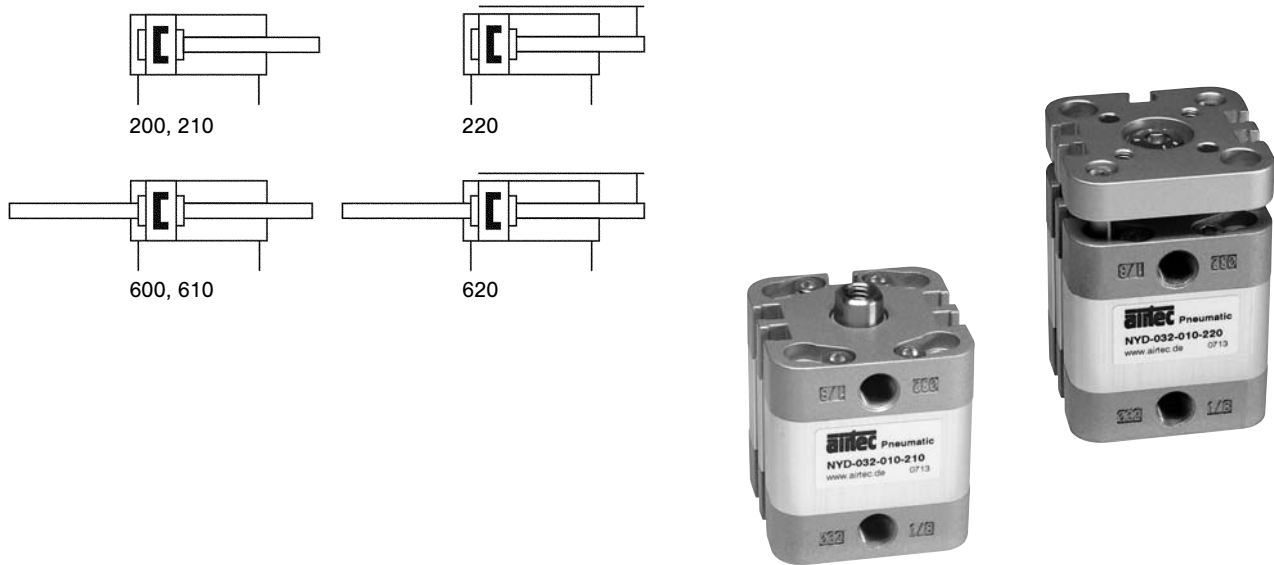


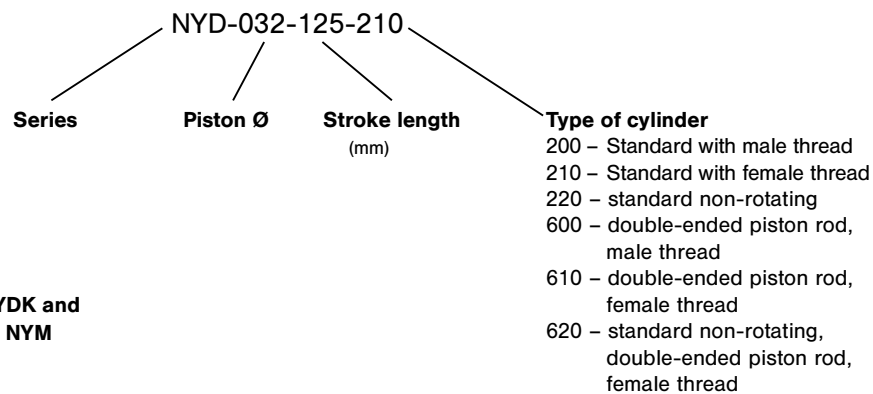
Compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



Order code



High force cylinder series NYDK and multiple positioning cylinder NYM
see pages 9.158 and 9.159.

Design and function

Double acting pneumatic cylinder with permanent magnet for proximity sensors and built-in cushioning rings. Cylinder end caps are connected with the Al-profile tube by mounting screws.

Order number Please complete according to order code.	NYD-020-...	NYD-025-...	NYD-032-...	NYD-040-...	NYD-050-...	NYD-063-...	NYD-080-...	NYD-100-...
Piston Ø (mm)	20	25	32	40	50	63	80	100
Connection	M5		G 1/8	G 1/8	G 1/8	G 1/8	G 1/8	G 1/8
Female thread	M6	M6	M8	M8	M10	M10	M12	M12
Male thread	M8 x 1,25	M8 x 1,25	M10 x 1,25	M10 x 1,25	M12 x 1,25	M12 x 1,25	M16 x 1,5	M16 x 1,5
Operating pressure	1 ... 10 bar (14.5 ... 145 psi)							
Temperature range	- 20 °C ... + 80 °C (- 4 °F ... + 176 °F)							
Medium	Compressed air in accordance with ISO 8573-1:2001, Class 7 4 – and free of aggressive additives							
Standard stroke lengths (mm)	Ø 20 + 25: 5, 10, 15, 20, 25, 30, 40, 50, 60, special stroke length on request. Ø 32 – 100: 5, 10, 15, 20, 25, 30, 40, 50, 60, 80, special stroke length up to 250 mm on request							
Materials	Cylinder tube: Al (anodized) End caps: Al (anodized) Piston rod: stainless steel Seals: PU + NBR							

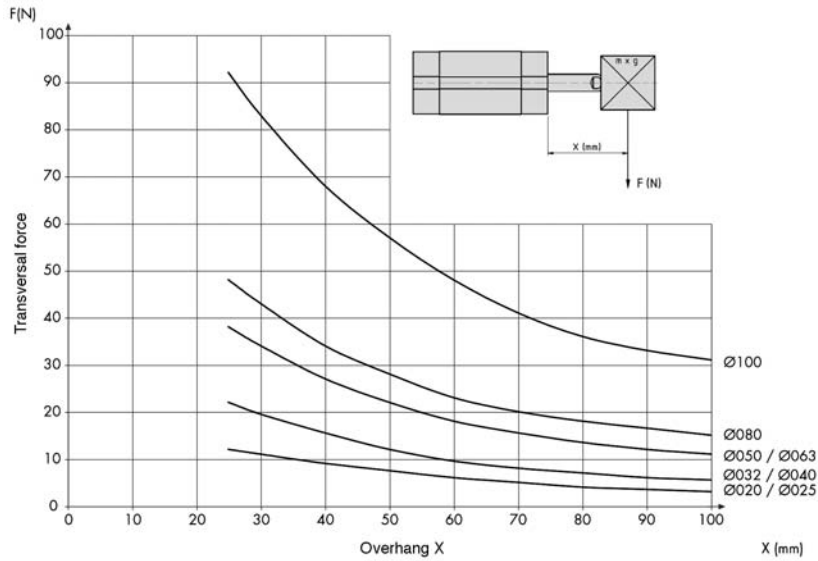
Loading diagram for compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

