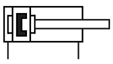
Series NYD
ISO 21287, double acting

Technical details

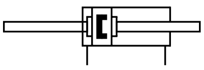
Operating pressure	1 ... 10 bar
Temperature range	-20°C ... +80°C (NYDH: -10°C ... +150°C)
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Cylinder tube: Al (anodized) End caps: Al-die-cast (painted) Piston rod: stainless steel Seals: PU, NBR (optional FKM)
Ex	Cylinders in accordance with 2014/34/EU (ATEX) available. (Chapter 13)

Double acting pneumatic cylinder with magnetic piston for proximity sensors and built-in cushioning rings.
Standard stroke lengths in table below, additional lengths on request.

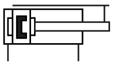
Versions



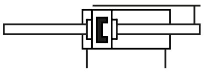
200, 210
double acting, built-in cushioning rings, with magnetic piston



600, 610, 800, 810
double acting, double end piston rod, built-in cushioning rings, with magnetic piston



220
double acting, non rotating, built-in cushioning rings, with magnetic piston



620
double acting, non rotating, double end piston rod, built-in cushioning rings, with magnetic piston

Order code

NYD*-*-***-***-******

Series	
NYD	standard
NYDH	high temperature version

Piston Ø	
020	20 mm
025	25 mm
032	32 mm
040	40 mm
050	50 mm
063	63 mm
080	80 mm
100	100 mm
125***	125 mm

Stroke (mm)	
XXX	max. 250 mm
Standard	5, 10, 15, 20, 25, 30, 40, 50, 60*, 80*

* up from Ø 32 mm

** max. stroke 100 mm (up to Ø 25 mm) , 200 mm (up from Ø 32 mm)

*** only version 200 and 210

Options	
ATEX	cylinders in accordance with 2014/34/EU (ATEX)

Versions	
200 600	standard version, male thread
210 610	standard version, female thread
220 620	non rotating
202 602	high temperature version (with magnetic piston up to 80°C effective), male thread
212 612	high temperature version (with magnetic piston up to 80°C effective), female thread
222 622	high temperature version (with magnetic piston up to 80°C effective), non rotating + female thread
800**	double end, through hollow piston rod, male thread
810**	double end, through hollow piston rod, female thread

Not all combinations are possible and available.

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Series NYD
ISO 21287, double acting

Technical data

Model-no.:		NYD-020-...	NYD-025-...	NYD-032-...	NYD-040-...	NYD-050-...
Piston Ø (mm)		20	25	32	40	50
Force at 6 bar (N)	Extension	170	265	434	678	1060
	Retraction	127	223	373	617	951
Connection		M5	M5	G1/8	G1/8	G1/8
Piston rod thread	male	M8	M8	M10 x 1.25	M10 x 1.25	M12 x 1.25
	female	M6	M6	M8	M8	M10

Model-no.:		NYD-063-...	NYD-080-...	NYD-100-...	NYD-125-...
Piston Ø (mm)		63	80	100	125
Force at 6 bar (N)	Extension	1682	2713	4239	6623
	Retraction	1574	2543	3974	6345
Connection		G1/8	G1/8	G1/8	G1/4
Piston rod thread	male	M12 x 1.25	M16 x 1.5	M16 x 1.5	M20 x 1.5
	female	M10	M12	M12	M16

Piston Ø (mm)		20	25	32	40	50	63	80	100
Weight (kg)	0 mm stroke (-200)	0.143	0.178	0.240	0.301	0.471	0.661	1.066	1.793
	0 mm stroke (-210)	0.131	0.166	0.217	0.278	0.435	0.625	0.996	1.722
	each 10 mm stroke	0.024	0.028	0.029	0.030	0.048	0.057	0.088	0.115

Piston Ø (mm)		20	25	32	40	50	63	80	100
Weight (kg)	0 mm stroke (-220)	0.163	0.204	0.287	0.373	0.590	0.833	1.398	2.261
	each 10 mm stroke	0.028	0.034	0.035	0.038	0.062	0.071	0.114	0.139

