

Short-stroke cylinders Series QP - QPR

1

Single and double-acting, magnetic (QP)
Double-acting magnetic, non-rotating (QPR)
ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100



The guides are manufactured in the external profile parallel to the sliding axis on three sides. These are used to locate the switches that sense the piston position. The non rotating guides make the QPR suitable for supply operations and for handling equipment.

The Series QP and QPR cylinders are available in 10 bore sizes, from ø12 to ø100. Their compact dimension allows the installation in small spaces. Because of their particular construction, they can be mounted by means of feet or trunnion.

GENERAL DATA

Type of construction	compact profile (QP), compact with non rotating guides (QPR)
Operation	QP single and double acting, QPR double - acting
Materials	aluminium body (anodized) - rolled stainless steel rod - NBR seals (FKM upon request)
Operating temperature	0°C + 80°C (with dry air - 20°C)
Assembly	by means of screws
Operating pressure	1 + 10 bar (double - acting); 2 + 10 bar (single- acting)
Fluid	clean air, without lubrication; if lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.
Strokes (min-max)	Series QP: ø12 + ø 25= 1+ 150 mm / ø 32 + ø 100= 1+200 mm Series QPR: ø 12= 1+50 mm / ø 16= 1+75 mm / ø 20 + ø 100=1+ 100 mm
Strokes	The minimum stroke for use of the sensors is 10 mm
Bores	ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100

STANDARD STROKES FOR SERIES QP AND QPR CYLINDERS

■ = Double-acting ✕ = Single-acting ● = Non-rotating

STANDARD STROKES														
Ø	5	10	15	20	25	30	35	40	45	50	60	75	80	100
12	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕ ●	■ ●	■	■	■					
16	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■	■
20	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
25	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
32	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
40	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
50	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
63	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
80	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
100	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●

CODING EXAMPLE

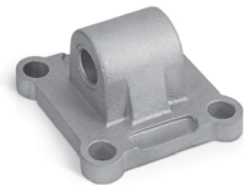
QP	2	A	050	A	050
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QP	SERIES QP = standard QPR = standard non-rotating
2	OPERATION 1 = single-acting (front spring) only QP 2 = double-acting 3 = double-acting through rod
A	MATERIALS A = Rolled stainless steel tube aluminium tube
050	BORE 12 mm 16 mm 20 mm 25 mm 32 mm 40 mm 50 mm 63 mm 80 mm 100 mm
A	TYPE OF MOUNTING A = compact
050	STROKE (see table)
-	= standard V = FKM

SHORT STROKE CYLINDERS SERIES QP



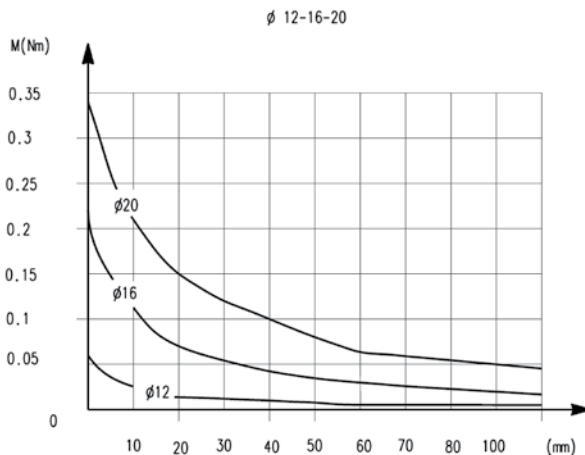
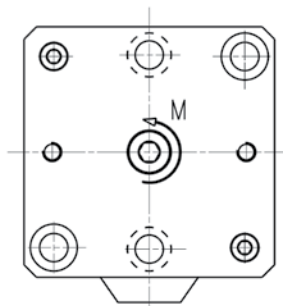
Foot mount Mod. B



