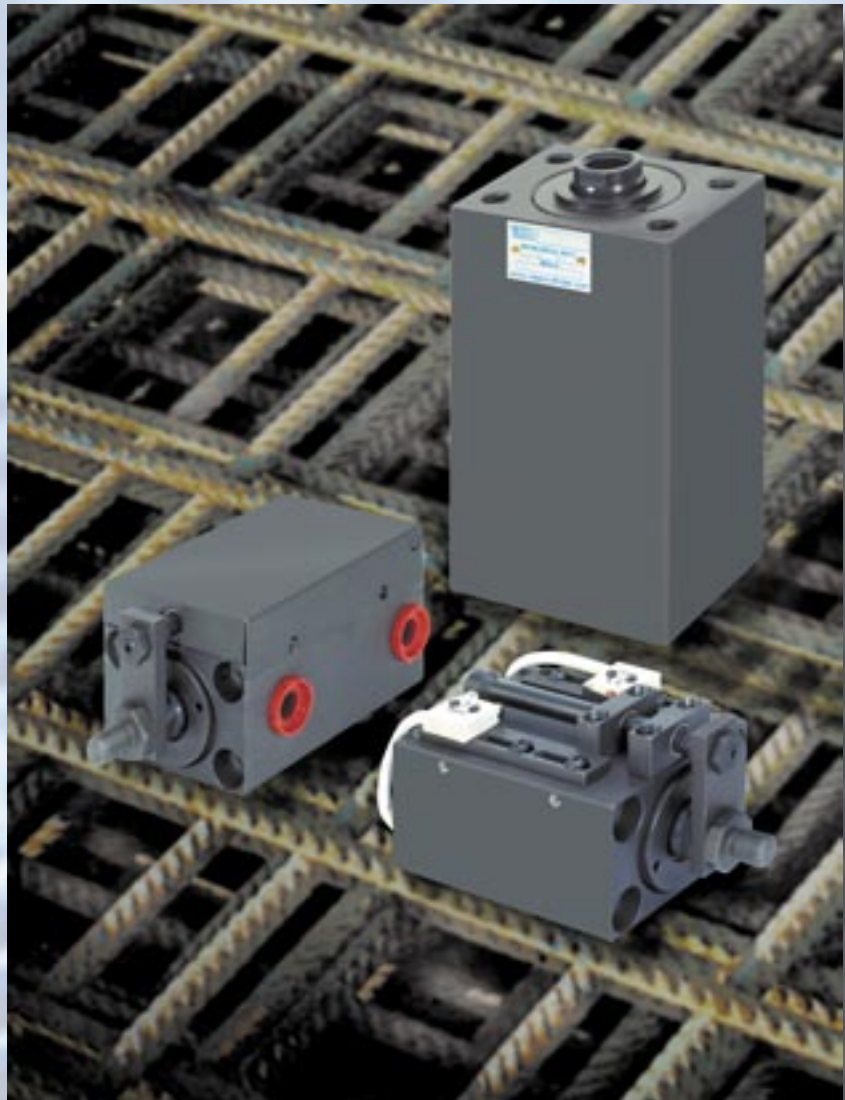




Mould Hydraulic Systems

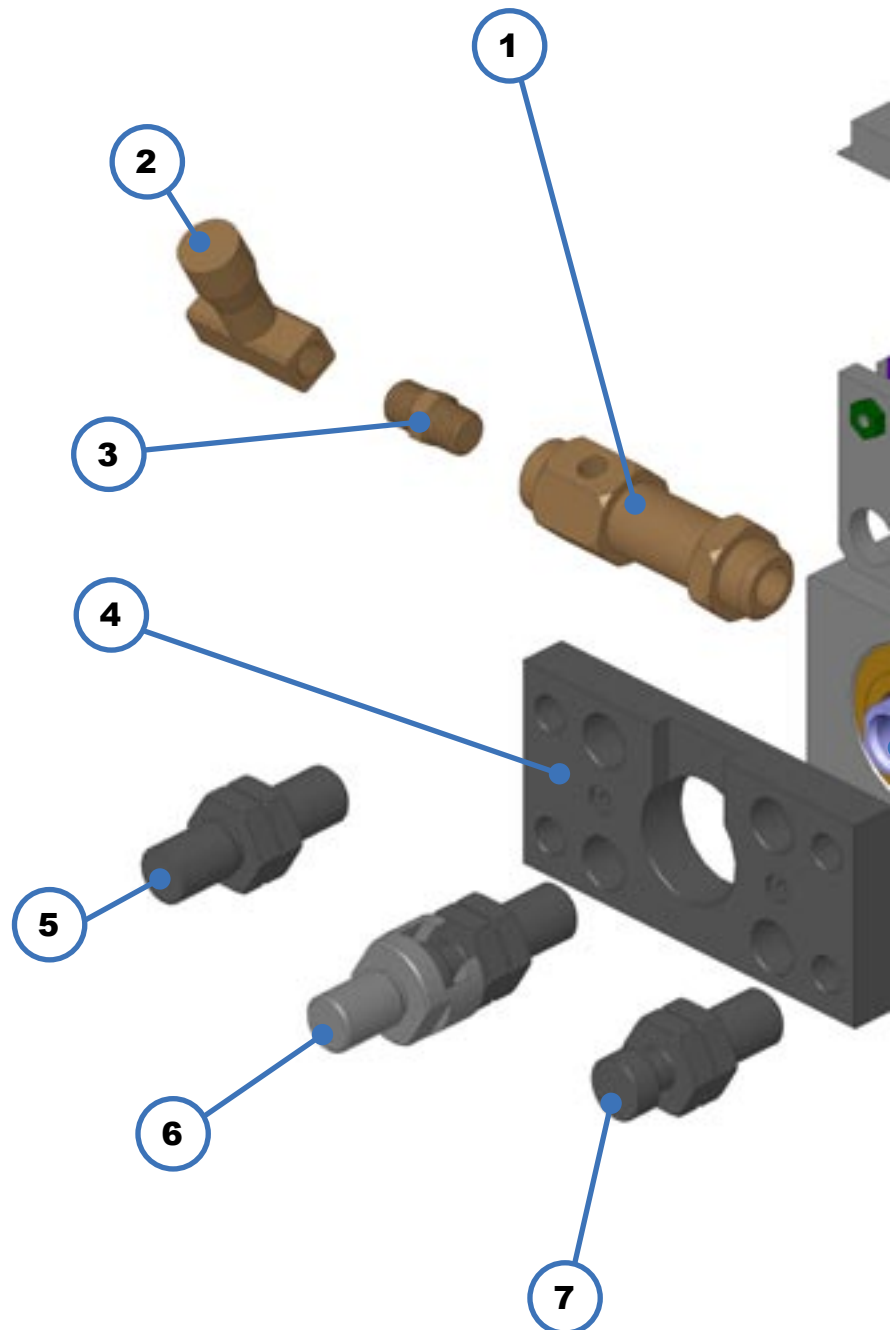
Compact Hydraulic Cylinders 450 bar



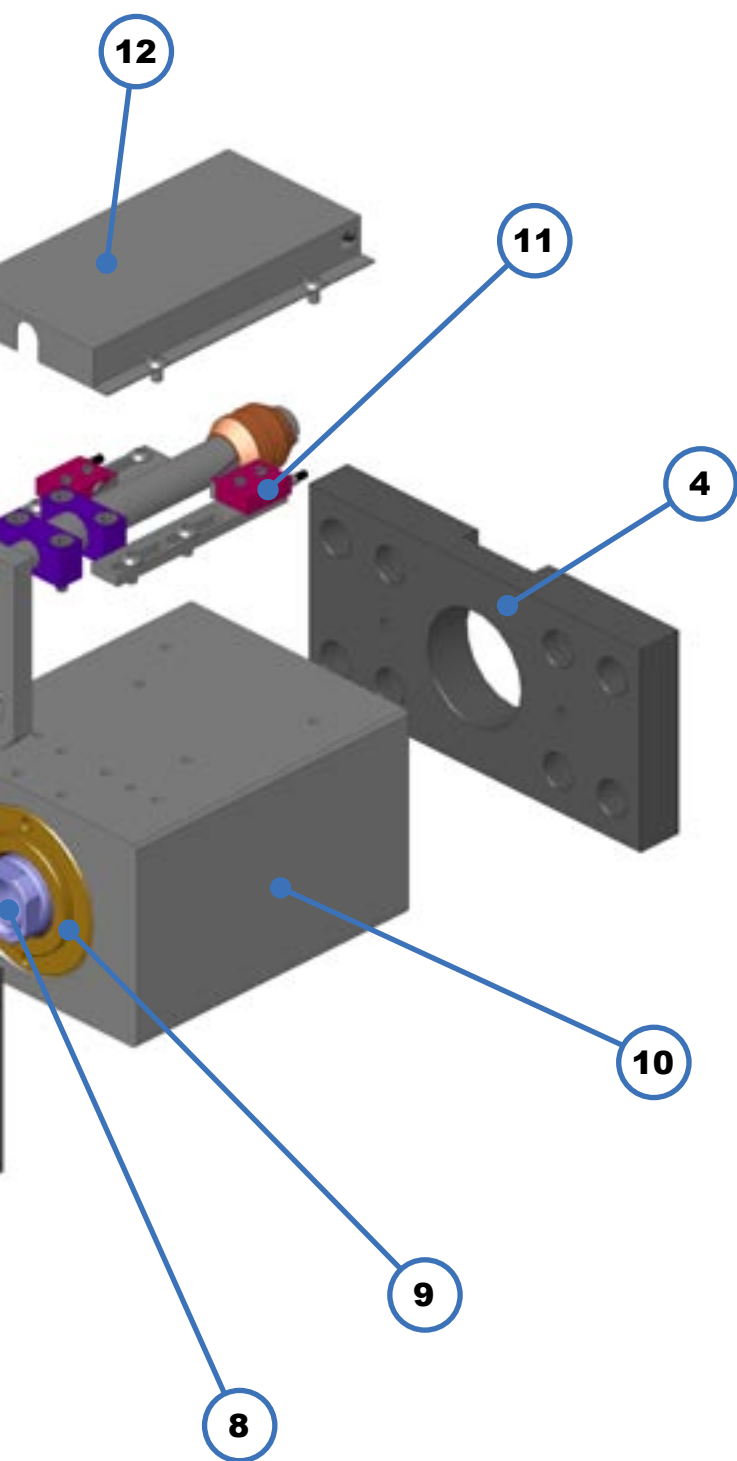
V450CBX

V450CBX

- 1 Accessory:
Pilot operated non return valve to increase the force of the cylinder (see accessory catalogue).
- 2 Accessory:
Unidirectional flow controller to regulate or reduce the speed of the piston (see accessory catalogue).
- 3 Accessory:
Steel hydraulic pipe fittings for non return valves and flow controllers (see accessory catalogue).
- 4 Accessory:
Steel applicable flange (see page M/22). It is equipped with screws for clamping on the cylinder. It is available for bore over 40 mm.
- 5 Accessory:
Male thread rod accessory with locknut (see accessory catalogue).
- 6 Accessory:
Floating joint rod end with locknut and female floating joint, providing an easier clamping of the cylinder on the mould (see accessory catalogue).
- 7 Accessory:
Floating joint rod end style with locknut (see accessory catalogue).
- 8 Integrated rod-piston group all in one in hardened steel (58 HRC) with antioxidant covering to facilitate lubrication and sliding.
- 9 Cartridge in cast iron with guide supports in cast iron for a higher mechanical resistance. With low friction seals in PTFE+Bronze and O-Rings in Viton®.
- 10 Steel body with low roughness for a better sliding. Customisation option with 3 possible clamping styles (see pages M/6-M/8) and 5 different types of oil ports (see pages M/9-M/14).
- 11 Integrated mechanical micro switches for end stroke position monitoring (see pages M/16-M/19).
- 12 Cover protection for the mechanical micro switches.



