



SHORT-STROKE CYLINDERS

SERIES QL

Series QL: double-acting, magnetic and non magnetic
 Ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100 mm



- Compact design
- Low weight
- Easy installation

Series QL short-stroke cylinders are available in seven different bore sizes from 12 mm to 100 mm and are designed to cover a wide range of application needs, from light duties in packaging or assembly through to the demanding requirements of handling components for woodworking.

The low weight of the aluminium body and the compact design makes this cylinder range quick and easy to install, even in confined or awkward spaces.

Series QL is available in double acting, magnetic and non-magnetic designs.

A full range of accessories such as standard, large and narrow mounting feet enhance the applicability and usability of the range.

GENERAL DATA

Type of construction	compact profile
Operation	double-acting
Materials	body: anodized AL rod: rolled stainless steel piston seals: NBR rod seals: PU
Operating temperature	0°C ÷ 80°C (with dry air -20°C)
Mounting	by means of screws or brackets
Operating pressure	1 ÷ 10 bar (double-acting)
Fluid	filtered air class 7.8.4 as indicated by ISO 8573-1. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.
Bores	Ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100
Use with sensors	Mod. CSC

SHORT-STROKE CYLINDERS
SERIES QL - STANDARD STROKES

STANDARD STROKES FOR SHORT-STROKE CYLINDERS SERIES QL

■ = Double-acting ✕ = Double-acting long strokes ● = Double-acting through rod

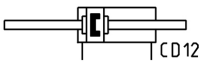
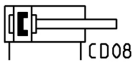
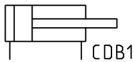
Ø	5	10	15	20	25	30	35	40	45	50	75	100	125	150	175	200	250	300
12	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●												
16	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●												
20	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●								
25	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●								
32	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	✕	✕	✕	✕	✕	✕
40	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	✕	✕	✕	✕	✕	✕
50		■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	✕	✕	✕	✕	✕	✕
63		■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	✕	✕	✕	✕	✕	✕
80		■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	✕	✕	✕	✕	✕	✕
100		■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	■ ●	✕	✕	✕	✕	✕	✕

Coding Examples

QL	M	2	A	032	A	050
QL	SERIES					
M	VERSION M = Magnetic N = Non magnetic					
2	OPERATION 2 = Double-acting 3 = Double-acting, through-rod (only for M version)					PNEUMATIC SYMBOLS CD01 (N) - CDB1 (N) CD08 (M) - CD12 (M)
A	MATERIALS A = Rolled stainless steel rod - AL tube profile					
032	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	CONSTRUCTION A = Standard L = Long strokes >100 mm					
050	STROKE (See the stroke table)					
	ROD OPTIONS = Standard M = Male rod					
	CERTIFICATIONS = Standard EX = ATEX					

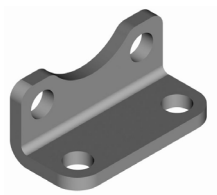
PNEUMATIC SYMBOLS

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



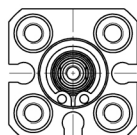
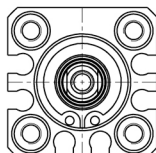
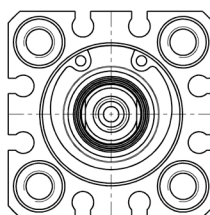
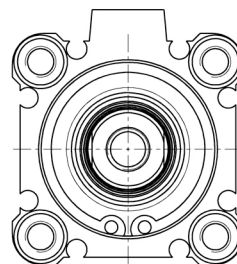
ACCESSORIES FOR SHORT-STROKE CYLINDERS SERIES QL

Foot mount Mod. B-QL

**Narrow (shorter) foot mount
Mod. BN-QL**


All accessories are supplied separately.