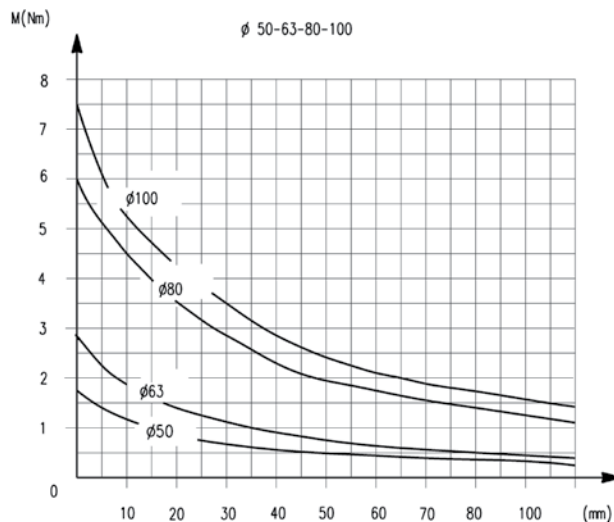
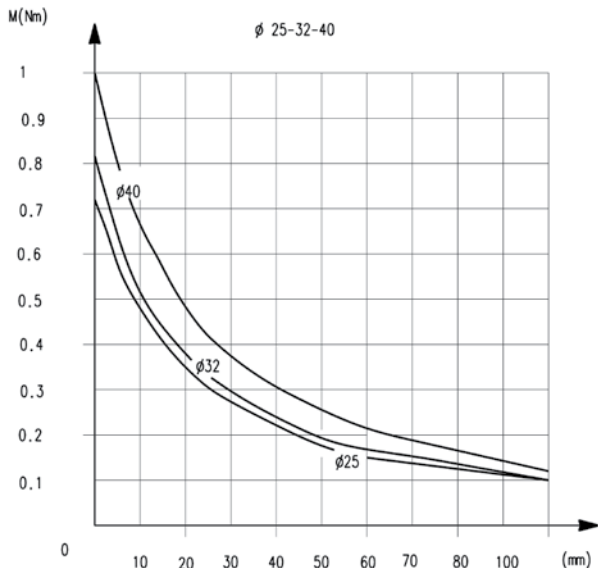
Male trunnion Mod. L

All accessories are supplied separately.

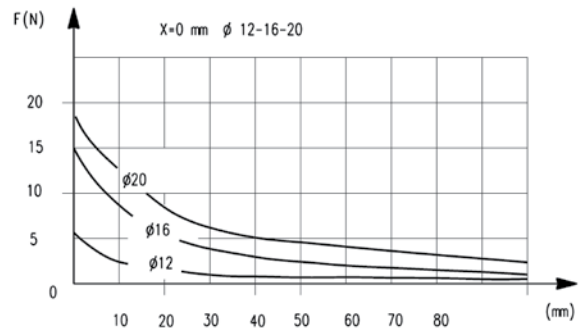
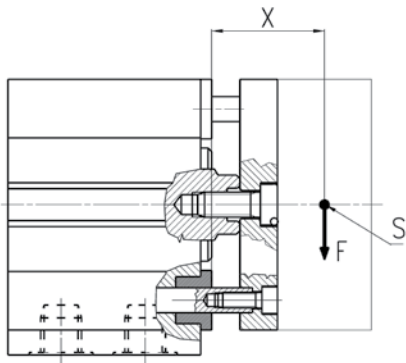
TORQUE MOMENT ACCORDING TO STROKE C



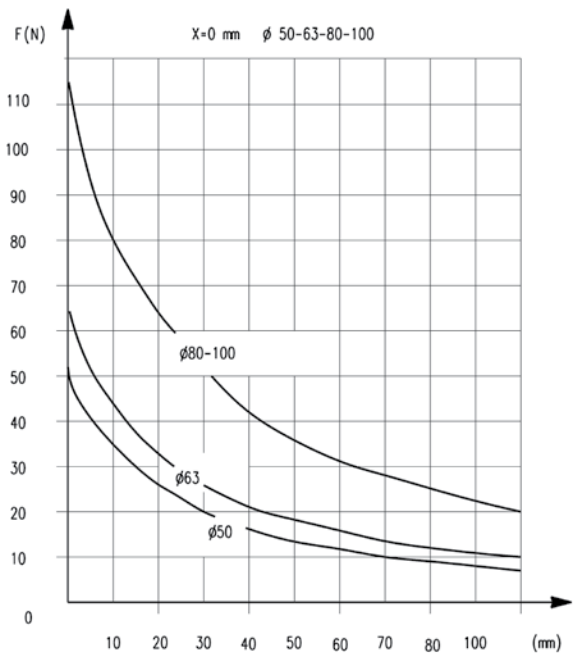
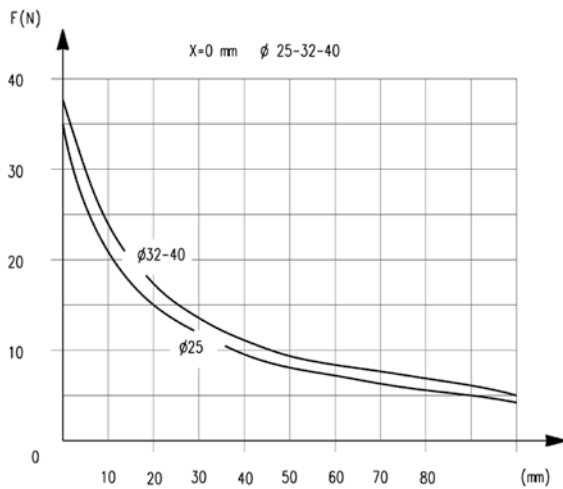
TORQUE MOMENT ACCORDING TO STROKE C



