

Cylinders with integrated guide

Series QCT and QCB

Double-acting, magnetic piston, guided
 ø 20, 25, 32, 40, 50, 63 mm



- » Magnetic sensors can be mounted on both sides
- » QCT: bronze bushings version
- » QCB: ball bearing guide version
- » Movement and guidance in one unit

Both versions are equipped with fixed cushioning to prevent direct impact with the end covers. The design of the cylinder body allows the mounting of the cylinder using either top, bottom or side faces. Several "T" shaped grooves in two faces allow sensors to be fitted in a number of positions. Out of standard strokes are available on demand only.

These actuators, suitable for use in very limited space, are available in two versions. QCT version: with sintered bronze bushes, suitable when the side loads applied to the cylinder are high. QCB version: with linear ball bearings, suitable for high precision and fast cycling applications.

GENERAL DATA

Type of construction	compact guided QCT = sintered bronze bushes QCB = linear ball bearings
Operation	double-acting
Materials	body = anodized AL flange = zinc-plated steel piston rod = rolled stainless steel AISI 303 QCT columns = rolled stainless steel 420B QCB columns = hardened steel C50 seals = PU
Mounting	threaded and non-threaded holes in the body
Strokes min. max	see table
Operating temperature	0°C + 80°C (with dry air - 20°C)
Speed	50 + 500 mm/s
Operating pressure	1 + 10 bar
Fluid	clean air, non lubricated. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.

STANDARD STROKES FOR DOUBLE-ACTING CYLINDERS SERIES QC

■ = Double-acting

Out of standard intermediate strokes available on request (strokes multiple of 5 mm)

STANDARD STROKES											
Ø	20	25	30	40	50	75	100	125	150	175	200
20	■		■	■	■	■	■	■	■	■	■
25	■		■	■	■	■	■	■	■	■	■
32		■			■	■	■	■	■	■	■
40		■			■	■	■	■	■	■	■
50		■			■	■	■	■	■	■	■
63		■			■	■	■	■	■	■	■

CODING EXAMPLE

QC	T	2	A	020	A	050		
QC	SERIES							
T	VERSION T = sintered bronze bushes B = linear ball bearings							
2	OPERATIONS 2 = double-acting				PNEUMATIC SYMBOLS CD07			
A	MATERIALS A = anodized aluminium body - rolled stainless steel AISI 303 piston rod rolled stainless steel AISI 420B columns for QCT - hardened steel C50 columns for QCB							
020	BORE 020 = 20 mm - 025 = 25 mm - 032 = 32 mm - 040 = 40 mm - 050 = 50 mm - 063 = 63 mm							
A	TYPE OF DESIGN A = standard							
050	STROKE (see the table)							

PNEUMATIC SYMBOLS

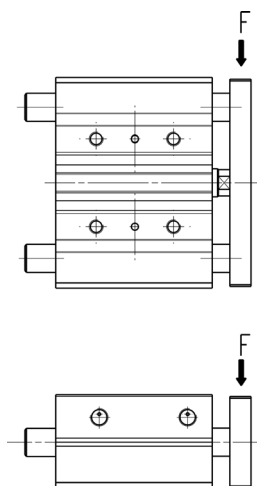
The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.



TABLE OF PERMISSABLE LOADS (F)

For sintered bronze bushes
QCT version
For linear ball bearings
QCB version

F (N) 1N = 0.102 kgf
Ex.: QCT2A025A020 = F = 140N

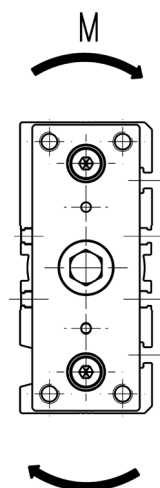


STROKE												
Ø	Mod	20	25	30	40	50	75	100	125	150	175	200
20	QCT	100	-	93	81	73	114	93	98	85	75	67
25	QCT	140	-	120	115	103	165	135	150	131	116	104
32	QCT	-	253	-	-	214	225	208	225	198	176	159
40	QCT	-	251	-	-	197	215	206	224	196	175	157
50	QCT	-	317	-	-	273	267	299	257	225	200	179
63	QCT	-	316	-	-	273	267	299	257	225	200	179
20	QCB	110	-	100	125	121	90	86	69	58	49	43
25	QCB	142	-	85	154	148	106	82	97	81	70	61
32	QCB	-	222	-	-	91	167	129	145	122	104	90
40	QCB	-	221	-	-	93	167	128	145	121	104	90
50	QCB	-	203	-	-	152	161	193	156	130	110	95
63	QCB	-	201	-	-	151	158	195	157	130	110	94

TABLE OF PERMISSIBLE MOMENTS (M)

