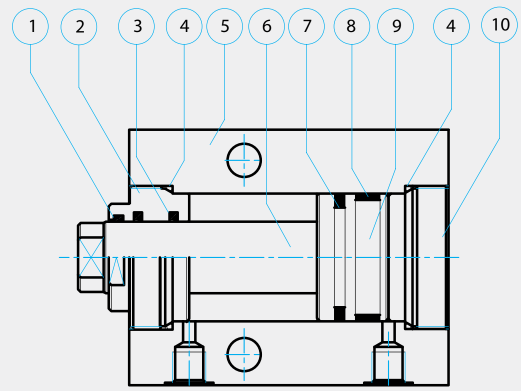
Double acting hydraulic cylinders, realized in steel for heavy duty uses. Suitable for industrial automation applications, when a strong, compact and highly modular construction is required. Available also with anti-rotation device and mechanic stroke limiters to control the final rod positions.

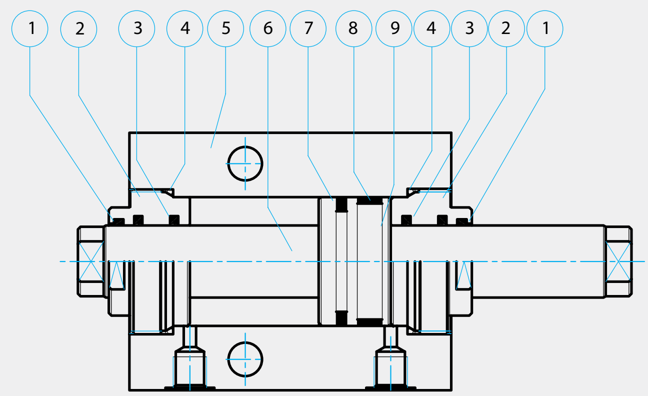
		SPECIFICATIONS
Bore	mm	from 25 to 100
Operating pressure	bar	250 max 320
Stroke	mm	20, 50, 80, 100

Seal code	Performance					Fluid		
	High sealing	Low friction	Max speed	Temp °C Min	Temp °C Max	Hydraulic oil	Phosphoric esters	HFC-fluid
L		√	1 m/s	- 20	+ 80	√		
H		√	1 m/s	- 20	+ 150	√	√	
G		√	0,5 m/s	- 20	+ 80			√

STANDARD CYLINDER



DOUBLE ROD CYLINDER

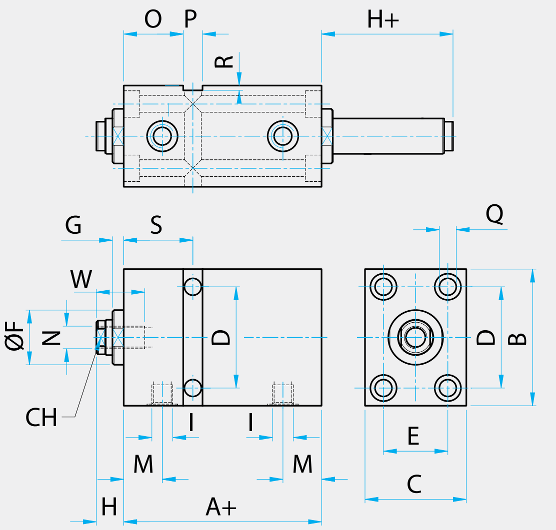


	Component	Material
2	Guide bushing	Bronze
5	Cylinder body	Steel
6	Rod	Chromeplated steel
9	Piston	Steel
10	Rear cap	Steel

	Component	Groove	Material L	Material H	Material G
1	Rod wiper		NBR + PTFE	Viton® + PTFE	NBR + PTFE CG
3	Rod seal	ISO 7425/2	NBR + PTFE	Viton® + PTFE	NBR + PTFE CG
4	Body seal		NBR + PTFE	Viton® + PTFE	NBR + PTFE CG
7	Piston seal	ISO 7425/1	NBR + PTFE	Viton® + PTFE	NBR + PTFE CG
8	Piston guide		Resin	Resin	Resin