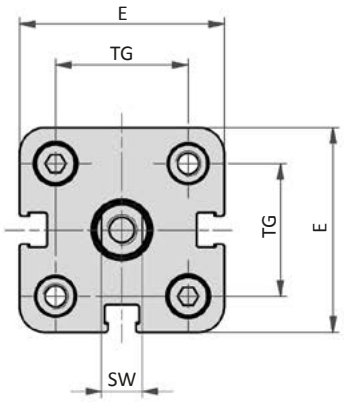
Piston Ø (mm)		20	25	32	40	50	63	80	100
Weight (kg)	0 mm stroke (-600)	0.140	0.175	0.232	0.293	0.463	0.653	1.050	1.833
	0 mm stroke (-610)	0.164	0.199	0.278	0.339	0.535	0.725	1.190	1.975
	each 10 mm stroke	0.030	0.034	0.037	0.038	0.064	0.073	0.114	0.149

Piston Ø (mm)		20	25	32	40	50	63	80	100
Weight (kg)	0 mm stroke (-620)	0.172	0.213	0.302	0.388	0.618	0.861	1.452	2.372
	each 10 mm stroke	0.034	0.040	0.043	0.046	0.078	0.087	0.140	0.173

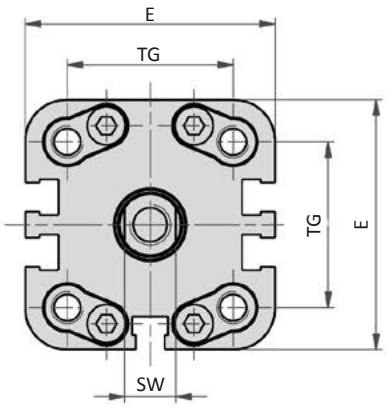
Series NYD
ISO 21287, double acting

Dimensions series NYD (versions 200 and 210)

