

# Short-stroke cylinders

## Series QL

**New Models**

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

<b>Type of construction</b>	compact profile
<b>Operation</b>	double-acting
<b>Materials</b>	body: anodized AL rod: rolled stainless steel piston seals: NBR rod seals: PU
<b>Operating temperature</b>	0°C ÷ 80°C (with dry air -20°C)
<b>Mounting</b>	by means of screws or brackets
<b>Operating pressure</b>	1 ÷ 10 bar (double-acting)
<b>Fluid</b>	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.
<b>Strokes</b>	see available strokes table
<b>Bores</b>	ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100
<b>Use with sensors</b>	CSC

**STANDARD STROKES FOR SHORT-STROKE CYLINDERS SERIES QL**

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

STANDARD STROKES																		
∅	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		●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	✕	✕	✕	✕	✕	✕

SERIES QL CYLINDERS

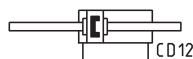
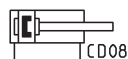
**CODING EXAMPLE**

<b>QL</b>	<b>M</b>	<b>2</b>	<b>A</b>	<b>032</b>	<b>A</b>	<b>050</b>
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<b>QL</b>	SERIES	
<b>M</b>	VERSION M = Magnetic N = Non magnetic	
<b>2</b>	OPERATION 2 = double-acting 3 = double-acting, through-rod (only for M version)	PNEUMATIC SYMBOLS CD08 (M) - CDB1 (N) CD12 (M)
<b>A</b>	MATERIALS A = rolled stainless steel rod - AL tube profile	
<b>032</b>	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	
<b>A</b>	CONSTRUCTION A = Standard L = Long strokes (>100mm)	
<b>050</b>	STROKE (see the stroke table)	
	= Standard M = Male rod	
	= 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



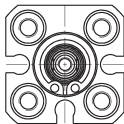
Narrow (shorter) foot mount Mod. BN-QL



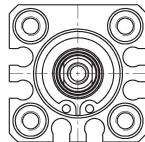
All accessories are supplied separately.