For sintered bronze bushes
QCT version
For linear ball bearings
QCB version

M (N*m) 1N*m = 0,102 kgf *m
Ex.: QCT2A025A020 = M = 3,4 Nm



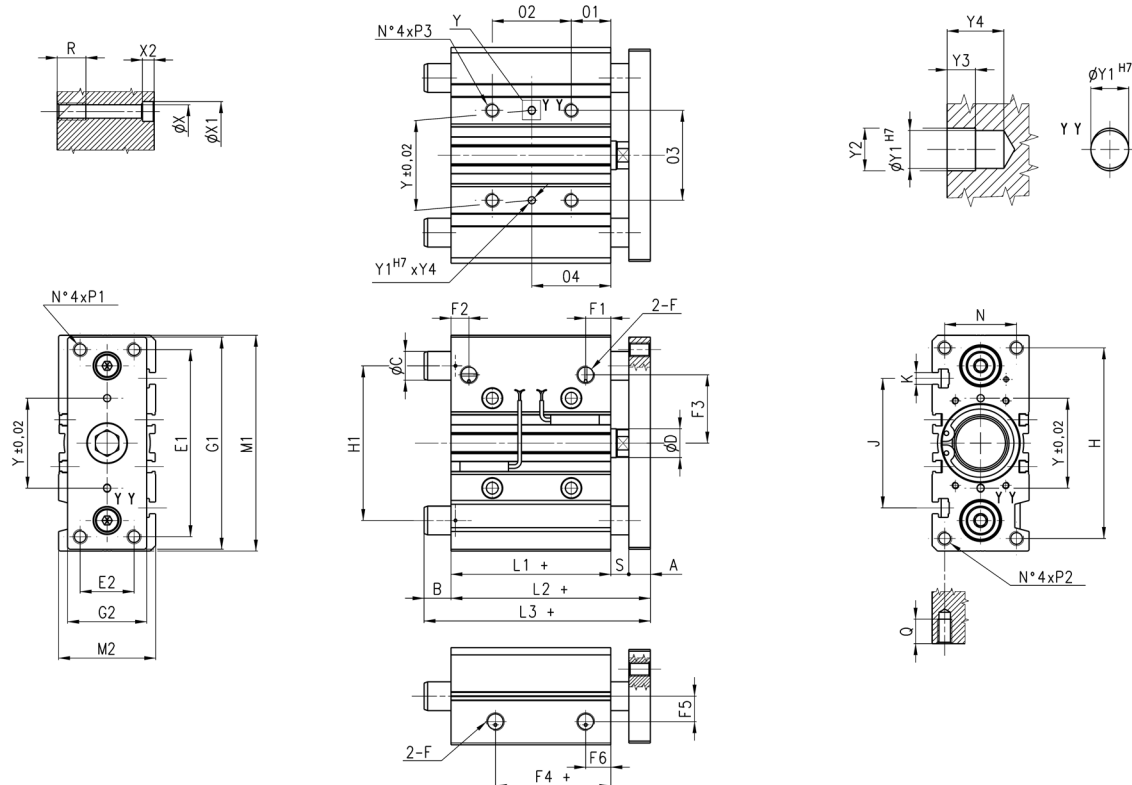
STROKE												
Ø	Mod	20	25	30	40	50	75	100	125	150	175	200
20	QCT	1,7	-	1,5	1,2	1,0	2,9	2,8	2,6	2,3	2,0	1,8
25	QCT	3,4	-	2,9	3,6	3,3	4,2	4,3	3,8	3,2	2,7	2,3
32	QCT	-	6,7	-	-	6,5	7,2	7,0	6,6	5,6	4,8	4,1
40	QCT	-	8,7	-	-	7,3	9,2	8,8	9,6	8,4	7,5	6,7
50	QCT	-	15,4	-	-	12,9	12,6	13,4	12,1	11,3	10,7	8,8
63	QCT	-	15,1	-	-	14,3	16,6	17	14	11,3	9,7	9,1
20	QCB	3,0	-	2,7	3,4	3,3	2,4	2,3	1,9	1,6	1,3	1,2
25	QCB	3,5	-	2,7	4,9	4,7	3,4	2,6	3,1	2,6	2,2	2,0
32	QCB	-	6,3	-	-	3,6	6,5	5,1	5,7	4,8	4,1	3,5
40	QCB	-	8,5	-	-	4,0	7,2	5,5	6,2	5,2	4,5	3,9
50	QCB	-	11,1	-	-	8,3	8,8	10,6	8,6	7,1	6,0	5,2
63	QCB	-	8,3	-	-	7,2	9,8	12,1	9,7	8,1	6,8	5,8

Cylinders Series QC



+ = add the stroke

Note: for out of standard intermediate strokes (ex. stroke 35), consider the immediately higher stroke dimensions (ex. stroke 40).



In case of use of lateral ports, unscrew the related threaded caps, screw them in the front ports and tighten them up to the cylinder surface (not tighter) having care to use a proper sealer.