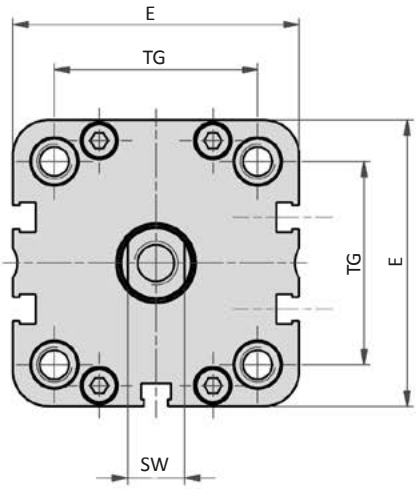
Ø 20 - 25



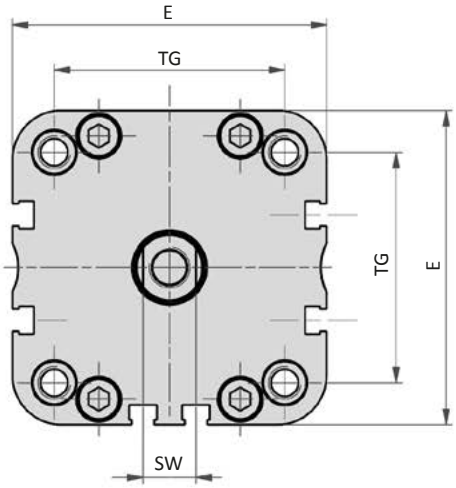
Ø 32

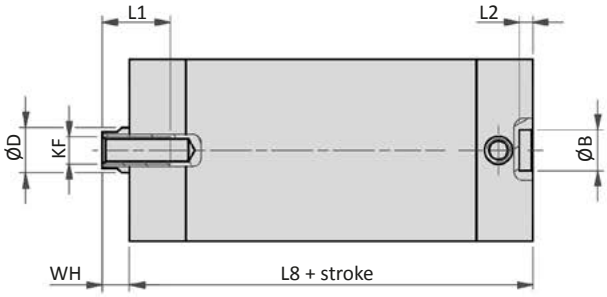


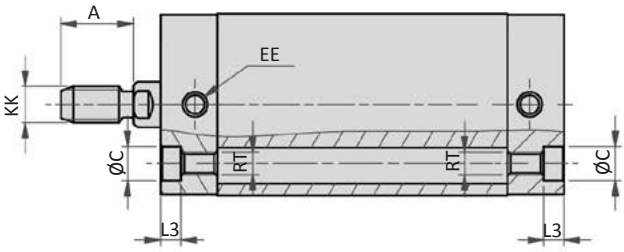
Ø 40 - 50



Ø 63 - 125





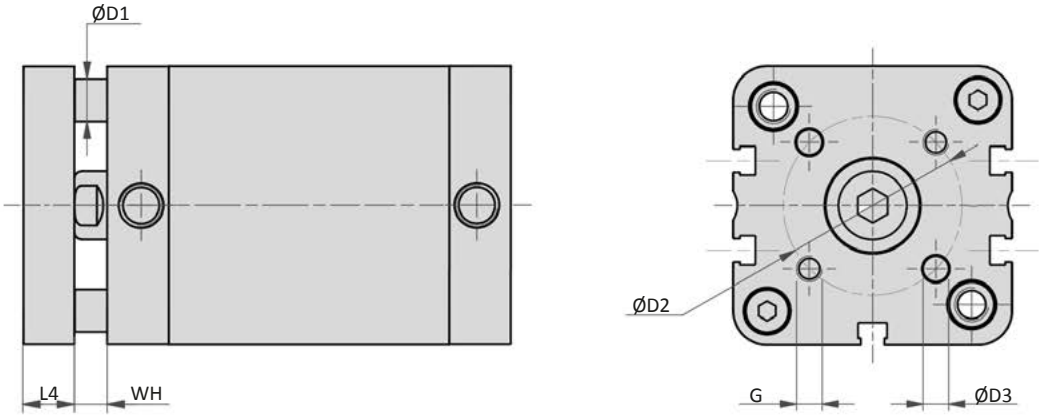


Piston Ø	A	Ø B	Ø C	Ø D	E	EE	KF	KK	L1	L2	L3	L8	RT	SW	TG	WH
20	16	9	7.5	10	36	M5	M6	M8	15	3	4.5	37	M5	8	22	6.5
25	16	9	7.5	10	40	M5	M6	M8	15	3	4.5	39	M5	8	26	6
32	19	9	9	12	49	G1/8	M8	M10 x 1.25	16	3	5	44	M6	10	32.5	6.5
40	19	9	9	12	54.5	G1/8	M8	M10 x 1.25	16	3	5	45	M6	10	38	7
50	22	12	10.5	16	65.5	G1/8	M10	M12 x 1.25	17	4	5	45	M8	13	46.5	8
63	22	12	10.5	16	77	G1/8	M10	M12 x 1.25	17	4	5	49	M8	13	56.5	8
80	28	12	13.5	20	95.5	G1/8	M12	M16 x 1.5	20	4	3	54	M10	17	72	9
100	28	12	13.5	25	113.5	G1/8	M12	M16 x 1.5	20	4	3	67	M10	22	89	10
125	40	12	-	25	135	G1/4	M16	M20 x 1.5	25	4	-	81	M12	22	110	11

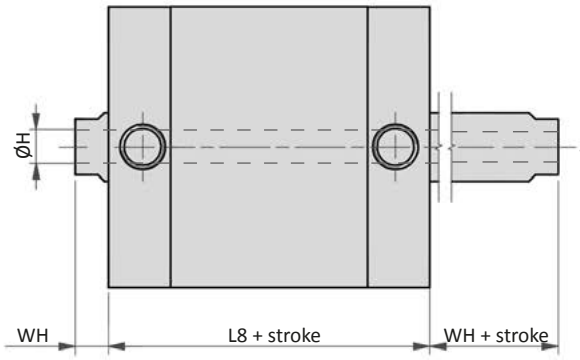
Series NYD
ISO 21287, double acting

Dimensions series NYD (versions 220, 600, 610, 620, 800 and 810)