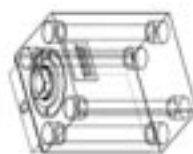
cylinders - 450 bar



General Characteristics

- **Maximum working pressure:** up to 450 bars (for details see page M/5)
- **Bore:** from $\varnothing 16$ to $\varnothing 100$ mm.
- **Rod diameter:** 10 ÷ 45 mm.
- **Stroke:** 10 ÷ 100 mm. (according to clamping styles see details page M/6 ÷ M/8)
- **Working temperature:**
 - without micro switches:** from -20°C to $+160^{\circ}\text{C}$
 - with micro switches:** from -20°C to $+130^{\circ}\text{C}$

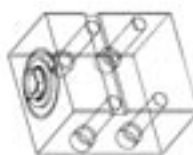
AVAILABLE CLAMPING STYLES



- Longitudinal through holes (4)

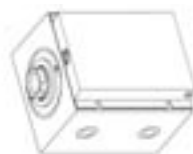


- Frontal and back threaded holes (4+4)

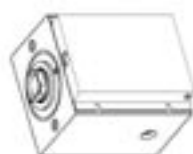


- Lateral through holes (2 or 4 according to the stroke) with keyway

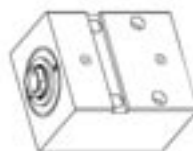
AVAILABLE OIL DELIVERY PORTS



- Left and right-positioned threaded holes



- Frontal with O-Rings



- Lateral with O-Rings



- Back with O-Rings



- Back threaded holes



ORDER COMPILATION SYMBOLS

(see page M/5)

Bore	016	025	032	040	050	063	080	100
-------------	------------	------------	------------	------------	------------	------------	------------	------------

(see pages M/6 ÷ M/8)

Clamping Style	B	C	E
-----------------------	----------	----------	----------

(see pages M/9 ÷ M/14)

Type of ports	G	N	O
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(see pages M/9 ÷ M/14)

Position of ports	M	M	F
	H	H	E
	D	D	R
	R		

CM **025** **B** **G** **M** **G** **M** **020,0**

V450CBX

(see page M/15)

G	I	Rod end style
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(see pages M/16÷ M/19)

*	M	N	L	Mechanical micro switches
----------	----------	----------	----------	----------------------------------

(see page M/5)

010	020	025	030	040	Stroke
	050	060	080	100	

Compact hydraulic cylinders - 450 bar

BORE AND STROKE (expressed in mm.)

ORDER CODE :

CM

025

020,0

THRUST (P) and TRACTION FORCE (T) in Kg.

Ø Bore	Ø Rod	80 bar		140 bar		200 bar		250 bar		300 bar		400 bar	
		P	T	P	T	P	T	P	T	P	T	P	T
016	10	161	98	281	171	402	245	502	306	603	367	804	90
025	18	393	189	687	331	981	473	1227	591	1472	709	1963	945
032	22	643	339	1125	593	1608	848	2010	1060	2412	1272	3215	1696
040	22	1005	701	1758	1226	2512	1752	3140	2190	3768	2628	5024	3504
050	28	1570	1078	2748	1886	3925	2694	4906	3368	5888	4041	7850	5388
063	28	2493	2000	4362	3500	6231	5000	7789	6251	9347	7501	12463	10001
080	36	4019	3205	7034	5609	10048	8013	12560	10017	15072	12020	20093	16027
100	45	6280	5008	10990	8765	15700	12521	19625	15651	23550	18781	31400	25042

Stroke (stroke tolerance +₀^{0,5} mm.)

Ø Bore	010,0	020,0	025,0	030,0	040,0	050,0	060,0	080,0	100,0
16	Standard	Special	Special	Standard	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
25	Special	Standard	Special	Special	Special	Standard	Unavailable	Unavailable	Unavailable
32	Special	Standard	Special	Special	Special	Standard	Unavailable	Unavailable	Unavailable
40	Special	Special	Standard	Special	Special	Standard	Unavailable	Standard	120
50	Special	Special	Standard	Special	Special	Standard	Unavailable	Standard	Unavailable
63	Special	Special	Special	Standard	Special	Special	Standard	Standard	Unavailable
80	Special	Special	Special	Special	Standard	Special	Special	Standard	Unavailable
100	Special	Special	Special	Special	Special	Standard	Special	Special	Standard

Standard strokes
 Unavailable strokes
 Special strokes

Maximum working pressure and oil flow

Ø Bore	Pressure Kg/cm ² with oil delivery		Flow l/min.
	NPT - BSP	O-Ring	
16	450	225	2
25	450	225	4
32	450	225	6
40	450	225	10
50	450	225	14
63	350	175	24
80	300	150	40
100	300	150	60

Maximum applicable mass and speed

Ø Bore	m/s	Kg
16	0,1	2
25	0,1	4
32	0,1	10
40	0,1	17
50	0,1	25
63	0,1	30
80	0,1	40
100	0,1	45

- The maximum impact speed between the piston and the heads, must never exceed 0.1 m/sec. For any need, please contact our technical department.
- It is always advisable to limit speed with flow controllers (see accessory catalogue).

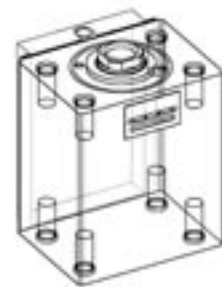
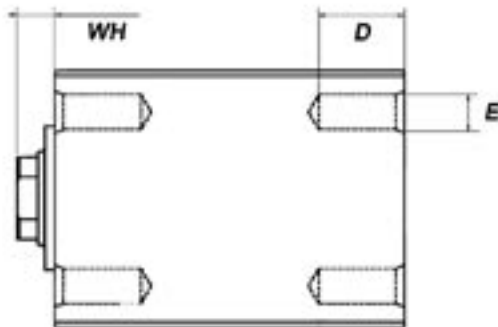
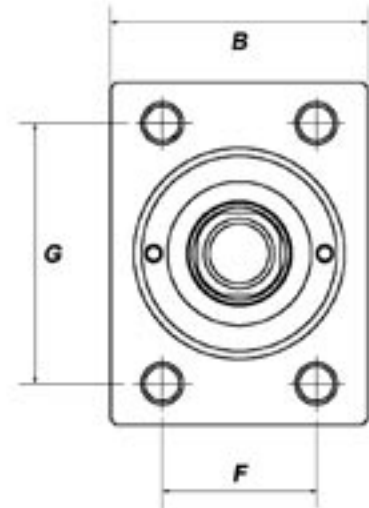
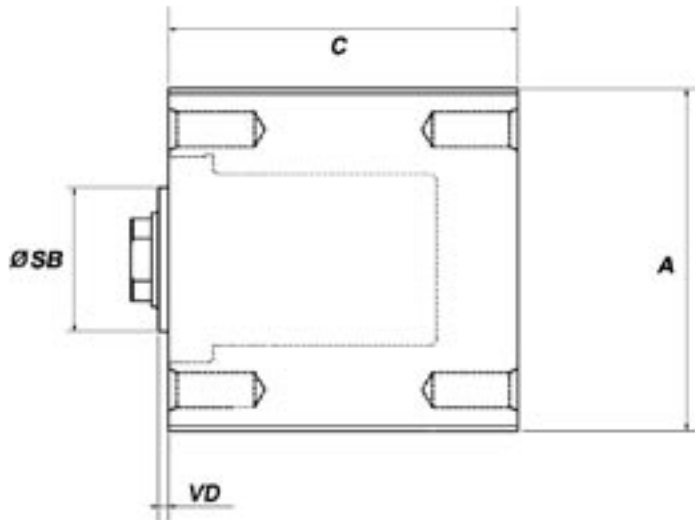
Compact hydraulic cylinders - 450 bar

CLAMPING STYLE

ORDER CODE : **CM** **B**

B

CLAMPING WITH LONGITUDINAL FRONTAL AND BACK THREADED HOLES (4+4)



Ø Bore	Ø Rod	Stroke	C	A	B	D	E	F	G	SB h9	VD	WH
16	10	10	56	55	35	10	M6×1	22	40	30	3	9
		30	76									
25	18	20	70	65	45	15	M8×1,25	30	50	38	3	11
		50	100									
32	22	20	75	75	55	20	M10×1,25	35	55	45	3	12
		50	105									
40	22	25	88	85	63	20	M10×1,5	40	63	45	3	12
		50	113									
		80	143									
50	28	25	98	100	75	20	M12×1,75	45	76	42	3	12
		50	123									
		80	153									
63	28	30	108	115	90	20	M12×1,75	55	90	50	3	13,5
		60	138									
		80	158									
80	36	40	133	140	110	30	M16×2	75	110	60	3	14
		80	173									
100	45	50	155	170	140	30	M16×2	95	135	72	3	15
		100	205									

