screw



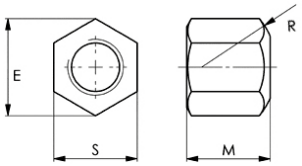


Part No.	M	L	D	K	
1490-10x42	M10	42	30	8	1
1490-12x50	M12	50	36	10	1
1490-12x95	M12	95	36	10	1
1490-16x62	M16	62	45	13	1
1490-16x97	M16	97	45	13	1
1490-16x117	M16	117	45	13	1
1490-20x62	M20	62	50	13	1
1490-20x97	M20	97	50	13	1
1490-20x117	M20	117	50	13	1
1490-24x81	M24	81	50	14	1
1490-24x116	M24	116	50	14	1
1490-30x180	M30	18	70	24	1

Material: Ck45 DIN.
Black Coating.

Hexagon Nut



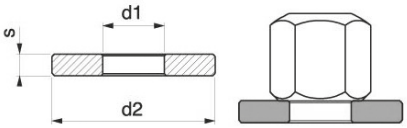


Part No.	Size	E	M	R	S	
6330B-6	M6	11,5	9	9	10	1
6330B-8	M8	15	12	12	13	1
6330B-10	M10	19,6	15	15	17	1
6330B-12	M12	21,9	18	17	19	1
6330B-14	M14	25,4	21	20	22	1
6330B-16	M16	27,7	24	22	24	1
6330B-18	M18	31,2	27	24	27	1
6330B-20	M20	34,6	30	27	30	1
6330B-22	M22	36,9	33	30	32	1
6330B-24	M24	41,5	36	32	36	1
6330B-30	M30	53,1	45	41	46	1
6330B-36	M36	63,5	54	50	55	1

Hexagon Nut DIN 6330B.
Material: Ck45 DIN.
Hardness: 30-32 HRC.
Black Coating.

Thick Washer





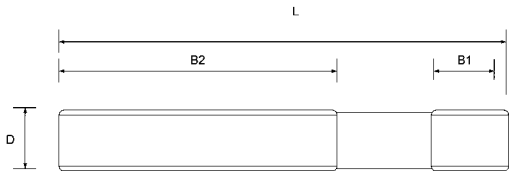
Part No.	d1	Thread to fit	d2	s	
KP-M6	6,4	M6	17	3	1
KP-M8	8,4	M8	23	4	1
KP-M10	10,5	M10	28	4	1
KP-M12	13	M12	35	5	1
KP-M14	15	M14	40	5	1
KP-M16	17	M16	45	6	1
KP-M18	19	M18	45	6	1
KP-M20	21	M20	50	6	1
KP-M22	23	M22	50	8	1
KP-M24	25	M24	60	8	1
KP-M30	31	M30	68	10	1

Ideal for Mould Clamping.

STRAIGHT STUDS

Straight Stud





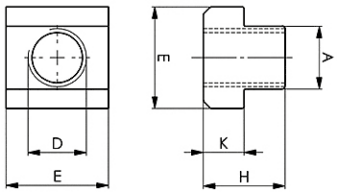
Part No.	D x L	B1	B2	
6379-8x40	M 8x 40	11	20	1
6379-8x63	M 8x 63	11	40	1
6379-8x80	M 8x 80	11	50	1
6379-8x100	M 8x100	11	63	1
6379-8x125	M 8x125	11	75	1
6379-8x160	M 8x160	11	100	1
6379-10x50	M10x 50	13	25	1
6379-10x80	M10x 80	13	50	1
6379-10x100	M10x100	13	75	1
6379-10x125	M10x125	13	75	1
6379-10x160	M10x160	13	100	1
6379-10x200	M10x200	13	125	1
6379-12x50	M12x 50	15	25	1
6379-12x63	M12x 63	15	32	1
6379-12x80	M12x 80	15	50	1
6379-12x100	M12x100	15	63	1
6379-12x125	M12x125	15	75	1
6379-12x160	M12x160	15	100	1
6379-12x200	M12x200	15	125	1
6379-14x63	M14x 63	17	32	1
6379-14x80	M14x80	17	50	1
6379-14x100	M14x100	17	63	1
6379-14x125	M14x125	17	75	1
6379-14x160	M14x160	17	100	1
6379-14x200	M14x200	17	125	1
6379-14x250	M14x250	17	160	1
6379-16x63	M16x 63	19	32	1
6379-16x80	M16x 80	19	50	1
6379-16x100	M16x100	19	63	1
6379-16x125	M16x125	19	75	1
6379-16x160	M16x160	19	100	1
6379-16x200	M16x200	19	125	1
6379-16x250	M16x250	19	160	1
6379-16x315	M16x315	19	180	1
6379-16x500	M16x500	19	315	1
6379-18x80	M18x 80	23	50	1
6379-18x125	M18x125	23	75	1
6379-18x160	M18x160	23	100	1
6379-18x200	M18x200	23	125	1
6379-18x250	M18x250	23	150	1

Part No.	D x L	B1	B2	
6379-18x315	M18x315	23	180	1
6379-20x80	M20x 80	27	32	1
6379-20x125	M20x125	27	70	1
6379-20x160	M20x160	27	100	1
6379-20x200	M20x200	27	125	1
6379-20x250	M20x250	27	160	1
6379-20x315	M20x315	27	200	1
6379-20x400	M20x400	27	250	1
6379-20x500	M20x500	27	315	1
6379-22x100	M22x100	31	45	1
6379-22x160	M22x160	31	100	1
6379-22x200	M22x200	31	125	1
6379-22x250	M22x250	31	160	1
6379-22x315	M22x315	31	180	1
6379-22x400	M22x400	31	250	1
6379-24x100	M24x100	35	45	1
6379-24x125	M24x125	35	70	1
6379-24x160	M24x160	35	100	1
6379-24x200	M24x200	35	125	1
6379-24x250	M24x250	35	160	1
6379-24x315	M24x315	35	200	1
6379-24x400	M24x400	35	250	1
6379-24x500	M24x500	35	315	1
6379-24x630	M24x630	35	315	1
6379-30x125	M30x125	43	56	1
6379-30x200	M30x200	43	125	1
6379-30x315	M30x315	43	200	1
6379-30x500	M30x500	43	315	1
6379-30x700	M30x700	43	400	1
6379-30x1000	M30x1000	43	400	1
6379-36x160	M36x160	51	80	1
6379-36x200	M36x200	51	125	1
6379-36x250	M36x250	51	160	1
6379-36x315	M36x315	51	200	1
6379-36x400	M36x400	51	250	1
6379-36x500	M36x500	51	315	1
6379-36x700	M36x700	51	400	1
6379-42x315	M42x315	59	200	1
6379-42x400	M42x400	59	250	1
6379-42x500	M42x500	59	315	1

Material: 41 Cr 4 DIN.
Quality 10.9.
Black Coating.

T-Nut





Part No.	D x Nut	A	E	H	K	
508-6x8	M 6x 8	7,7	13	10	6	1
508-8x10	M 8x10	9,7	15	12	6	1
508-8x12	M 8x12	11,7	18	14	7	1
508-10x12	M10x12	11,7	18	14	7	1
508-8x14	M 8x14	13,7	22	16	8	1
508-10x14	M10x14	13,7	22	16	8	1
508-12x14	M12x14	13,7	22	16	8	1
508-8x16	M 8x16	15,7	25	18	9	1
508-10x16	M10x16	15,7	25	18	9	1
508-12x16	M12x16	15,7	25	18	9	1
508-14x16	M14x16	15,7	25	18	9	1
508-8x18	M 8x18	17,7	28	20	10	1
508-10x18	M10x18	17,7	28	20	10	1
508-12x18	M12x18	17,7	28	20	10	1
508-14x18	M14x18	17,7	28	20	10	1
508-16x18	M16x18	17,7	28	20	10	1
508-16x20	M16x20	19,7	32	24	12	1
508-18x20	M18x20	19,7	32	24	12	1
508-16x22	M16x22	21,7	35	28	14	1
508-18x22	M18x22	21,7	35	28	14	1
508-20x22	M20x22	21,7	35	28	14	1
508-16x24	M16x24	23,7	40	32	16	1
508-20x24	M20x24	23,7	40	32	16	1
508-22x24	M22x24	23,7	40	32	16	1
508-16x28	M16x28	27,7	44	36	18	1
508-20x28	M20x28	27,7	44	36	18	1
508-22x28	M22x28	27,7	44	36	18	1
508-24x28	M24x28	27,7	44	36	18	1
508-24x36	M24x36	35,6	54	44	22	1
508-30x36	M30x36	35,6	54	44	22	1

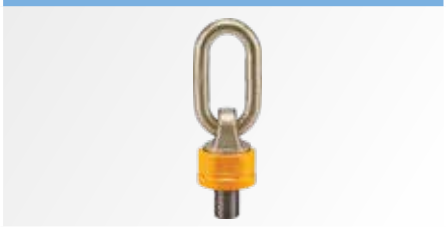
T-Clamp DIN 508.
Material: Ck45 DIN.
Hardness: 30-32 HRC.
Black Coating.