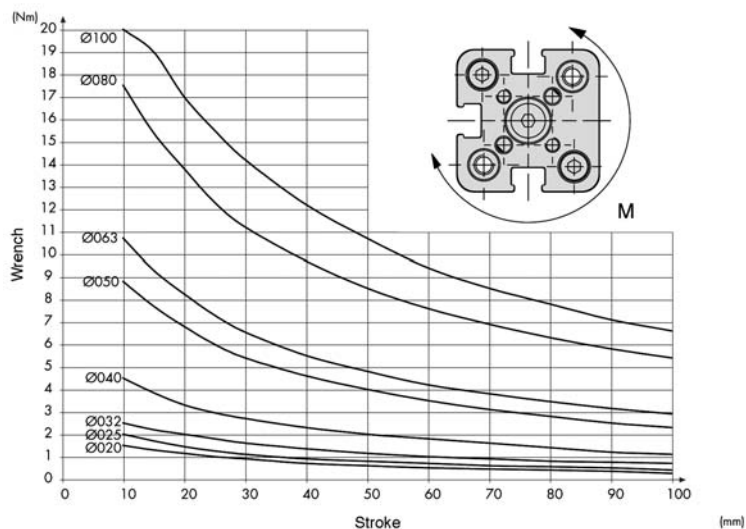
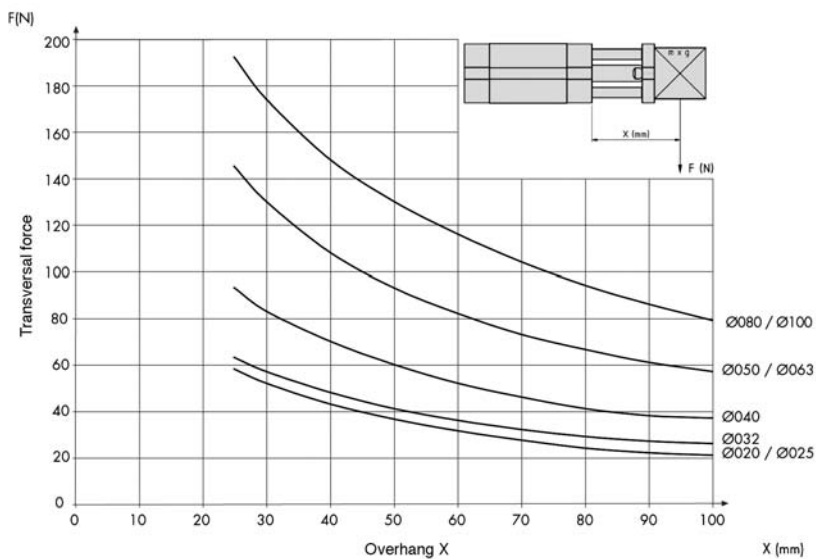
M5 to G1/8 • Piston Ø 20 to 100 mm



Series NYD (Type for order code: -200 = male thread, -210 = female thread)



Series NYD (Type for order code: -220 = non-rotating)



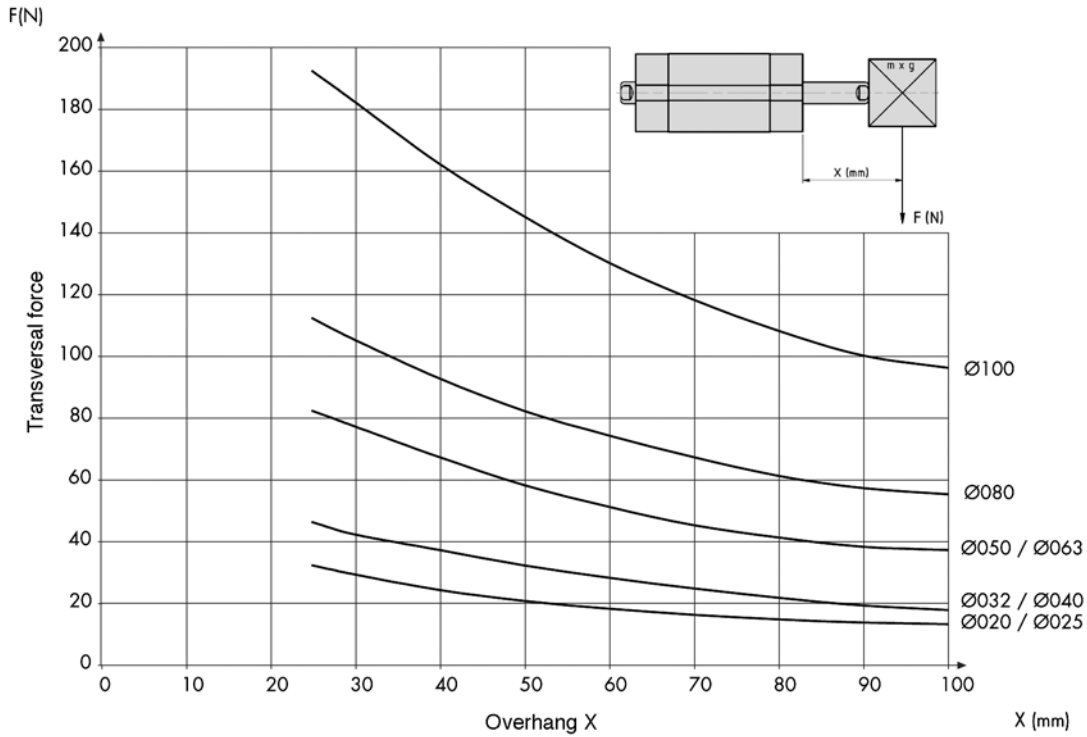
Loading diagram for compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