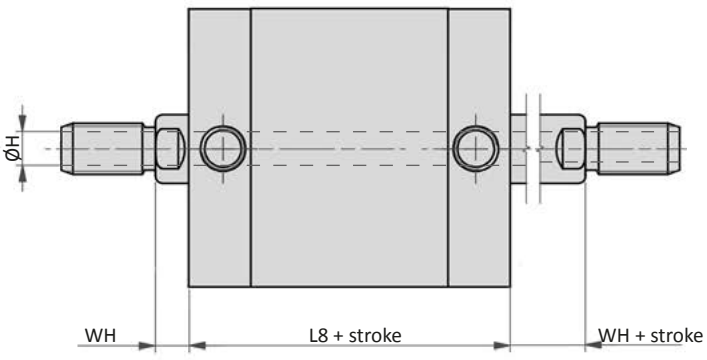
Version 220



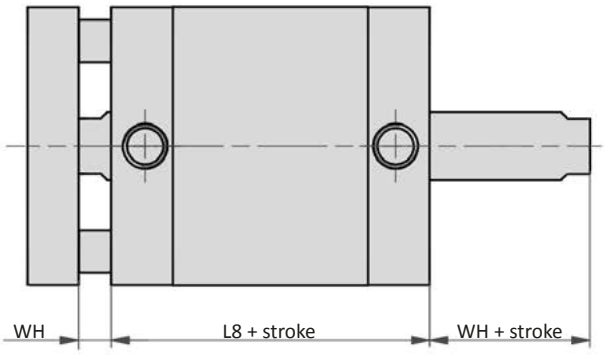
Versions 610, 810



Versions 600, 800



Version 620



Piston Ø	Ø D1	Ø D2	Ø D3	G	Ø H*	L4	L8	WH
20	5	17	4	M4	4	8	37	6.5
25	6	22	5	M5	4	8	39	6
32	6	28	5	M5	5	10	44	6.5
40	8	33	5	M5	5	10	45	7
50	10	42	6	M6	6	12	45	8
63	10	50	6	M6	6	12	49	8
80	14	65	8	M8	8	14	54	9
100	14	80	10	M10	10	14	67	10

* only for versions 800 and 810

Series NYD

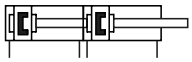
High force and multiple positioning cylinder, double acting

Technical details

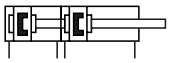
Operating pressure	1 ... 10 bar
Temperature range	-20°C ... +80°C
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	Cylinder tube: Al (anodized) End caps: Al-die-cast (painted) Piston rod: stainless steel Seals: PU, NBR (optional FKM)
⟨Ex⟩	Cylinders in accordance with 2014/34/EU (ATEX) available. (Chapter 13)

A back to back mounting of cylinders with same piston diameter is available up to 4 positions.
Combining 2 to 3 cylinders with same piston diameter but different stroke lengths provides a max. of 4* positions.
Multiplying the force will be achieved by adding several cylinders with same diameter and same stroke length.

Versions



NYDKx
high force cylinder, double acting,
built-in cushioning rings,
with magnetic piston, x-times force



NYMy
multiple positioning cylinder, double acting,
built-in cushioning rings,
with magnetic piston, y+1 positions

NYR2
multiple positioning cylinder, double acting,
built-in cushioning rings, with magnetic piston

Order code

NY*##-***-*********-*****

Series	
NYDK2	high force cylinder, 2 x force
NYDK3	high force cylinder, 3 x force
NYDK4	high force cylinder, 4 x force
NYM2	multiple positioning cylinder, 2 strokes, 3 positions
NYM3	multiple positioning cylinder, 3 strokes, 4 positions
NYR2	multiple positioning cylinder, 2 strokes, 3 positions

AG*	piston rod male thread
IG*	piston rod female thread

Piston Ø	
020	20 mm
025	25 mm
032	32 mm
040	40 mm
050	50 mm
063	63 mm
080	80 mm
100	100 mm

Versions	
without	only NYM2 and NYM3
200	standard version, male thread
210	standard version, female thread