11.
LIFTING

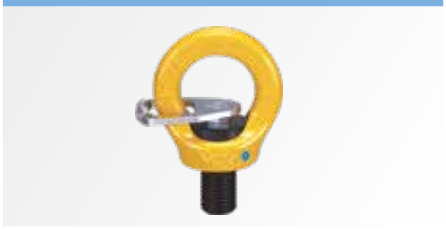
249 LIFTING POINTS



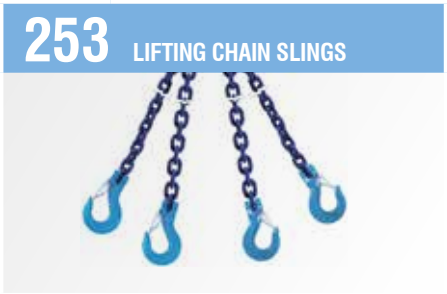
250 SUPER LIFTING POINTS



251 EYE BOLTS AND SHACKLES



253 LIFTING CHAIN SLINGS



Now with NFC Inspection Chip

The SAP, SLP and KEP lifting points are equipped with NFC/RFID inspection Chip.

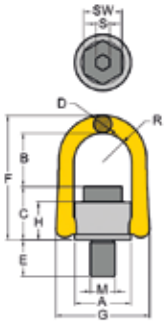
Access and update safety inspection procedures with your Smart-Phone. Scan the Chip on the lifting point and get all relevant data to ensure safety inspection compliance.

Free APP for iPhone and Android.



Swivel Anchor Point SAP





Part No.	W.L.L. (t)	M(mm)	Thread E (mm)	Pich(DIN13)	Dimensions A	B	C	D	F	G	H	R	S	SW	Torque in Nm	Weight Kg.
SAP-M8	0.5	M8	12	1.25	33	42	28	11	80	58	23	17	6	13	30	0.3
SAP-M10	0.7	M10	15	1.5	33	41	29	11	80	58	23	17	6	17	60	0.3
SAP-M12	1.0	M12	20	1.75	33	40	31	11	80	58	23	17	8	19	100	0.3
SAP-M16	2.0	M16	24	2	50	54	46	17	117	90	36	27	10	24	150	0.9
SAP-M20	3.0	M20	30	2.5	50	52	49	17	117	90	36	27	12	30	250	1.0
SAP-M24	5.0	M24	36	3	72	81	59	25	163	125	44	37	14	36	400	2.6
SAP-M27	5.6	M27	38	3	87	86	79	30	204	148	62	46	17	41	400	4.9
SAP-M30	7.8	M30	48	3.5	87	94	81	30	204	148	62	46	17	46	500	5.0
SAP-M36	12.5	M36	54	4	110	112	98	36	247	188	75	57	22	55	1000	9.6
SAP-M42	15.6	M42	63	4.5	110	101	108	36	247	188	83	57	24	65	1500	10.9
SAP-M48	20.0	M48	72	5	110	97	113	36	248	188	83	57	27	75	2000	11.6
SAP-M56	22.0	M56	84	5.5	123	116	121	36	274	202	91	64	27	85	2100	15.0
SAP-M64	22.5	M64	100	6	123	111	126	36	274	202	91	64	32	95	2200	16.3

- Rotates through 360° and pivots 180°, and simultaneously allows lifting from any direction.
- Manufactured from forged alloy steel, quenched and tempered.
- Manufactured and tested in accordance with EN1677-1.
- Load rated parts are 100% magnaflux crack detected.
- Individual forged parts and cap screw are traceable to Test Certification.
- Bolts are Metric thread (ASME / ANSI B18.3.1M), specification is alloy socket head screw per DIN EN ISO 4762.
- Proof tested to 2.5 times the WLL.
- Fatigue rated to 20,000 cycles at 1.5 times the WLL.
- All YOKE Lifting points meet or exceed all the requirements of ASME B30.26.
- Quick and simple assembly, just a tapped hole is required.

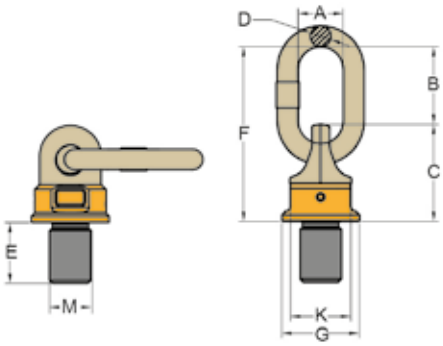




SUPER LIFTING POINTS

Swivel Lifting Point SLP





Part No.	Working Load Tonnes	Thread			Dimensions							Torque in Nm	Weight Kg.
		M(mm)	E (mm)	Pich(DIN13)	G	C	K	F	D	B	A		
SLP-M8	0.3	M8	12	1.25	36.5	48	34	101	13	53	35	10-40	0.3
SLP-M10	0.5	M10	18	1.5	36.5	48	34	101	13	53	35	10-40	0.4
SLP-M12	0.7	M12	18	1.75	36.5	48	34	101	13	53	35	15-40	0.4
SLP-M16	1.4	M16	20	2	36.5	48	34	101	13	53	35	45-130	0.44
SLP-M20	2.5	M20	30	2.5	52	68	46	127	16	59	35	100-170	1.0
SLP-M24	4.0	M24	30	3	57	75	50	148	19	73	40	190-280	1.5
SLP-M30	6.7	M30	35	3.5	70	95	65	163	19	68	40	230-400	2.4
SLP-M36	10.0	M36	50	4	81	106	75	201	22	95	50	270-600	3.8
SLP-M42	12.5	M42	50	4.5	81	106	75	201	22	95	50	270-700	3.9
SLP-M48	12.5	M48	72	5	81	106	75	201	22	95	50	270-700	4.4
SLP-M56	18	M56	78	5.5	104	127	95	256	32	129	70	350-900	8.1
SLP-M64	20	M64	110	6	104	127	95	256	32	129	70	350-900	9.3

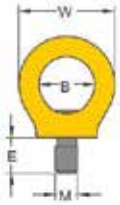
- Pivots to 230°, rotates through 360° due to its unique ball bearing design. Design factor 4:1 in all directions.
- Manufactured from forged alloy steel, quenched and tempered.
- Manufactured and tested in accordance with EN1677-1.
- Certified by DGUV GS-OA-15-04.
- Load rated parts are 100% magnaflux crack detected.
- Individual forged parts and batch code links to Test Certificate sheet.
- Bolt are Metric thread (ASME / ANSI B18.3.1M).
- Proof tested to 2.5 times the WLL.
- Fatigue rated to 1.5 times the WLL.
- All YOKE Super points meet or exceed all the requirements of ASME B30.26.
- Easy to attach or dismantle due to the forged hexagon shaped body of the Super Point.
- Capable of rotating under load. Do not turn continuously in 90 degree direction at full load.

