

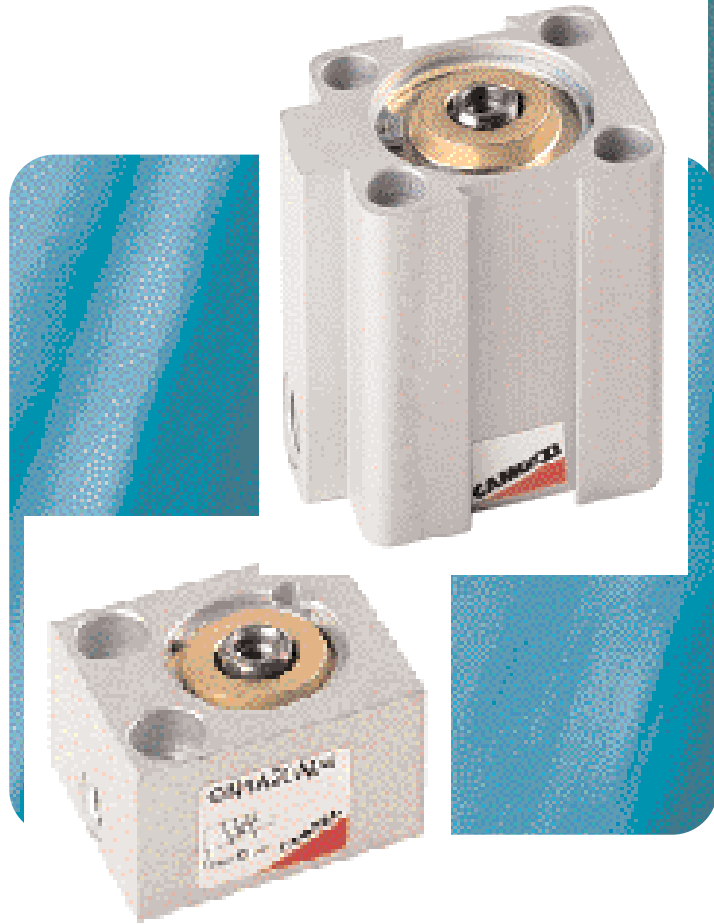
Short-stroke cylinders Series QN

Single-acting

Series QN: ø8, 12, 20, 32, 50, 63

The Series QN short-stroke cylinders (single-acting) have been designed so that they can be installed in confined spaces. The standard stroke are indicated in the tables below.

Due to the compactness and sturdness of these cylinders, they are mainly suitable for positioning and locking.



ACTUATORS

GENERAL DATA

Type of construction	compact
Operation	single-acting
Materials	aluminium body - NBR seals - other: stainless steel and OT58
Operating pressure	P. min 2 bar P. max 10 bar
Operating temperature	0° ÷ 80°C (with dry air -20°C)
Fluid	clean air, with or without lubrication
Bore	ø8, 12, 20, 32, 50, 63
Stroke	see table
Type of mounting	by means of holes in body

EXAMPLE OF CYLINDER CODING

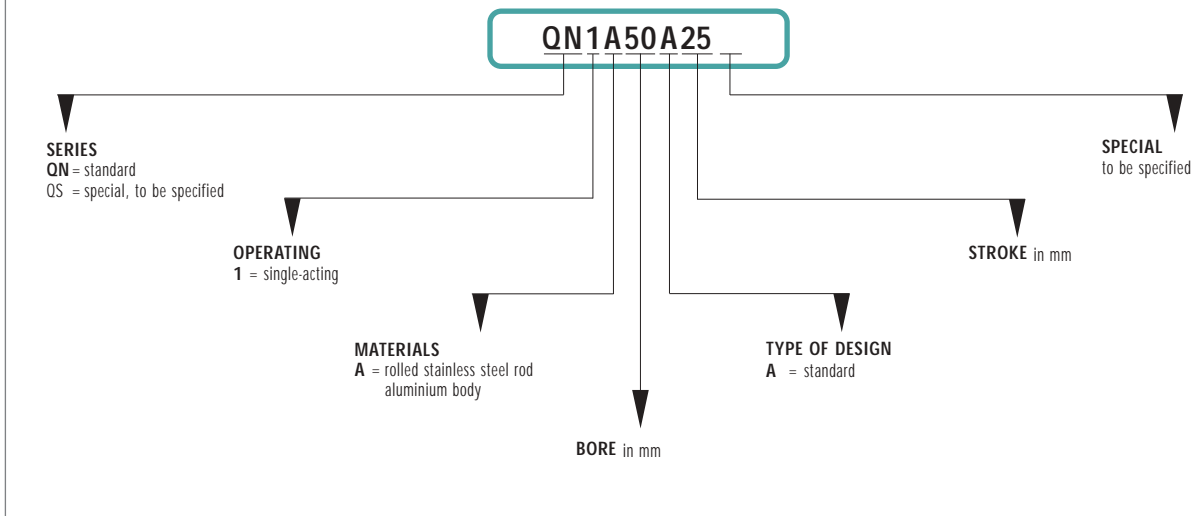


TABLE SHOWING OUTPUT FORCES OF SERIES QN CYLINDERS (SINGLE-ACTING)