TRANSVERSAL LOAD ACCORDING TO PROJECTION "x"



TRANSVERSAL LOAD ACCORDING TO PROJECTION "x"



F = transversal force

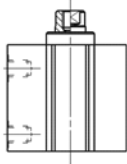
Short stroke cylinders Series QP

Note:
The cylinder's end stop must be provided externally.
For single-acting cylinders ϕ 12, 16, 20 and 25 add 5 mm to size G+, G1+ and N+

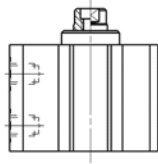


+ = add the stroke

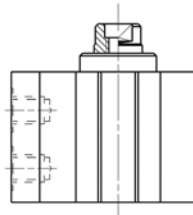
ϕ 12/ ϕ 20



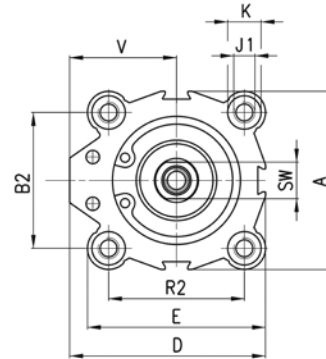
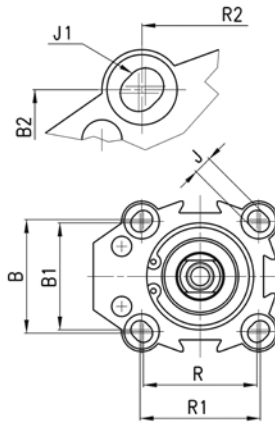
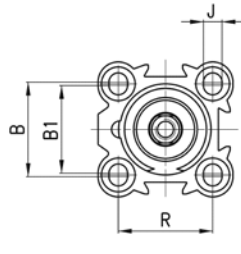
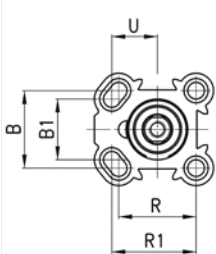
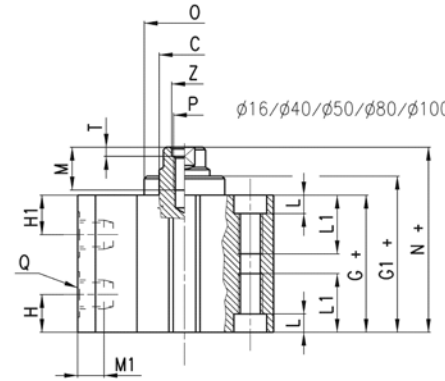
ϕ 25