SENSOR GROOVES POSITIONING:

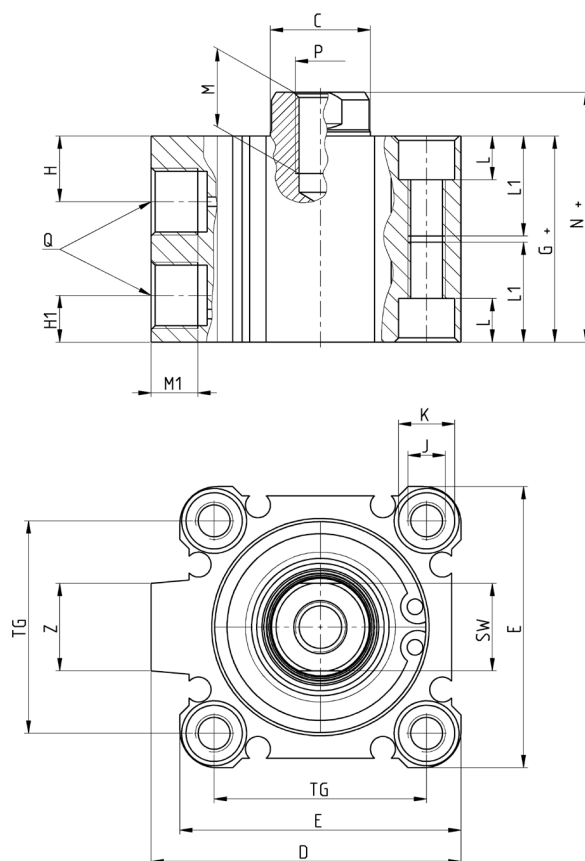
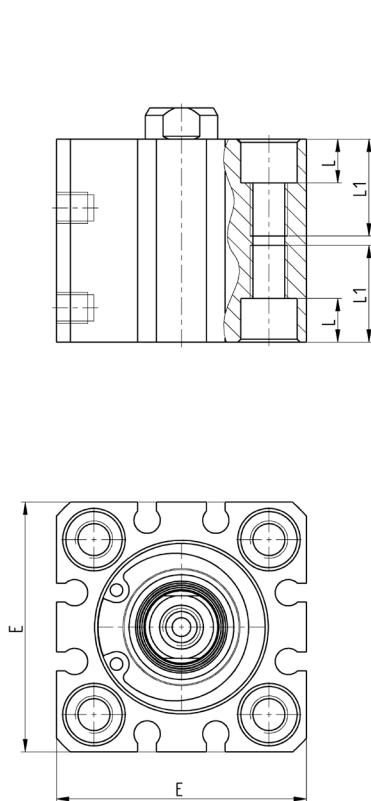
 $\varnothing 12$