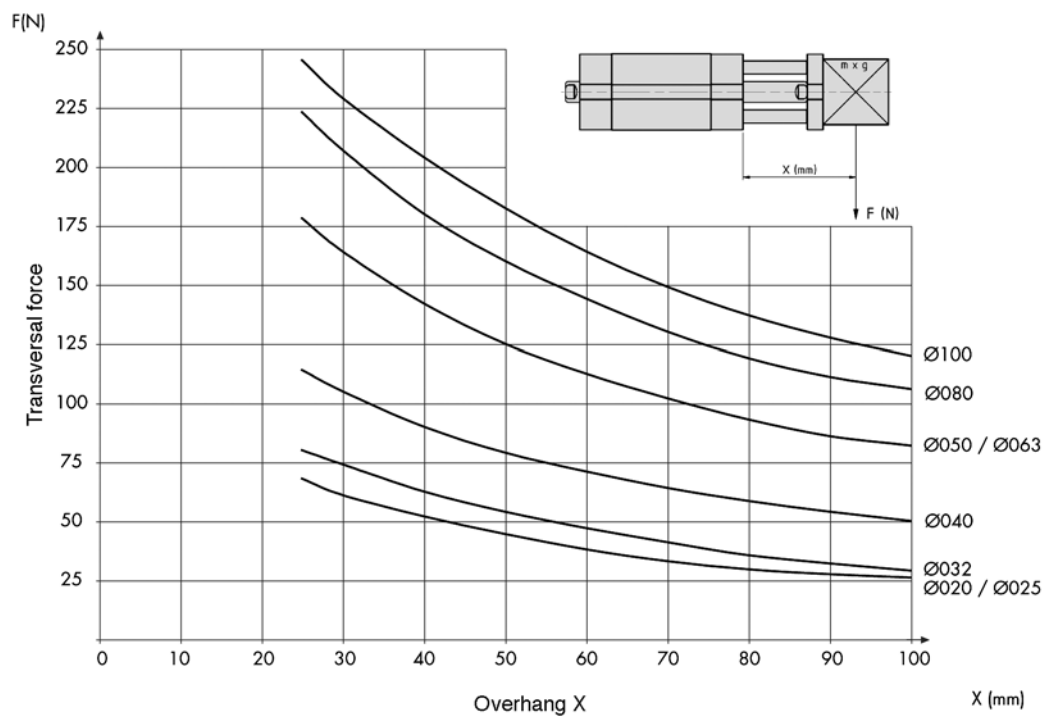
M5 to G1/8 • Piston Ø 20 to 100 mm



Series NYD (Type for order code: -600 = male thread, -610 = female thread)



Series NYD (Type for order code: -620 = non-rotating)



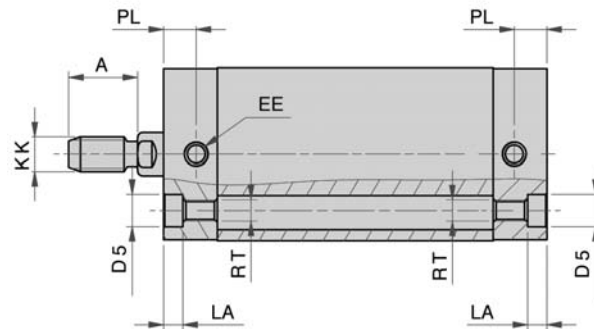
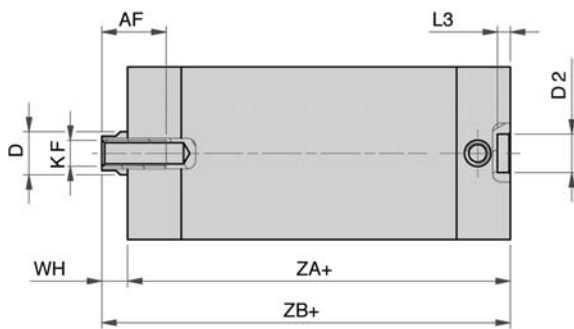
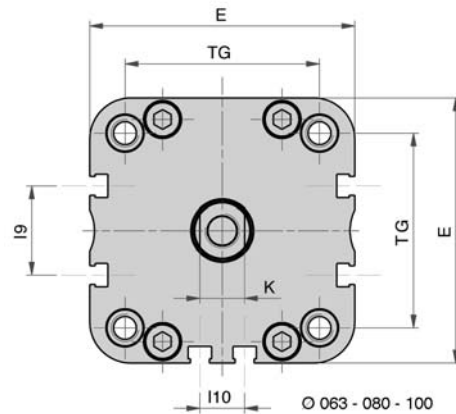
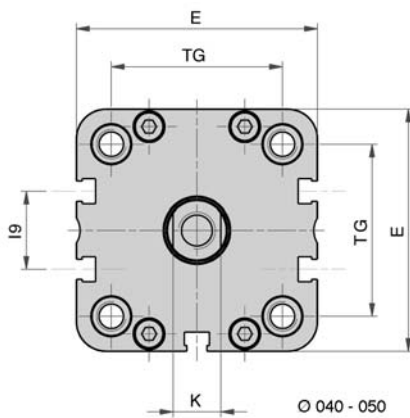
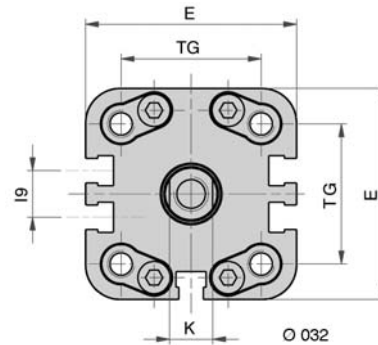
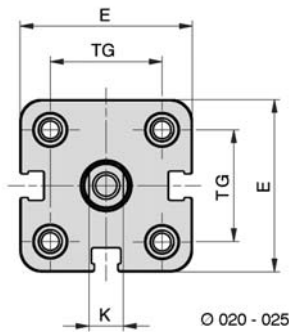
Compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



Series NYD (Type for order code: -200 = male thread, -210 = female thread)