ϕ 32/ ϕ 63



ϕ 16/ ϕ 40/ ϕ 50/ ϕ 80/ ϕ 100



DIMENSIONS

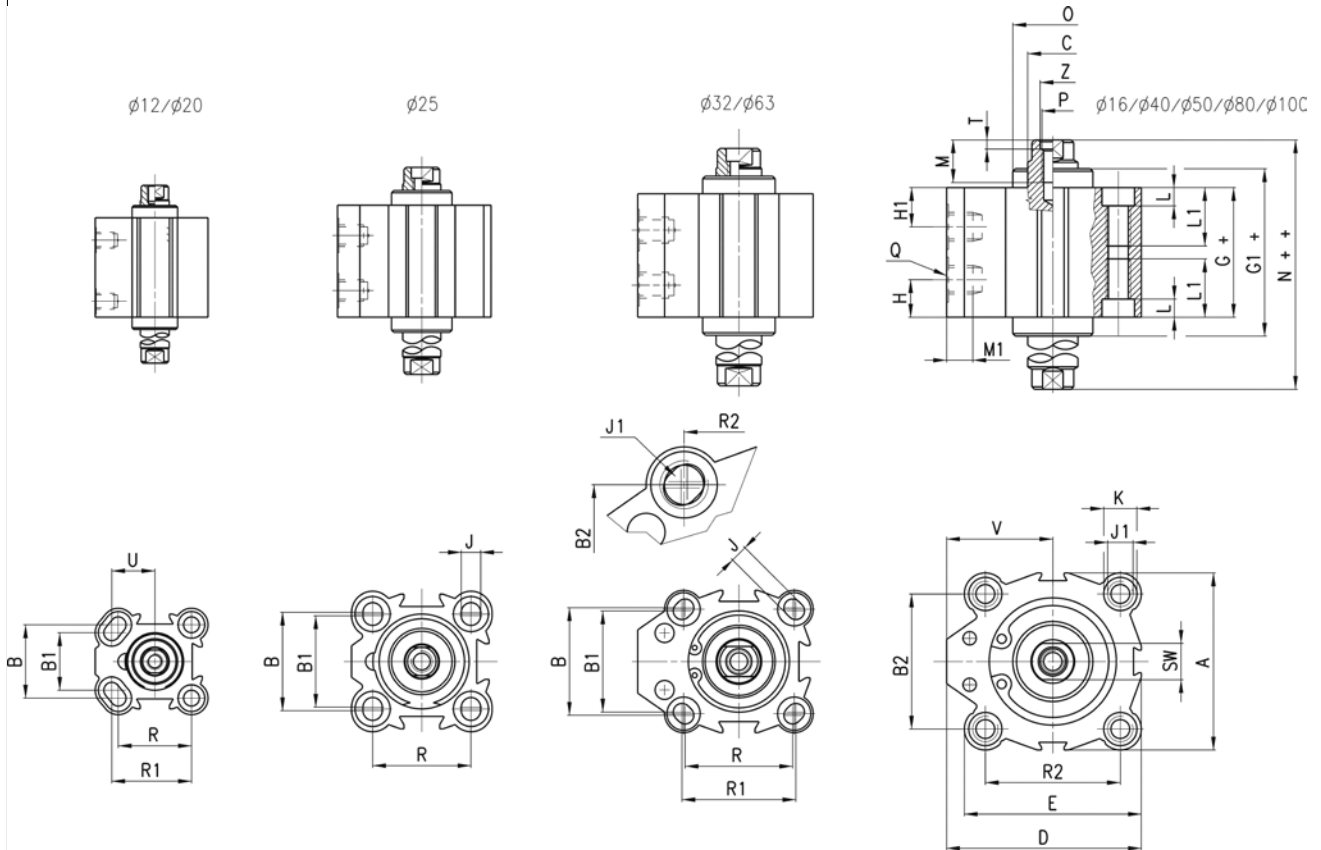
ϕ	A	B	B1	B2	ϕ C	D	E	G+	G1+	H1	H	J	J1	K	L	L1	M	M1	N+	ϕ O	P	Q	R	R1	R2	SW	T	U	V	Z
12	23.8	15.5	13	-	6	25	25	29.6	-	12.3	7.8	3.5	-	5.8	3	-	5.5	4.5	32.9	-	M3	M5	15.5	16.75	-	5	-	9	13.15	-
16	29	20	-	-	8	29	29	32	32.4	10.9	8.7	3.5	-	5.8	3	-	8	4.5	36.4	16.6	M4	M5	20	-	-	6	-	-	14.5	-
20	37	25.5	20	-	10	39.25	39.25	31.2	31.7	9.8	9.8	5.5	-	9	6	-	8	4.5	36	19.5	M6	M5	25.5	27.75	-	8	-	15	20.75	-
25	40	28	26	-	10	40	40	32.1	33.5	8	6.9	5.5	-	10	5.5	-	8	4.5	37.5	22	M6	M5	28	-	-	8	-	-	20	-
32	45	34	32	33	12	55.5	47	39.5	-	9.5	9.5	5.5	M8	10.5	6	21	10	7.5	44	-	M6	G1/8	34	36	35	10	2.5	-	32	7
40	52	-	-	40	16	57	52	42.4	43.4	10.7	10.7	5.5	M8	9	6	21	13.5	7.5	47.9	29.6	M8	G1/8	-	-	40	13	3.5	-	31	8.5
50	64	-	-	50	16	72	64	42.2	44	11.2	11.2	6.5	M8	10.5	6	21	13.5	9	48.4	37.5	M8	G1/4	-	-	50	13	3.5	-	40	8.5
63	80	62	60	61	20	88	80	49.5	-	13	13	8.5	M12	15	8.5	31.5	13.5	9	54	-	M8	G1/4	60	62	61	17	4	-	48	8.5
80	98	-	-	77	25	104	98	57.5	-	16.2	16.2	10.5	M12	17	10.5	31.5	15	10.5	63.5	-	M16	G3/8	-	-	77	22	4	-	55	16.5
100	117	-	-	94	25	123.5	117	68.5	-	20.3	20.3	10.5	M12	17	10.5	31.5	15	10.5	74.5	-	M16	G3/8	-	-	94	22	4	-	65	16.5