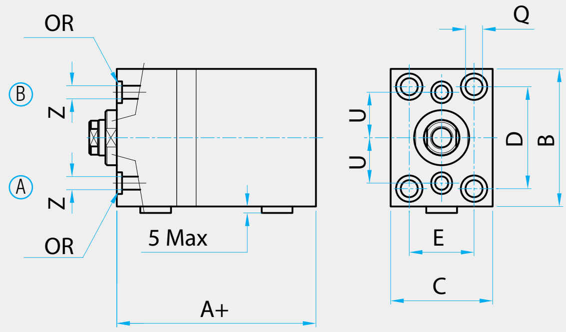
4

X *THREADED OIL CONNECTIONS*



Bore	25	32	40	50	63	80	100
Rod	**18**	**22**	**22**	**28**	**28**	**36**	**45**
A	57+	60+	73+	75+	85+	100+	110+
B	65	75	85	100	115	140	170
C	45	55	63	75	90	110	140
CH	15	19	19	22	22	30	36
D	50	55	63	76	90	110	135
E	30	35	40	45	55	75	95
F f8	32	34	34	42	50	60	72
G	6.5	8	7	8	7	7	8
H	14	15	17	20	20	20	25
I	G 1/4"	G 1/4"	G 1/4"	G 1/4"	G 3/8"	G 1/2"	G 1/2"
M	17	18	23.5	23.5	26	30	35
N	M10	M12	M14	M20	M20	M27	M33
O	32	34	37	37.5	47.5	50	60
P $^{+0.1}_{+0.2}$	10	12	12	15	15	20	20
Q	8.5	10.5	10.5	13	13	17	17
R	2	3	3	5	5	5	5
S	37	40	43	45	55	60	70
W	23	23	30	30	30	40	50

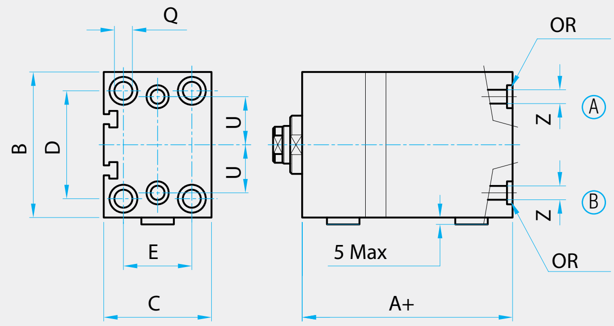
A *FRONT SIDE OIL SUPPLY*



Bore	25	32	40	50	63	80	100
A	57+	60+	73+	75+	85+	100+	110+
B	65	75	85	100	115	140	170
C	45	55	63	75	90	110	140
D	50	55	63	76	90	110	135
E	30	35	40	45	55	75	95
OR	OR106(610)	OR106(610)	OR106(610)	OR108(611)	OR108(611)	OR108(611)	OR108(611)
Q	8.5	10.5	10.5	13	13	17	17
U	25.5	30	32.5	40	47.5	59	70
Z	4	4	5	7	7	7	7

(A) *pull* (B) *push*

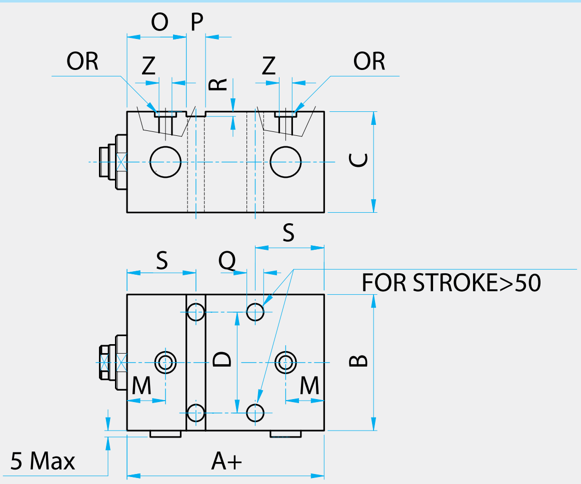
B *REAR SIDE OIL SUPPLY*



Bore	25	32	40	50	63	80	100
A	57+	60+	73+	75+	85+	100+	110+
B	65	75	85	100	115	140	170
C	45	55	63	75	90	110	140
D	50	55	63	76	90	110	135
E	30	35	40	45	55	75	95
OR	OR106(610)	OR106(610)	OR106(610)	OR108(611)	OR108(611)	OR108(611)	OR108(611)
Q	8.5	10.5	10.5	13	13	17	17
U	25.5	30	32.5	40	47.5	59	70
Z	4	4	5	7	7	7	7

(A) *pull* (B) *push*

E *LATERAL OIL SUPPLY*

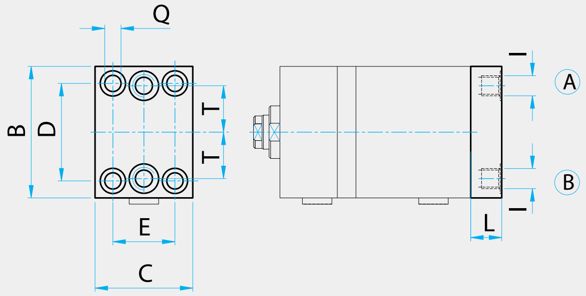


Bore	25	32	40	50	63	80	100
A	57+	60+	73+	75+	85+	100+	110+
B	65	75	85	100	115	140	170
C	45	55	63	75	90	110	140
D	50	55	63	76	90	110	135
M	17	18	23.5	23.5	26	30	35
O	32	34	37	37.5	47.5	50	60
OR	OR106(610)	OR106(610)	OR106(610)	OR108(611)	OR108(611)	OR108(611)	OR108(611)
P $^{+0.1}_{+0.2}$	10	12	12	15	15	20	20
Q	8.5	10.5	10.5	13	13	17	17
R	2	3	3	5	5	5	5
S	37	40	43	45	55	60	70
Z	4	4	5	7	7	7	7