**SENSOR GROOVES POSITIONING:**

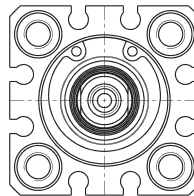
∅12



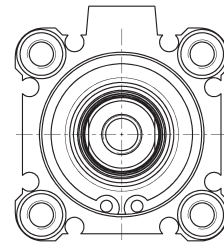
∅16



∅20/∅25



∅32/∅40/∅50  
∅63/∅80/∅100



**Short-stroke non magnetic cylinders Series QL**

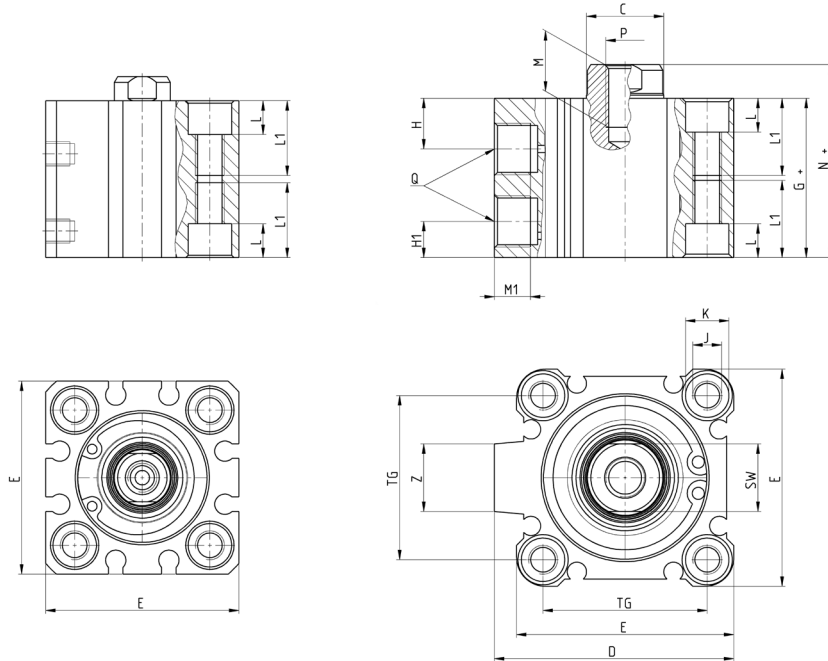


+ = add the stroke

SERIES QL CYLINDERS

∅12/∅16/∅20/∅25

∅32/∅40/∅50/∅63/∅80/∅100



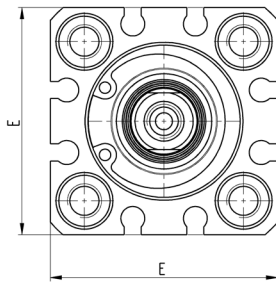
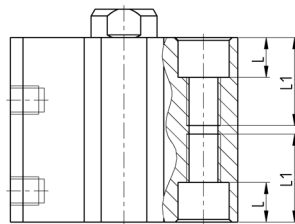
DIMENSIONS																			
∅	Strokes range (mm)	∅C	D	E	G	H	H1	J	∅K	L	L1	M	M1	N	P	Q	SW	TG	Z
12	5 ÷ 30	6	-	25	17	7,5	5	M4x0,7	6,5	3,5	11	6	6	20,5	M3x0,5	M5x0,8	5	15,5	-
16	5 ÷ 30	8	-	29	18,5	9	5	M4x0,7	6,5	3,5	11	8	6	22	M4x0,7	M5x0,8	6	20	-
20	5 ÷ 50	10	-	35,5	19,5	8	5,5	M6x1	9	7	17	7	6	24	M5x0,8	M5x0,8	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

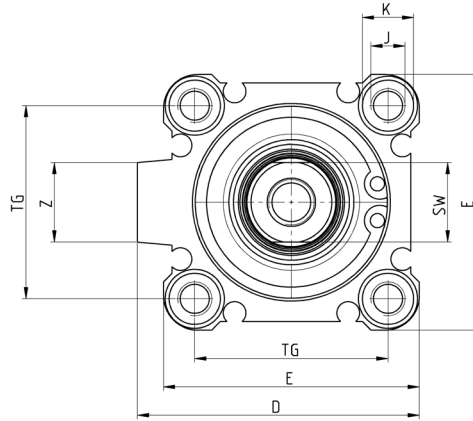
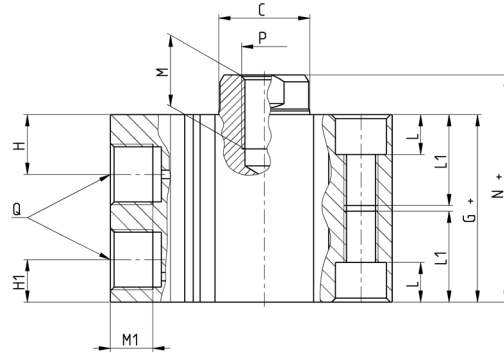


+ = add the stroke

∅12/∅16/∅20/∅25



∅32/∅40/∅50/∅63/∅80/∅100



DIMENSIONS																			
∅	Strokes range (mm)	∅C	D	E	G	H	H1	J	∅K	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

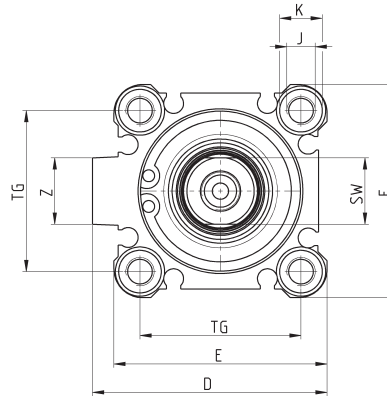
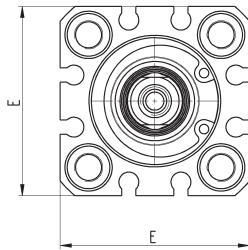
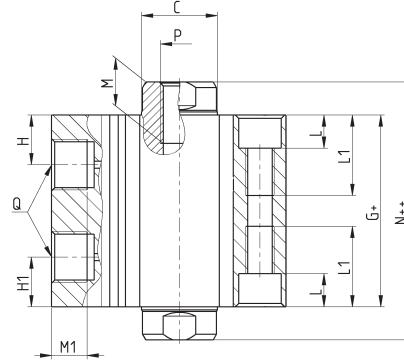
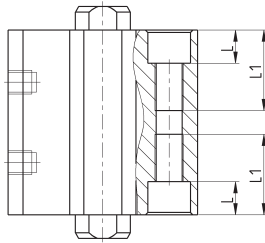
**Short-stroke through rod magnetic cylinders Series QL**