Short stroke cylinders Series QP

Note:
The cylinder's end stop must be provided externally.



+ = add the stroke
++ = add the stroke 2 times



DIMENSIONS

Ø	A	B	B1	B2	C _{h8}	D	E	G+	G1+	H1	H	J	J1	K	L	L1	M	M1	N++	O	P	Q	R	R1	R2	SW	T	U	V	Z
12	23.8	15.5	13	-	6	25	25	37.3	-	12.3	12.3	3.5	-	5.8	3	-	5.5	4.5	41	-	M3	M5	15.5	16.75	-	5	-	9	13.15	-
16	29	20	-	-	8	29	29	38	38.8	10.9	10.9	3.5	-	5.8	3	-	8	4.5	52	16.6	M4	M5	20	-	-	6	-	-	14.5	-
20	37	25.5	20	-	10	39.25	39.25	38.1	39.1	9.8	9.8	5.5	-	9	6	-	8	4.5	47.7	19.5	M6	M5	25.5	27.75	-	8	-	15	20.75	-
25	40	28	26	-	10	40	40	36.3	39.1	8	8	5.5	-	10	5.5	-	8	4.5	47.1	22	M6	M5	28	-	-	8	-	-	20	-
32	45	34	32	33	12	55.5	47	39.5	-	9.5	9.5	5.5	M8	10.5	6	21	10	7.5	48.5	-	M6	G1/8	34	36	35	10	2.5	-	32	7
40	52	-	-	40	16	57	52	42.4	44.4	10.7	10.7	5.5	M8	9	6	21	13.5	7.5	53.4	29.6	M8	G1/8	-	-	40	13	3.5	-	31	8.5
50	64	-	-	50	16	72	64	42.2	45.8	11.2	11.2	6.5	M8	10.5	6	21	13.5	9	54.8	37.5	M8	G1/4	-	-	50	13	3.5	-	40	8.5
63	80	62	60	61	20	88	80	49.5	-	13	13	8.5	M12	15	8.5	31.5	13.5	9	58.5	-	M8	G1/4	60	62	61	17	4	-	48	8.5
80	98	-	-	77	25	104	98	57.5	-	16.2	16.2	10.5	M12	17	10.5	31.5	15	10.5	69.5	-	M16	G3/8	-	-	77	22	4	-	55	16.5
100	117	-	-	94	25	123.5	117	68.5	-	20.3	20.3	10.5	M12	17	10.5	31.5	15	10.5	80.5	-	M16	G3/8	-	-	94	22	4	-	65	16.5