 $\varnothing 16$

 $\varnothing 20/\varnothing 25$

 $\varnothing 32/\varnothing 40/\varnothing 50$


Short-stroke non magnetic cylinders Series QL



Ø12/Ø16/Ø20/Ø25

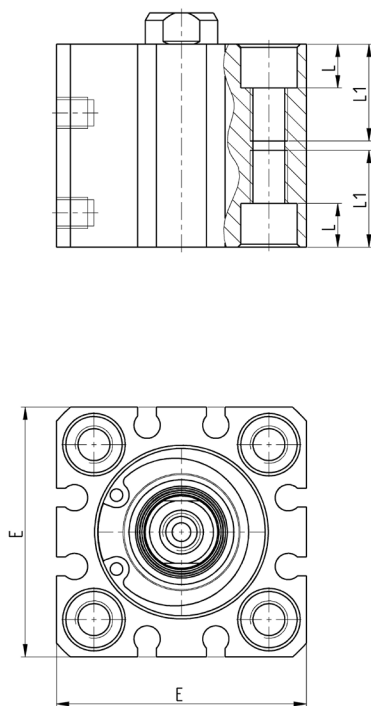
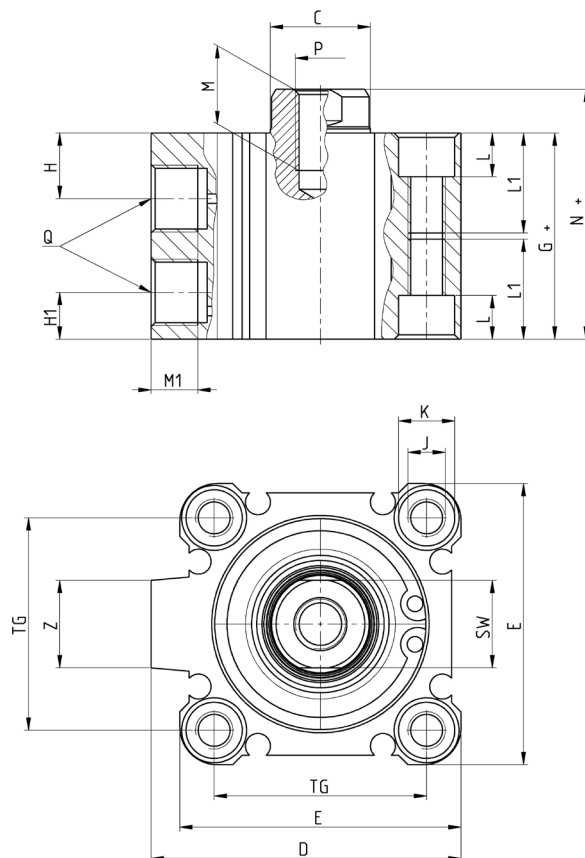
Ø32/Ø40/Ø50



+ = add the stroke

Ø	Strokes range (mm)	gC	D	E	G	H	H1	J	gK	L	L1	M	M1	N	P	Q	SW	TG	Z
12	5 ÷ 30	6	-	25	17	7,5	5	M4x0,7	6,5	3,5	11	6	6	20,5	M3x0,5	M5x0,8	5	15,5	-
16	5 ÷ 30	8	-	29	18,5	9	5	M4x0,7	6,5	3,5	11	8	6	22	M4x0,7	M5x0,8	6	20	-
20	5 ÷ 50	10	-	35,5	19,5	8	5,5	M6x1	9	7	17	7	6	24	M5x0,8	M5x0,8	8	25,5	-
25	5 ÷ 50	12	-	40	22,5	11	5,5	M6x1	9	7	17	12	6	27,5	M6x1	M5x0,8	10	28	-
32	5	16	49,5	45	23	10,5	7,5	M6x1	9	7	17	13	6	30	M8x1,25	M5x0,8	14	34	14
32	10 ÷ 50	16	49,5	45	23	10,5	7,5	M6x1	9	7	17	13	7,5	30	M8x1,25	G1/8	14	34	14
32	75 ÷ 100	16	49,5	45	33	10,5	7,5	M6x1	9	7	17	13	7,5	40	M8x1,25	G1/8	14	34	14
40	5 ÷ 50	16	57	52	29,5	11	8	M6x1	9	7	17	13	7,5	36,5	M8x1,25	G1/8	14	40	15
40	75 ÷ 100	16	57	52	39,5	11	8	M6x1	9	7	17	13	7,5	46,5	M8x1,25	G1/8	14	40	15
50	10 ÷ 50	20	71	64	30,5	10,5	10,5	M8x1,25	11	8	22	15	8,5	38,5	M10x1,5	G1/4	17	50	19
50	75 ÷ 100	20	71	64	40,5	10,5	10,5	M8x1,25	11	8	22	15	8,5	48,5	M10x1,5	G1/4	17	50	19
63	10 ÷ 50	20	84	77	36	15	10,5	M10x1,5	14	10,5	28,5	15	8,5	44	M10x1,5	G1/4	17	60	19
63	75 ÷ 100	20	84	77	46	15	10,5	M10x1,5	14	10,5	28,5	15	11	54	M10x1,5	G1/4	17	60	19
80	10 ÷ 50	25	98	98	43,5	15	12,5	M12x1,75	17,5	13,5	35,5	21	11	53,5	M16x2	G3/8	22	77	25
80	75 ÷ 100	25	98	98	53,5	15	12,5	M12x1,75	17,5	13,5	35,5	21	11	63,5	M16x2	G3/8	22	77	25
100	10 ÷ 50	32	123,5	117	53	20,5	13	M12x1,75	17,5	13,5	35,5	27	11	65	M20x2,5	G3/8	27	94	25
100	75 ÷ 100	32	123,5	117	63	20,5	13	M12x1,75	17,5	13,5	35,5	27	11	75	M20x2,5	G3/8	27	94	25

