

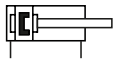
Technical details

Operating pressure	1 ... 10 bar
Temperature range	-20°C ... +80°C
Medium	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.
Materials	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 magnetic piston for proximity sensors and built-in cushioning rings.

Versions



double acting, built-in cushioning rings, with magnetic piston



A double acting, non rotating, built-in cushioning rings, with magnetic piston

Order code

NDM-*-*****

Series	←	NDM	→	Versions
NDM standard				standard version, female thread
				A non rotating
Piston-Ø	←	***	→	Stroke (mm)
012 12 mm [#]				xxx standard max. 250 mm* version A max. 160 mm**
016 16 mm [#]				* Ø 12 stroke max. 40 mm, Ø 16 stroke max. 100 mm, Ø 20 to Ø 25 stroke max. 125 mm, Ø 32 to Ø 40 stroke max. 160 mm, Ø 50 to Ø 63 stroke max. 200 mm
020 20 mm				** Ø 20 to Ø 50 stroke max. 125 mm
025 25 mm				
032 32 mm				
040 40 mm				
050 50 mm				
063 63 mm				
080 80 mm				
100 100 mm				

[#] only available as standard version

Series NDM

double acting

Technical data

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

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

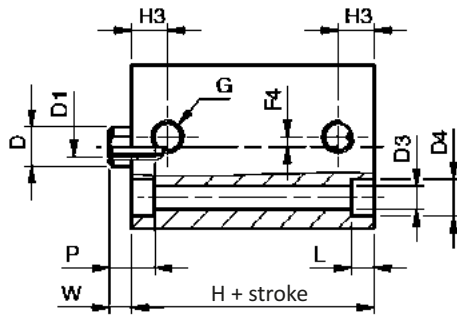
Dimensions series NDM

Piston-Ø	A	B	ØD	D1	ØD2	ØD3	ØD4	E	G	H	H3	I1
12	25	25	6	M3	-	3,7	5,6	-	M5	27	5,5	15,5
16	34	30	8	M4	-	5,6	7,5	19	M5	32*	8	-
20	40	36	10	M5	-	5,8	9	22	M5	32*	8	-
25	44,5	40	10	M5	-	5,8	9	24,5	G1/8	38,5**	10,5	-
32	51	46	12	M6	24,5	5,8	9	27	G1/8	39,5	11,5	36
40	58	55	12	M6	28	5,8	9	30,5	G1/8	39,5	11	42
50	70	65	16	M8	34	6,8	11	37,5	G1/8	39,5	11,5	50
63	89	80	16	M8	38,5	9	14	46	G1/8	42	11	62
80	105	100	20	M10	44	9	14	55	G1/4	46	14	82
100	131	124	25	M12	56	11	17,2	69	G1/4	56	16	103

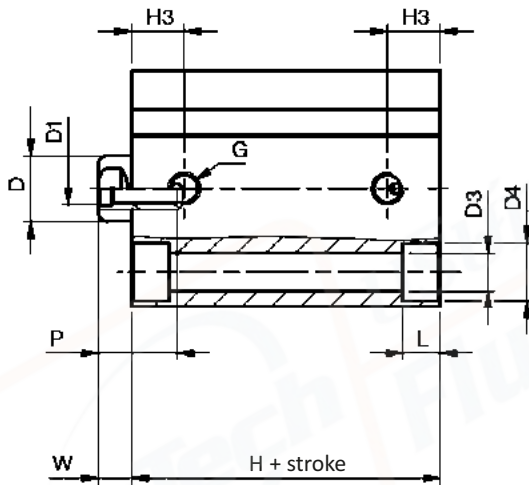
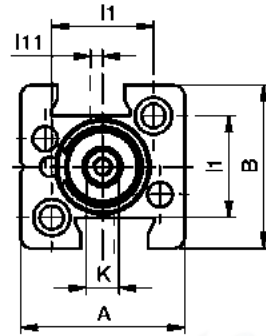
* for strokes ≥ 25 mm: H = 38, ** for strokes ≥ 25 mm: H = 39,5