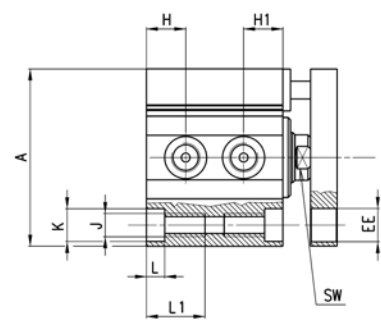
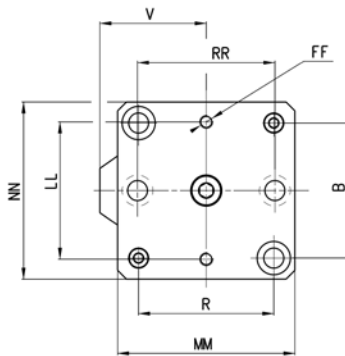
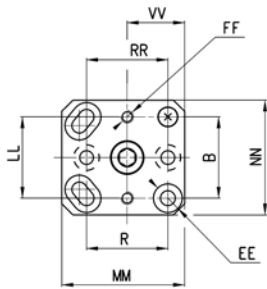
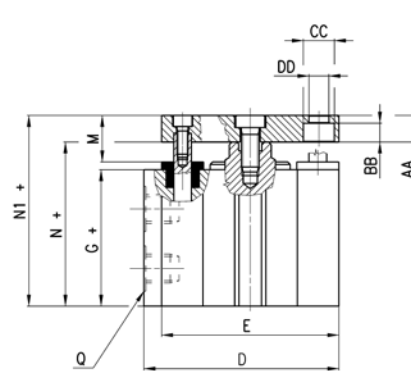
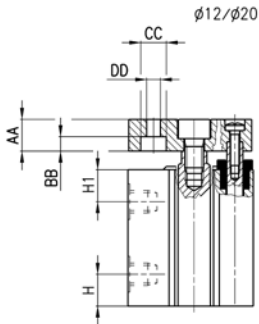
The company reserves the right to vary models and dimensions without notice.
Products designed for industrial applications. Sale to general public is forbidden.

Short stroke cylinder Series QPR

Note: The cylinder's end stop must be provided externally.



+ = add the stroke



DIMENSIONS

ϕ	A	B	D	E	G+	H1	H	J	K	L	L1	N+	N1+	Q	R	SW	V	AA	BB	ϕ CC	ϕ DD	EE	FF	LL	MM	NN	RR	VV
12	23.8	15.5	25	25	29.6	12.3	7.8	3.5	5.8	3	-	32.9	37.9	M5	15.5	5	13.15	5	3.5	ϕ 6.2	ϕ 3.2	5.8	M3	15.5	25	24	15.5	12
16	29	20	29	29	32	10.9	8.7	3.5	5.8	3	-	36.4	41.4	M5	20	6	14.5	5	3.5	ϕ 6.2	ϕ 3.2	6.5	M3	20	28	28	20	-
20	37	25.5	39.25	39.25	31.2	9.8	9.8	5.5	9	6	-	36	46	M5	25.5	8	20.75	10	4.6	ϕ 8	ϕ 4.2	9	M4	25.5	38.5	36	25.5	18
25	40	28	40	40	32.1	8	6.9	5.5	10	5.5	-	37.5	47.5	M5	28	8	20	10	4.6	ϕ 8	ϕ 4.2	10	M4	27	40	40	28	-
32	45	33	55.5	47	39.5	9.5	9.5	M8	10.5	6	21	44	54	G1/8	35	10	32	10	6	ϕ 9	ϕ 5.5	9	M5	32	47	45	36	-
40	52	40	57	52	42.4	10.7	10.7	M8	9	6	21	47.9	57.9	G1/8	40	13	31	10	6	ϕ 9	ϕ 5.5	9	M5	40	52	50	40	-
50	64	50	72	64	42.2	11.2	11.2	M8	10.5	6	21	48.4	60.4	G1/4	50	13	40	12	6.8	ϕ 10.5	ϕ 6.5	10	M6	50	65	65	50	-
63	80	61	88	80	49.5	13	13	M12	15	8.5	31.5	54	66	G1/4	61	17	48	12	8.5	ϕ 14	ϕ 9	15	M6	62	80	80	62	-
80	98	77	104	98	57.5	16.2	16.2	M12	17	10.5	31.5	63.5	78.5	G3/8	77	22	55	15	10	ϕ 16.5	ϕ 11	17	M8	77	100	100	77	-
100	117	94	123.5	117	68.5	20.3	20.3	M12	17	10.5	31.5	74.5	89.5	G3/8	94	22	65	15	10	ϕ 16.5	ϕ 11	17	M8	94	115	115	94	-