ø cyl. in mm.	ø rod in mm.	working area in cm ² .	Operating pressure in Bar										
			1	2	3	4	5	6	7	8	9	10	
8	4	Thrust side	0,5	4	9	13	18	22	26	31	35	40	44
12	5	Thrust side	1,13	10	20	30	40	50	60	70	80	90	100
20	10	Thrust side	3,14	28	55	83	111	138	166	194	222	250	277
32	12	Thrust side	8,03	71	141	212	282	353	423	494	565	635	70
50	16	Thrust side	19,62	173	346	519	692	865	1037	1210	1383	1556	1729
63	16	Thrust side	31,15	275	550	824	1100	1373	1650	1923	2198	2472	2747

TABLE SHOWING OUTPUT FORCES OF SERIES QN CYLINDERS (SINGLE-ACTING)

ø Cylinders	ø8	ø12	ø20	ø32	ø50	ø63
Stroke	4	4 10	4 10 5	10 25	10 25	10 25
Force of spring at rest N	3,2	3,7 2,7	9,1 13,4 23,2	17,8 10,8	35,3 18,6	49 40,2
Force of compressed spring N	3,9	5,4 5	11,8 18,6 31,4	31,4 28,4	51 36,3	62,7 55,9

Note: To obtain the forces of the single-acting cylinders in relation to the pressure applied, deduct the relevant spring loads from the forces values shown on the table.

TABLE SHOWING THE STANDARD STROKES FOR SERIES QN CYLINDERS

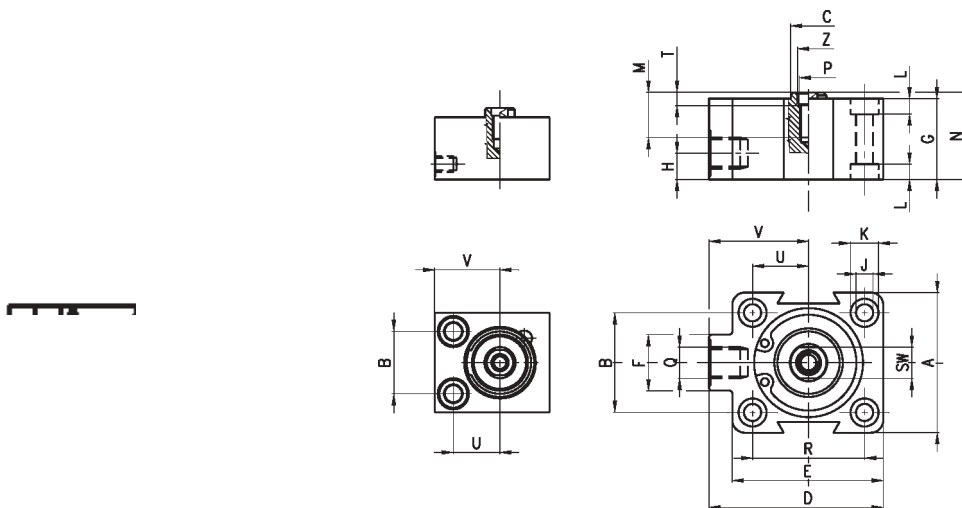
x Single-acting

Standard cylinder strokes					
Series	ø	4	5	10	25
QN	8	x			
QN	12	x		x	
QN	20	x		x	
QN	32		x	x	x
QN	50			x	x
QN	63			x	x

Note: Non standard models on request.

Short-stroke cylinders Series QN

Single-acting.



DIMENSIONS																							
Series	ø cyl.	Stroke ± 0,2	A h 8	B	Ø C	D	E	F	G	H	Ø J	Ø K	L	M	N	P	Q H13	R	SW +0,1	T	U	V	Z+0,1 0
QN1A08A04	8	4	18	11	4	20	20	-	16	5	3,2	5,8	3	-	17	-	M5	-	-	-	8	13,5	-
QN1A12A04	12	4	20	13	5	25	25	-	16	5	3,2	5,8	3	-	17	-	M5	-	-	-	9	16	-
QN1A12A10		-							26						30								
QN1A20A04	20	4	32	20	10	37	37	-	20	5	5,5	9	5	8	21	M5	M5	-	8	2,5	15	21	5,5
QN1A20A10		-							32						33								
QN1A32A05	32	5	45	32	12	56	48,5	18	26	8,5	5,5	9	5	14,5	27	M6	G1/8"	36	13	2,5	18	32	7
QN1A32A10		-							-						-								
QN1A32A25		-							-						-								
		25							57,5						58,5								
QN1A50A10	50	10	64	50	16	72	64	20	30	8,5	6,5	10,5	6,3	15,5	31	M8	G1/8"	50	13	3,5	25	40	8,5
QN1A50A25		-							57,5						58,5								
QN1A63A10	63	10	80	62	16	88	80	20	35	8,5	8,5	14	8,5	14,5	36	M8	G1/8"	62	13	3,5	31	48	8,5
QN1A63A25		-							60,5						62,5								

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