Short-stroke magnetic cylinders Series QL

 $\varnothing 12/\varnothing 16/\varnothing 20/\varnothing 25$

 $\varnothing 32/\varnothing 40/\varnothing 50$


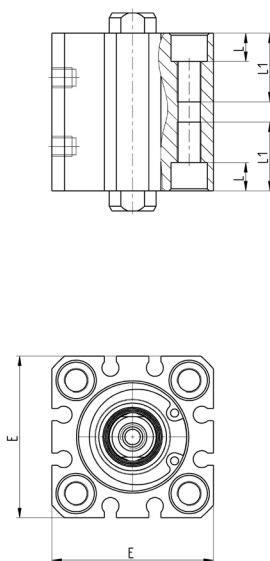
+ = add the stroke

Ø	Strokes range (mm)	øC	D	E	G	H	H1	J	øK	L	L1	M	M1	N	P	Q	SW	TG	Z
12	5 ÷ 30	6	-	25	28	7,5	5	M4x0,7	6,5	3,5	11	6	6	31,5	M3x0,5	M5x0,8	5	15,5	-
16	5 ÷ 30	8	-	29	30,5	9	5	M4x0,7	6,5	3,5	11	8	6	34	M4x0,7	M5x0,8	6	20	-
20	5 ÷ 50	10	-	35,5	31,5	8	5,5	M6x1	9	7	17	7	6	36	M5x0,8	M5x0,8	8	25,5	-
25	5 ÷ 50	12	-	40	32,5	11	5,5	M6x1	9	7	17	12	6	37,5	M6x1	M5x0,8	10	28	-
32	5 ÷ 100	16	49,5	45	33	10,5	7,5	M6x1	9	7	17	13	6 / 7,5	40	M8x1,25	G1/8	14	34	14
40	5 ÷ 100	16	57	52	39,5	11	8	M6x1	9	7	17	13	7,5	46,5	M8x1,25	G1/8	14	40	15
50	10 ÷ 100	20	71	64	40,5	10,5	10,5	M8x1,25	11	8	22	15	8,5	48,5	M10x1,5	G1/4	17	50	19
63	10 ÷ 100	20	84	77	46	15	10,5	M10x1,5	14	10,5	28,5	15	8,5	54	M10x1,5	G1/4	17	60	19
80	10 ÷ 100	25	104	98	53,5	15	12,5	M12x1,75	17,5	13,5	35,5	21	11	63,5	M16x2	G3/8	22	77	25
100	10 ÷ 100	32	123,5	117	63	20,5	13	M12x1,75	17,5	13,5	35,5	27	11	75	M20x2,5	G3/8	27	94	25

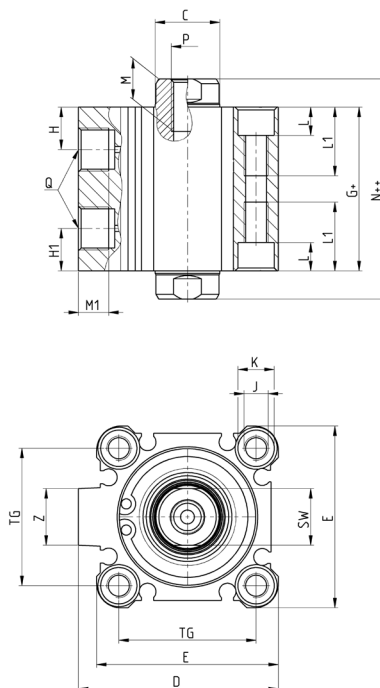
Short-stroke through rod magnetic cylinders Series QL



