

## Series ND

### double acting

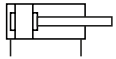
#### Technical details

<b>Operating pressure</b>	1 ... 10 bar
<b>Temperature range</b>	-20°C ... +80°C
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Cylinder tube: Al (anodized) End caps: Ø12 -25: brass Ø32 -100: Al (anodized) Piston rod: stainless steel Seals: PU, NBR



Double acting pneumatic cylinder with built-in cushioning rings.

#### Versions



ND  
double acting, built-in cushioning rings

#### Order code

Series		Stroke (mm)	
ND	standard	XXX	max. 250 mm *
Piston-Ø			
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		

**ND-\*\*\*-\*\*\***

\* up to Ø 25 stroke max. 50 mm,  
from Ø 32 up to Ø 63 stroke max. 100 mm

## Series ND

### double acting

#### Technical data

Model-no.:	ND-012-...	ND-016-...	ND-020-...	ND-025-...	ND-032-...	
Piston Ø (mm)	12	16	20	25	32	
Force at 6 bar (N)	Extension	58	114	176	277	462
	Retraction	42	84	129	230	392
Connection	M5	M5	M5	G1/8	G1/8	
Piston rod thread	M3	M4	M5	M5	M6	

Model-no.:	ND-040-...	ND-050-...	ND-063-...	ND-080-...	ND-100-...	
Piston Ø (mm)	40	50	63	80	100	
Force at 6 bar (N)	Extension	763	1110	1770	2990	4650
	Retraction	663	990	1650	2800	4370
Connection	G1/8	G1/8	G1/8	G1/4	G1/4	
Piston rod thread	M6	M8	M8	M10	M12	

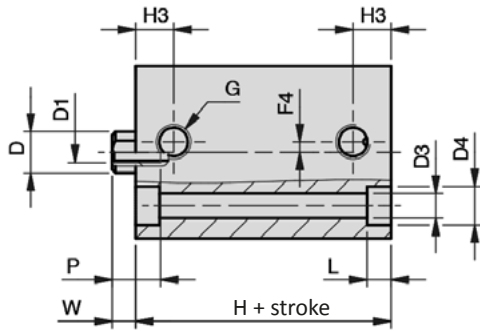
#### Dimensions series ND

Piston-Ø	A	B	ØD	D1	ØD3	ØD4	E	G	H	H3	I1
12	25	25	6	M3	3,7	5,6	-	M5	17	5,5	15,5
16	34	30	8	M4	5,6	7,5	19	M5	27*	8	-
20	40	36	10	M5	5,8	9	22	M5	27*	8	-
25	44,5	40	10	M5	5,8	9	24,5	G1/8	28,5**	10,5	-
32	51	46	12	M6	5,8	9	27	G1/8	29,5	11,5	36
40	58	55	12	M6	5,8	9	30,5	G1/8	29,5	11	42
50	70	65	16	M8	6,8	11	37,5	G1/8	34,5	11,5	50
63	89	80	16	M8	9	14	46	G1/8	37	11	62
80	105	100	20	M10	9	14	55	G1/4	46	14	82
100	131	124	25	M12	11	17,2	69	G1/4	56	16	103

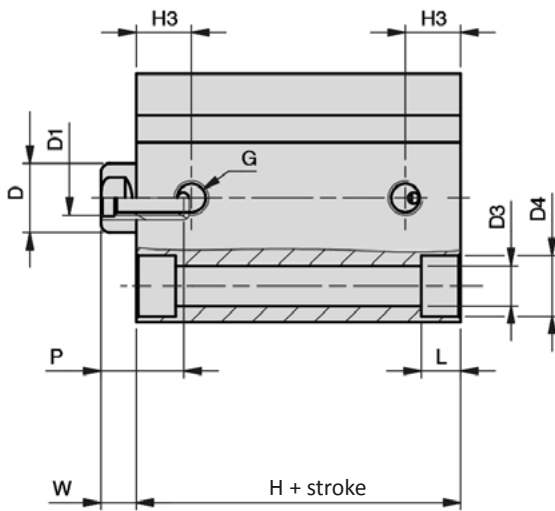
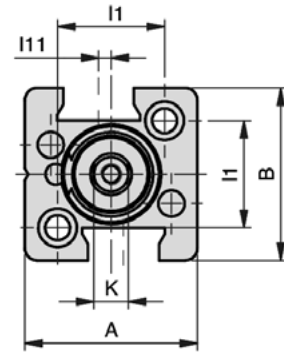
\* for strokes 30, 40 and 50 mm: H = 28, \*\* for strokes 40 and 50 mm: H = 29,5

Piston-Ø	I2	I3	I5	I6	K	L	L1	N	P	W
12	-	-	-	-	5	3,5	-	-	7	3,5
16	18	12	20	10	6	4,6	3,5	32	11	4,5
20	20	15	25,5	12,7	8	5,7	5,7	38,5	12	5
25	26	15,5	28	14	8	5,7	5,7	42	12	5,5
32	32	-	34	-	10	5,7	-	48	15	6
40	42	-	40	-	10	5,7	-	55	15	6
50	50	-	50	-	13	6,8	-	65	17	7,5
63	62	-	60	-	13	8,8	-	80	17	7
80	82	-	77	-	17	9	-	100	17	8
100	103	-	94	-	22	11	-	124	22	10

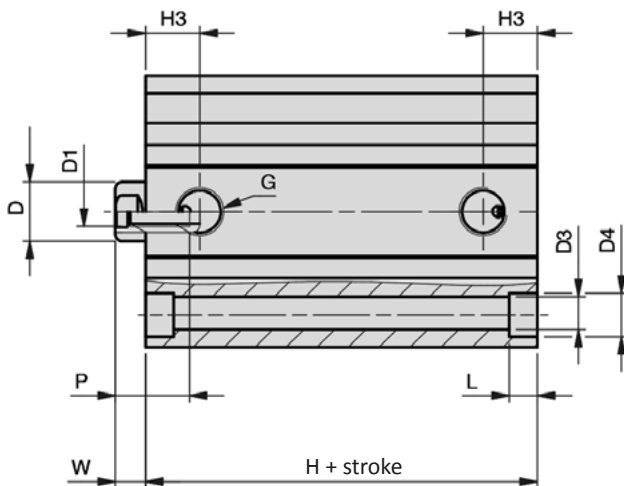
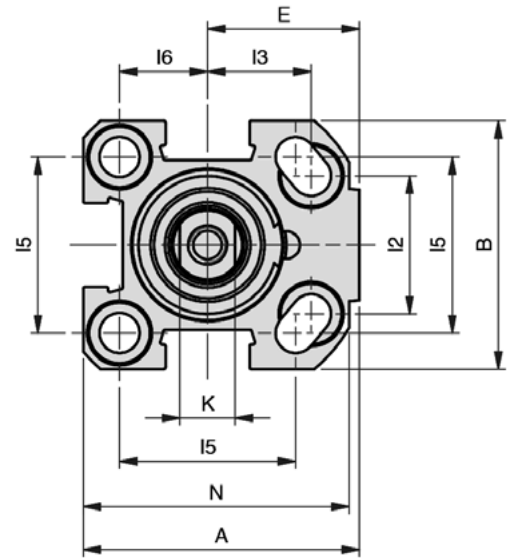
Dimensions series ND



Ø 12



Ø 16 - 25



Ø 32 - 100