4

SPECIAL OPTIONS - VERSIONS

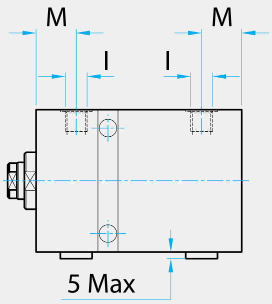
BU PLATE CONNECTIONS - VERSION "B"



Bore	25	32	40	50	63	80	100
B	65	75	85	100	115	140	170
C	45	55	63	75	90	110	140
D	50	55	63	76	90	110	135
E	30	35	40	45	55	75	95
I	G 1/4"	G 1/4"	G 1/4"	G 1/4"	G 3/8"	G 1/2"	G 1/2"
L	20	20	20	24	30	30	30
Q	8.5	10.5	10.5	13	13	17	17
T	16	20	30	37	40	50	65

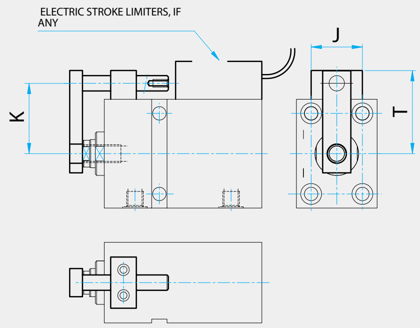
A *pull*   B *push*

AS ADDITIONAL CONNECTIONS



Bore	25	32	40	50	63	80	100
I	G 1/4"	G 1/4"	G 1/4"	G 1/4"	G 3/8"	G 1/2"	G 1/2"
M	17	18	23.5	23.5	26	30	35

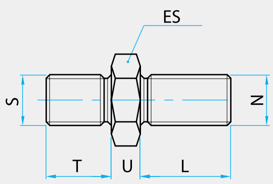
AR ANTIROTATION SYSTEM AND STROKE LIMITERS



Bore	25	32	40	50	63	80	100
K	45	50	55	62.5	70	82.5	97.5
J	40	40	40	40	40	40	50
T	55	60	65	72.5	80	92.5	107.5

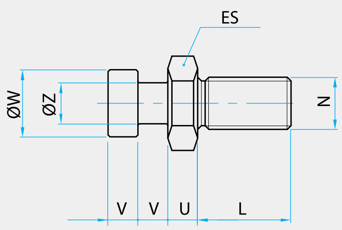
ROD ACCESSORIES

EM MALE ROD END



Bore	25	32	40	50	63	80	100
Type	**EM10**	**EM12**	**EM14**	**EM20**	**EM20**	**EM27**	**EM33**
ES	17	19	22	30	30	36	46
L	20	20	25	30	30	40	50
N	M10	M12	M14	M20	M20	M27	M33
S	M10x1.25	M12x1.25	M14x1.5	M20x1.5	M20x1.5	M27x2	M33x2
T	14	16	18	28	28	36	45
U	6	7	8	9	9	12	14

ET FLOATING JOINT



Bore	25	32	40	50	63	80	100
Type	**ET10**	**ET12**	**ET14**	**ET20**	**ET20**	**ET27**	**ET33**
ES	17	19	22	30	30	36	46
L	20	20	25	30	30	40	50
N	M10	M12	M14	M20	M20	M27	M33
U	6	7	8	9	9	12	14
V	7	8	8	10	10	12.5	16
W	16	18	18	22	22	28	35
Z	10	11	11	14	14	18	22

ORDERING CODE

The fields containing sample values are compulsory.

RQ [ ] **32** / **22** / [ ] **X** **20** [ ] **L** [ ]

Special version (1) SX

Bore	Rod
25	18
32	22
40	22
50	28
63	28
80	36
100	45

Possible 2nd rod

Connections	Oil feeder	
Threaded	Standard	X
Wall	*Front*	A
	Rear	B
	Lateral	E

Special options/versions

Seals (see page 48)

L	*Low friction*
H	*Viton®*
G	*HFC-fluid*

Spacer *(for intermediate strokes)*

SJ ...	*Spacer length in mm (standard stroke - real stroke)*

Standard stroke

20	20 mm
50	50 mm
80	80 mm
100	100 mm

(1) *Indicate* ***SX*** *when the cylinder has special options or versions. Then, indicate in the appropriate box, after the ordering code, the corresponding code followed by the drawing's number, if any.*