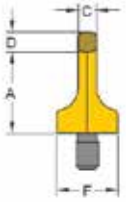


Key Eye Point KEP









Load directions



– Nominal WLL –



Vertical load
– Straight Pull –
()-values

Part No.	W.L.L. (t) x (z)	Bolt Size	A	B	C	D	E	F	W	S	Mass Kg
KEP-M8	0.40 (1)	M8 X 1.5	36	25	8	9	12	25	44	6	0.1
KEP-M10	0.40 (1)	M10 x 1.50	36	25	8	9	15	25	44	6	0.1
KEP-M12	0.75 (2)	M12 x 1.75	45	30	10	11	18	33	52	8	0.2
KEP-M16	1.50 (4)	M16 x 2.00	52	35	14	13	24	35	61	10	0.3
KEP-M20	2.30 (6)	M20 x 2.00	60	40	16	15	30	44	70	12	0.6
KEP-M24	3.20 (8)	M24 x 3.00	72	48	19	18	36	52	84	14	1.0
KEP-M30	4.50 (12)	M30 x 3.50	90	60	24	22	45	60	105	17	1.8
KEP-M36	7.00 (16)	M36 x 4.00	109	72	29	27	54	76	126	22	3.2
KEP-M42	9.00 (24)	M42 x 4.50	123	82	34	32	63	88	147	24	5.0
KEP-M48	12.00 (32)	M48 x 5.00	144	94	38	37	72	104	168	27	7.6
KEP-M56	16.00 (34)	M56 x 5.50	147	102	40	43	84	124	178	27	9.2
KEP-M64	18.00 (36)	M64 X 6.00	147	102	40	43	95	130	178	27	10.0

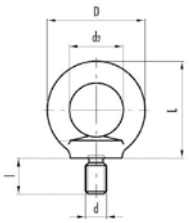
- Rotates through 360° adjustable in the direction of the load.
- Manufactured from alloy steel, quenched and tempered.
- Manufactured and tested in accordance with EN1677-1.
- Load rated parts are 100% magnaflux crack detected.
- Individual forged parts and cap screw are traceable to Test Certification.
- Bolts are Metric thread (ASME / ANSI B18.3.1M),specification is alloy socket head screw per DIN EN ISO 4762.
- Proof tested to 2.5 times the WLL.
- Fatigue rated to 20,000 cycles at 1.5 times theWLL.
- All YOKE Lifting points meet or exceed all the requirements of ASME B30.26.
- Quick and simple assembly, just a tapped hole is required.





Lifting Eyebolts - Zinc Electroplated DIN 580





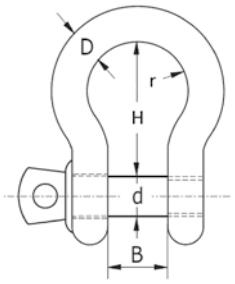
Part No.	d	l	D	d2	L	WLL	
EBGM8	M8	13	36	20	36	140kg	1
EBGM10	M10	17	45	25	45	230kg	1
EBGM12	M12	20	54	30	53	340kg	1
EBGM16	M16	27	63	35	62	700kg	1
EBGM20	M20	30	72	40	71	1200kg	1
EBGM24	M24	36	90	50	90	1800kg	1
EBGM30	M30	45	108	60	109	3600kg	1
EBGM36	M36	54	126	70	128	5100kg	1
EBGM42	M42	63	144	80	147	7000kg	1
EBGM48	M48	68	160	90	168	8600kg	1

Eyebolts/eyenuts to this standard are intended as permanent attachments on equipment.
Material: Steel C15E.
Marking: According to standard, WLL, manufacturer C15, thread, CE.
Finish: Electro galvanized.
Standard: DIN 580.

Note: The lifting eyes shall be screwed tight against the surface. When two lifting eyes are used their mutual position shall result in the two eyes at the same level. Larger angle between the slings than 90° are not tolerated. Lifting eyes can not be assembled against a surface that differs essentially from a surface perpendicular to the direction of the lift.
Safety factor: 6:1.

Alloy Steel Bow Shackles - Galvanised





Part No.	Dim	B	d	H	r	WLL	
ASBSG11	3/8" x 7/16"'	17mm	11mm	37mm	26mm	1000kg	1
ASBSG13	7/16" x 1/2"	18mm	13mm	43mm	29mm	1500kg	1
ASBSG16	1/2" x 5/8"	21mm	16mm	48mm	33mm	2000kg	1
ASBSG19	5/8" x 3/4"	27mm	19mm	60mm	43mm	3250kg	1
ASBSG22	3/4" x 7/8"	32mm	22mm	71mm	51mm	4750kg	1
ASBSG25	7/8" x 1"	37mm	25mm	84mm	58mm	6500kg	1
ASBSG28	1" x 1 1/8"	43mm	28mm	95mm	68mm	8500kg	1
ASBSG32	1 1/8" x 1 1/4"	46mm	32mm	104mm	75mm	9500kg	1
ASBSG35	1 1/4" x 1 3/8"	52mm	36mm	119mm	82mm	12000kg	1

Mouldpro bow type shackle is a high quality shackle intended for use in demanding environments.
It is supplied with a screw pin for quick and easy opening.
Material: Forged alloy steel, supplied with alloy screw pin.
Marking: According to standard, CE-marked, WLL, size and grade
Temperature range: -20°C up to +200°C.
Finish: All parts hot dip galvanized. Bolt additional powder painted.
Standard: EN 13889.
Safety factor: 6:1.
Grade: 6.



Lifting Chain Slings

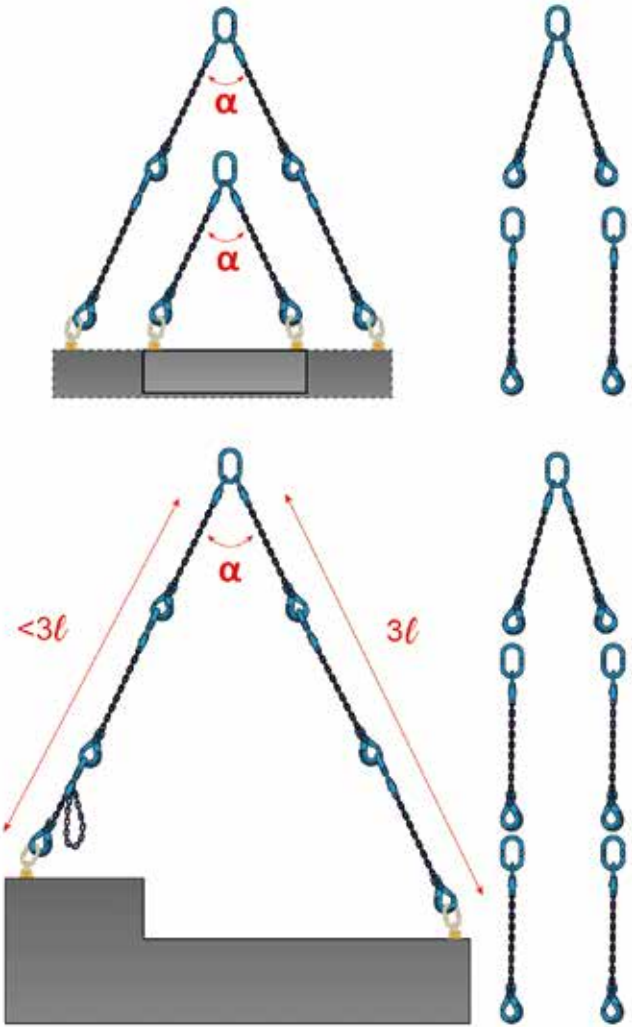
Features

Mouldpro offers best solutions which can adjust the length of Chain Sling serving for unsymmetric lengths with convenience and functionality.
Also with following features.

Light weight but heavy duty system, extreme wear resistance and longer life than traditional components.

- Cost effective compared to conventional slings using multiple components.
- Product designed according to EN1677 and PAS 1061, tested according to GS-OA-15-05.
- Each component is Proof Load tested at 2.5 times the WLL with certification for each sling.
- Each component is Fatigue Rated to 20,000 cycles at 1.5 times the WLL.
- Each component is marked with batch number that links to the test certificate with full traceability to raw material.
- Fully integrated shortening clutch and master link.
- No reduction in WLL when shortening chain.
- Replacement parts available worldwide.
- Equipped with NFC/RFID Inspection Chip





LIFTING CHAIN SLINGS

Sling with 1 Chain



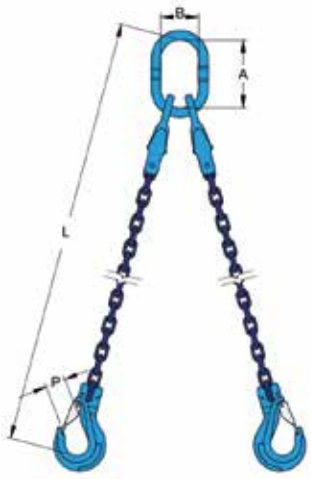


Part No.	WLL Tonnes*	Dimensions (mm)				L (M)	N.W. KG
		Chain Size	A	B	P		
LCS-1-08	2.5	8	160	95	27	3	10.8
LCS-1-10	4.0	10	170	105	34	3	18.0

* Design factor 4:1 for components in accordance with PAS1061.