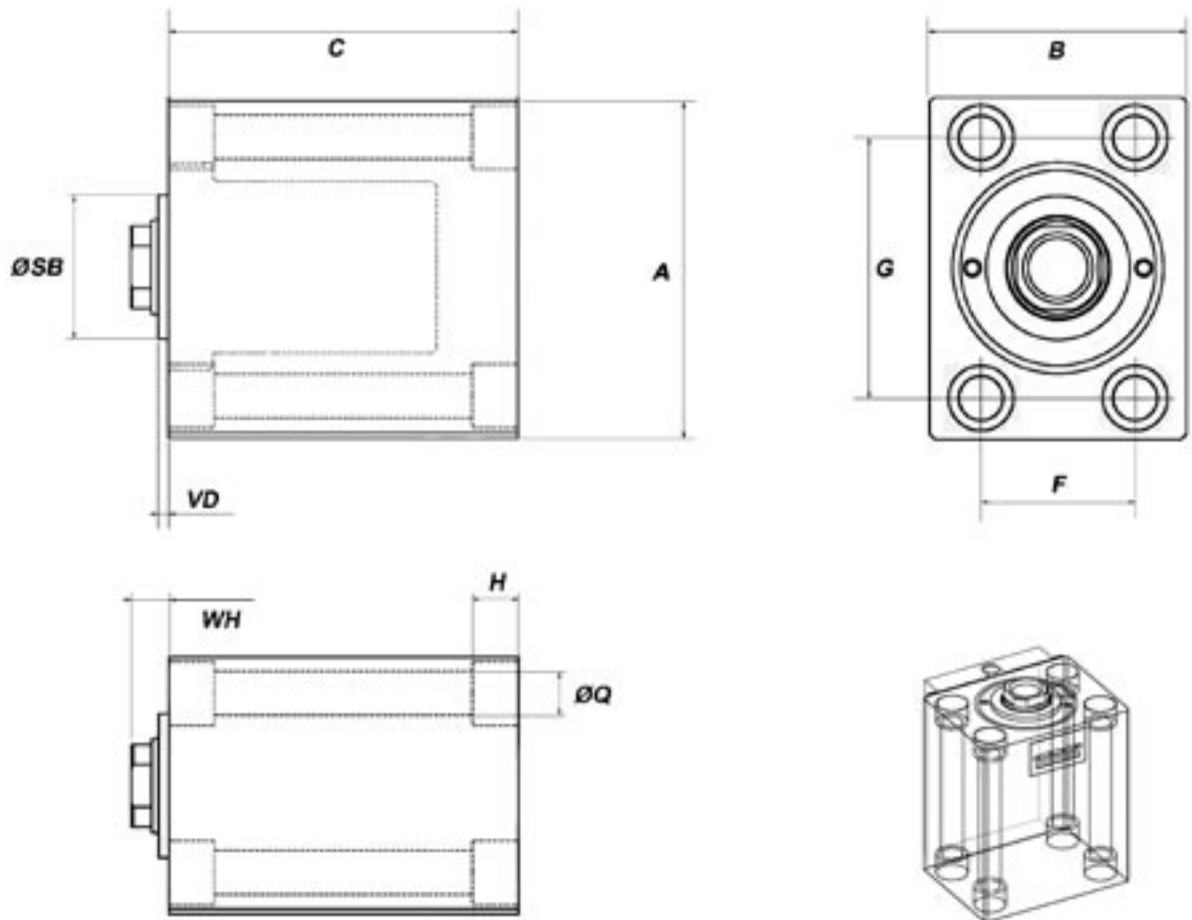
Compact hydraulic cylinders - 450 bar

CLAMPING STYLE

ORDER CODE : **CM** **C**

C

CLAMPING WITH LONGITUDINAL THROUGH HOLES (4)



Ø Bore	Ø Rod	Stroke	C	A	B	F	H	Q	G	SB h9	VD	WH
16	10	10	56	55	35	22	7	6,5	40	30	3	9
		30	76									
25	18	20	70	65	45	30	9	8,5	50	38	3	11
		50	100									
32	22	20	75	75	55	35	11	10,5	55	45	3	12
		50	105									
40	22	25	88	85	63	40	11	10,5	63	45	3	12
		50	113									
		80	143									
50	28	25	98	100	75	45	13	13	76	42	3	12
		50	123									
		80	153									
63	28	30	108	115	90	55	13	13	90	50	3	13,5
		60	138									
		80	158									
80	36	40	133	140	110	75	17	17	110	60	3	14
		80	173									
100	45	50	155	170	140	95	17	17	135	72	3	15
		100	205									

Compact hydraulic cylinders - 450 bar

CLAMPING STYLE

ORDER CODE :

CM

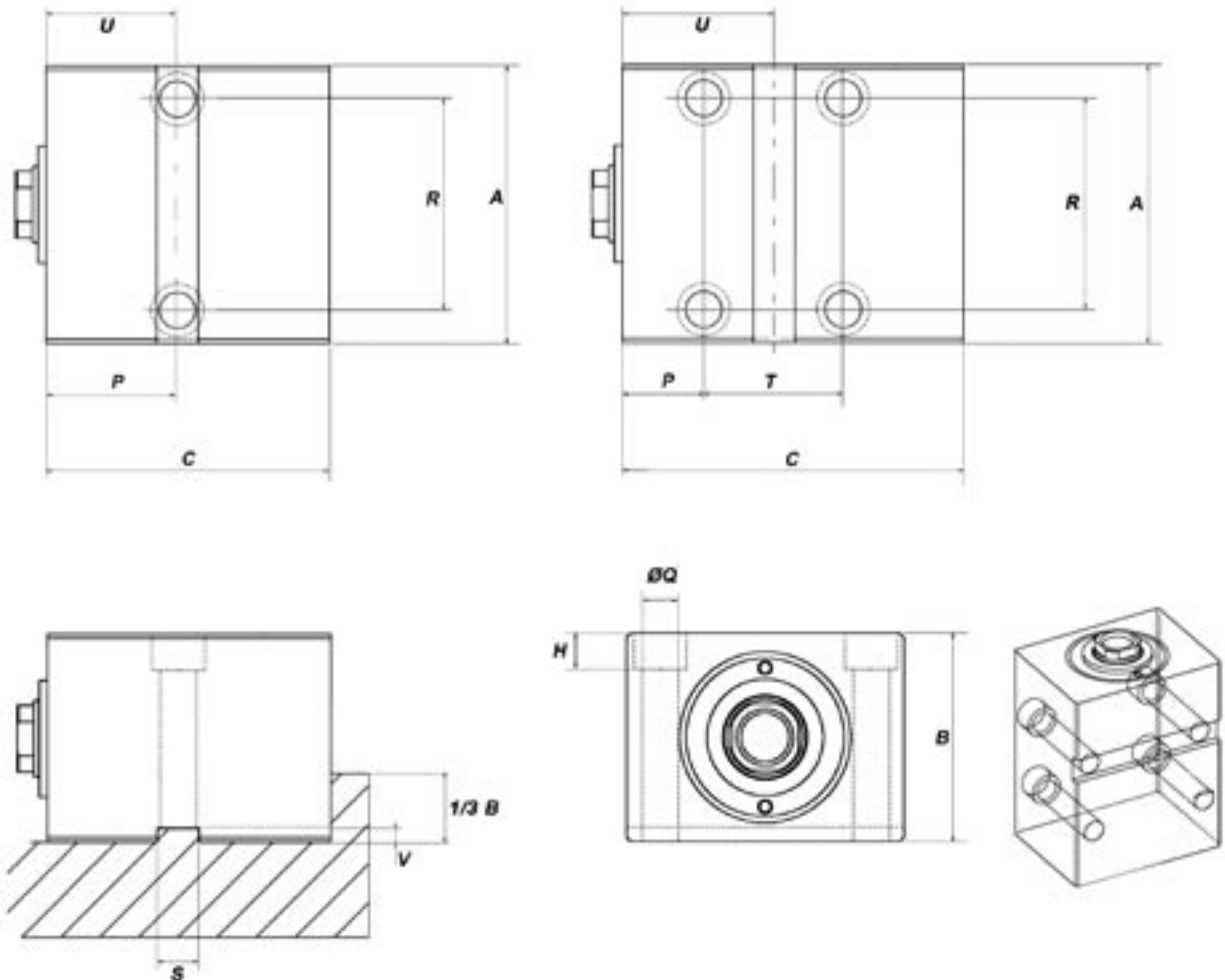
✓

E

✓

FOOT CLAMPING HOLES (2 or 4 according to the stroke) WITH LOCKING KEY-WAY

E



These combinations vary according to the stroke (see table below)

If utilizing a thrust force cylinder with pressure exceeding the ones suggested, it is better to apply a holding bracket as to avoid any torsion of the cylinder itself.

Ø Bore	Ø Rod	Stroke	C	U	T	A	B	H	Q	R	S	P	V
16	10	10	56	33,5	-	55	35	7	6,5	40	8	33,5	2
		30	76	43	19								
25	18	20	70	38	-	65	45	9	8,5	50	10	38	2
		50	100	56,5	37								
32	22	20	75	43	-	75	55	11	10,5	55	12	43	3
		50	105	60	34								
40	22	25	88	44,5	-	85	63	11	10,5	63	12	44,5	3
		50	113	63	37								
		80	143	78	67								
50	28	25	98	47	-	100	75	13	13	76	15	47	5
		50	123	67	40								
		80	153	82	70								
63	28	30	108	49	-	115	90	13	13	95	15	49	5
		60	138	72,5	47								
		80	158	82,5	67								
80	36	40	133	62	-	140	110	17	17	110	20	62	5
		80	173	91,5	59								
100	45	50	155	69,5	-	170	140	17	17	135	20	69,5	5
		100	205	108	77								

Compact hydraulic cylinders - 450 bar

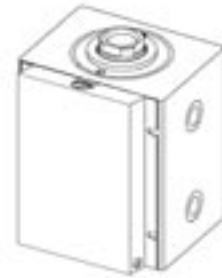
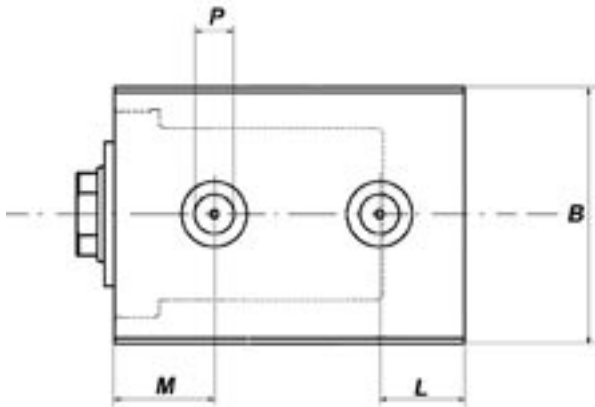
OIL DELIVERY PORTS (type and position)

ORDER CODE : **CM** **G** **H**

GH

STANDARD

LEFT-POSITIONED THREAD
lateral ports with BSP thread
(European standard)

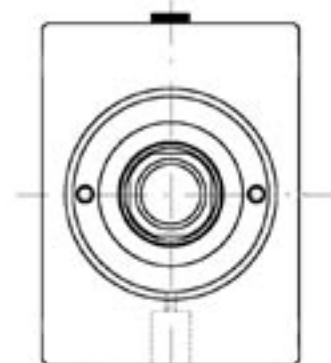
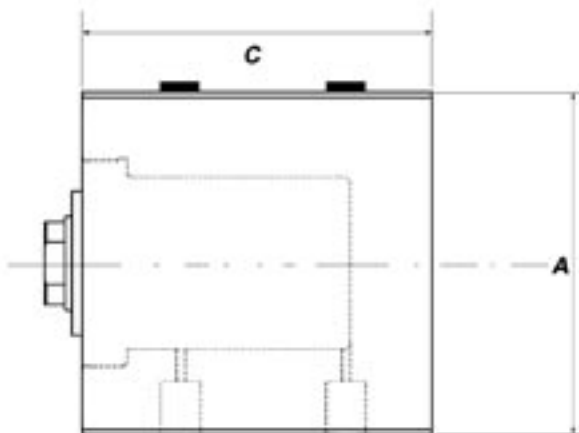


ATTENTION: The caps can protude (5 mm. Max.) on the opposite side of the ports on both oil delivery sides.

For both oil delivery sides (right and left) BSP type please insert code « GD »

NH

LEFT-POSITIONED THREAD
Lateral ports with NPT thread
(American standard)



ATTENTION: The caps can protude (5 mm. Max.) on the opposite side of the ports on both oil delivery sides.