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

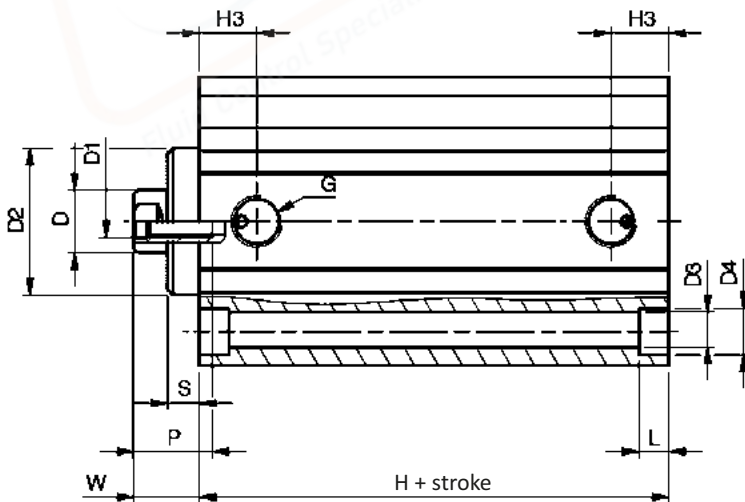
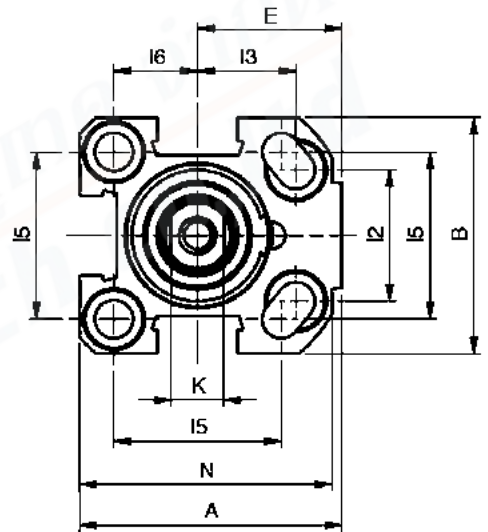
Dimensions series NDM



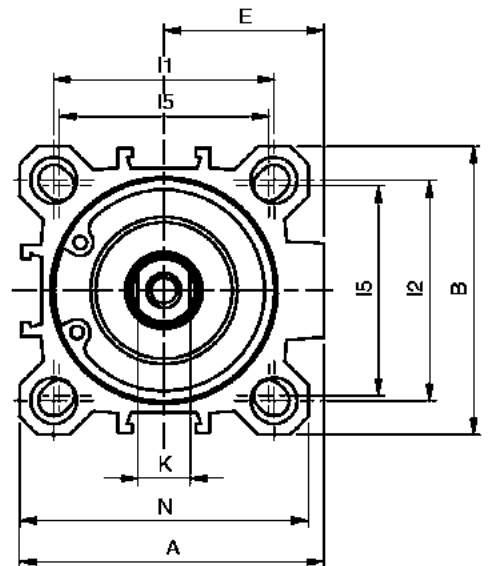
Ø 12



Ø 16 - 25



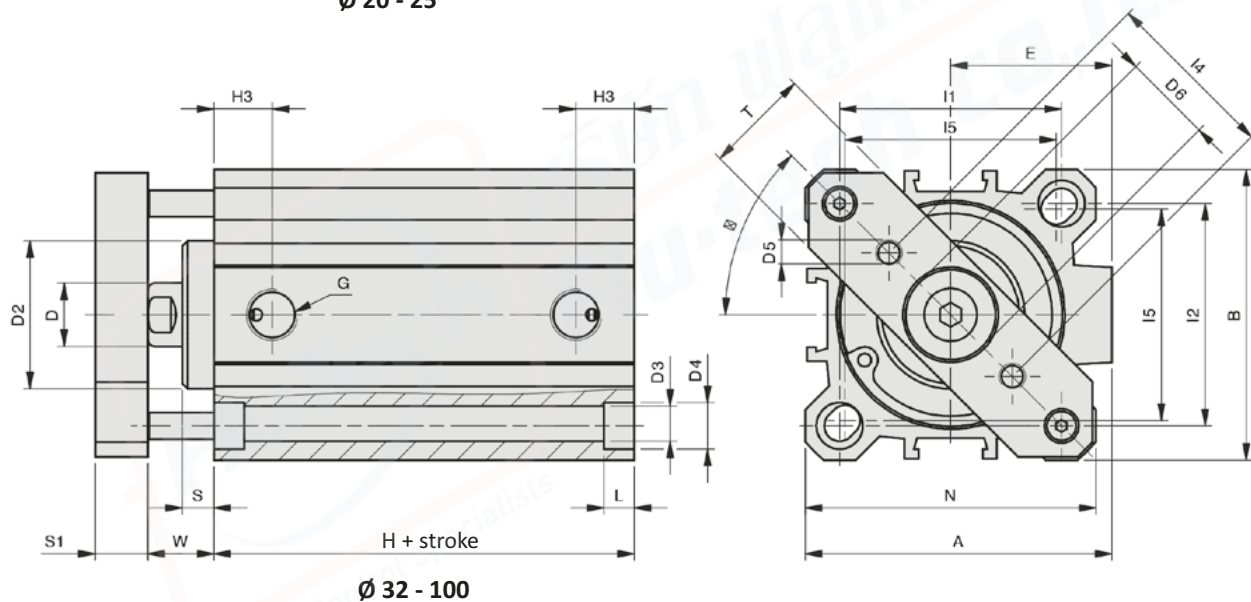
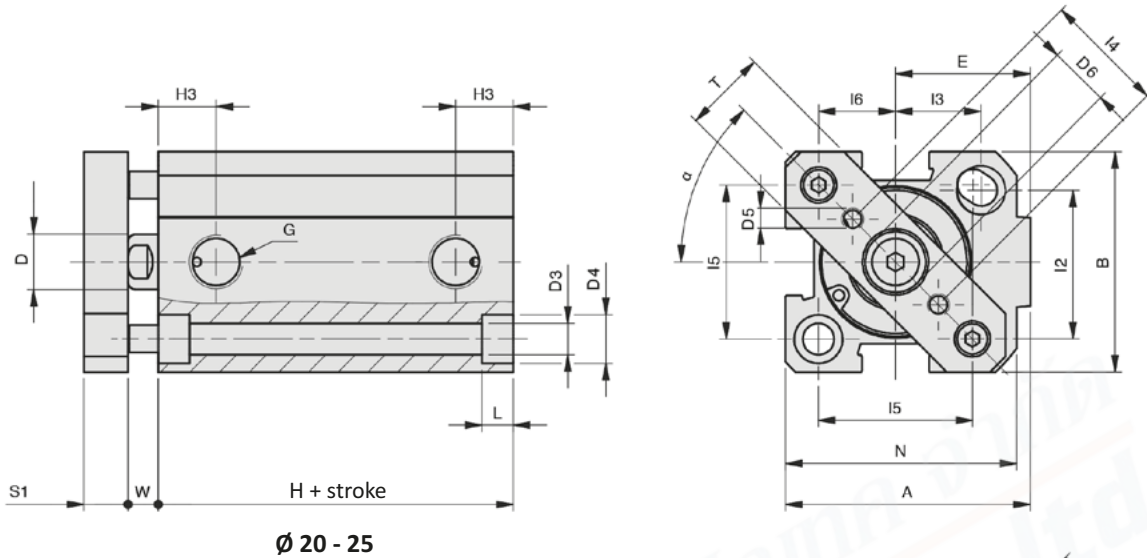
Ø 32 - 100