Sling with 2 Chains



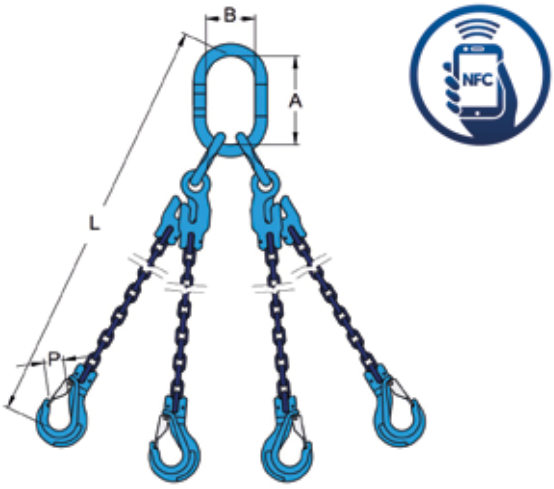


Part No.	Working Load Tonnes		Dimensions (mm)				L (M)	N.W. KG
	β 0-45° α 0-90°	β 45-60° α 90-120°	Chain Size	A	B	P		
LCS-2-08	3.5	2.5	8	160	95	27	3	10.8
LCS-2-10	5.6	4.0	10	170	105	34	3	18.0

* Design factor 4:1 for components in accordance with PAS1061.

Sling with 4 Chains





Part No.	Working Load Tonnes		Dimensions (mm)				L (M)	N.W. KG
	β 0-45° α 0-90°	β 45-60° α 90-120°	Chain Size	A	B	P		
LCS-4-08	5.3	3.8	8	160	95	27	3	21.5
LCS-4-10	8.4	6.0	10	170	105	34	3	35.6

* Design factor 4:1 for components in accordance with PAS1061.

12.
MOULD COMPONENTS

257 EJECTOR PINS



262 SLEEVE EJECTORS



263 FLAT EJECTORS



264 CORE PINS



265 DOWEL PINS



267 ANGLE GUIDE PINS



268 SOCKET HEAD CAP SCREWS



269 SHOULDER SCREWS



270 SPRING PLUNGERS



271 ISO SPRINGS

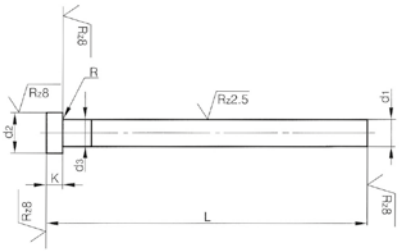


274 MOULD CYCLE COUNTER



Ejector Pins, DIN 1530, Type AH - Hardened





					L 0/+2						
d1 g6	d2 0 -0,2	k 0 -0,05	R +0,2 0	d3	100	125	160	200	250	315	400
1,5	3	1,5	0,2	d1 + 0,03	•	•	•	•			
1,6					•	•	•	•			
2,0	4	2			•	•	•	•	•	•	
2,2					•	•	•	•	•	•	
2,5	5		0,3		•	•	•	•	•	•	
2,7					•	•	•	•	•	•	
3,0	6	3			•	•	•	•	•	•	•
3,2					•	•	•	•	•	•	
3,5	7				•	•	•	•	•	•	
3,7					•	•	•	•	•	•	
4,0	8				•	•	•	•	•	•	•
4,2					•	•	•	•	•	•	•
4,5					•	•	•	•	•	•	•
5,0	10				•	•	•	•	•	•	•
5,2					•	•	•	•	•	•	•
5,5					•	•	•	•	•	•	•
6,0	12	5	0,5		•	•	•	•	•	•	•
6,2					•	•	•	•	•	•	•
6,5					•	•	•	•	•	•	•
7,0					•	•	•	•	•	•	•
8,0	14				•	•	•	•	•	•	•
8,2				d1 + 0,04	•	•	•	•	•	•	•
8,5					•	•	•	•	•	•	•
9,0					•	•	•	•	•	•	•
10,0					•	•	•	•	•	•	•
10,2					•	•	•	•	•	•	•
10,5					•	•	•	•	•	•	•
11,0					•	•	•	•	•	•	•
12,0	20	7	0,8		•	•	•	•	•	•	•
12,2					•	•	•	•	•	•	•
12,5					•	•	•	•	•	•	•
14,0	22				•	•	•	•	•	•	•
16,0					•	•	•	•	•	•	•
18,0	24			d1 + 0,07	•	•	•	•	•	•	•
20,0	26	8	1,0		•	•	•	•	•	•	•

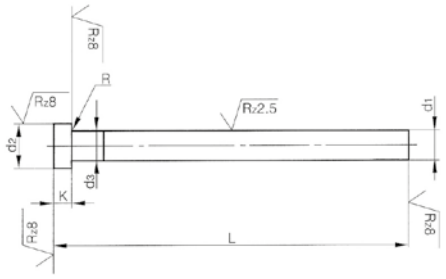
Surface: Hardened and Polished.
Material: 1.2516.
Hardness: 60 ± 2 HRC. Head 45 ± 5 HRC.

Order example
UDSAH+d1+L ex. UDSAH4160 (4x160 mm).

EJECTOR PINS

Ejector Pins, DIN 6751, Type AB - Nitrided





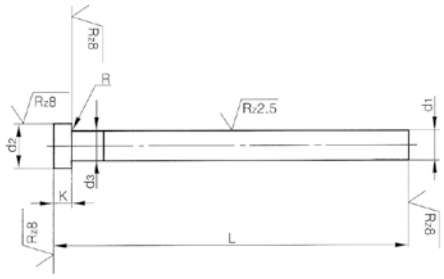
					L 0/+2										
d1 g6	d2 -0,2	k -0,05	R	d3	100	125	160	200	250	315	400	500	630	800	1000
1,5	3	1,5	0,2	d_1 + 0,03	•	•	•	•							
2,0	4	2			•	•	•	•	•						
2,2			0,3		•	•	•	•	•						
2,5	5	3			•	•	•	•	•	•					
3,0	6				•	•	•	•	•	•	•	•			
3,2					•	•	•	•	•	•	•				
3,5	7				•	•	•	•	•	•	•	•			
3,7					•	•	•	•	•	•					
4,0	8				•	•	•	•	•	•	•	•			
4,2					•	•	•	•	•	•	•				
4,5					•	•	•	•	•	•	•				
5,0	10				•	•	•	•	•	•	•	•	•	•	
5,2					•	•	•	•	•	•	•	•			
6,0	12	5	0,5		•	•	•	•	•	•	•	•	•	•	
6,2					•	•	•	•	•	•	•	•			
8,0	14				•	•	•	•	•	•	•	•	•	•	•
8,2				d_1 + 0,04	•	•	•	•	•	•	•	•			
10,0	16				•	•	•	•	•	•	•	•	•	•	•
10,2					•	•	•	•	•	•	•	•			
11,0					•	•	•	•	•	•	•	•			
12,0	20	7	0,8		•	•	•	•	•	•	•	•	•	•	•
12,2					•	•	•	•	•	•	•	•			
12,5					•	•	•	•	•	•	•	•	•		
14,0	22				•	•	•	•	•	•	•	•	•	•	•
16,0					•	•	•	•	•	•	•	•	•	•	•
20,0	26	8	1	d_1 + 0,1		•	•	•	•	•	•	•	•	•	•
25,0	32	10					•	•	•	•	•	•	•	•	•
32,0	40							•	•	•	•	•	•	•	•

Surface: Nitrided and Polished.
Material: 1.2344.
Hardness: 65 ± 2 HRC. Head 45 ± 5 HRC.

Order example
UDSAB+d1+L ex. UDSAB4160 (4x160 mm).