Ø12/Ø16/Ø20/Ø25



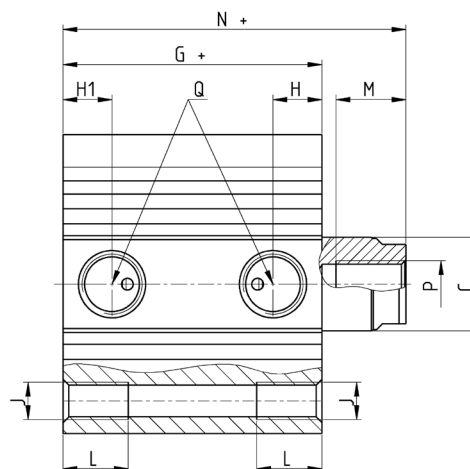
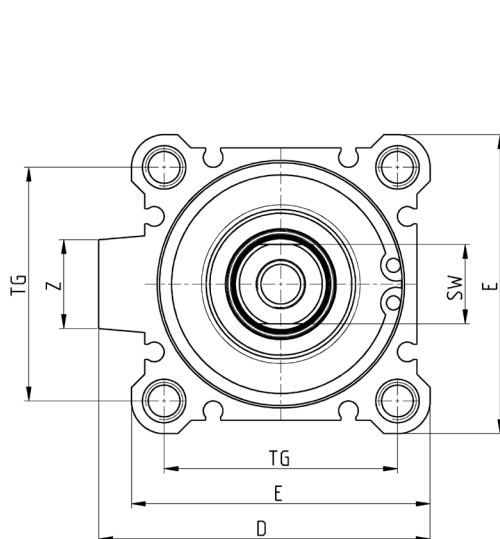
Ø32/Ø40/Ø50/Ø63/Ø80/Ø100



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

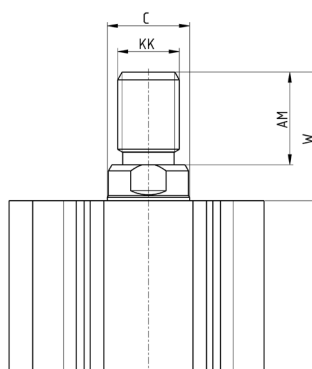
Ø	Strokes range (mm)	ØC	D	E	G	H	H1	J	ØK	L	L1	M	M1	N	P	Q	SW	TG	Z
12	5 ÷ 30	6	-	25	32,4	7,5	7,5	M4x0,7	6,5	3,5	11	6	6	39,4	M3x0,5	M5x0,8	5	15,5	-
16	5 ÷ 30	8	-	29	36	9	5	M4x0,7	6,5	3,5	11	8	6	43	M4x0,7	M5x0,8	6	20	-
20	5 ÷ 50	10	-	35,5	38	8	8	M6x1	9	7	17	8	6	47	M5x0,8	M5x0,8	8	25,5	-
25	5 ÷ 50	12	-	40	39	11	11	M6x1	9	7	17	12	6	49	M6x1	M5x0,8	10	28	-
32	5 ÷ 100	16	49,5	45	40,5	10,5	10,5	M6x1	9	7	17	13	7,5	54,5	M8x1,25	G1/8	14	34	14
40	5 ÷ 100	16	57	52	50	11	11	M6x1	9	7	17	13	7,5	64	M8x1,25	G1/8	14	40	15
50	10 ÷ 100	20	71	64	50,5	10,5	10,5	M8x1,25	11	8	22	15	8,5	66,5	M10x1,5	G1/4	17	50	19
63	10 ÷ 100	20	84	77	52	15	15	M10x1,5	14	10,5	28,5	15	8,5	69	M10x1,5	G1/4	17	60	19
80	10 ÷ 100	25	104	98	61	16	16	M12x1,75	17,5	13,5	35,5	21	11	83	M16x2	G3/8	22	77	25
100	10 ÷ 100	32	123,5	117	70,5	21	21	M12x1,75	17,5	13,5	35,5	21	11	96,25	M20x2,5	G3/8	27	94	25