DIMENSIONS

Dimension 02 (mm)	Ø 20	Ø 25	Ø 32	Ø 40	Ø 50	Ø 63	Dimension 04 (mm)	Ø 20	Ø 25	Ø 32	Ø 40	Ø 50	Ø 63
20 + 30	24	24	24	24	24	28	20 + 30	29	29	33	34	36	38
40 + 100	44	44	48	48	48	52	40 + 100	39	39	45	46	48	50
125 + 200	120	120	124	124	124	128	125 + 200	77	77	83	84	86	88

DIMENSIONS

Ø	A	ØD	E1	E2	F	F1	F2	F3	F4	F5	F6	G1	G2	H	H1	L1	L2	M1	M2	N	01	03	P1/P2	P3	Q	R	S	Y	Y1	Y2	Y3	Y4	X	X1	X2	J	K
20	10	10	70	18	G1/8	10,5	10,5	25	12,5	11,5	10,5	81	30	72	54	37	53	83	36	24	17	28	M5X0,8	M6X1	13	12	6	28	3	3,5	3	6	5,5	9,5	5,5	44	M5
25	10	12	78	26	G1/8	11,5	8	28,5	12,5	13,5	11,5	91	40	82	64	37,5	53,5	93	42	30	17	34	M6X1	M6X1	15	12	6	34	4	4,5	3	6	5,5	9,5	5,5	50	M5
32	12	16	96	30	G1/8	12,5	9,5	34	7	15	12,5	110	45	98	78	37,5	59,5	112	48	34	21	42	M8X1,25	M8X1,25	20	16	10	42	4	4,5	3	6	6,5	11	7,5	63	M6
40	12	16	104	30	G1/8	13	12	38	13	18	13	118	45	106	86	44	66	120	54	40	22	50	M8X1,25	M8X1,25	20	16	10	50	4	4,5	3	6	6,5	11	7,5	72	M6
50	15	20	130	40	G1/4	14	11	47	8	215	12	146	60	130	110	44	72	148	64	46	24	66	M10X1,5	M10X1,5	22	20	13	66	5	6	4	8	8,5	14	9	92	M8
63	15	20	130	50	G1/4	14,5	11,4	55	12	28	14,5	158	70	142	124	49	77	162	78	58	24	80	M10X1,5	M10X1,5	22	20	13	80	5	6	4	8	8,5	14	9	110	M10

QCB - total length (L3), projection (B) and columns Ø (C)

Dimensions L3 and B change according to the different strokes of QCB.
Refer to the drawing on page 1/4.05.04.



DIMENSIONS

Ø	Dim. L3 (strokes 20-30 mm)	Dim. L3 (strokes 25-50 mm)	Dim. L3 (strokes 25-75 mm)	Dim. L3 (strokes 40-100 mm)	Dim. L3 (strokes 75-100 mm)	Dim. L3 (strokes 100-200 mm)	Dim. L3 (strokes 125-200 mm)	Dim. B (strokes 20-30 mm)	Dim. B (strokes 25-50 mm)	Dim. B (strokes 25-75 mm)	Dim. B (strokes 40-100 mm)	Dim. B (strokes 75-100 mm)	Dim. B (strokes 100-200 mm)	Dim. B (strokes 125-200 mm)	Dimension C (Ø)
20	72	-	-	75	-	-	85	19	-	-	22	-	-	32	10
25	74,5	-	-	85,5	-	-	98	21	-	-	32	-	-	44,5	12
32	-	86	-	-	95	-	110	-	26,5	-	-	35,5	-	50,5	16
40	-	86	-	-	95	-	110	-	20	-	-	29	-	44	16
50	-	-	93	-	-	112	-	-	-	21	-	-	40	-	20
63	-	-	93	-	-	112	-	-	-	16	-	-	35	-	20

QCT - total length (L3), projection (B) and columns Ø (C)

Dimensions L3 and B change according to the different strokes of QCT.
Refer to the drawing on page 1/4.05.04.



DIMENSIONS

Ø	Dim. L3 (strokes 20-50 mm)	Dim. L3 (strokes 20 mm)	Dim. L3 (strokes 25 mm)	Dim. L3 (strokes 30-50 mm)	Dim. L3 (strokes 25-200 mm)	Dim. L3 (strokes 75-200 mm)	Dim. L3 (strokes 50-200 mm)	Dim. B (strokes 20-50 mm)	Dim. B (strokes 20 mm)	Dim. B (strokes 25 mm)	Dim. B (strokes 30-50 mm)	Dim. B (strokes 20-200 mm)	Dim. B (strokes 25-200 mm)	Dim. B (strokes 75-200 mm)	Dim. B (strokes 50-200 mm)	Dimension C (Ø)
20	74,5	-	-	-	-	79,5	-	21,5	-	-	-	-	26,5	-	-	12
25	-	74,5	-	80,5	-	85	-	21	-	27	-	31,5	-	-	-	16
32	-	-	73,5	-	-	-	91,5	-	-	14	-	-	-	32	-	20
40	-	-	73,5	-	-	-	91,5	-	-	7,5	-	-	-	25,5	-	20
50	-	-	-	-	98,5	-	-	-	-	-	-	26,5	-	-	-	25
63	-	-	-	-	98,5	-	-	-	-	-	-	21,5	-	-	-	25

Series QP - QPR short-stroke cylinders

1

MOVEMENT

Series QP: single and double-acting, magnetic
Series QPR: double-acting magnetic, non-rotating
ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm



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.