Ø	A	AF	Ø D	Ø D2	Ø D5	E	EE	I9	I10	K	KF	KK	LA	L3	PL	RT	TG	WH	ZA+	ZB+
20	16	15	10	9	7.5	36	M5	-	-	8	M6	M8	4.5	3	7.5	M5	22	6.5	37	43.5
25	16	15	10	9	7.5	40	M5	-	-	8	M6	M8	4.5	3	7.5	M5	26	6	39	45
32	19	16	12	9	9	49	G1/8	10.8	-	10	M8	M10 x 1.25	5	3	7.5	M6	32.5	6.5	44	50.5
40	19	16	12	9	9	54.5	G1/8	12.8	-	10	M8	M10 x 1.25	5	3	8	M6	38	7	45	52
50	22	17	16	12	10.5	65.5	G1/8	21	-	13	M10	M12 x 1.25	5	4	8	M8	46.5	8	45	53
63	22	17	16	12	10.5	77	G1/8	25.8	13	13	M10	M12 x 1.25	5	4	7.5	M8	56.5	8	49	57
80	28	20	20	12	13.5	95.5	G1/8	30	18	17	M12	M16 x 1.5	3	4	8	M10	72	9	54	63
100	28	20	25	12	13.5	113.5	G1/8	50	35	22	M12	M16 x 1.5	3	4	10.5	M10	89	10	67	77

+ stroke length

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

Weight in lbs. = x 2.2046

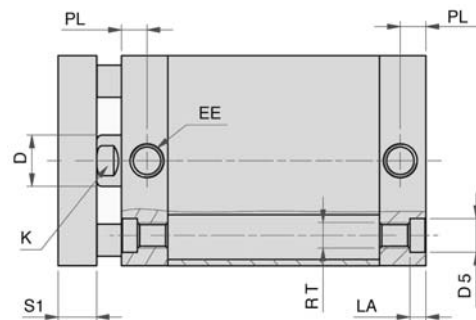
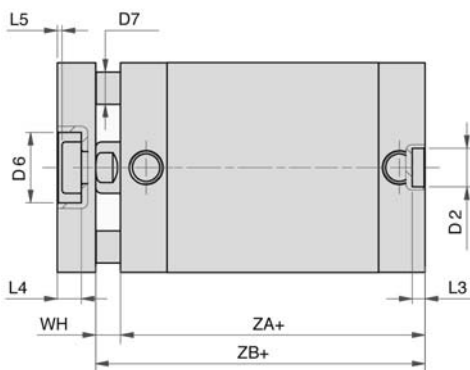
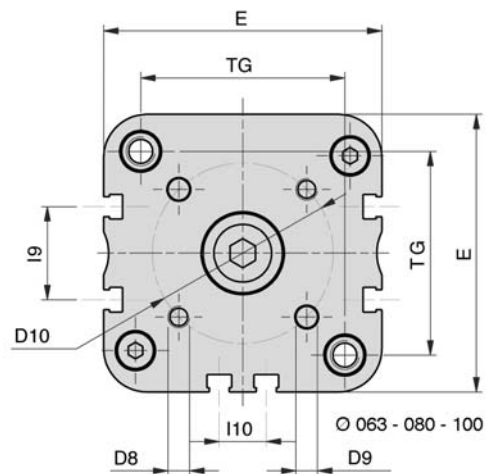
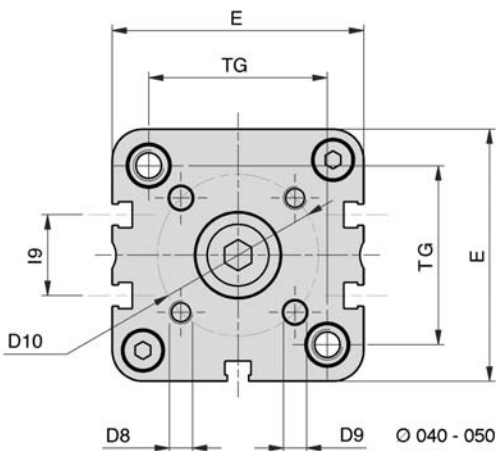
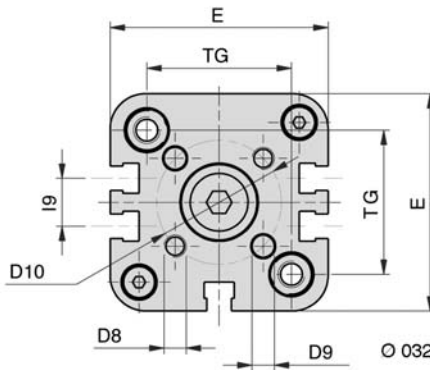
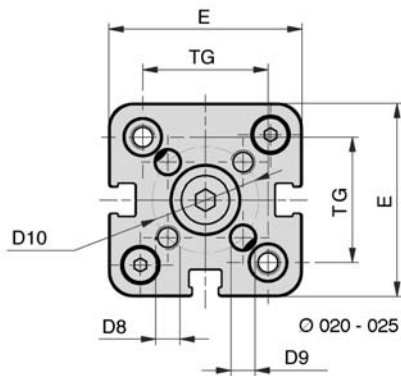
Compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



Series NYD (Type for order code: -220 = non-rotating)



Ø	Ø D	Ø D2	Ø D5	Ø D6	Ø D7	D8	Ø D9	Ø D10	E	EE	I9	I10	K	LA	L3	L4	L5	PL	RT	S1	TG	WH	ZA+	ZB+
20	10	9	7.5	11	5	M4	4	17	36	M5	-	-	8	4.5	3	5	1	7.5	M5	8	22	6.5	37	43.5
25	10	9	7.5	14	6	M5	5	22	40	M5	-	-	8	4.5	3	5	1	7.5	M5	8	26	6	39	45
32	12	9	9	17	6	M5	5	28	49	G1/8	10.8	-	10	5	3	6.5	1.5	7.5	M6	10	32.5	6.5	44	50.5
40	12	9	9	17	8	M5	5	33	54.5	G1/8	12.8	-	10	5	3	6.5	1.5	8	M6	10	38	7	45	52
50	16	12	10.5	22	10	M6	6	42	65.5	G1/8	21	-	13	5	4	7.5	1.5	8	M8	12	46.5	8	45	53
63	16	12	10.5	22	10	M6	6	50	77	G1/8	25.8	13	13	5	4	7.5	1.5	7.5	M8	12	56.5	8	49	57
80	20	12	13.5	28	14	M8	8	65	95.5	G1/8	30	18	17	3	4	9	2	8	M10	14	72	9	54	63
100	25	12	13.5	30	14	M10	10	80	113.5	G1/8	50	35	22	3	4	10	3	10.5	M10	14	89	10	67	77