Short-stroke cylinders Series QL long strokes



Ø	Stroke range (mm)	$\varnothing C$	D	E	G	H	H1	J	L	M	N	P	Q	SW	TG	Z
32	125 ÷ 300	16	49,5	45	45,5	10,5	10,5	M6x1,0	10	13	62,5	M8x1,25	G1/8	14	34	14
40	125 ÷ 300	16	57	52	55	11	11	M6x1,0	10	13	72	M8x1,25	G1/8	14	40	15
50	125 ÷ 300	20	71	64	55,5	10,5	10,5	M8x1,25	14	15	73,5	M10x1,5	G1/4	17	50	19
63	125 ÷ 300	20	84	77	57	15	15	M10x1,5	18	15	75	M10x1,5	G1/4	17	60	19
80	125 ÷ 300	25	104	98	66	16	16	M12x1,75	22	21	86	M16x2	G3/8	22	77	25
100	125 ÷ 300	32	123,5	117	75,5	21	21	M12x1,75	22	27	97,5	M20x2,5	G3/8	27	94	25

Short-stroke cylinders series QL male rod variant



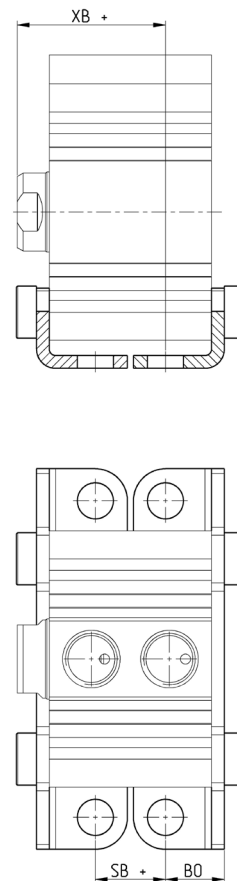
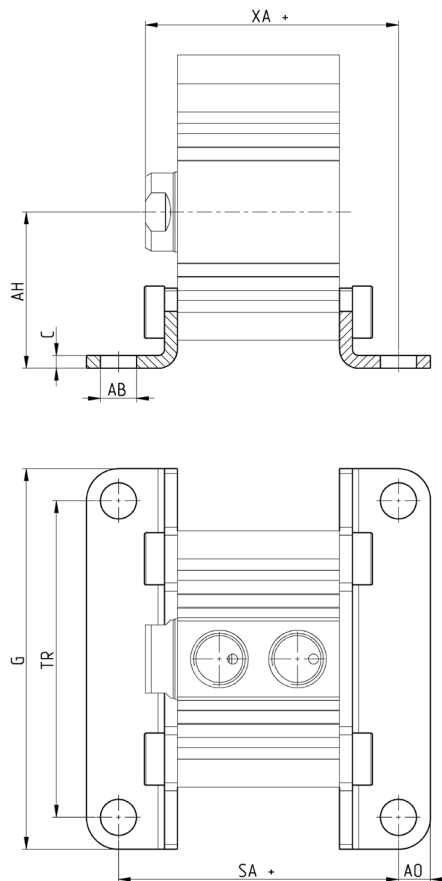
Ø	Stroke range (mm)	W	$\varnothing C$	KK	AM
12	5 ÷ 30	14	6	M5x0,8	10,5
16	5 ÷ 30	15,5	8	M6x1	12
20	5 ÷ 50	18,5	10	M8x1,25	14
25	5 ÷ 50	22,5	12	M10x1,25	17,5
32	5 ÷ 100	30,5	16	M14x1,5	23,5
32	125 ÷ 300	40,5	16	M14x1,5	23,5
40	5 ÷ 100	30,5	16	M14x1,5	23,5
40	125 ÷ 300	40,5	16	M14x1,5	23,5
50	10 ÷ 100	36,5	20	M18x1,5	28,5
50	125 ÷ 300	46,5	20	M18x1,5	28,5
63	10 ÷ 100	36,5	20	M18x1,5	28,5
63	125 ÷ 300	46,5	20	M18x1,5	28,5
80	10 ÷ 100	45,5	25	M22x1,5	35,5
80	125 ÷ 300	55,5	25	M22x1,5	35,5
100	10 ÷ 100	47,5	32	M26x1,5	35,5
100	125 ÷ 300	57,5	32	M26x1,5	35,5