For both oil delivery sides (right and left) NPT type please insert code « ND »

Ø Bore	Ø Rod	Stroke	C	A	B	L	M	P	
								BSP	NPT
16	10	10	56	55	35	10,5	20,5	1/4"	1/4"
		30	76						
25	18	20	70	65	45	10,5	22	1/4"	1/4"
		50	100						
32	22	20	75	75	55	12,5	26,5	1/4"	1/4"
		50	105						
40	22	25	88	85	63	15,5	28,5	1/4"	1/4"
		50	113						
		80	143						
50	28	25	98	100	75	18	29	1/4"	1/4"
		50	123						
		80	153						
63	28	30	108	115	90	21,5	29	3/8"	3/8"
		60	138						
		80	158						
80	36	40	133	140	110	26	36	1/2"	1/2"
		80	173						
100	45	50	155	170	140	31	42	1/2"	1/2"
		100	205						

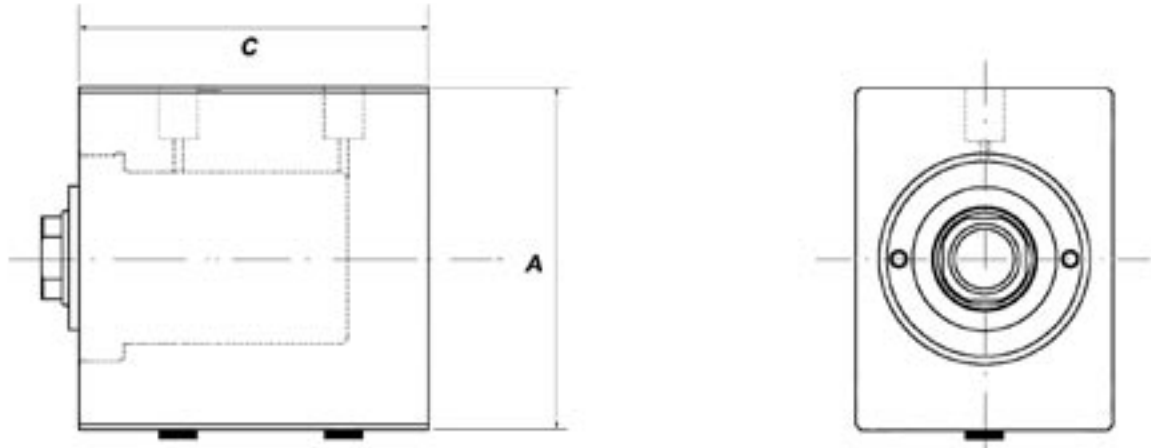
Compact hydraulic cylinders - 450 bar

OIL DELIVERY PORTS (type and position)

ORDER CODE : **CM** **G** **M**

GM

RIGHT-POSITIONED THREAD
lateral ports with BSP thread
(European standard)

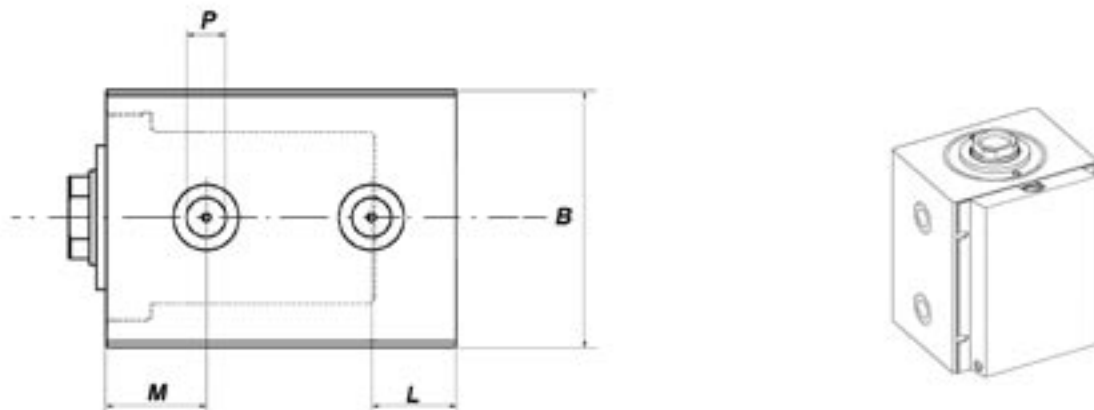


ATTENTION: The caps can protude (5 mm. Max.) on the opposite side of the ports on both oil delivery sides.

For both oil delivery sides (right and left) BSP type please insert code « GD »

NM

RIGHT-POSITIONED THREAD
Lateral ports with NPT thread
(American standard)



ATTENTION: The caps can protude (5 mm. Max.) on the opposite side of the ports on both oil delivery sides.

For both oil delivery sides (right and left) NPT type please insert code « ND »

Ø Bore	Ø Rod	Stroke	C	A	B	L	M	P	
								BSP	NPT
16	10	10	56	55	35	10,5	20,5	1/4"	1/4"
		30	76						
25	18	20	70	65	45	10,5	22	1/4"	1/4"
		50	100						
32	22	20	75	75	55	12,5	26,5	1/4"	1/4"
		50	105						
40	22	25	88	85	63	15,5	28,5	1/4"	1/4"
		50	113						
		80	143						
50	28	25	98	100	75	18	29	1/4"	1/4"
		50	123						
		80	153						
63	28	30	108	115	90	21,5	29	3/8"	3/8"
		60	138						
		80	158						
80	36	40	133	140	110	26	36	1/2"	1/2"
		80	173						
100	45	50	155	170	140	31	42	1/2"	1/2"
		100	205						

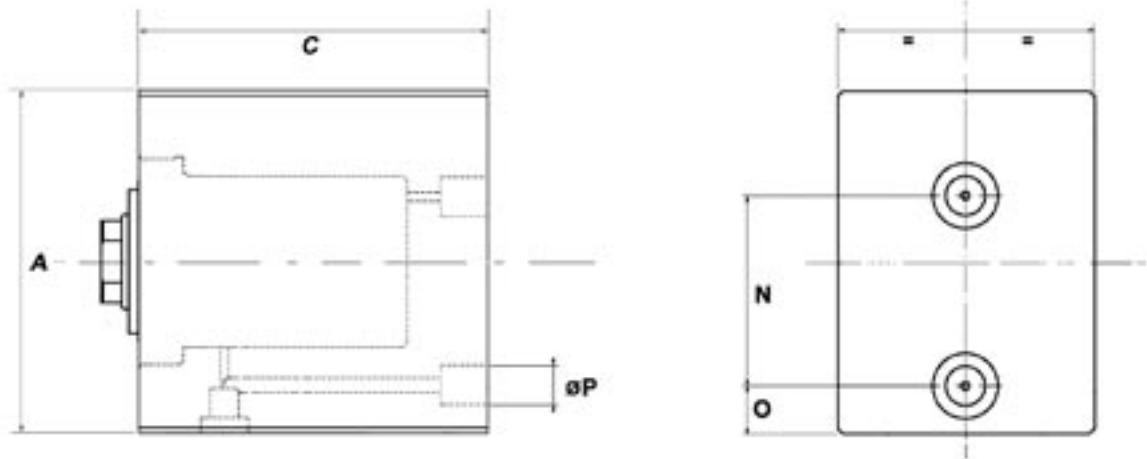
Compact hydraulic cylinders - 450 bar

OIL DELIVERY PORTS (type and position)

ORDER CODE : **CM** **G** **R**

GR

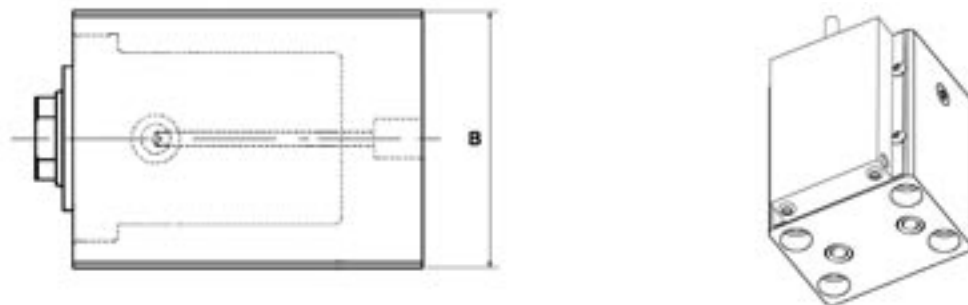
BACK BSP THREAD
(European standard)



Unavailable with clamping style type « E »

NR

NPT THREAD
(American standard)



Unavailable with clamping style type « E »

Ø Bore	Ø Rod	Stroke	C	A	B	N	O	P	
								BSP	NPT
16	10	10	56	55	35	30	12,5	1/8"	1/8"
		30	76						
25	18	20	70	65	45	39	13	1/8"	1/8"
		50	100						
32	22	20	75	75	55	47,5	14,5	1/8"	1/8"
		50	105						
40	22	25	88	85	63	56,5	13	1/8"	1/8"
		50	113						
		80	143						
50	28	25	98	100	75	64	17	1/4"	1/4"
		50	123						
		80	153						
63	28	30	108	115	90	66	17	1/4"	1/4"
		60	138						
		80	158						
80	36	40	133	140	110	85	18	1/4"	1/4"
		80	173						
100	45	50	155	170	140	103	20	3/8"	3/8"
		100	205						

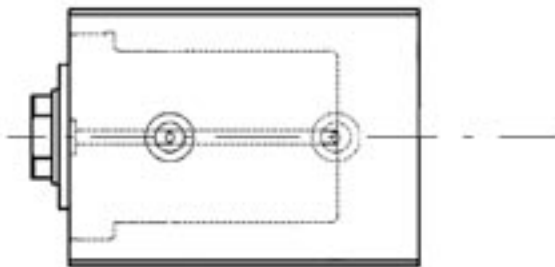
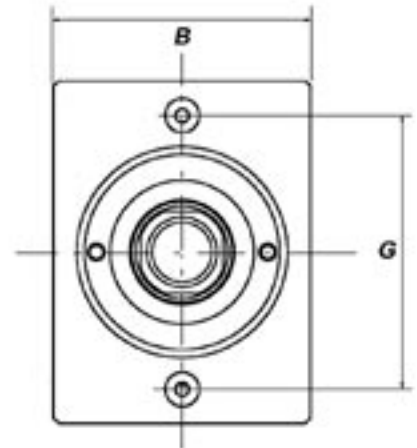
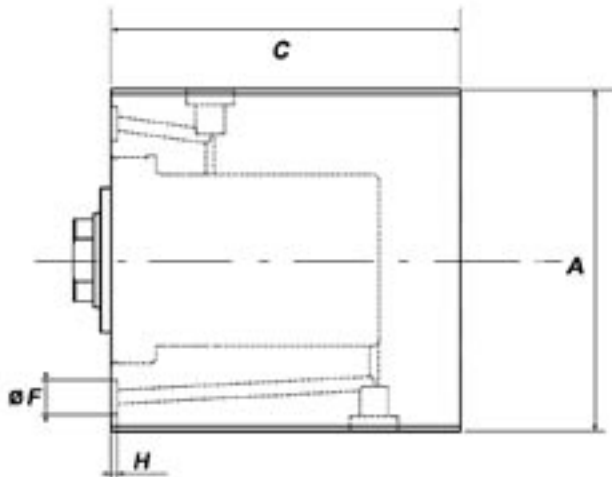
Compact hydraulic cylinders - 450 bar

OIL DELIVERY PORTS (type and position)

ORDER CODE : **CM** **O** **F**

OF

FRONTAL MANIFOLD OIL DELIVERY
Ports for integrated oil delivery without fittings (O-Rings included in the supply)



Unavailable with clamping style type « E »

Max. bore of the plate oil delivery port: mm. 3 Max. (Ø 16-50); mm. 5 Max. (Ø 63-100).