Series QP - 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	Series QP: compact profile Series QPR: compact with non rotating guides
Operation	Series QP: single and double-acting Series QPR: double-acting
Materials	body: anodized AL rod: rolled stainless steel piston seals: PU rod seals: PU (Ø 12 ÷ 25 mm) - NBR (Ø 32 ÷ 100 mm)
Operating temperature	0°C ÷ 80°C (with dry air -20°C)
Assembly	by means of screws or brackets
Operating pressure	1 ÷ 10 bar (double-acting) 2 ÷ 10 bar (single-acting)
Fluid	filtered 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: 1 ÷ 150 mm (ø12 ÷ ø 25) - 1 ÷ 200 mm (ø 32 ÷ ø 100) Series QPR: 1 ÷ 50 mm (ø 12) - 1 ÷ 75 mm (ø 16) - 1 ÷ 100 mm (ø 20 ÷ ø 100)
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 SHORT-STROKE CYLINDERS SERIES QP AND QPR

■ = Double-acting

✕ = Single-acting

● = Non-rotating

STANDARD STROKES

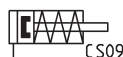
Ø	5	10	15	20	25	30	35	40	45	50	60	75	80	100
12	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕	■ ✕ ●	■ ●	■	■	■					
16	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■	■
20	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
25	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ✕ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●
32	■ ✕ ●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

CODING EXAMPLE

QP	2	A	050	A	050	
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			PNEUMATIC SYMBOLS CS09 CD07 CD14		
A	MATERIALS A = rolled stainless steel rod - AL tube profile					
050	BORE 012 = 12 mm 016 = 16 mm 020 = 20 mm 025 = 25 mm 032 = 32 mm 040 = 40 mm 050 = 50 mm 063 = 63 mm 080 = 80 mm 100 = 100 mm					
A	TYPE OF MOUNTING A = standard					
050	STROKE (see the table)					
	= standard V = FKM rod seal W = all FKM seals (Ø 12 excepted)					

PNEUMATIC SYMBOLS

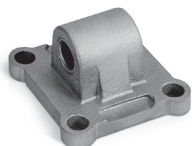
The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.



ACCESSORIES FOR SHORT-STROKE CYLINDERS SERIES QP



Foot mount Mod. B

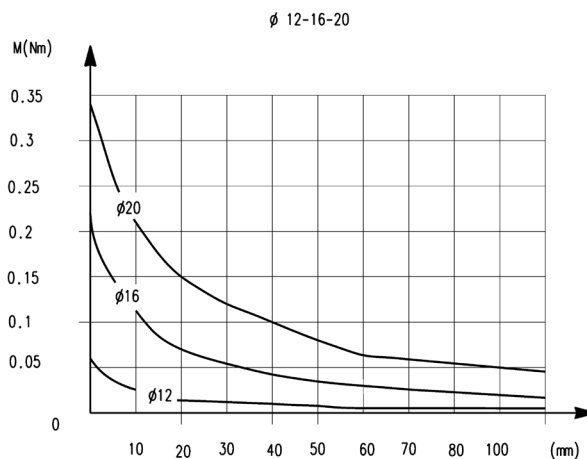
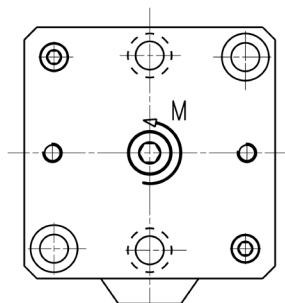


Male trunnion Mod. L

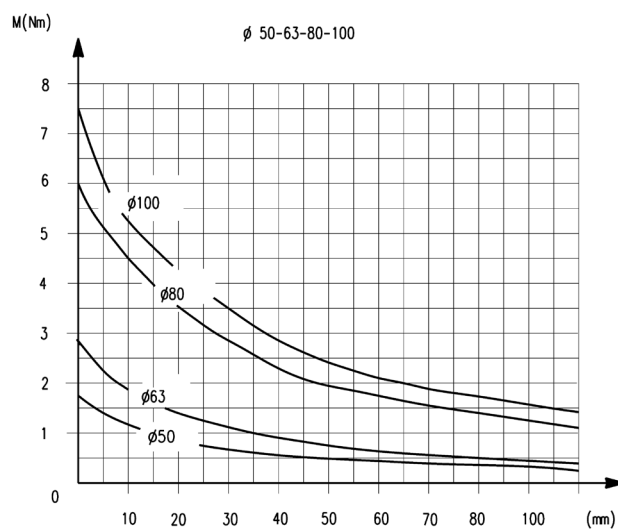
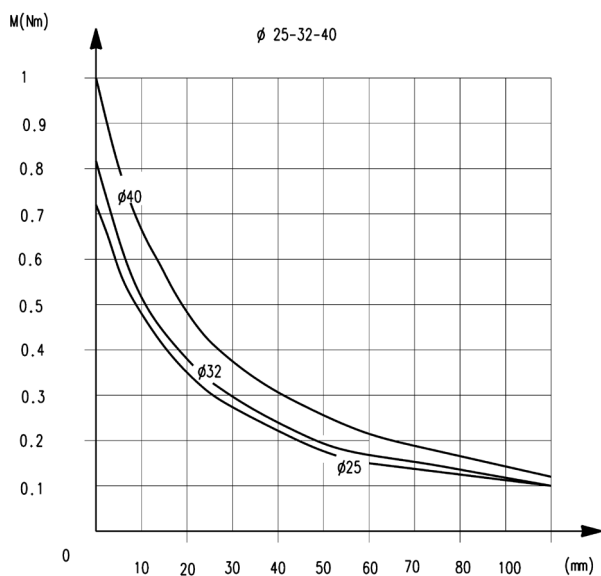


All accessories are supplied separately.