Foot mount Mod. B-QL



Material:
zinc-plated steel

Supplied with:
2x foot brackets
4x screws



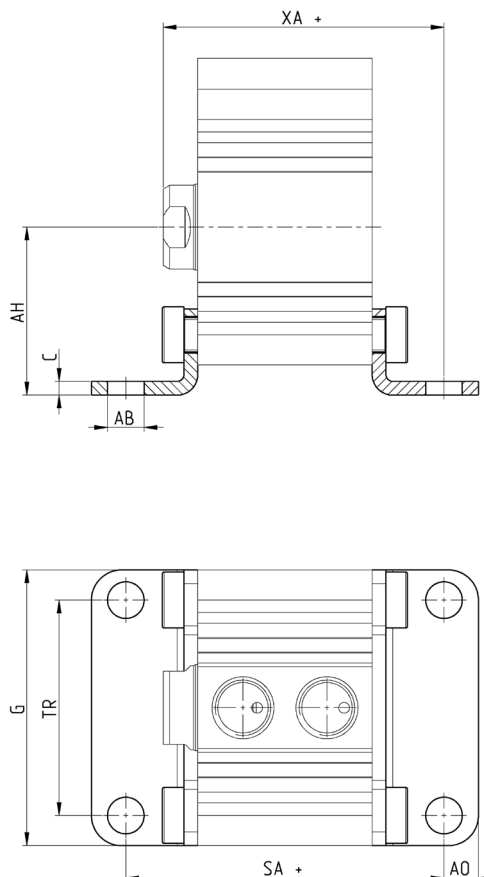
+ = add the stroke

Ø	Version	Stroke range (mm)	AH	XA +	XB +	G	TR	C	SA +	AO	SB +	BO	AB
12	QLM	5 ÷ 30	17	39,5	25,5	44	34	2	44	4,5	16	8	4,5
12	QLN	5 ÷ 30	17	28,5	14,5	44	34	2	33	4,5	5	8	4,5
16	QLM	5 ÷ 30	19	42	28	48	38	2	46,5	5	18,5	8	4,5
16	QLN	5 ÷ 30	19	30	16	48	38	2	34,5	5	6,5	8	4,5
20	QLM	5 ÷ 50	24	45,2	30	62	48	3,2	49,9	5,8	19,5	9,2	6,5
20	QLN	5 ÷ 50	24	33,2	18	62	48	3,2	37,9	5,8	7,5	9,2	6,5
25	QLM	5 ÷ 50	26	48,2	30	66	48	3,2	53,9	5,8	17,5	10,7	6,5
25	QLN	5 ÷ 50	26	38,2	20	66	52	3,2	43,9	5,8	7,5	10,7	6,5
32	QLM	5 ÷ 100	30	51,2	32	71	52	3,2	55,4	5,8	17	11,2	6,5
32	QLN	5 ÷ 50	30	41,2	22	71	57	3,2	45,4	5,8	7	11,2	6,5
32	QLN	75 ÷ 100	30	51,2	32	71	57	3,2	55,4	5,8	17	11,2	6,5
40	QLM	5 ÷ 100	33	57,5	38,5	78	57	3,2	61,9	7	23,5	11,2	6,5
40	QLN	5 ÷ 50	33	47,7	28,5	78	64	3,2	51,9	7	13,5	11,2	6,5
40	QLN	75 ÷ 100	33	57,5	38,5	78	64	3,2	61,9	7	23,5	11,2	6,5
50	QLM	5 ÷ 100	39	53,2	37	95	79	3,2	69,9	8	17,5	14,7	9
50	QLN	5 ÷ 50	39	53,2	27	95	79	3,2	59,9	8	7,5	14,7	9
50	QLN	75 ÷ 100	39	53,2	37	95	79	3,2	69,9	8	17,5	14,7	9
63	QLM	5 ÷ 100	46	70,2	41	113	95	3,2	78,4	9	20	16,2	11
63	QLN	5 ÷ 50	46	60,2	31	113	95	3,2	68,4	9	10	16,2	11
63	QLN	75 ÷ 100	46	70,2	41	113	95	3,2	78,4	9	20	16,2	11
80	QLM	5 ÷ 100	59	83	48,5	140	118	4,5	92,5	11	23,5	19,5	13
80	QLN	5 ÷ 50	59	73	38,5	140	118	4,5	82,5	11	13,5	19,5	13
80	QLN	75 ÷ 100	59	83	48,5	140	118	4,5	92,5	11	23,5	19,5	13
100	QLM	5 ÷ 100	71	98	58	162	137	6	109	12,5	29	23	13
100	QLN	5 ÷ 50	71	88	48	162	137	6	99	12,5	19	23	13
100	QLN	75 ÷ 100	71	98	58	162	137	6	109	12,5	29	23	13