Max. eccentricity mm. 0,5. O-Rings in Viton® included in the supply.

Ø Bore	Ø Rod	Stroke	C	A	B	G	F	H
16	10	10	56	55	35	43	10	1,9
		30	76					
25	18	20	70	65	45	51	10	1,9
		50	100					
32	22	20	75	75	55	60	10	1,9
		50	105					
40	22	25	88	85	63	65	10	1,9
		50	113					
		80	143					
50	28	25	98	100	75	80	10	1,9
		50	123					
		80	153					
63	28	30	108	115	90	95	13	1,9
		60	138					
		80	158					
80	36	40	133	140	110	118	13	1,9
		80	173					
100	45	50	155	170	140	140	13	1,9
		100	205					

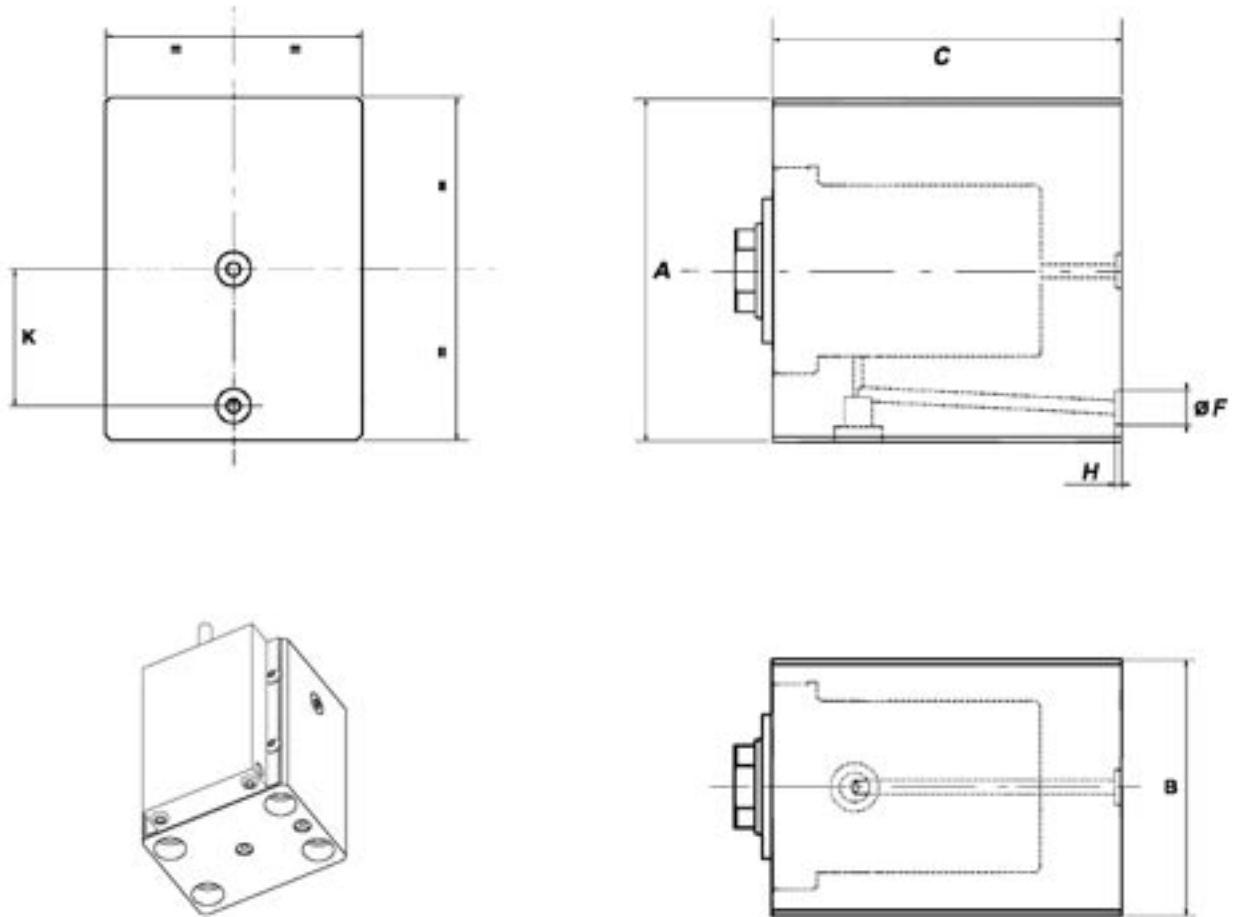
Compact hydraulic cylinders - 450 bar

OIL DELIVERY PORTS (type and position)

ORDER CODE : **CM** **O** **R**

OR

BACK MANIFOLD OIL DELIVERY
Ports for integrated oil delivery without fittings (O-Rings included in the supply)



Unavailable with clamping style type « E »

Max. bore of the plate oil delivery port: mm. 3 Max. (Ø 16-50); mm. 5 Max. (Ø 63-100).

Max. eccentricity mm. 0,5. O-Rings in Viton® included in the supply.

Ø Bore	Ø Rod	Stroke	C	A	B	F	H	K
16	10	10	56	55	35	10	1,9	21,5
		30	76					
25	18	20	70	65	45	10	1,9	25,5
		50	100					
32	22	20	75	75	55	10	1,9	30
		50	105					
40	22	25	88	85	63	10	1,9	32,5
		50	113					
		80	143					
50	28	25	98	100	75	10	1,9	40
		50	123					
		80	153					
63	28	30	108	115	90	13	1,9	47,5
		60	138					
		80	158					
80	36	40	133	140	110	13	1,9	59
		80	173					
100	45	50	155	170	140	13	1,9	70
		100	205					

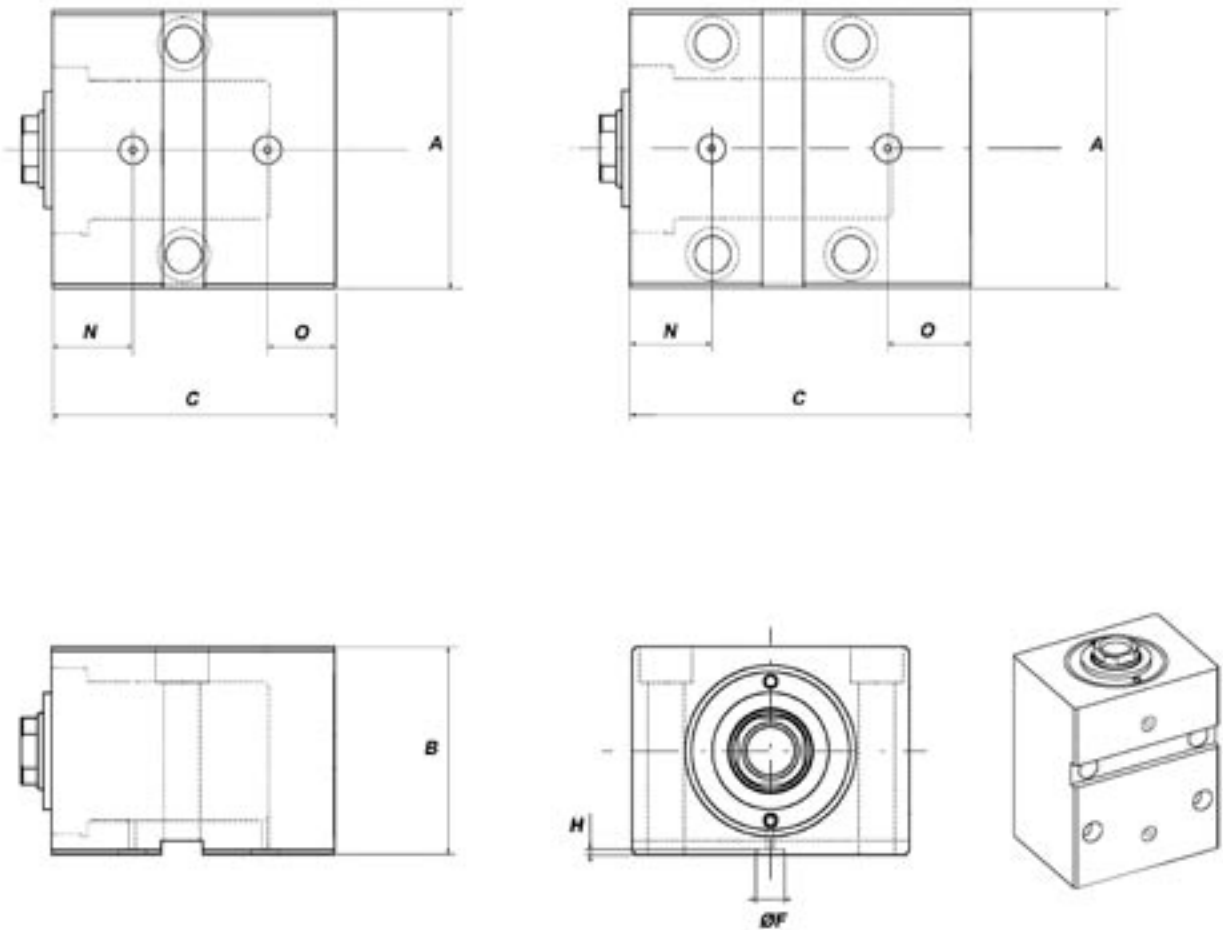
Compact hydraulic cylinders - 450 bar

OIL DELIVERY PORTS (type and position)

ORDER CODE : **CM** **O** **E**

OE

LATERAL OIL DELIVERY WITH O-RINGS
Ports for integrated oil delivery without fittings (O-Rings included in the supply)



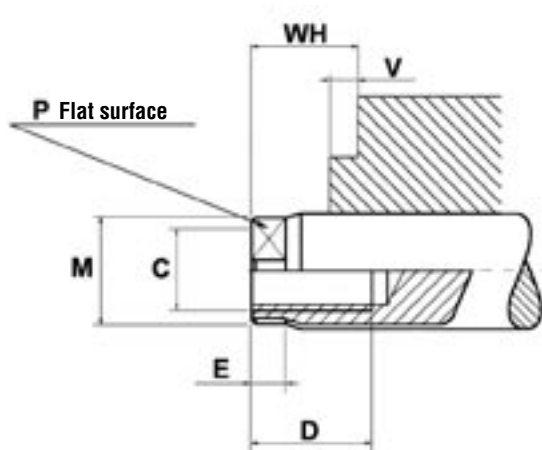
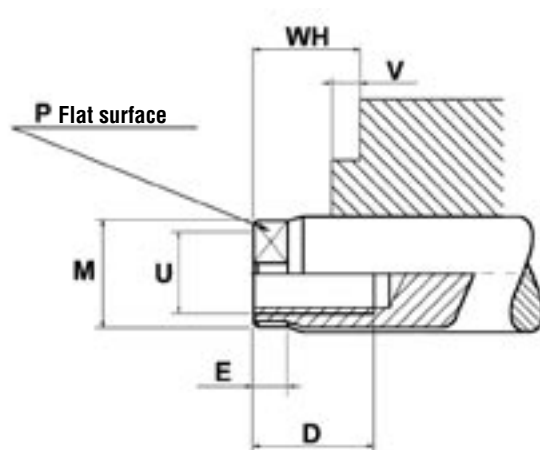
Max. bore of the plate oil delivery port: mm. 3 Max. (Ø 16-50); mm. 5 Max. (Ø 63-100).
Max. eccentricity mm. 0,5. O-Rings in Viton® included in the supply.