Series NDM

double acting

Dimensions series NDM, version A



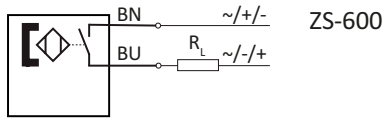
Dimensions series NDM

Piston-Ø	A	B	α	ØD	ØD2	ØD3	ØD4	D5	ØD6	E	G	H	H3
20	40	36	45°	10	-	5,8	9	M4	11	22	M5	32*	8
25	44,5	40	45°	10	-	5,8	9	M4	11	24,5	G1/8	38,5**	10,5
32	51	46	41,5°	12	24,5	5,8	9	M5	17	27	G1/8	39,5	11,5
40	58	55	45°	12	28	5,8	9	M5	17	30,5	G1/8	39,5	11
50	70	65	45°	16	34	6,8	11	M6	22	37,5	G1/8	39,5	11,5
63	89	80	45°	16	38,5	9	14	M6	22	46	G1/8	42	11
80	105	100	45°	20	44	9	14	M8	28	55	G1/4	46	14
100	131	124	45°	25	56	11	17,2	M10	30	69	G1/4	56	16

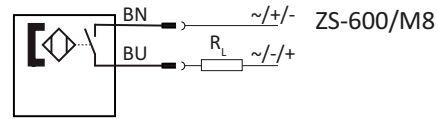
* for strokes ≥ 25 mm: H = 38, ** for strokes ≥ 25 mm: H = 39,5

Piston-Ø	I1	I2	I3	I4	I5	I6	K	L	L1	N	S	S1	T	W
20	-	20	15	20	25,5	12,7	8	5,7	5,7	38,5	-	8	15	4,5
25	-	26	15,5	22	28	14	8	5,7	5,7	42	-	8	15	5,5
32	36	32	-	28	34	-	10	5,7	-	48	5	10	20	11
40	42	42	-	33	40	-	10	5,7	-	55	6	10	20	12,5
50	50	50	-	42	50	-	13	6,8	-	65	6	12	30	13,5
63	62	62	-	50	60	-	13	8,8	-	80	8	12	30	15
80	82	82	-	65	77	-	17	9	-	100	10	14	50	18
100	103	103	-	80	94	-	22	11	-	124	10,5	14	50	20,5



Proximity sensors with cable



Proximity sensors with plug



Technical data

Model-no.:	ZS-600	ZS-600/M8
Design	 2-pole Reed sensor	 2-pole Reed sensor
Contact function	NO	NO
Rated operational voltage	5 ... 42 V AC / DC	5 ... 42V AC / DC
Rated operational current I_E	3 ... 300 mA	3 ... 300 mA
Max. voltage drop at I_E	≤ 3,5	≤ 3,5
Breaking capacity	10 W	10 W
Cable length	3 m	0,25 m with M8 connection
Temperature range	-20 ... +70°C	-20 ... +70°C
Protection	IP 67	IP 67
Switching status indication	LED red	LED red

Cable with socket for proximity sensors

Model-no.:	KA-30	KA-50	KA-51	KA-100	KA-101
Connection	M8, snap-in	M8, snap-in	M8, snap-in	M8, snap-in	M8, snap-in
Version	straight	straight	elbow 90°	straight	elbow 90°
Cable length	3 m	5 m	5 m	10 m	10 m

Mounting

The sensors are mounted at the groove of the cylinder profile. First push the black plastic holder (2) into the groove. The sensor (1) and counter part (3) are then fixed by using the Allan key (4).