Narrow (shorter) foot mount Mod. BN-QL


Material:
zinc-plated steel

Supplied with:
2x foot brackets
4x screws



+ = add the stroke

Ø	Version	Stroke range (mm)	AH	XA +	G	TR	C	SA +	AO	AB
12	QLM	5 ÷ 30	17	40,8	25	15,5	2	46,6	4,5	4,5
12	QLN	5 ÷ 30	17	29,8	25	15,5	2	35,6	4,5	4,5
16	QLM	5 ÷ 30	19	43,3	29	20	2	49,1	5	4,5
16	QLN	5 ÷ 30	19	31,3	29	20	2	37,1	5	4,5
20	QLM	5 ÷ 50	24	49,2	36	25,5	3,2	57,9	5,8	6,5
20	QLN	5 ÷ 50	24	37,2	36	25,5	3,2	45,9	5,8	6,5
25	QLM	5 ÷ 50	26	50,7	40	28	3,2	58,9	5,8	6,5
25	QLN	5 ÷ 50	26	40,7	40	28	3,2	48,9	5,8	6,5
32	QLM	5 ÷ 100	30	53,7	45	34	3,2	60,4	5,8	6,5
32	QLN	5 ÷ 50	30	43,7	45	34	3,2	50,4	5,8	6,5
32	QLN	75 ÷ 100	30	53,7	45	34	3,2	60,4	5,8	6,5
40	QLM	5 ÷ 100	33	60,2	52	40	3,2	66,9	7	6,5
40	QLN	5 ÷ 50	33	50,2	52	40	3,2	56,9	7	6,5
40	QLN	75 ÷ 100	33	60,2	52	40	3,2	66,9	7	6,5
50	QLM	5 ÷ 100	39	65,2	64	50	3,2	73,9	8	8,5
50	QLN	5 ÷ 50	39	55,2	64	50	3,2	63,9	8	8,5
50	QLN	75 ÷ 100	39	65,2	64	50	3,2	73,9	8	8,5
63	QLM	5 ÷ 100	46	72,2	77	60	3,2	82,4	9	11
63	QLN	5 ÷ 50	46	62,2	77	60	3,2	72,4	9	11
63	QLN	75 ÷ 100	46	72,2	77	60	3,2	82,4	9	11
80	QLM	5 ÷ 100	59	87,5	98	77	6	101,5	11,5	13
80	QLN	5 ÷ 50	59	77,5	98	77	6	91,5	11,5	13
80	QLN	75 ÷ 100	59	87,5	98	77	6	101,5	11,5	13
100	QLM	5 ÷ 100	71	99	117	94	6	111	12,5	13
100	QLN	5 ÷ 50	71	89	117	94	6	101	12,5	13
100	QLN	75 ÷ 100	71	99	117	94	6	111	12,5	13