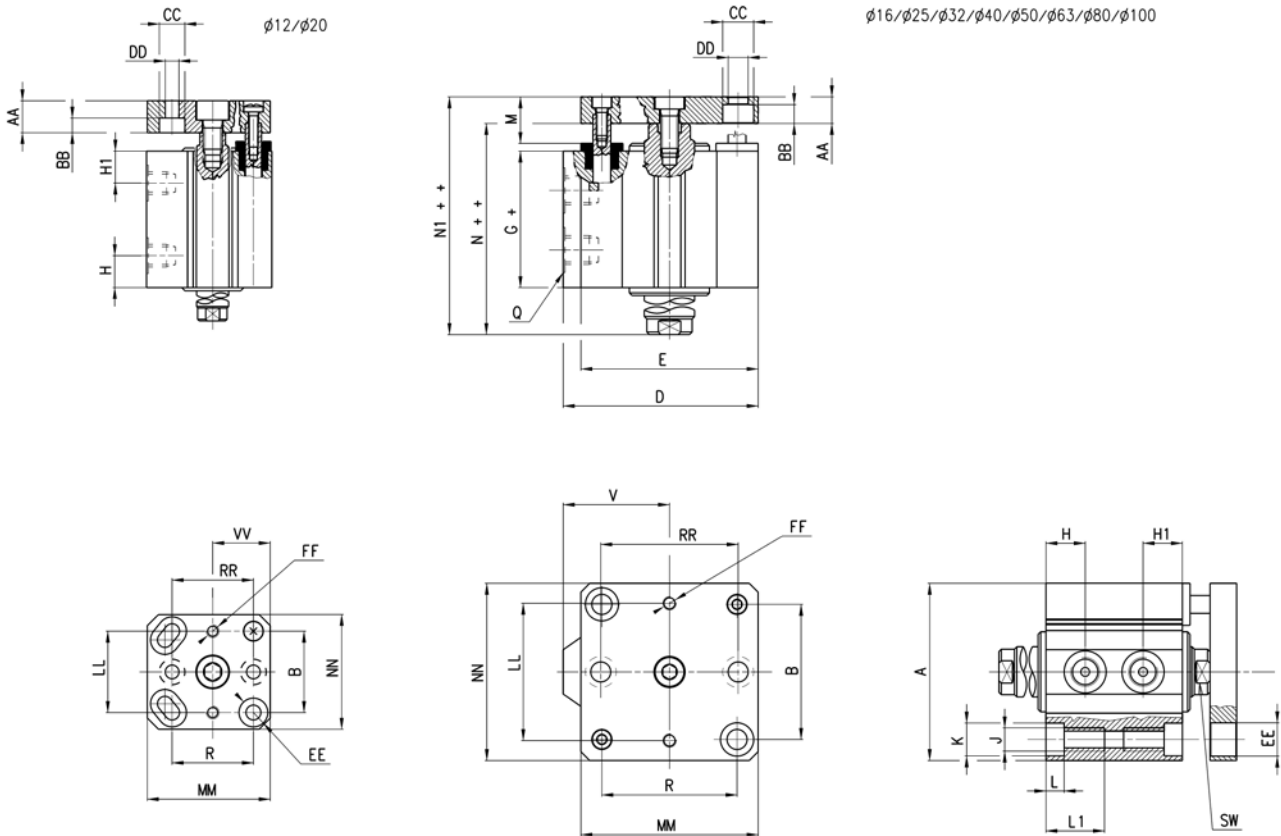
Short stroke cylinder Series QPR

Through rod

Note: The cylinder's end stop must be provided externally.