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

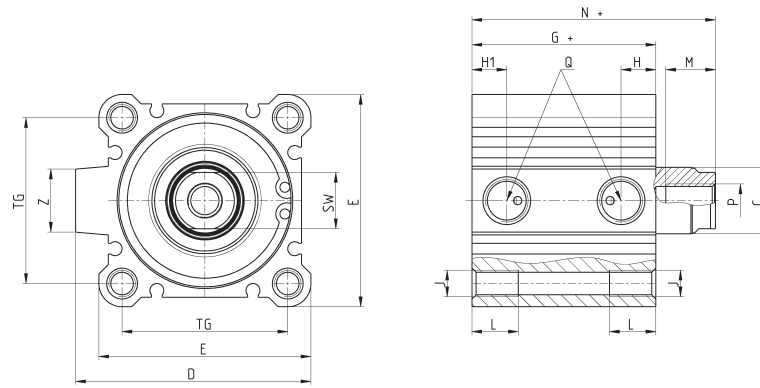
∅12/∅16/∅20/∅25

∅32/∅40/∅50/∅63/∅80/∅100



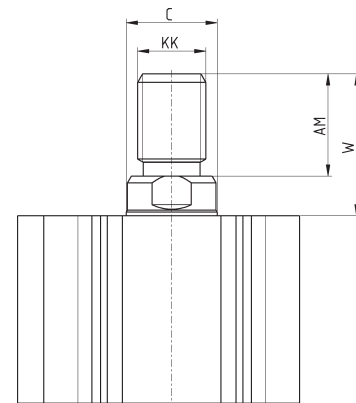
DIMENSIONS																			
∅	Strokes range (mm)	∅C	D	E	G	H	H1	J	∅K	L	L1	M	M1	N	P	Q	SW	TG	Z
12	5 ÷ 30	6	-	25	32,4	7,5	7,5	M4x0,7	6,5	3,5	11	6	6	39,4	M3x0,5	M5x0,8	5	15,5	-
16	5 ÷ 30	8	-	29	36	9	5	M4x0,7	6,5	3,5	11	8	6	43	M4x0,7	M5x0,8	6	20	-
20	5 ÷ 50	10	-	35,5	38	8	8	M6x1	9	7	17	8	6	47	M5x0,8	M5x0,8	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



DIMENSIONS																
Ø	Stroke range (mm)	øC	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



DIMENSIONS					
Ø	Stroke range (mm)	W	øC	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

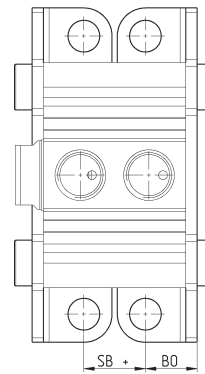
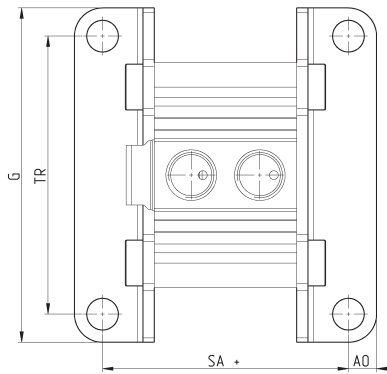
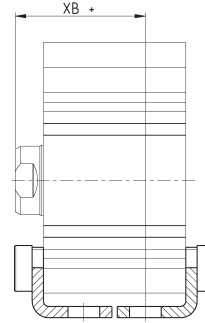
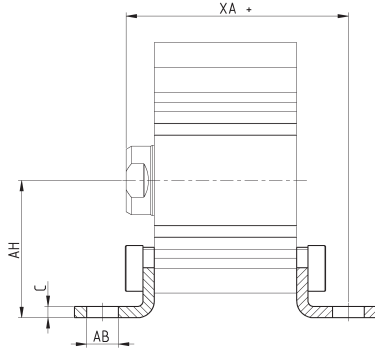
**Foot bracket Mod.B-QL**

Material: zinc-plated steel.



Supplied with:  
2x foot brackets  
4x screws

+ = add the stroke



DIMENSIONS													
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



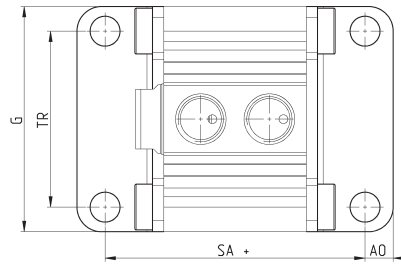
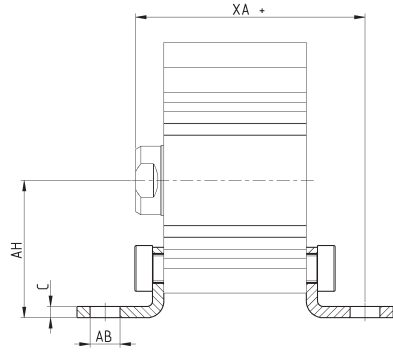
**Foot bracket Mod.BN-QL**

Material: zinc-plated steel.



Supplied with:  
2x foot brackets  
4x screws

+ = add the stroke



DIMENSIONS										
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