Ø Bore	Ø Rod	Stroke	C	A	B	F	H	N	O
16	10	10	56	55	35	10	1,9	23,5	7,5
		30	76						
25	18	20	70	65	45	10	1,9	25,5	9
		50	100						
32	22	20	75	75	55	10	1,9	26,5	12,5
		50	105						
40	22	25	88	85	63	10	1,9	28,5	15,5
		50	113						
		80	143						
50	28	25	98	100	75	10	1,9	29	18
		50	123						
		80	153						
63	28	30	108	115	90	13	1,9	29	21,5
		60	138						
		80	158						
80	36	40	133	140	110	13	1,9	36	26
		80	173						
100	45	50	155	170	140	13	1,9	42	31
		100	205						

Compact hydraulic cylinders - 450 bar

ROD END STYLE

ORDER CODE : **CM** **G**

G	STANDARD	
I	UNF-UNEF THREAD (American standard)	

Ø Bore	Ø Rod	C	D	E	M	P	U	V	WH
16	10	M6×1	12	4	9,5	8	1/4-28	3	9
25	18	M10×1,5	20	5	17	15	3/8-24	3	11
32	22	M12×1,75	20	6	21	18	1/2-20	3	12
40	22	M14×2	20	6	21	18	9/16-18	3	12
50	28	M20×2,5	30	6	27	24	3/4-16	3	12
63	28	M20×2,5	30	7	27	24	3/4-16	3	13,5
80	36	M27×3	40	8	35	32	1-12	3	14
100	45	M33×3,5	50	9	44	40	1-1/4-12	3	15

Compact hydraulic cylinders - 450 bar

MECHANICAL MICRO SWITCHES

ORDER CODE :

CM

✓

✓

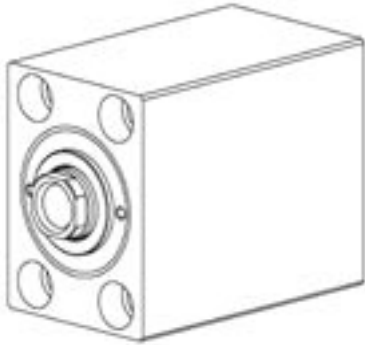
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✓

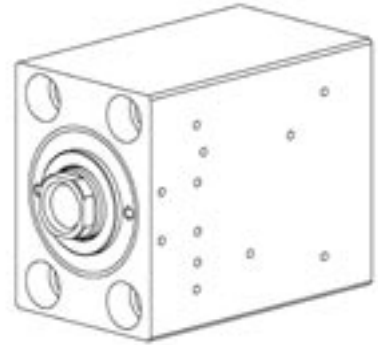
✓

✓

WITHOUT MICRO SWITCHES

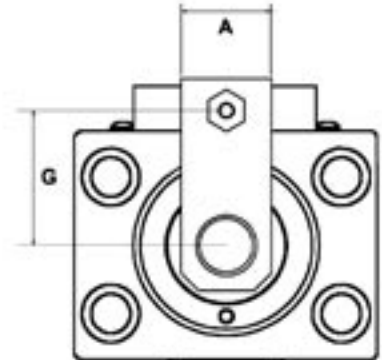
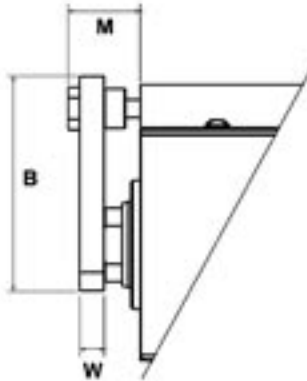
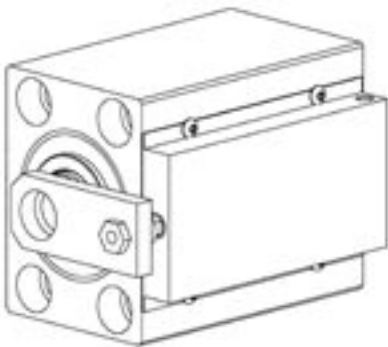


WITH MICRO SWITCH PRE-SET
Body with pre-set holes for the assembly of mechanical micro switches



M

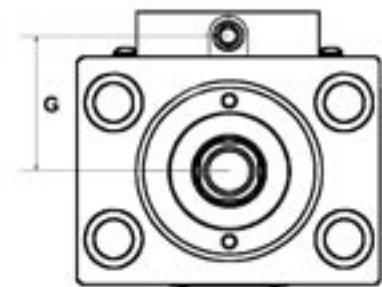
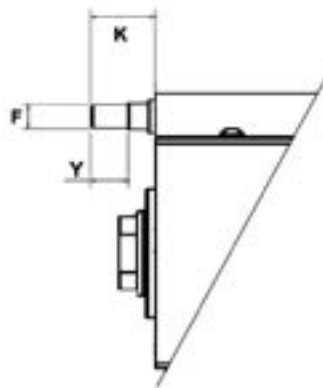
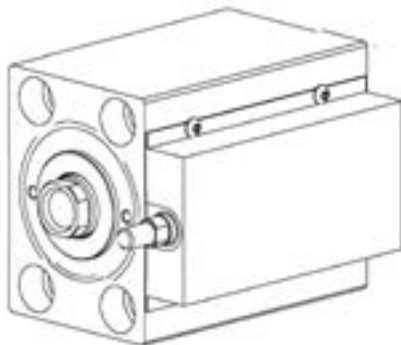
WITH MECHANICAL MICRO SWITCHES
Cylinder with regulated mechanical micro switches (2), protection and applicable flange



Overall dimension with "E" mounting are different. See pag. M/18

L

WITH MECHANICAL MICRO SWITCHES
Cylinder with mechanical micro switches (2) for the direct mould application



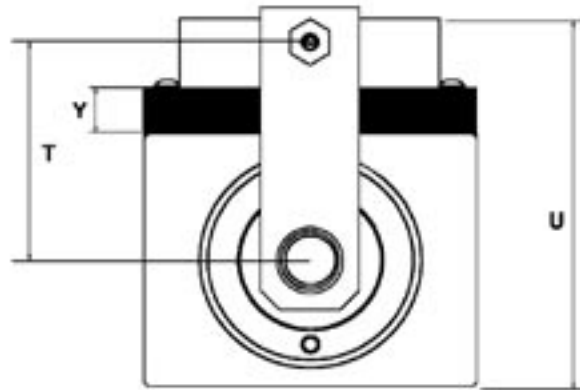
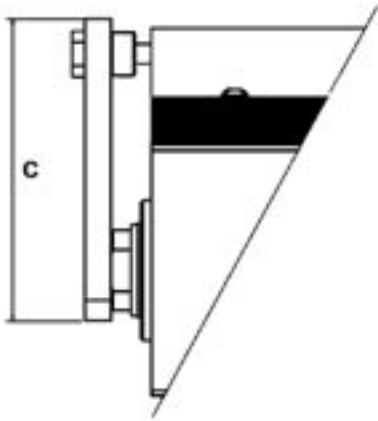
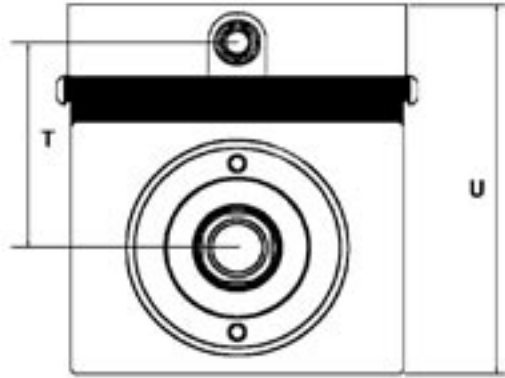
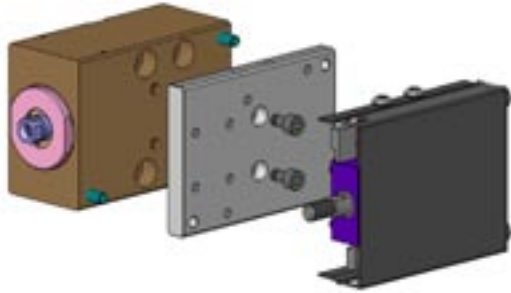
Overall dimension with "E" mounting are different. See pag. M/18

Compact hydraulic cylinders - 450 bar

MECHANICAL MICRO SWITCHES

O

COVER PROTECTION OVERALL DIMENSIONS WITH CLAMPING « E »



For other quotes please refer to pages M/16 M/17.

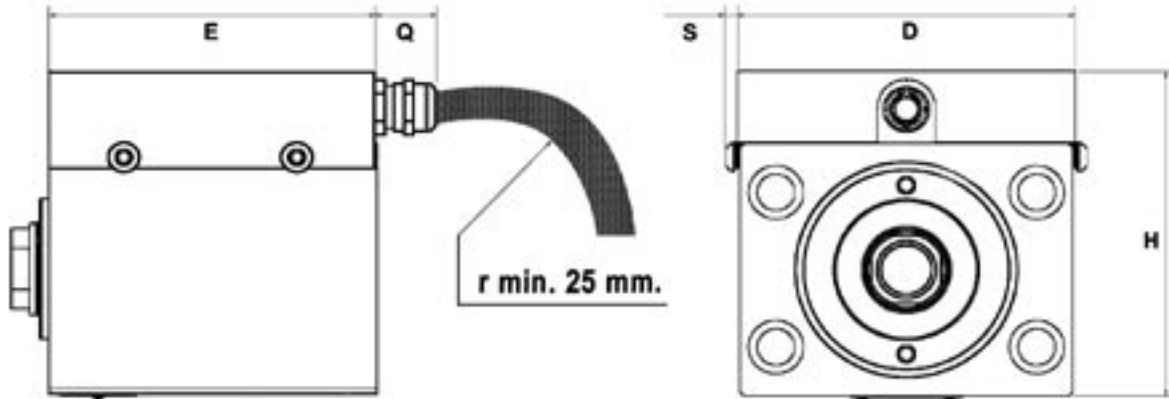
Ø Bore	Ø Rod	Stroke	C	Y	T	U
16	10	10	44	8	32,5	57,5
		30				
25	18	20	56	8	37,5	67,5
		50				
32	22	20	63	8	42,5	77,8
		50				
40	22	25	68	8	46,5	85,8
		50				
		80				
50	28	25	78	8	52,5	97,8
		50				
		80				
63	28	30	97	12	69	128
		60				
		80				
		80				
80	36	40	107	12	79	147,8
		80				
100	45	50	115	12	94	177,8
		100				