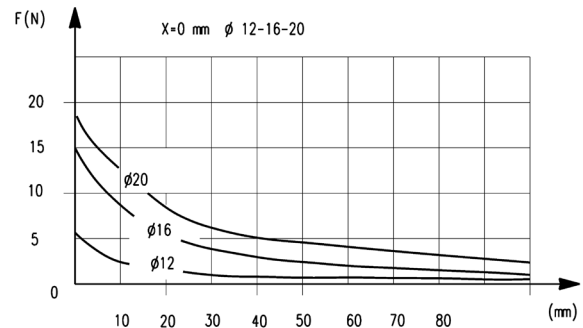
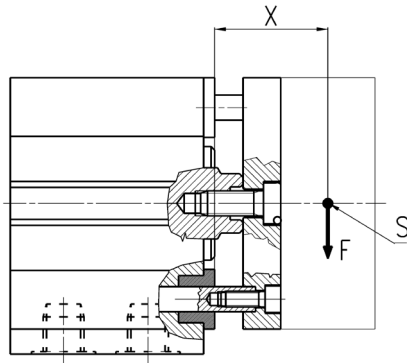
TORQUE MOMENT ACCORDING TO STROKE C



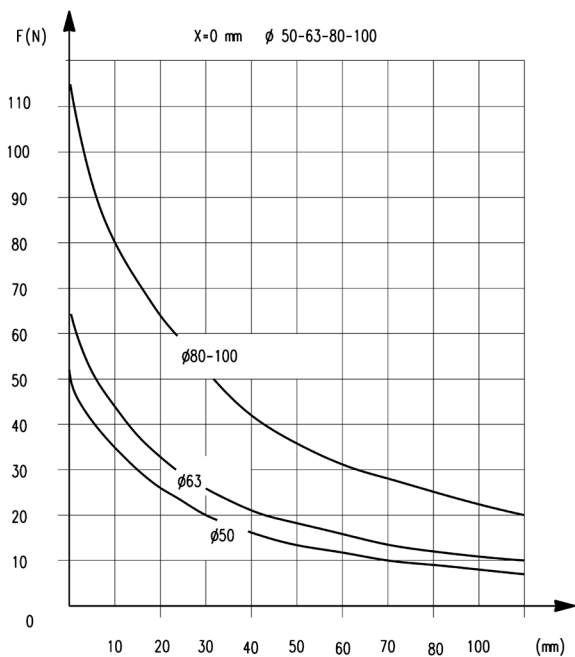
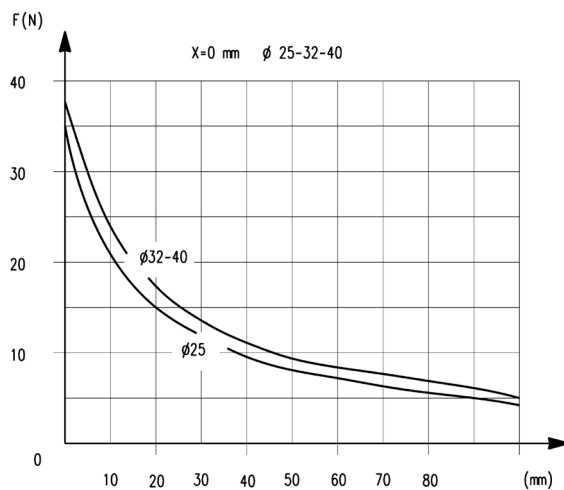
TORQUE MOMENT ACCORDING TO STROKE C



TRANSVERSAL LOAD ACCORDING TO PROJECTION "X"



TRANSVERSAL LOAD ACCORDING TO PROJECTION "X"



F = transversal force

Short-stroke cylinders Series QP

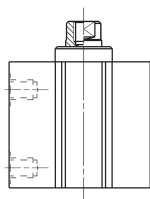
Note:

The cylinder's end stop must be provided externally.
For single-acting cylinders $\varnothing$ 12, 16, 20 and 25 add 5 mm to G+, G1+ and N+ dimensions.