+ stroke length

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

Weight in lbs. = x 2.2046

Subject to change

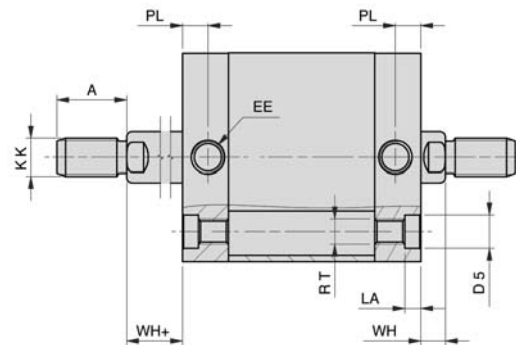
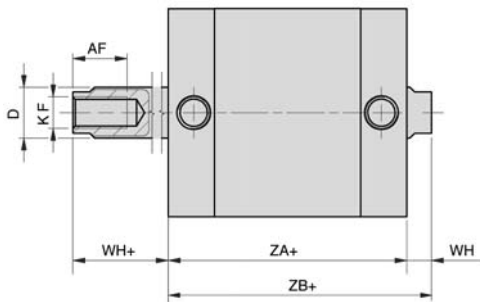
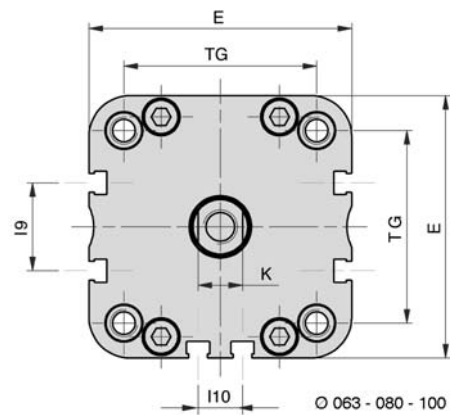
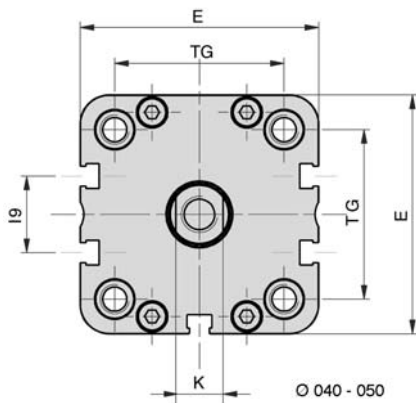
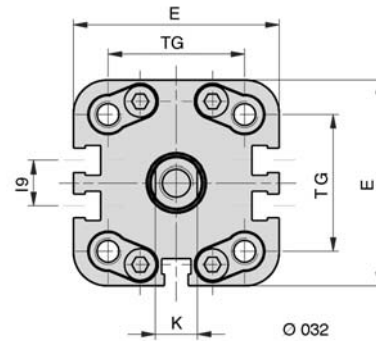
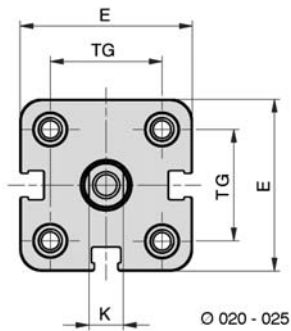
Compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



Series NYD (Type for order code: -600 = male thread, -610 = female thread)



Ø	A	AF	Ø D	Ø D5	E	EE	I9	I10	K	KF	KK	LA	PL	RT	TG	WH	WH+	ZA+	ZB+
20	16	15	10	7.5	36	M5	-	-	8	M6	M8	4.5	7.5	M5	22	6.5	6.5	37	43.5
25	16	15	10	7.5	40	M5	-	-	8	M6	M8	4.5	7.5	M5	26	6	6	39	45
32	19	16	12	9	49	G1/8	10.8	-	10	M8	M10 x 1.25	5	7.5	M6	32.5	6.5	6.5	44	50.5
40	19	16	12	9	54.5	G1/8	12.8	-	10	M8	M10 x 1.25	5	8	M6	38	7	7	45	52
50	22	17	16	10.5	65.5	G1/8	21	-	13	M10	M12 x 1.25	5	8	M8	46.5	8	8	45	53
63	22	17	16	10.5	77	G1/8	25.8	13	13	M10	M12 x 1.25	5	7.5	M8	56.5	8	8	49	57
80	28	20	20	13.5	95.5	G1/8	30	18	17	M12	M16 x 1.5	3	8	M10	72	9	9	54	63
100	28	20	25	13.5	113.5	G1/8	50	35	22	M12	M16 x 1.5	3	10.5	M10	89	10	10	67	77