Compact hydraulic cylinders - 450 bar

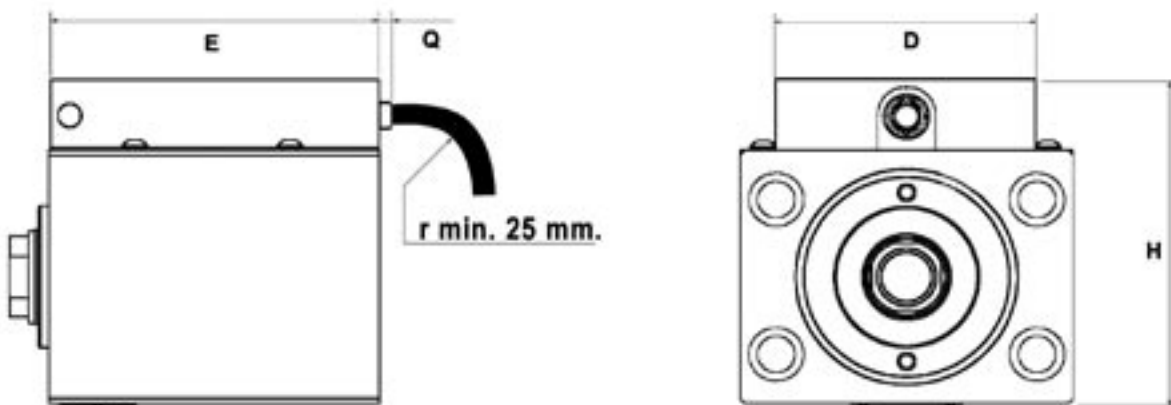
MECHANICAL MICRO SWITCHES

COVER PROTECTION OVERALL DIMENSIONS

COVER PROTECTION OVERALL DIMENSIONS – CYLINDERS BORE 32-50-80-100



COVER PROTECTION OVERALL DIMENSIONS – CYLINDERS BORE 16-25-63



Micro switch cables can have both back and lateral outputs.

Ø Bore	Ø Rod	Stroke	E	Y	K	A	B	D	F	G	H	M	Q	S	W
16	10	10	54	11	18	12	36	60	M6×1	24,5	49,5	17,7	4,5	1,8	5
		30	74												
25	18	20	69	11	18,5	16	48	66,6	M6×1	29,5	59,5	20,7	4,5	2,2	6
		50	99												
32	22	20	73	11	18,5	20	55	60	M6×1	34,5	69,8	21,7	4,5	-	6
		50	103												
40	22	25	86	11	17	25	60	60	M6×1	38,5	77,8	21,7	4,5	-	6
		50	111												
		80	141												
50	28	25	96	11	16	30	70	60	M6×1	44,5	89,8	23,7	4,5	-	8
		50	121												
		80	151												
63	28	30	107	15	25,5	30	85	116,6	M10×1,5	57	116	25,2	22,5	3,3	8
		60	137												
		80	157												
80	36	40	132	17	28	35	95	116	M10×1,5	67	135,8	27,7	22,5	-	10
		80	172												
100	45	50	154	20	32	45	115	116	M10×1,5	94	165,8	30,7	22,5	-	12
		100	204												

Compact hydraulic cylinders - 450 bar

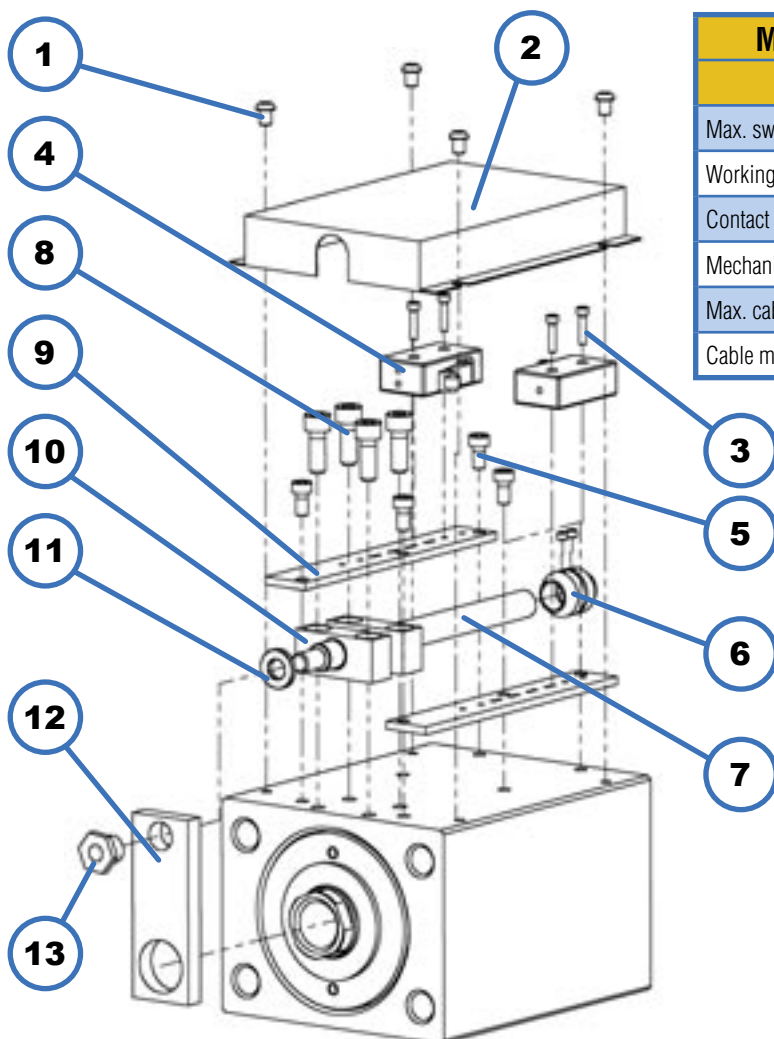
MECHANICAL MICRO SWITCHES

Stroke regulation of the micro switches (range of the stroke in mm.)

Ø	Stroke	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
016	10	F																	
		R																	
016	30	F																	
		R																	
025	20	F																	
		R																	
025	50	F																	
		R																	
032	20	F																	
		R																	
032	50	F																	
		R																	
040	25	F																	
		R																	
040	50	F																	
		R																	
040	80	F																	
		R																	
050	25	F																	
		R																	
050	50	F																	
		R																	
050	80	F																	
		R																	

Ø : Bore F : micro switch forward position R : micro switch backward position

FOR BORES OVER 50 mm. THE MICRO SWITCHES CAN BE REGULATED ON ALL STROKES



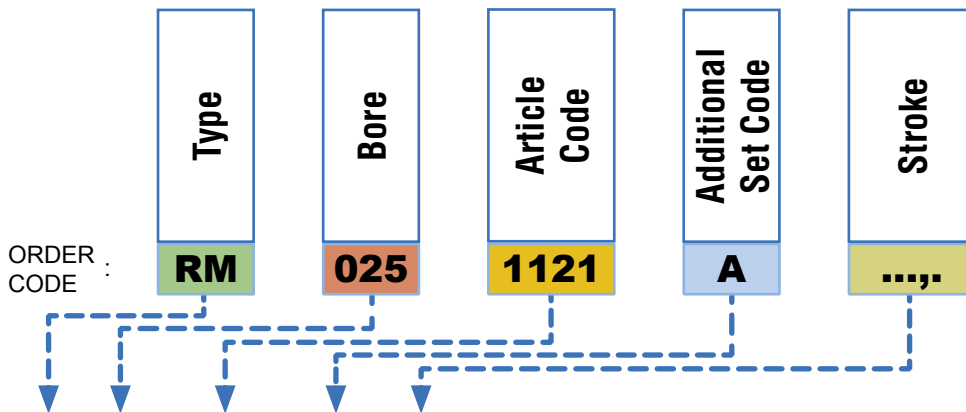
Micro switch type	MS1	MS3
bore	Ø 16 ÷ 50	Ø 63 ÷ 100
Max. switching voltage	6A - 250V AC	10A - 400V AC
Working temperature °C	- 40 / + 125	- 40 / +125
Contact distance mm.	0,4	0,3
Mechanical life time	2 × 10 ⁶	50 × 10 ⁶
Max. cable temp.	105 °C	105 °C
Cable mm. (diameter - length)	Ø4×3000	Ø7×3000

COMPONENTS

- 1 Cover fixing screw (4). For some bores the clamping is lateral
- 2 Switch protection cover
- 3 Switch fixing screw (nr.4)
- 4 Mechanical micro switch **MS1** or **MS3**
- 5 Bracket fixing screw
- 6 Cam
- 7 Control shaft
- 8 Guide support fixing screw (nr.4)
- 9 Switch regulation and set bracket (nr.2)
- 10 Control shaft guide supports
- 11 Control shaft washer
- 12 Control shaft joining bracket
- 13 Control shaft fixing nut

Compact hydraulic cylinders - 450 bar

SPARE PARTS



RM	...	6010	A		Rod seals	2
RM	...	6020	A		Piston seals	4
RM	...	6030			O-Ring in Viton® for integrated oil delivery	
RM	...	0310			Rod cartridge without seals	1
RM	...	0310	A		Rod cartridge with seals	1+2
RM	...	1120	A	...	Piston/rod group with rod end type G + seals	3
RM	...	1121	A	...	Piston/rod group with rod end type I + seals	