Ejector Pins, DIN 1530, Type AN - Nitrided





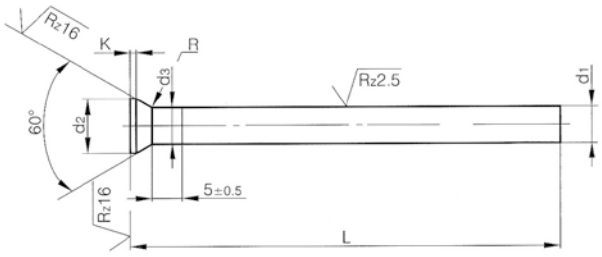
					L 0/+2										
d1 g6	d2 -0,2	k -0,05	R	d3	100	125	160	200	250	315	400	500	630	800	1000
1,5	3	1,5	0,2	d_1 + 0,03	•	•	•	•							
2,0	4	2			•	•	•	•	•						
2,2			0,3		•	•	•	•							
2,5	5	3			•	•	•	•	•	•					
3,0	6				•	•	•	•	•	•	•	•			
3,2					•	•	•	•	•	•	•				
3,5	7				•	•	•	•	•	•	•				
3,7					•	•	•	•	•	•					
4,0	8				•	•	•	•	•	•	•	•			
4,2					•	•	•	•	•	•	•				
4,5					•	•	•	•	•	•	•				
5,0	10				•	•	•	•	•	•	•	•	•	•	
5,2					•	•	•	•	•	•	•	•			
6,0	12	5	0,5		•	•	•	•	•	•	•	•	•	•	
6,2					•	•	•	•	•	•	•	•			
8,0	14				•	•	•	•	•	•	•	•	•	•	•
8,2				d_1 + 0,04	•	•	•	•	•	•	•	•			
10,0	16				•	•	•	•	•	•	•	•	•	•	•
10,2					•	•	•	•	•	•	•	•			
11,0					•	•	•	•	•	•	•	•			
12,0	20	7	0,8		•	•	•	•	•	•	•	•	•	•	•
12,2					•	•	•	•	•	•	•	•			
12,5					•	•	•	•	•	•	•	•	•		
14,0	22				•	•	•	•	•	•	•	•	•	•	•
16,0					•	•	•	•	•	•	•	•	•	•	•
20,0	26	8	1	d_1 + 0,1		•	•	•	•	•	•	•	•	•	•
25,0	32	10					•	•	•	•	•	•	•	•	•
32,0	40						•	•	•	•	•	•	•	•	•

Surface: Bath Nitrided.
Material: 1.2344.
Hardness: 65 ± 2 HRC. Head 45 ± 5 HRC.

Order example
UDSAN+d1+L ex. UDSAN4160 (4x160 mm).

Ejector Pins, DIN 1530, Type D - Hardened





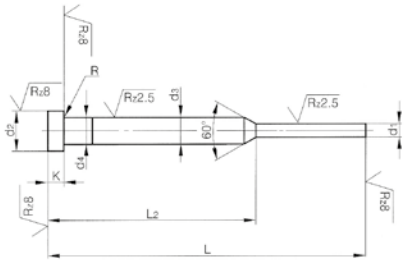
					L 0/+2				
d1 g6	d2-0,2	k -0,05	R 0/+0,2	d3	100	125	160	200	250
1	1,8	0,3	0,3	d_1 + 0,03	•	•	•	•	•
1,2	2				•	•	•	•	•
1,5	2,2				•	•	•	•	•
2	3				•	•	•	•	•
2,2	3,2				•	•	•	•	•
2,5	3,5				•	•	•	•	•
3	4,5				•	•	•	•	•
3,5	5				•	•	•	•	•
4	5,5				•	•	•	•	•
4,5	6				•	•	•	•	•
5	6,5				•	•	•	•	•
5,5	7		0,5		•	•	•	•	•
6	8	0,5			•	•	•	•	•
6,5	9				•	•	•	•	•
7					•	•	•	•	•
7,5	10				•	•	•	•	•
8					•	•	•	•	•
10	12				•	•	•	•	•
12	14				•	•	•	•	•
14	16	0,8	0,8	d_1 + 0,04	•	•	•	•	•
16	18				•	•	•	•	•

Surface: Hardened and Polished.
Material: 1.2516.
Hardness: 60 ± 2 HRC. Head 45 ± 5 HRC.

Order example
UDSD+d1+L ex. UDSD4160 (4x160 mm).

Ejector Pins, DIN 1530, Type CH - Hardened





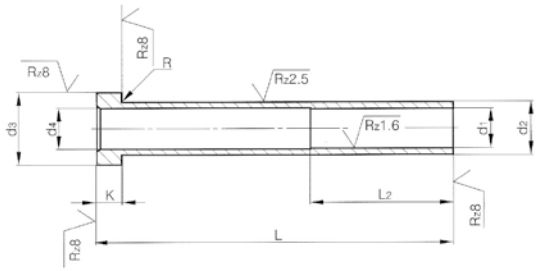
					L1	100	125	160	200
d1 g6	d2 0-0,2	d3 g6	k 0-0,05	R -0,05	L2	50	50	75	75
0,8	4	2	2	0,2		•	•	•	•
0,9	4	2	2	0,2		•	•	•	•
1,0	4	2	2	0,2		•	•	•	•
1,1	4	2	2	0,2		•	•	•	
1,2	4	2	2	0,2		•	•	•	•
1,3	4	2	2	0,2		•	•	•	•
1,4	4	2	2	0,2		•	•	•	•
1,5	6	3	3	0,3		•	•	•	•
1,6	6	3	3	0,3		•	•	•	•
1,7	6	3	3	0,3		•	•	•	•
1,8	6	3	3	0,3		•	•	•	•
1,9	6	3	3	0,3		•	•	•	•
2,0	6	3	3	0,3		•	•	•	•
2,1	6	3	3	0,3		•	•	•	•
2,2	6	3	3	0,3		•	•	•	•
2,3	6	3	3	0,3		•	•	•	•
2,4	6	3	3	0,3		•	•	•	•
2,5	6	3	3	0,3		•	•	•	•

Surface: Hardened and Polished.
Material: 1.2516.
Hardness: 60 ± 2 HRC. Head 45 ± 5 HRC.

Order example
UDSCH+d1+L ex. UDSCH2160 (2x160 mm).

Sleeve Ejectors - Hardened





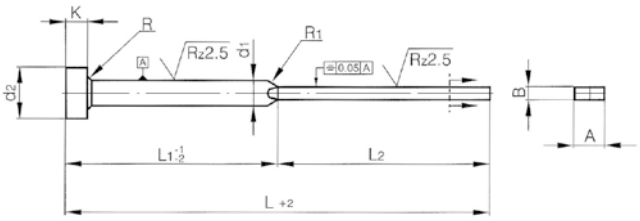
							L 0/+2							
d2 g6	d1 H5	d4	d3 0 -0,2	k 0 -0,05	R +0,2 0	l2 +2 0	75	100	125	150	175	200	225	250
4	2	2,4					•	•	•	•	•	•		
	2,2	2,6	8				•	•	•	•				
5	2,5	2,9				35	•	•	•	•	•	•		
	2,7	3		3	0,3		•	•	•	•	•	•		
	3	3,4	10				•	•	•	•	•	•		
	3,2	3,6					•	•	•	•	•	•		
6	3,5	3,9					•	•	•	•	•	•		
	3,7	4					•	•	•	•	•	•		
	4	4,4	12				•	•	•	•	•	•		
8	4,2	4,6					•	•	•	•	•	•		
	5	5,4		5	0,5		•	•	•	•	•	•		
	5,2	5,6	14			45	•	•	•	•	•	•		
10	6	6,4					•	•	•	•	•	•		
	6,2	6,6					•	•	•	•	•	•	•	•
12	8	8,4	16				•	•	•	•	•	•	•	•
	8,2	8,6					•	•	•	•	•	•	•	•
14	10	10,4	20	7	0,7		•	•	•	•	•	•	•	•
16	12	12,4					•	•	•	•	•	•	•	•

Surface: Hardened and Polished.
Material: 1.2516.
Hardness: 60 ± 2 HRC. Head 45 ± 5 HRC.

Order example
RUD(+d2+d1+L)H ex. RUD64125H (6x4x125mm).

Flat Ejectors - Hardened





					L	100	125	160	200
					L1	50	65	80	100
d1 g6	A +0 -0,015	B +0 -0,015	d2 +0 -0,2	K -0,05	L2	50	60	80	100
4	3,5	1	8	3		•	•		
4,2	3,8	1	8	3		•	•	•	
4,2	3,8	1,2	8	3		•	•	•	
6	5,5	1,2	12	5		•	•	•	•
6	5,5	1,5	12	5		•	•	•	•
6	5,5	2	12	5		•	•	•	•
8	7,5	1,2	14	5		•	•	•	•
8	7,5	1,5	14	5		•	•	•	•
8	7,5	2	14	5		•	•	•	•

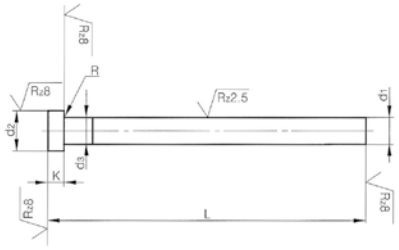
Surface: Hardened and Polished/Grinded.
Material: 1.2516.
Hardness: Skaft 60 ± 2 HRC. Head 45 ± 5 HRC.