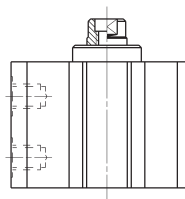
+ = add the stroke



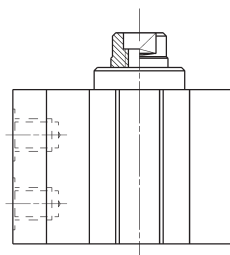
$\varnothing$ 12/ $\varnothing$ 20



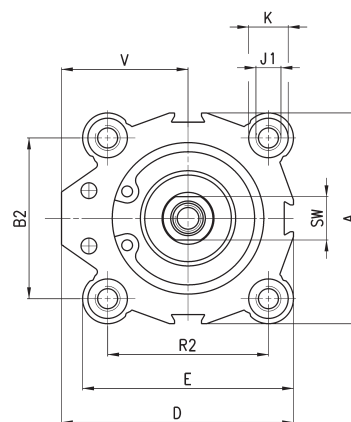
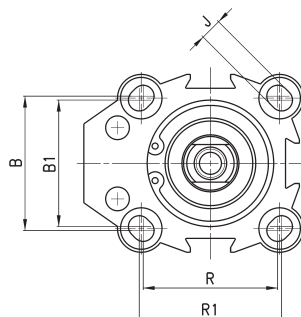
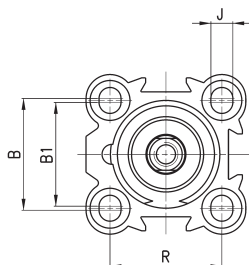
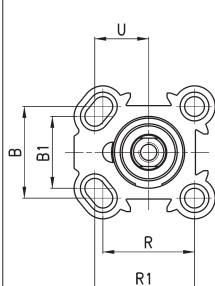
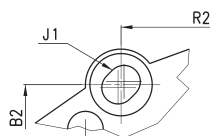
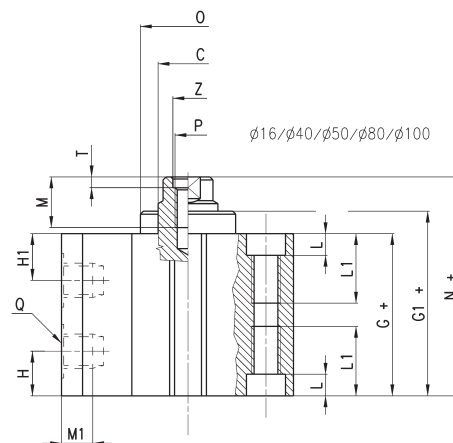
$\varnothing$ 25



$\varnothing$ 32/ $\varnothing$ 63



$\varnothing$ 16/ $\varnothing$ 40/ $\varnothing$ 50/ $\varnothing$ 80/ $\varnothing$ 100



DIMENSIONS

$\varnothing$	A	B	B1	B2	$\varnothing$ C	D	E	G +	G1 +	H1	H	J	J1	K	L	L1	M	M1	N +	$\varnothing$ O	P	Q	R	R1	R2	SW	T	U	V	Z
12	23.8	15.5	13	-	6	25	25	29.6	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	40	9.5	9.5	5.5	M8	10.5	6	21	10	7.5	44	23.5	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	50.1	13	13	8.5	M12	15	8.5	31.5	13.5	9	54	50	M8	G1/4	60	62	61	17	4	-	48	8.5
80	98	-	-	77	25	104	98	57.5	58.1	16.2	16.2	10.5	M12	17	10.5	31.5	15	10.5	63.5	62	M16	G3/8	-	-	77	22	4	-	55	16.5
100	117	-	-	94	25	123.5	117	68.5	69.1	20.3	20.3	10.5	M12	17	10.5	31.5	15	10.5	74.5	80	M16	G3/8	-	-	94	22	4	-	65	16.5