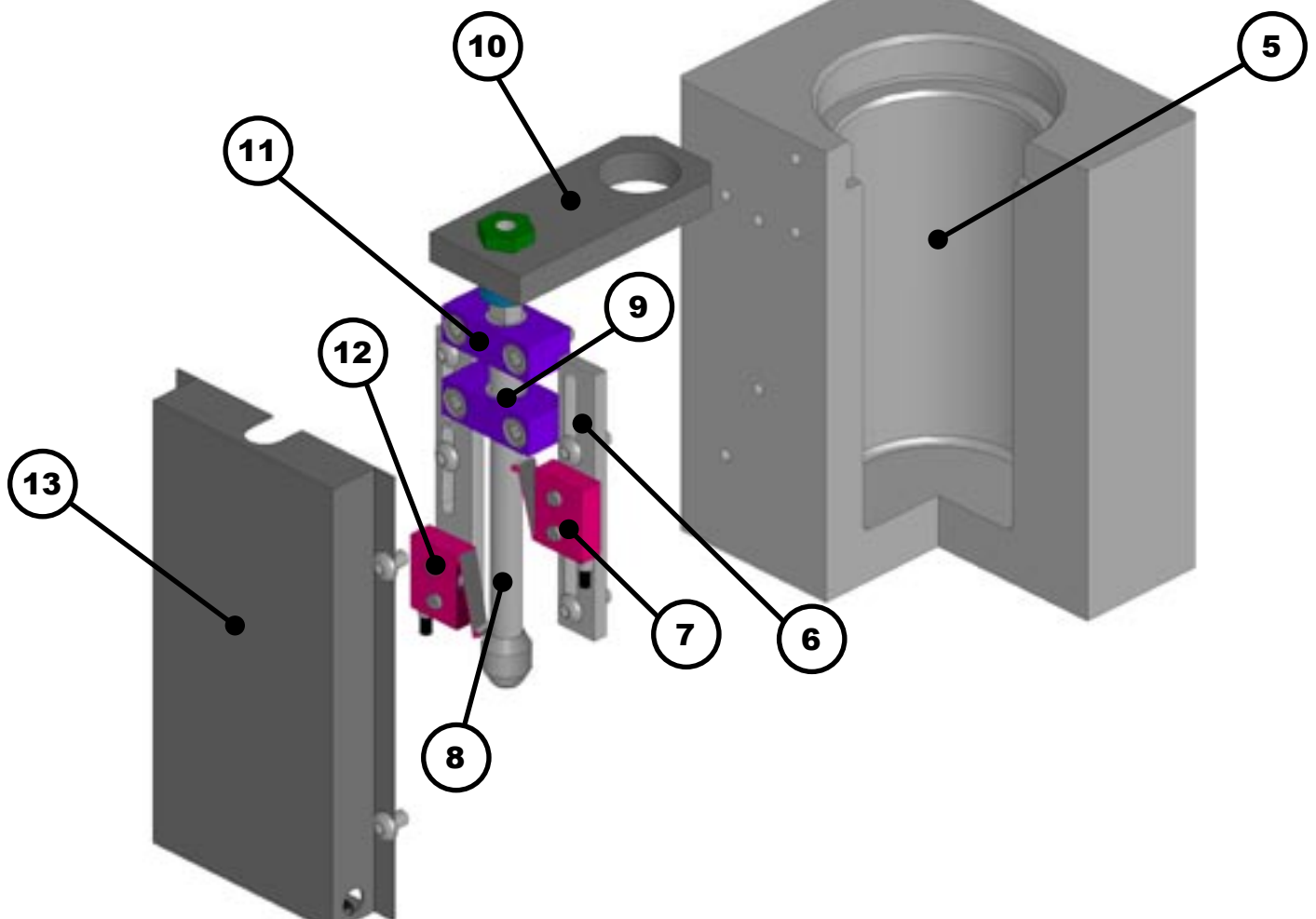
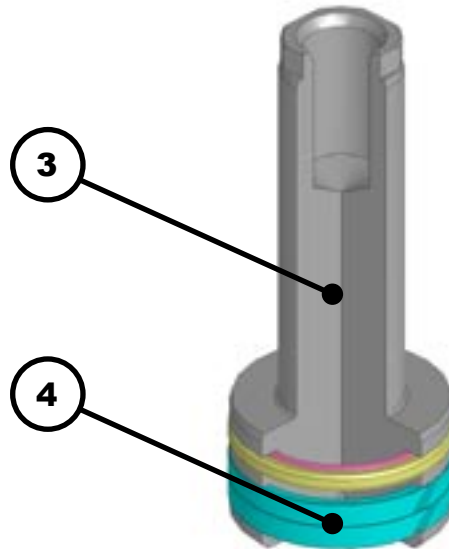
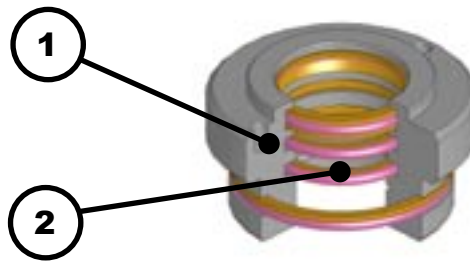
Without switch holes	With switch holes
	<p>!To fix the mechanical switch, the body should be equipped with the relative holes</p>

RM	...	1911M	1912M	...	Clamping « B », threaded ports BSP right	5
RM	...	1911H	1912H	...	Clamping « B », threaded ports BSP left	
RM	...	1913M	1914M	...	Clamping « B », threaded ports NPT right	
RM	...	1913H	1914H	...	Clamping « B », threaded ports NPT left	
RM	...	1930F	1931F	...	Clamping « B », ports with O-Rings at head	
RM	...	1930R	1931R	...	Clamping « B », ports with O-Rings at bottom	
RM	...	1911R	1912R	...	Clamping « B », threaded ports BSP back	
RM	...	1913R	1914R	...	Clamping « B », threaded ports NPT back	
RM	...	1915M	1916M	...	Clamping « C », threaded ports BSP right	
RM	...	1915H	1916H	...	Clamping C, threaded ports BSP left	
RM	...	1917M	1918M	...	Clamping « C », threaded ports NPT right	
RM	...	1917H	1918H	...	Clamping « C », threaded ports NPT left	
RM	...	1935F	1936F	...	Clamping « C », ports with O-Rings at head	
RM	...	1935R	1936R	...	Clamping « C », ports with O-Rings at bottom	
RM	...	1915R	1916R	...	Clamping « C », threaded ports BSP back	
RM	...	1917R	1918R	...	Clamping « C », threaded ports NPT back	
RM	...	1921M	1922M	...	Clamping « E », threaded ports BSP right	
RM	...	1921H	1922H	...	Clamping « E », threaded ports BSP left	
RM	...	1923M	1924M	...	Clamping « E », threaded ports NPT right	
RM	...	1923H	1924H	...	Clamping « E », threaded ports NPT left	
RM	...	1940E	1941E	...	Clamping « E », ports with lateral O-Rings	
RM	...	1944D	1945D	...	Clamping « B », threaded ports NPT right and left	
RM	...	1948D	1949D	...	Clamping « C », threaded ports NPT right and left	
RM	...	1951D	1953D	...	Clamping « E », threaded ports NPT right and left	
RM	...	1942D	1943D	...	Clamping « B », threaded ports BSP right and left	
RM	...	1946D	1947D	...	Clamping « C », threaded ports BSP right and left	
RM	...	1950D	1952D	...	Clamping « E », threaded ports BSP right and left	

RM	...	6311	A	...	Micro complete group for rod	6+7+8+9+10+11+12+13
RM	...	6312	A	...	Micro complete group for mould slide	6+7+8+9+11+12+13
		MS1			Small type switch with right lever and 2,5 mt. length direct cable	7
		MS2			Small type switch with left lever and 2,5 mt. length direct cable	12
		MS3			Big type switch with right lever and 2,5 mt. length direct cable	7
		MS4			Big type switch with left lever and 2,5 mt. length direct cable	12
RM	...	5010	A	...	Micro switch shaft	8
RM	...	5011	A	...	Control shaft joining bracket	10
RM	...	5012	A	...	Micro fixing brackets (2)	6
RM	...	5013	A		Couple of guide supports for switch shaft	9
RM	...	6310	A	...	Micro switch protection cover	13

Compact hydraulic cylinders - 450 bar

- 1 Rod cartridge
- 2 Rod seals (kit)
- 3 Rod piston
- 4 Piston seals (kit)
- 5 Body
- 6 Micro fixing brackets
- 7 Mechanical right micro
- 8 Micro switch shaft
- 9 Couple of guide supports for switch shaft
- 10 Control shaft joining bracket
- 11 Supports for switch shaft
- 12 Mechanical left micro
- 13 Micro switch protection cover



Compact hydraulic cylinders - 450 bar

ACCESSORY

ORDER CODE :

RM

040

2710

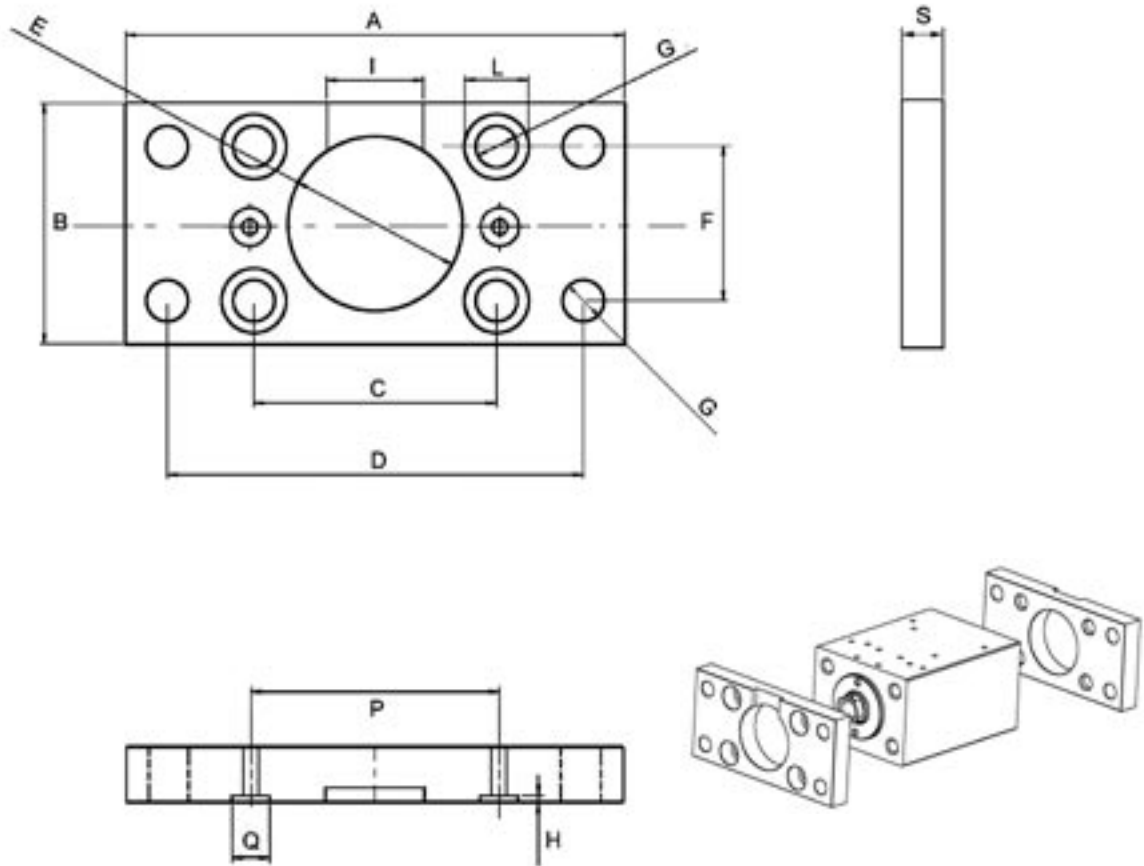
A

Insert Bore

2710

ONLY AVAILABLE FROM BORE Ø40 WITH CLAMPING STYLE « B »

FRONTAL AND REAR APPLICABLE FLANGE WITH FRONTAL PRE-SET FOR O-RING (O-Rings included in the supply)



THE CLAMPING SCREWS ARE INCLUDED.

Ø Bore	Ø Rod	A	B	C	D	H	E h7	F	G	S	I	L	Q	P
40	22	130	63	63	108	1,9	45	40	10,5	15	26	16,5	10	65
50	28	150	75	76	125	1,9	42	45	13	18	32	19	10	80
63	28	165	90	90	140	1,9	50	55	13	18	32	19	13	95
80	36	195	110	110	165	1,9	60	75	17	24	38	25	13	118
100	45	235	140	135	205	1,9	72	95	17	24	48	25	13	140

Mould Hydraulic Systems

VEGA S.r.l.
Via De Gasperi, 16
IT-21053 CASTELLANZA -VA
Phone +39-0331-481077 Italy
Phone +39-0331-480831 Export
Fax +39-0331-481149
e-mail. info@vegacyl.com