Order example
FLU(+B+A+L)H ex. FLU25,5125H (2x5,5x125mm).

CORE PINS

Core Pins ISO 6751 Non Hardened (Soft)





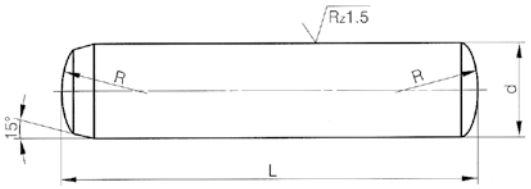
d1 g6	d2-0,2	k-0,05	R	d3	100	125	160	200	250	315
2	4	2	0,2	d_1 + 0,03	•	•	•	•		
2,2			0,3		•	•	•			
2,5	5	3			•	•	•			
3	6				•	•	•	•		
3,2					•	•	•	•		
3,5	7				•	•	•	•		
4	8				•	•	•	•		
4,2					•	•	•	•		
4,5					•	•	•	•		
5	10				•	•	•	•	•	
5,2					•	•	•	•		
5,5					•	•	•	•		
6	12	5	0,5		•	•	•	•	•	
6,2					•	•	•	•	•	
6,5					•	•	•	•	•	
7					•	•	•	•	•	
8	14				•	•	•	•	•	•
10				d_1 + 0,04	•	•	•	•	•	•
12	20	7			•	•	•	•	•	
16					•	•	•	•	•	•

Surface: Nitrided and Polished.
Material: 1.2344.
Hardness: 40 ± 2 HRC. Head 45 ± 5 HRC.

Order example
UDSAC+d1+L ex. UDSAC4160 (4X160 mm).

Dowel Pins, DIN 6325





L \ d	2	3	4	5	6	8	10	12	14	16	20
6	•	•									
8	•	•	•	•							
10	•	•	•	•	•						
12	•	•	•	•	•						
14	•	•	•	•	•						
16	•	•	•	•	•	•	•				
18	•	•	•	•	•	•	•				
20	•	•	•	•	•	•	•	•			
24	•	•	•	•	•	•	•	•			
28	•	•	•	•	•	•	•	•			
32	•	•	•	•	•	•	•	•	•	•	
36		•	•	•	•	•	•	•	•	•	
40			•	•	•	•	•	•	•	•	•
45			•	•	•	•	•	•	•	•	•
50			•	•	•	•	•	•	•	•	•
55			•	•	•	•	•	•	•	•	•
60			•	•	•	•	•	•	•	•	•
70				•	•	•	•	•	•	•	•
80				•	•	•	•	•	•	•	•
90					•	•	•	•	•	•	•
100					•	•	•	•	•	•	•
120						•	•	•	•	•	•
130										•	•
140										•	•
150										•	•

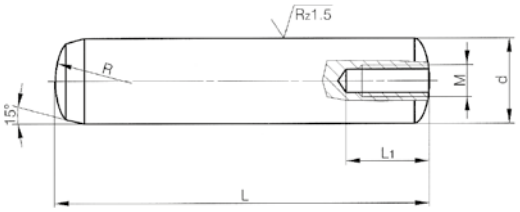
Surface: Hardened and Polished.
Material: 1.3505.
Tolerance: m6.
Hardness: 60 ± 2 HRC.

Order example
CYL+d+L ex. CYL532 (5x32mm).

DOWEL PINS

Dowel Pins - Threaded - DIN 7979





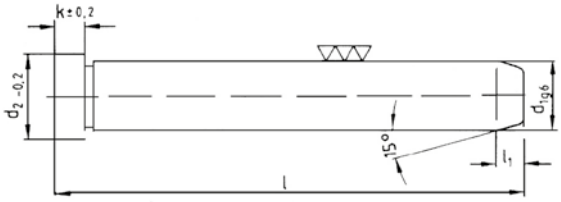
L1	10	12	16	16	20	20	25
L \ d	Ø 6 M4	Ø 8 M5	Ø 10 M6	Ø 12 M6	Ø 14 M8	Ø 16 M8	Ø 20 M10
16	•	•					
18	•	•					
20	•	•	•	•			
24	•	•	•	•			
28	•	•	•	•			
32	•	•	•	•	•	•	
36	•	•	•	•	•	•	
40	•	•	•	•	•	•	•
45	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•
55	•	•	•	•	•	•	•
60	•	•	•	•	•	•	•
70	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•
90	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•
110		•	•	•	•	•	•
120		•	•	•	•	•	•

Surface: Hardened and Polished.
Material: 1.3505.
Tolerance: m6.
Hardness: 60 ± 2 HRC.

Order example
CYLG+d+L ex. CYLG832 (8x32mm).

Angle Guide Pin





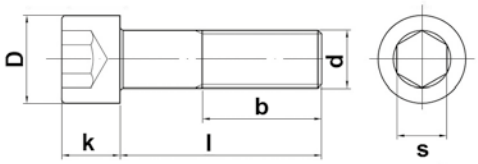
Part No.	d1 x l	d2	l1	k
EOC1040	10 x 40	12	4	3
EOC1060	10 x 60	12	4	3
EOC1080	10 x 80	12	4	3
EOC10100	10 x 100	12	4	3
EOC10120	10 x 120	12	4	3
EOC1260	12 x 60	16	7	6
EOC1280	12 x 80	16	7	6
EOC12100	12 x 100	16	7	6
EOC12120	12 x 120	16	7	6
EOC12140	12 x 140	16	7	6
EOC1460	14 x 60	18	7	8
EOC1480	14 x 80	18	7	8
EOC14100	14 x 100	18	7	8
EOC14120	14 x 120	18	7	8
EOC14140	14 x 140	18	7	8
EOC14160	14 x 160	18	7	8
EOC1680	16 x 80	20	7	8
EOC16100	16 x 100	20	7	8
EOC16120	16 x 120	20	7	8
EOC16140	16 x 140	20	7	8
EOC16160	16 x 160	20	7	8
EOC16180	16 x 180	20	7	8
EOC1860	18 x 60	22	7	8
EOC1880	18 x 80	22	7	8
EOC18100	18 x 100	22	7	8
EOC18120	18 x 120	22	7	8
EOC18140	18 x 140	22	7	8
EOC18160	18 x 160	22	7	8
EOC18200	18 x 200	22	7	8
EOC18240	18 x 240	22	7	8
EOC20100	20 x 100	24	7	8
EOC20120	20 x 120	24	7	8
EOC20160	20 x 160	24	7	8
EOC20200	20 x 200	24	7	8
EOC20240	20 x 240	24	7	8
EOC24100	24 x 100	28	7	15
EOC24120	24 x 120	28	7	15
EOC24140	24 x 140	28	7	15
EOC24160	24 x 160	28	7	15
EOC24200	24 x 200	28	7	15
EOC24240	24 x 240	28	7	15

Surface: Hardened and Polished.
Material: 1.7262.
Tolerance: g6.
Hardness: 60 ± 2 HRC.