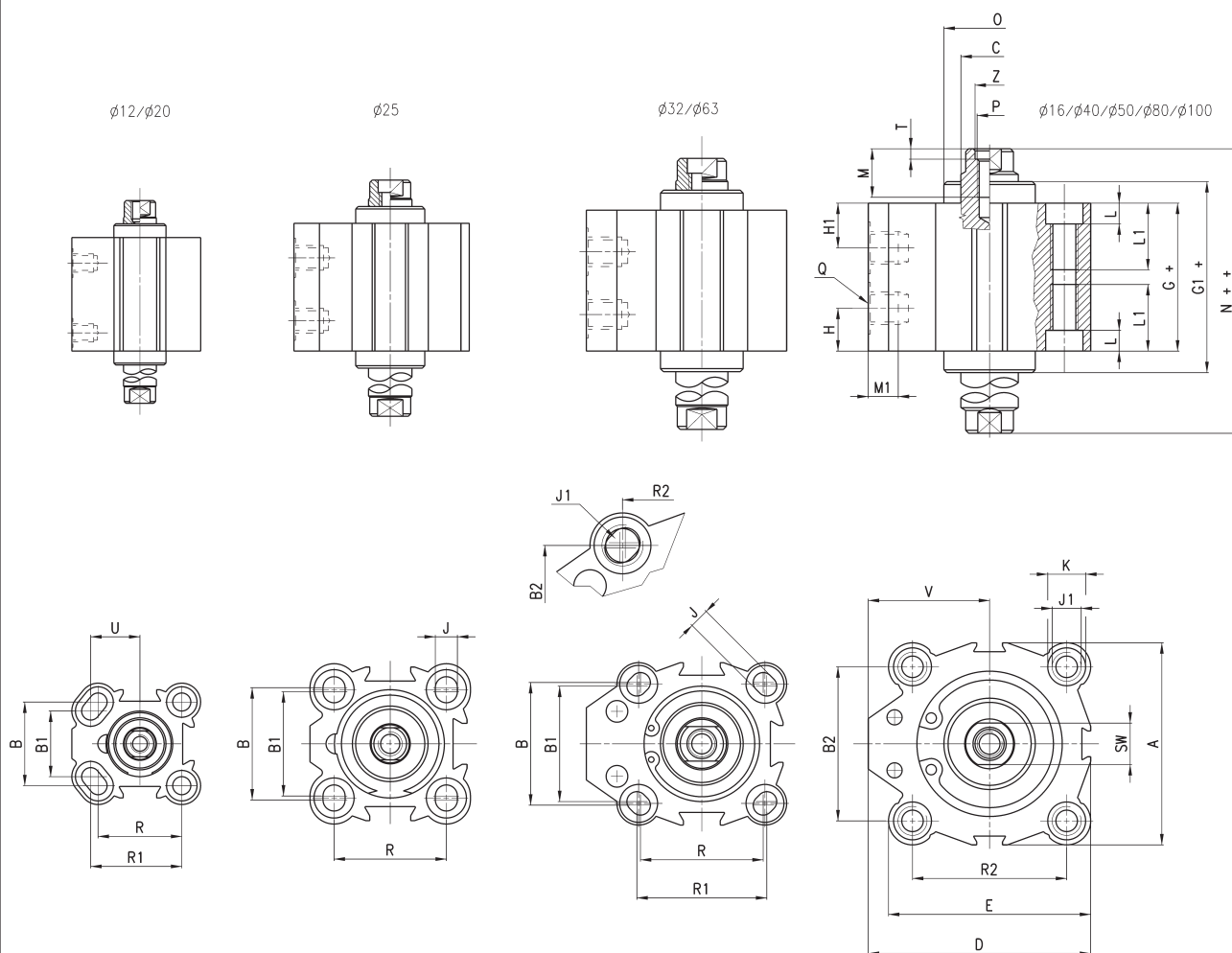
Short-stroke cylinders Series QP

Note:

The cylinder's end stop must be provided externally.



+ = add the stroke once
+ = add the stroke twice



DIMENSIONS

ϕ	A	B	B1	B2	${}^{\circ}C^{h8}$	D	E	G+	G1+	H1	H	J	J1	K	L	L1	M	M1	N++	${}^{\circ}O$	P	Q	R	R1	R2	SW	T	U	V	Z
12	23.8	15.5	13	-	6	25	25	34.5	34.5	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	46.4	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	40.5	9.5	9.5	5.5	M8	10.5	6	21	10	7.5	48.5	23.5	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	50.7	13	13	8.5	M12	15	8.5	31.5	13.5	9	58.5	50	M8	G1/4	60	62	61	17	4	-	48	8.5
80	98	-	-	77	25	104	98	57.5	58.7	16.2	16.2	10.5	M12	17	10.5	31.5	15	10.5	69.5	62	M16	G3/8	-	-	77	22	4	-	55	16.5
100	117	-	-	94	25	123.5	117	68.5	69.7	20.3	20.3	10.5	M12	17	10.5	31.5	15	10.5	80.5	80	M16	G3/8	-	-	94	22	4	-	65	16.5

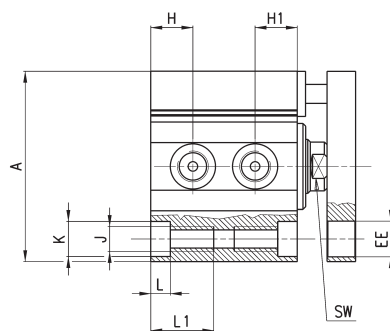
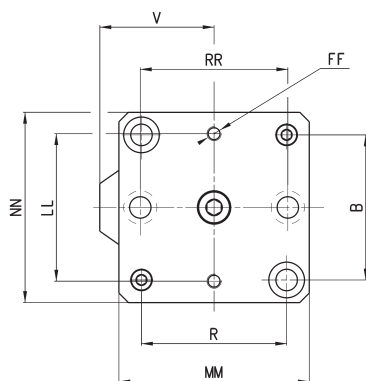
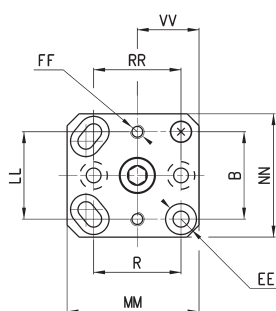
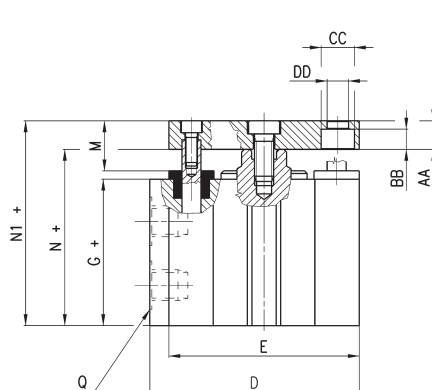
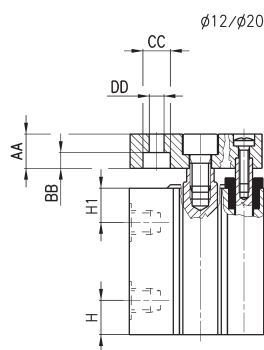
Short-stroke cylinder Series QPR

Note:

The cylinder's end stop must be provided externally.