+ stroke length

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

Weight in lbs. = x 2.2046

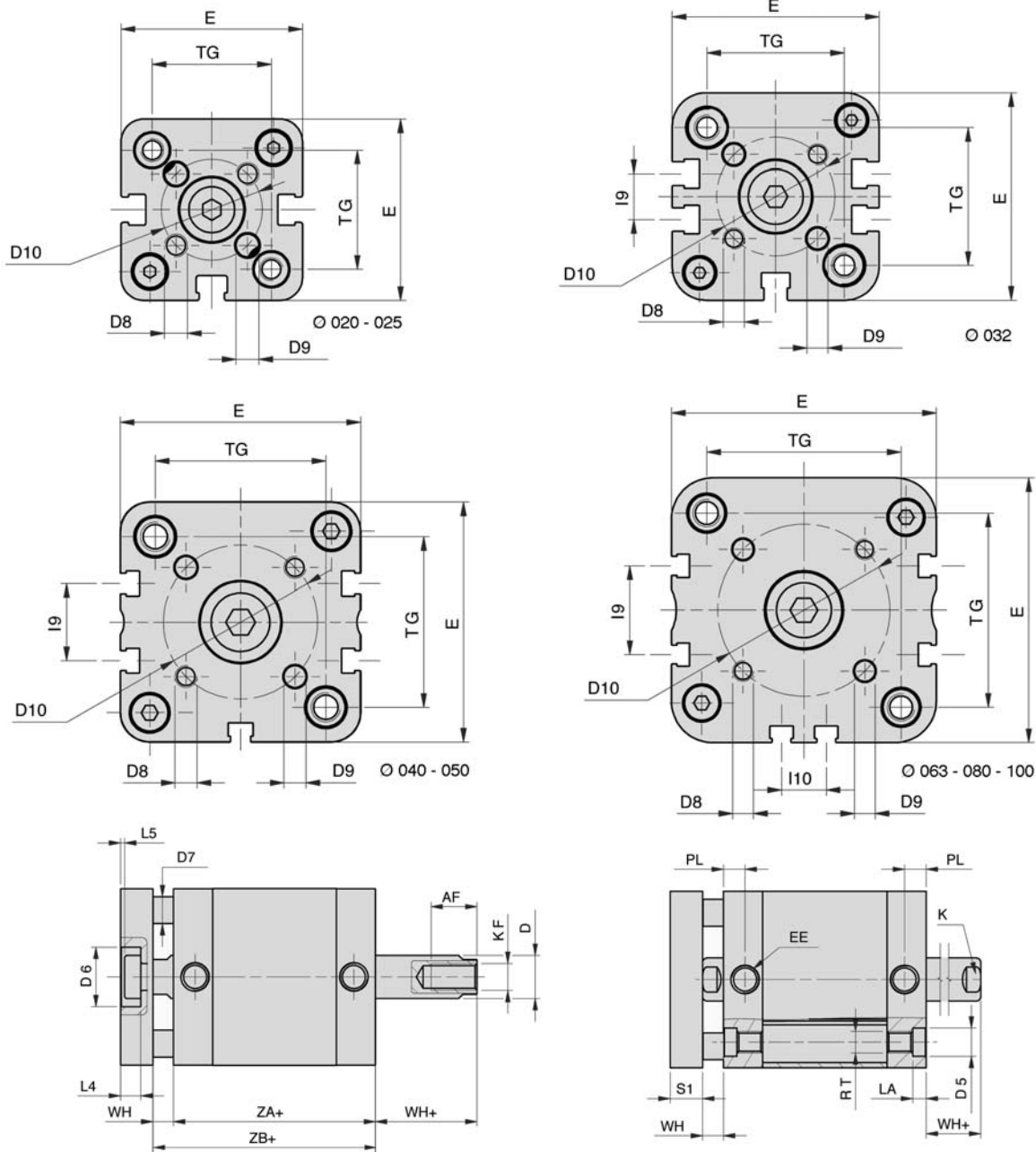
Compact cylinders series NYD

Double acting with magnetic piston, ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



Series NYD (Type for order code: -620 = non-rotating)



Ø	A	AF	Ø D	Ø D5	Ø D6	Ø D7	D8	Ø D9	Ø D10	E	EE	I9	I10	K	KF	KK	LA	L4	L5	PL	RT	S1	TG	WH	WH+	ZA+	ZB+
20	16	15	10	7.5	11	5	M4	4	17	36	M5	-	-	8	M6	M8	4.5	5	1	7.5	M5	8	22	6.5	6.5	37	43.5
25	16	15	10	7.5	14	6	M5	5	22	40	M5	-	-	8	M6	M8	4.5	5	1	7.5	M5	8	26	6	6	39	45
32	19	16	12	9	17	6	M5	5	28	49	G1/8	10.8	-	10	M8	M10x1.25	5	6.5	1.5	7.5	M6	10	32.5	6.5	6.5	44	50.5
40	19	16	12	9	17	8	M5	5	33	54.5	G1/8	12.8	-	10	M8	M10x1.25	5	6.5	1.5	8	M6	10	38	7	7	45	52
50	22	17	16	10.5	22	10	M6	6	42	65.5	G1/8	21	-	13	M10	M12x1.25	5	7.5	1.5	8	M8	12	46.5	8	8	45	53
63	22	17	16	10.5	22	10	M6	6	50	77	G1/8	25.8	13	13	M10	M12x1.25	5	7.5	1.5	7.5	M8	12	56.5	8	8	49	57
80	28	20	20	13.5	28	14	M8	8	65	95.5	G1/8	30	18	17	M12	M16x1.5	3	9	2	8	M10	14	72	9	9	54	63
100	28	20	25	13.5	30	14	M10	10	80	113.5	G1/8	50	35	22	M12	M16x1.5	3	10	3	10.5	M10	14	89	10	10	67	77

+ stroke length

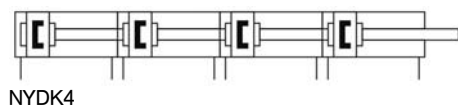
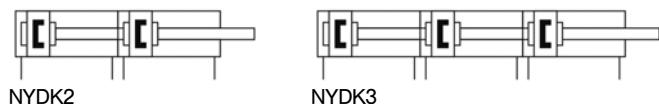
Piston Ø	20	25	32	40	50	63	80	100
Mass at 0 mm stroke (-620) in kg	0.172	0.213	0.302	0.388	0.618	0.861	1.452	2.372
add-on per 10 mm stroke	0.034	0.040	0.043	0.046	0.078	0.087	0.140	0.173

Weight in lbs. = x 2.2046

Subject to change

High force cylinder series NYDK

Double acting with magnetic piston, similar to ISO 21287
M5 to G1/8 • Piston Ø 20 to 100 mm