SOCKET HEAD CAP SCREWS

Socket Head Cap Screws





d	M1,6	M2	M2,5	M3	M4	M5	M6	M8	M10	M12	M14	M16	M18	M20	M24
Thread-pitch	0,35	0,40	0,45	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	2,00	2,50	2,50	3,00
D	3	3,8	4,5	5,5	7	8,5	10	13	16	18	21	24	27	30	36
k	1,6	2	2,5	3	4	5	6	8	10	12	14	16	18	20	24
b	15	16	17	18	20	22	24	28	32	36	40	44	48	52	60
s	1,5	1,5	2	2,5	3	4	5	6	8	10	12	14	14	17	19

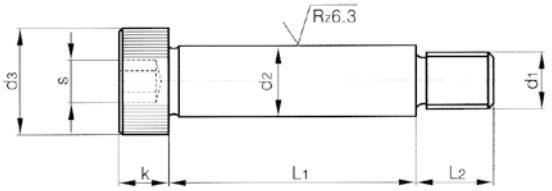
	Thread Size Metric														
Length	1,6	2	2,5	3	4	5	6	8	10	12	14	16	18	20	24
3		•													
4	•	•													
5		•	•	•	•										
6	•	•	•	•	•	•									
8		•	•	•	•	•	•								
10		•	•	•	•	•	•	•	•						
12		•	•	•	•	•	•	•	•	•					
14				•	•	•	•	•	•	•					
15				•	•	•	•	•	•	•					
16				•	•	•	•	•	•	•					
18					•	•	•	•	•	•					
20				•	•	•	•	•	•	•					
22					•	•	•	•	•	•					
25				•	•	•	•	•	•	•	•	•			
30				•	•	•	•	•	•	•	•	•			
35					•	•	•	•	•	•	•	•	•	•	
40					•	•	•	•	•	•	•	•	•	•	•
45					•	•	•	•	•	•	•	•	•	•	•
50					•	•	•	•	•	•	•	•	•	•	•
55						•	•	•	•	•	•	•	•	•	•
60						•	•	•	•	•	•	•	•	•	•
65						•	•	•	•	•	•	•	•	•	•
70						•	•	•	•	•	•	•	•	•	•
75							•	•	•	•	•	•	•	•	•
80							•	•	•	•	•	•	•	•	•
90							•	•	•	•	•	•	•	•	•
100							•	•	•	•	•	•	•	•	•
110							•	•	•	•	•	•	•	•	•
120							•	•	•	•	•	•	•	•	•
130								•	•	•		•		•	•
140								•	•	•		•		•	•
150								•	•	•		•		•	•
160								•	•	•		•		•	•
180								•	•	•		•		•	•
200								•	•	•		•		•	•

Material: High tensile strength (12.9).
DIN 912/ISO 4762.

Order example
HCS-(Thread Size+(-)+Length) ex. HCS-16-35 (M16x35mm).

Shoulder Screws, ISO 7379





d2h8	6	8	10	12	16	20	24
d1	5 X 0,8	6 X 1	8 X 1,25	10 X 1,5	12 X 1,75	16 X 2	20 X 2,5
d3	10	13	16	18	24	30	36
K	4,5	5,5	7	8	10	14	16
L2	9,5	11	13	16	18	22	27
S	3	4	5	6	8	10	12
Kg/mm	0,68	1,15	3	6	11	28	55

L1	L1 h11						
10	•						
12	•	•					
16	•	•	•				
20	•	•	•	•			
25	•	•	•	•			
30	•	•	•	•	•		
35	•	•	•	•	•		
40	•	•	•	•	•	•	
45	•	•	•	•	•	•	
50	•	•	•	•	•	•	•
55		•	•	•	•	•	•
60		•	•	•	•	•	•
65		•	•	•	•	•	•
70		•	•	•	•	•	•
80			•	•	•	•	•
90				•	•	•	•
100				•	•	•	•
120				•	•	•	•

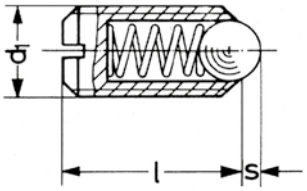
Material: High tensile strength (12.9).
ISO 7379.

Order example
UNBH+d2+L1 ex. UNBH610 (6 x 10 mm).

SPRING PLUNGERS

Spring Plunger, Ball Type



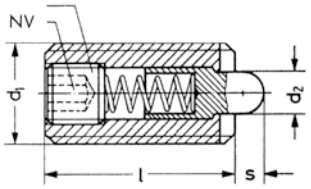


Part No.	d1	l	S	Ball Ø
WZ8087M3	M3	7	0,5	1,5
WZ8087M4	M4	9	0,8	2,5
WZ8087M5	M5	12	0,9	3
WZ8087M6	M6	14	1,0	3,5
WZ8087M8	M8	16	1,5	5
WZ8087M10	M10	19	2,0	6
WZ8087M12	M12	22	2,5	8
WZ8087M16	M16	24	3,5	10

Material: 1.0718.

Spring Plunger, Pin Type



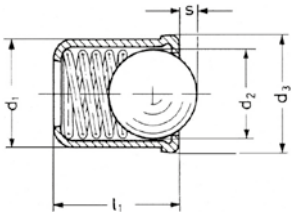


Part No.	d1	l	S	d2	NV
WZ8090M3	M3	12	1	1	0,7
WZ8090M4	M4	15	1,5	1,5	1,3
WZ8090M5	M5	18	2,3	2,4	1,5
WZ8090M6	M6	20	2,5	2,7	2
WZ8090M8	M8	22	3	3,5	2,5
WZ8090M10	M10	22	3	4	3
WZ8090M12	M12	28	4	6	4
WZ8090M16	M16	32	5	7,5	5

Material: 1.0718.

Spring Plunger, Straight

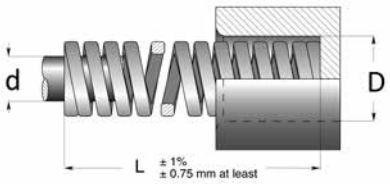




Part No.	d1	l1	S	d2	d3
WZ80934	4	5	0,7	3	4,6
WZ80935	5	6	1	4	5,6
WZ80936	6	7	1,5	5	6,5
WZ80938	8	9	1,8	6,5	8,5

Material: 1.4303.

Die springs ISO 10243 - Steel











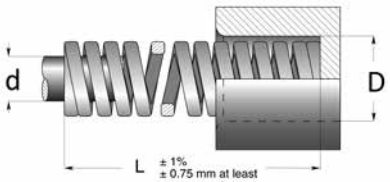
D x L	d	Type V Green	Type B Blue	Type R Red	Type G Yellow
10 x 38	5	•	•	•	•
10 x 44	5	•	•	•	•
10 x 51	5	•	•	•	•
10 x 64	5	•	•	•	•
10 x 76	5	•	•	•	•
10 x 305	5	•	•	•	•
13 x 25	6,3	•	•	•	•
13 x 32	6,3	•	•	•	•
13 x 38	6,3	•	•	•	•
13 x 44	6,3	•	•	•	•
13 x 51	6,3	•	•	•	•
13 x 64	6,3	•	•	•	•
13 x 76	6,3	•	•	•	•
13 x 89	6,3	•	•	•	•
13 x 102	6,3	•	•	•	•
13 x 305	6,3	•	•	•	•
16 x 25	8	•	•	•	•
16 x 32	8	•	•	•	•
16 x 38	8	•	•	•	•
16 x 44	8	•	•	•	•
16 x 51	8	•	•	•	•
16 x 64	8	•	•	•	•
16 x 76	8	•	•	•	•
16 x 89	8	•	•	•	•
16 x 102	8	•	•	•	•
16 x 115	8	•	•	•	•
16 x 305	8	•	•	•	•
20 x 25	10	•	•	•	•
20 x 32	10	•	•	•	•
20 x 38	10	•	•	•	•
20 x 44	10	•	•	•	•
20 x 51	10	•	•	•	•
20 x 64	10	•	•	•	•
20 x 76	10	•	•	•	•
20 x 89	10	•	•	•	•
20 x 102	10	•	•	•	•
20 x 115	10	•	•	•	•
20 x 127	10	•	•	•	•
20 x 139	10	•	•	•	•
20 x 152	10	•	•	•	•
20 x 305	10	•	•	•	•

Order example

Type+Dimension+Length: V10076 (Green ø 10 x 76 mm).
V10305 (Green ø 10 x 305 mm).

ISO SPRINGS

Die springs ISO 10243 - Steel







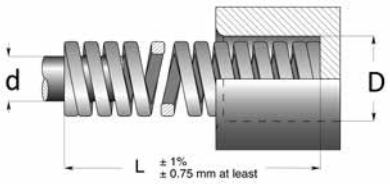




D x L	d	Type V Green	Type B Blue	Type R Red	Type G Yellow
25 x 25	12,5	•	•	•	•
25 x 32	12,5	•	•	•	•
25 x 38	12,5	•	•	•	•
25 x 44	12,5	•	•	•	•
25 x 51	12,5	•	•	•	•
25 x 64	12,5	•	•	•	•
25 x 76	12,5	•	•	•	•
25 x 89	12,5	•	•	•	•
25 x 102	12,5	•	•	•	•
25 x 115	12,5	•	•	•	•
25 x 127	12,5	•	•	•	•
25 x 139	12,5	•	•	•	•
25 x 152	12,5	•	•	•	•
25 x 178	12,5	•	•	•	•
25 x 203	12,5	•	•	•	•
25 x 305	12,5	•	•	•	•
32 x 38	16	•	•	•	•
32 x 44	16	•	•	•	•
32 x 51	16	•	•	•	•
32 x 64	16	•	•	•	•
32 x 76	16	•	•	•	•
32 x 89	16	•	•	•	•
32 x 102	16	•	•	•	•
32 x 115	16	•	•	•	•
32 x 127	16	•	•	•	•
32 x 139	16	•	•	•	•
32 x 152	16	•	•	•	•
32 x 178	16	•	•	•	•
32 x 203	16	•	•	•	•
32 x 254	16	•	•	•	•
32 x 305	16	•	•	•	•

Order example
Type+Dimension+Length: V10076 (Green ø 10 x 76 mm).
V10305 (Green ø 10 x 305 mm).