+ = add the stroke



DIMENSIONS

Ø	A	B	D	E	G+	H1	H	J	K	L	L1	N+	N1+	Q	R	SW	V	AA	BB	φCC	φDD	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	6.2	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	6.2	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	8	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	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	44	54	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	47.9	57.9	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	48.4	60.4	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	54	66	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	63.5	78.5	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	74.5	89.5	G3/8	94	22	65	15	10	16.5	11	17	M8	94	115	115	94	-

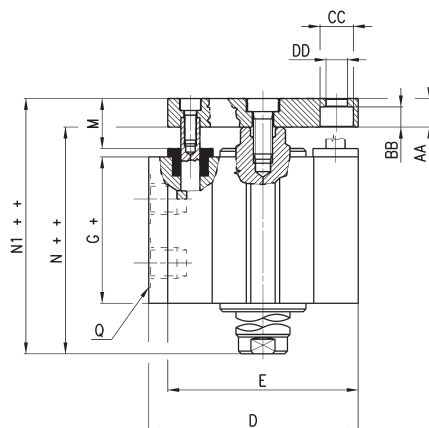
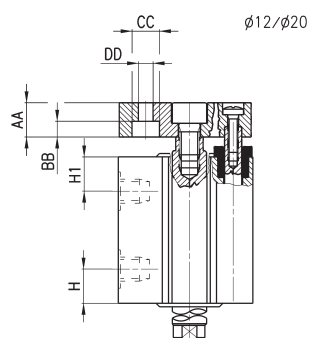
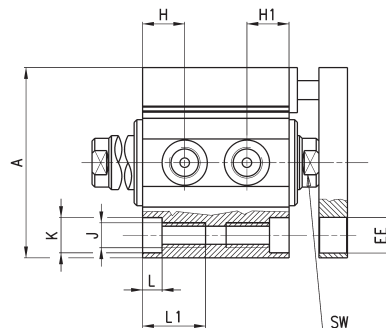
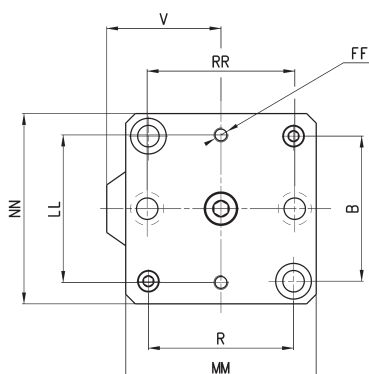
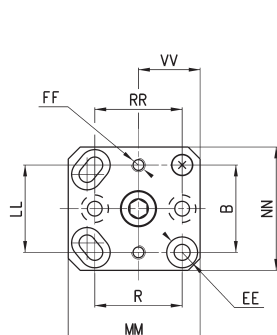
Short-stroke cylinder Series QPR - through-rod

Note:

The cylinder's end stop must be provided externally.



+ = add the stroke once
 ++ = add the stroke twice

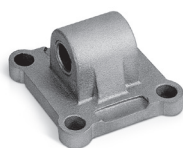

 $\phi 16/\phi 25/\phi 32/\phi 40/\phi 50/\phi 63/\phi 80/\phi 100$


DIMENSIONS

Ø	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	-	47	52	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	57.7	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	-

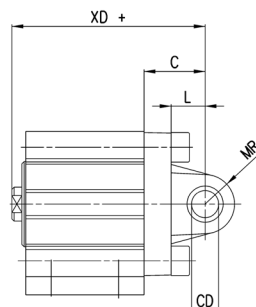
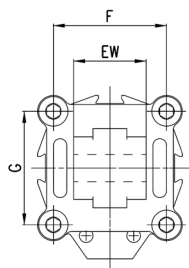
Male trunnion bracket Mod. L

Material: Aluminium



Supplied with:
1x trunnion
4x screws

+ = add the stroke



DIMENSIONS

Mod.	Ø	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

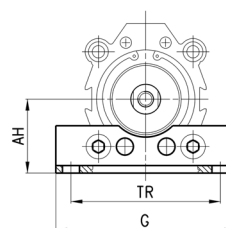
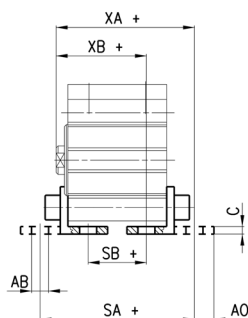
Feet bracket Mod. B

Material: zinc-plated steel.



Supplied with:
2x feet
4x screws

+ = add the stroke



DIMENSIONS

Mod.	Ø	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	30.5	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