Stroke (mm)	
XXX XXX XXX	stroke 1, stroke 2, stroke 3**

***stroke 2 and stroke 3 only for multiple positioning cylinder*

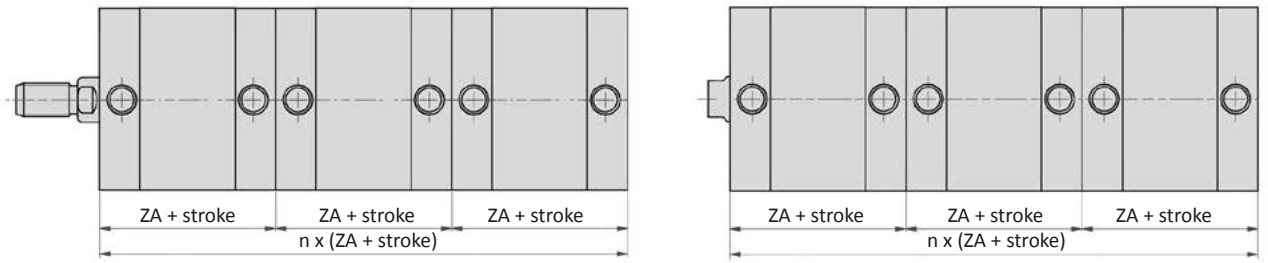
** only for NYM2 and NYM3*

Series NYD

High force and multiple positioning cylinder, double acting

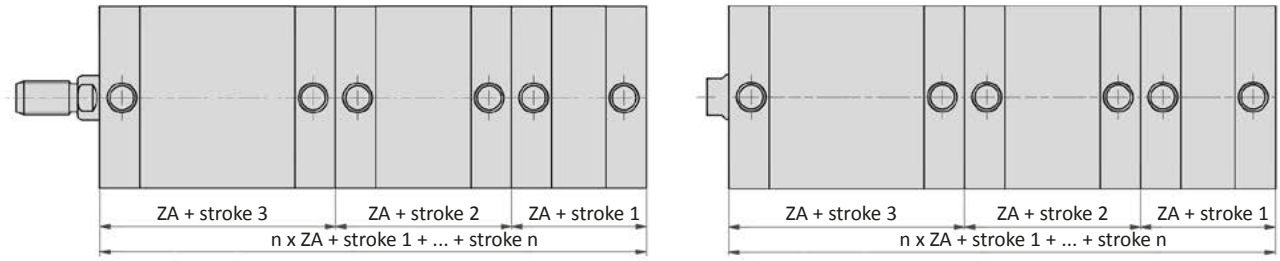
Dimensions series NYD (versions NYDK, NYM, NYR)

Version NYDK



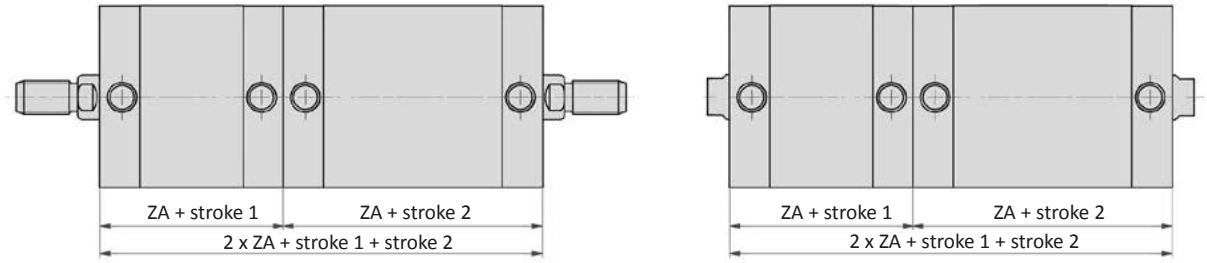
For cylinder applications for NYDK3 and NYDK4 check mounting advices with our technical department.

Version NYM



stroke 3 (max. total stroke) > stroke 2 > stroke 1

Version NYR



Piston Ø (mm)		20	25	32	40	50	63	80	100
ZA		37	39	44	45	45	49	54	67
Weight (kg)	0 mm stroke (-200/-AG)	0.286	0.351	0.480	0.597	0.888	1.278	2.136	3.605
	0 mm stroke (-210/-IG)	0.274	0.339	0.457	0.574	0.852	1.242	2.066	3.534
	surcharge for 3rd and more cylinders	0.143	0.173	0.240	0.296	0.417	0.617	1.070	1.812
	each 10 mm stroke*	0.024	0.028	0.029	0.030	0.048	0.057	0.088	0.115

* total of all strokes