+ = add the stroke
 ++ = add the stroke 2 times



DIMENSIONS

∅	A	B	D	E	G+	H1	H	J	K	L	L1	N++	N1++	Q	R	SW	V	AA	BB	∅CC	∅DD	EE	FF	LL	MM	NN	RR	VV
12	23.8	15.5	25	25	37.3	12.3	12.3	3.5	5.8	3	-	41	46	M5	15.5	5	13.15	5	3.5	6.2	3.2	5.8	M3	15.5	25	24	15.5	12
16	29	20	29	29	38	10.9	10.9	3.5	5.8	3	-	52	57	M5	20	6	14.5	5	3.5	6.2	3.2	6.5	M3	20	28	28	20	-
20	37	25.5	39.25	39.25	38.1	9.8	9.8	5.5	9	6	-	47.7	57.5	M5	25.5	8	20.75	10	4.6	8	4.2	9	M4	25.5	38.5	36	25.5	18
25	40	28	40	40	36.3	8	8	5.5	10	5.5	-	47.1	57.1	M5	28	8	20	10	4.6	8	4.2	10	M4	27	40	40	28	-
32	45	33	55.5	47	39.5	9.5	9.5	M8	10.5	6	21	48.5	58.5	G1/8	35	10	32	10	6	9	5.5	9	M5	32	47	45	36	-
40	52	40	57	52	42.4	10.7	10.7	M8	9	6	21	53.4	63.4	G1/8	40	13	31	10	6	9	5.5	9	M5	40	52	50	40	-
50	64	50	72	64	42.2	11.2	11.2	M8	10.5	6	21	54.8	66.8	G1/4	50	13	40	12	6.8	10.5	6.5	10	M6	50	65	65	50	-
63	80	61	88	80	49.5	13	13	M12	15	8.5	31.5	58.5	70.5	G1/4	61	17	48	12	8.5	14	9	15	M6	62	80	80	62	-
80	98	77	104	98	57.5	16.2	16.2	M12	17	10.5	31.5	69.5	84.5	G3/8	77	22	55	15	10	16.5	11	17	M8	77	100	100	77	-
100	117	94	123.5	117	68.5	20.3	20.3	M12	17	10.5	31.5	80.5	95.5	G3/8	94	22	65	15	10	16.5	11	17	M8	94	115	115	94	-

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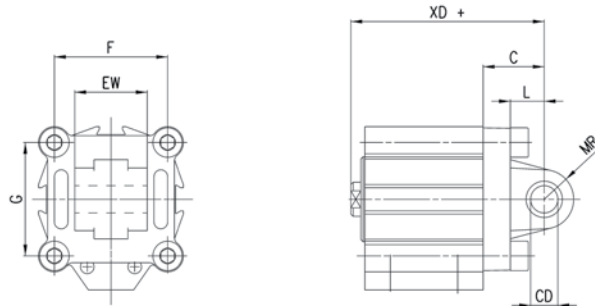
Male trunnion bracket Mod. L

Material: aluminium.



Supplied with:
4x screws
1x trunnion

+ = add the stroke



DIMENSIONS

Mod.	∅	CD ^{H9}	MR	L	C	XD+	F	G	EW
L-QP-32	32	10	9	12	22	66	33	35	26
L-QP-40	40	12	13	15	25	73	40	40	28
L-QP-50	50	12	13	15	27	75,5	50	50	32
L-QP-63	63	16	15	20	32	86	61	61	40
L-QP-80	80	16	15	24	36	99,5	77	77	50
L-QP-100	100	20	18	29	41	115,5	94	94	60

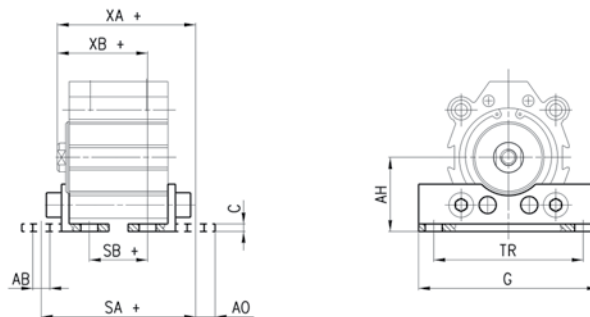
Feet bracket Mod. B

Material: zinc-plated steel.



Supplied with:
2x feet
4x screws

+ = add the stroke



DIMENSIONS

Mod.	∅	C	SA+	XA+	SB+	XB+	TR	G	AB	AH	AO
B-QP-32	32	3	61,9	55,2	23,1	35,8	57	71	6,6	30	8,8
B-QP-40	40	3	64,8	59,1	26	39,7	64	78	6,6	33	8,8
B-QP-50	50	4	71,6	63,1	20,8	37,7	79	95	9	39	10,3
B-QP-63	63	4	81,9	70,2	25,1	41,8	95	113	11	46	13,8
B-QP-80	80	6	96,5	83	28,5	49	118	140	13	59	10,5
B-QP-100	100	6	114,5	97,5	22,5	51,5	137	162	13	71	17