Die springs ISO 10243 - Steel











D x L	d	Type V Green	Type B Blue	Type R Red	Type G Yellow
40 x 51	20	•	•	•	•
40 x 64	20	•	•	•	•
40 x 76	20	•	•	•	•
40 x 89	20	•	•	•	•
40 x 102	20	•	•	•	•
40 x 115	20	•	•	•	•
40 x 127	20	•	•	•	•
40 x 139	20	•	•	•	•
40 x 152	20	•	•	•	•
40 x 178	20	•	•	•	•
40 x 203	20	•	•	•	•
40 x 254	20	•	•	•	•
40 x 305	20	•	•	•	•
50 x 64	25	•	•	•	•
50 x 76	25	•	•	•	•
50 x 89	25	•	•	•	•
50 x 102	25	•	•	•	•
50 x 115	25	•	•	•	•
50 x 127	25	•	•	•	•
50 x 139	25	•	•	•	•
50 x 152	25	•	•	•	•
50 x 178	25	•	•	•	•
50 x 203	25	•	•	•	•
50 x 229	25		•		
50 x 254	25	•	•	•	•
50 x 305	25	•	•	•	•
63 x 76	38	•	•	•	•
63 x 89	38	•	•	•	•
63 x 102	38	•	•	•	•
63 x 115	38	•	•	•	•
63 x 127	38	•	•	•	•
63 x 152	38	•	•	•	•
63 x 178	38	•	•	•	•
63 x 203	38	•	•	•	•
63 x 229	38	-	•	-	-
63 x 254	38	•	•	•	•
63 x 305	38	•	•	•	•

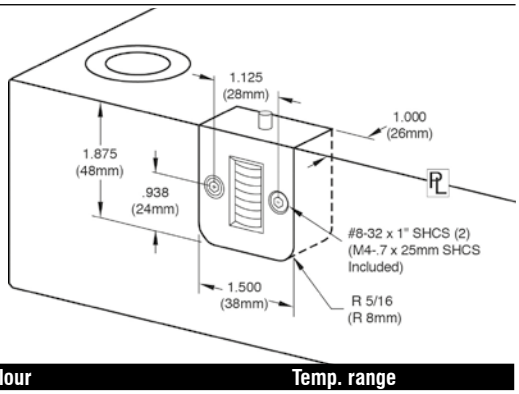
Order example

Type+Dimension+Length: V10076 (Green ø 10 x 76 mm).
V10305 (Green ø 10 x 305 mm).

MOULD CYCLE COUNTER

Mould Cycle Counter





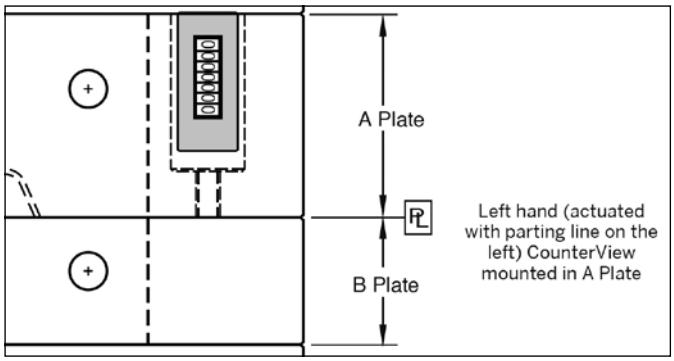
Part No.	# Digit	Colour	Temp. range
CC200	7	Black	120˚ C

Mouldpro Cycle Counter positively monitors mould activity, validates process monitoring data, and assists mould maintenance procedures.

- Maximum operating temperature is 120˚C.
- Counter: Non-resettable mechanical, 7-digit.
- Glass-filled Nylon housing.
- Reliable and tested quality.
- Specified worldwide by leading OEM's.
- Supplied with serial Number.
- Socket head cap screws are included.

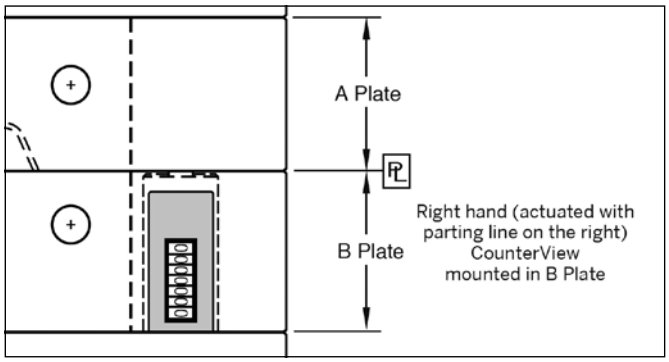
Round Counter - Right Hand





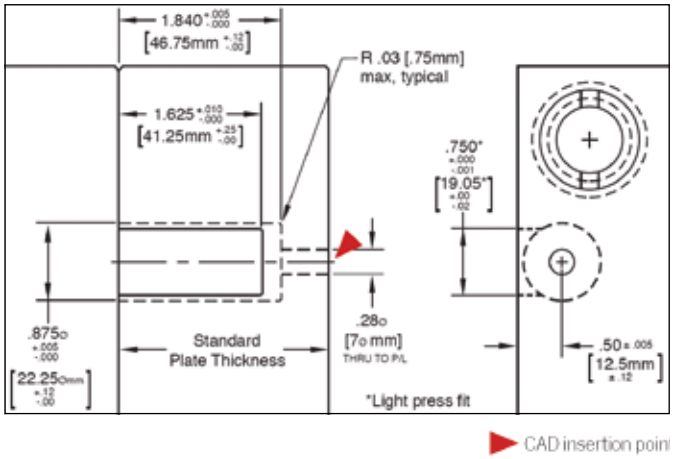
Round Counter - Left Hand

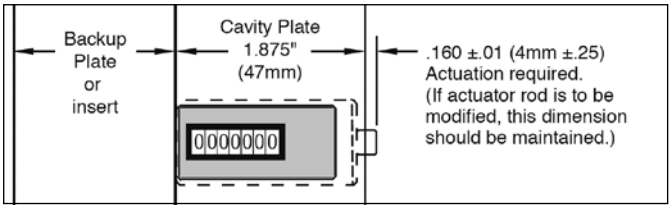




Part No.	Direction	# Digit	Colour	Temp. Range
CR100	Right hand	7	Black	120°C
CL100	Left hand	7	Black	120°C

The Round counters can be installed in the A or B plates with a minimum thickness of 1.875" (47mm). Larger plates utilize a threaded rod (included with each) that is pre-machined to the appropriate length for standard plate thicknesses to provide consistent actuation.

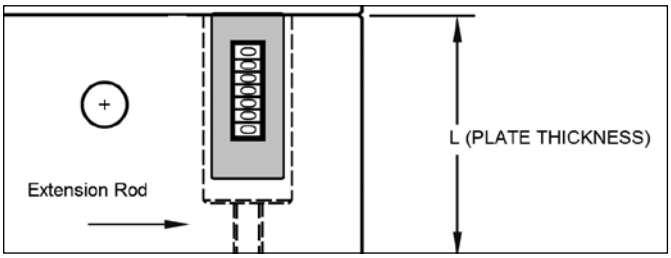




Extension Rods

Part No.	L
CER-56	56
CER-66	66
CER-76	76
CER-96	96
CER-116	116
CER-196	196

L=Length to make plate thickness.



EXPLANATION OF SYMBOLS

	Water
	Oil
	Temperature max.
	Only in combination with Push-Lock hose and Push-Lock hosetail
	TS Safety coupling
	Optional colour clips see page 33

NOTES

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In case of any questions or remarks, feel free to contact us.

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