Order code

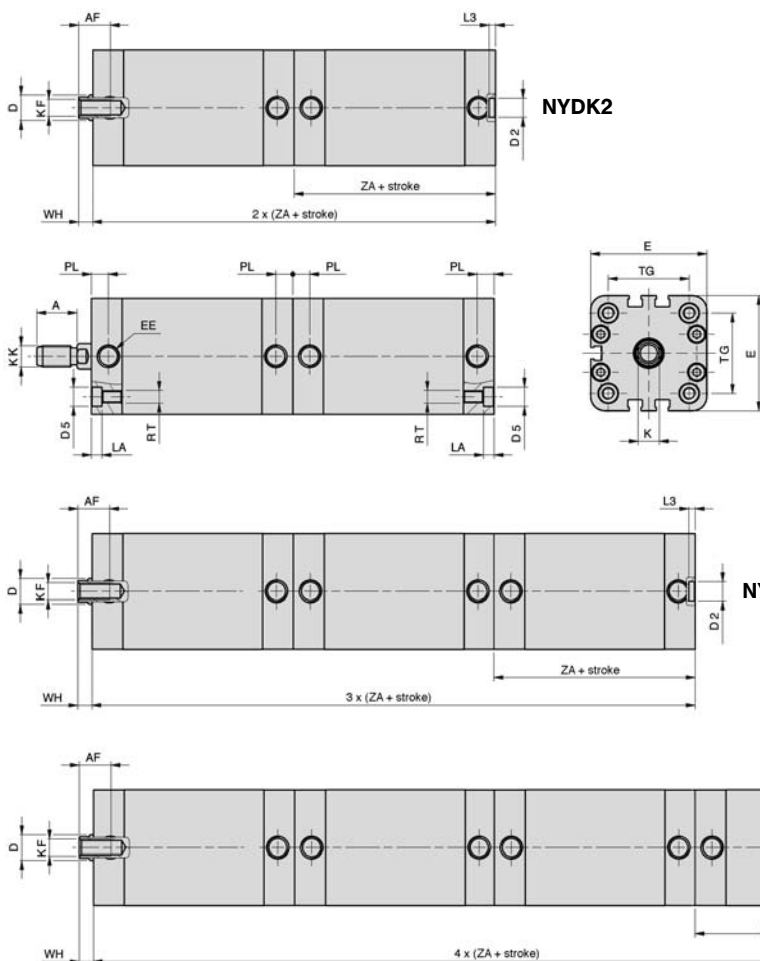
NYDK2-025-050-210

Series
 NYDK2 = 2 x force
 NYDK3 = 3 x force
 NYDK4 = 4 x force

Piston Ø **Stroke length (mm)**

Type for order code
 200 – Standard with male thread
 210 – Standard with female thread

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



Series and function

Multiplying the force will be achieved by adding several cylinders with same diameter and same stroke length.

Ø	A	AF	Ø D	Ø D2	Ø D5	E	EE	K	KF	KK	L3	LA	PL	RT	TG	WH	ZA+
20	16	15	10	9	7.5	36	M5	8	M6	M8	3	4.5	7.5	M5	22	6.5	37
25	16	15	10	9	7.5	40	M5	8	M6	M8	3	4.5	7.5	M5	26	6	39
32	19	16	12	9	9	49	G1/8	10	M8	M10 x 1.25	3	5	7.5	M6	32.5	6.5	44
40	19	16	12	9	9	54.5	G1/8	10	M8	M10 x 1.25	3	5	8	M6	38	7	45
50	22	17	16	12	10.5	65.5	G1/8	13	M10	M12 x 1.25	4	5	8	M8	46.5	8	45
63	22	17	16	12	10.5	77	G1/8	13	M10	M12 x 1.25	4	5	7.5	M8	56.5	8	49
80	28	20	20	12	13.5	95.5	G1/8	17	M12	M16 x 1.5	4	3	8	M10	72	9	54
100	28	20	25	12	13.5	113.5	G1/8	22	M12	M16 x 1.5	4	3	10.5	M10	89	10	67

+ stroke length

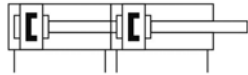
Piston Ø	20	25	32	40	50	63	80	100
NYDK2 Mass at 0 mm stroke (-210) in kg	0.274	0.339	0.457	0.574	0.852	1.242	2.066	3.534
NYDK2 Mass at 0 mm stroke (-200) in kg	0.286	0.351	0.480	0.597	0.888	1.278	2.136	3.605
add on for 1 x NYDK3 and 2 x NYDK4	0.143	0.173	0.240	0.296	0.417	0.617	1.070	1.812
add-on for each 10 mm stroke (total of all cyl. elements)	0.024	0.028	0.029	0.030	0.048	0.057	0.088	0.115

Weight in lbs. = x 2.2046

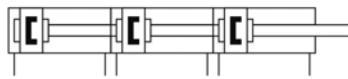
Multiple positioning cylinder series NYM

Double acting with magnetic piston, similar to ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



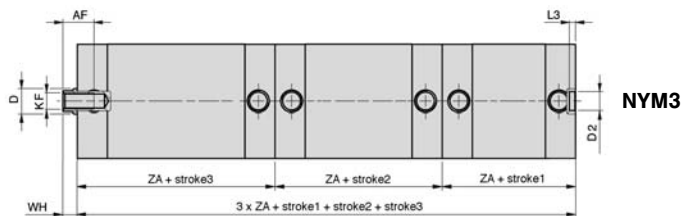
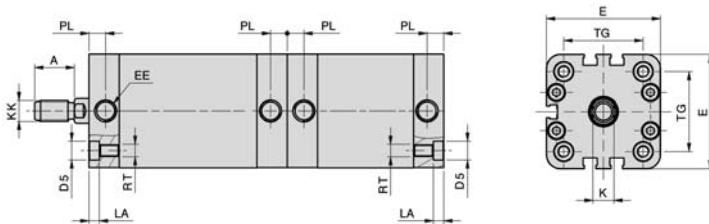
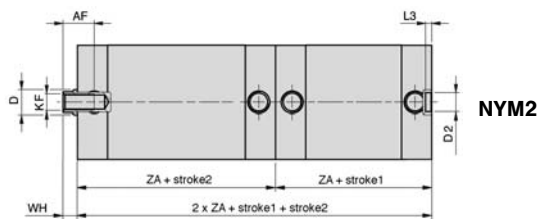
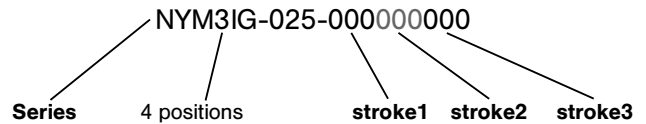
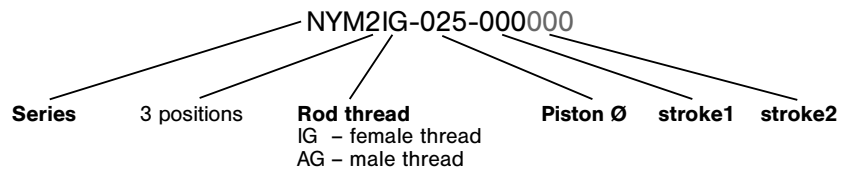
NYM2



NYM3



Order code



* More positions on request.

Series and function

Combining 2 to 3 cylinders with same piston diameter but different stroke lengths provides a max. of 4* positions.

Ø	A	AF	Ø D	Ø D2	Ø D5	E	EE	K	KF	KK	L3	LA	PL	RT	TG	WH	ZA+
20	16	15	10	9	7.5	36	M5	8	M6	M8	3	4.5	7.5	M5	22	6.5	37
25	16	15	10	9	7.5	40	M5	8	M6	M8	3	4.5	7.5	M5	26	6	39
32	19	16	12	9	9	49	G1/8	10	M8	M10 x 1.25	3	5	7.5	M6	32.5	6.5	44
40	19	16	12	9	9	54.5	G1/8	10	M8	M10 x 1.25	3	5	8	M6	38	7	45
50	22	17	16	12	10.5	65.5	G1/8	13	M10	M12 x 1.25	4	5	8	M8	46.5	8	45
63	22	17	16	12	10.5	77	G1/8	13	M10	M12 x 1.25	4	5	7.5	M8	56.5	8	49
80	28	20	20	12	13.5	95.5	G1/8	17	M12	M16 x 1.5	4	3	8	M10	72	9	54
100	28	20	25	12	13.5	113.5	G1/8	22	M12	M16 x 1.5	4	3	10.5	M10	89	10	67

+ stroke length

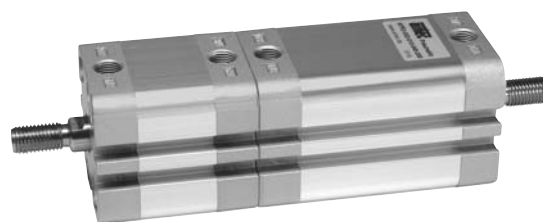
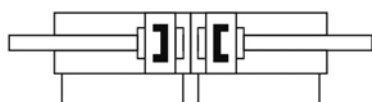
Piston Ø	20	25	32	40	50	63	80	100
NYM2IG Mass at 0 mm stroke in kg	0.274	0.339	0.457	0.574	0.852	1.242	2.066	3.534
NYM2AG Mass at 0 mm stroke in kg	0.286	0.351	0.480	0.597	0.888	1.278	2.136	3.605
add-on for each element (NYM3)	0.143	0.173	0.240	0.296	0.417	0.617	1.070	1.812
add-on for each 10 mm stroke (total of all cyl. elements)	0.024	0.028	0.029	0.030	0.048	0.057	0.088	0.115

Weight in lbs. = x 2.2046

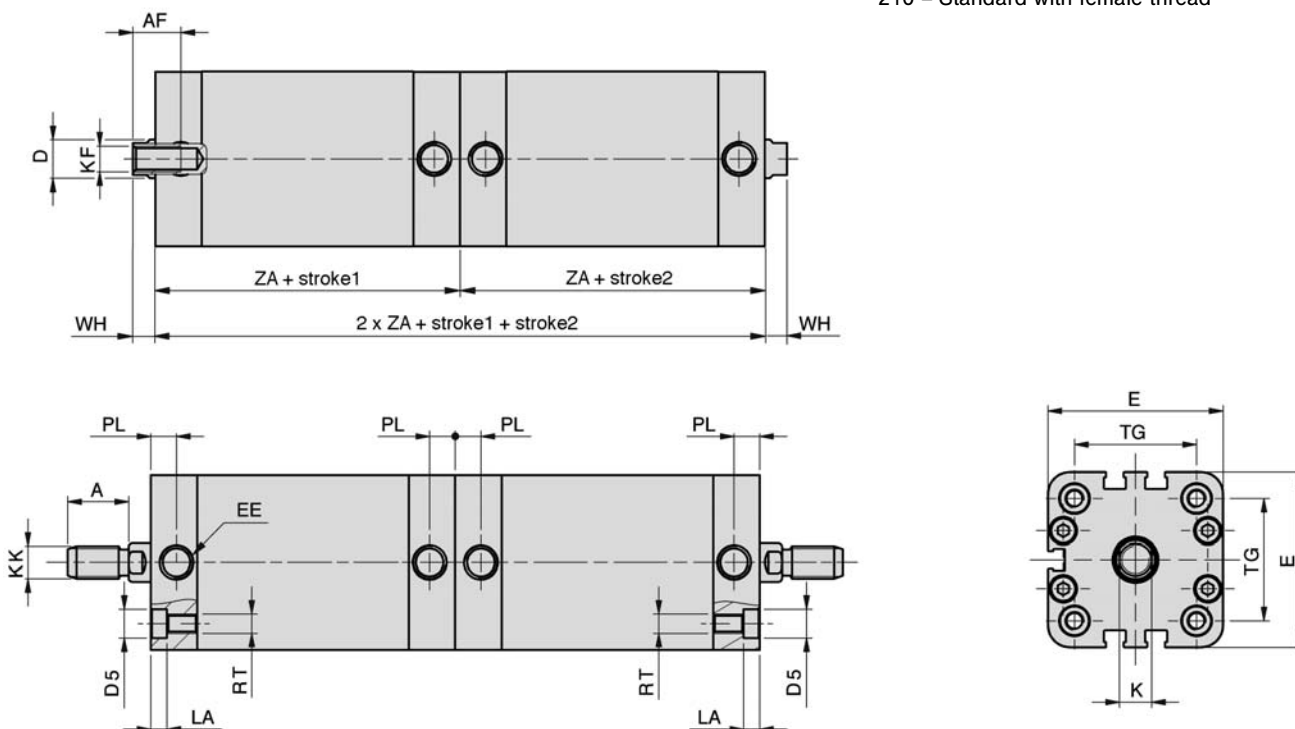
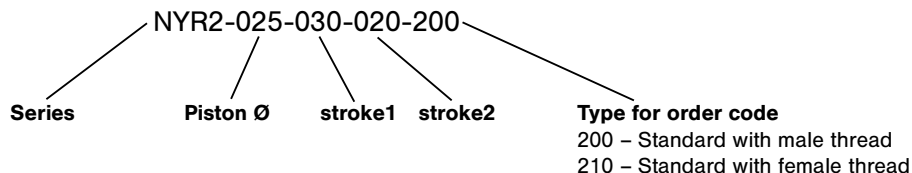
Multiple positioning cylinder series NYR

Double acting with magnetic piston, similar to ISO 21287

M5 to G1/8 • Piston Ø 20 to 100 mm



Order code



Series and function

A back to back mounting of cylinders with same piston diameter and equal or different stroke lengths provides up to 4 positions.

Ø	A	AF	Ø D	Ø D5	E	EE	K	KF	KK	L3	LA	PL	RT	TG	WH	ZA+
20	16	15	10	7.5	36	M5	8	M6	M8	3	4.5	7.5	M5	22	6.5	37
25	16	15	10	7.5	40	M5	8	M6	M8	3	4.5	7.5	M5	26	6	39
32	19	16	12	9	49	G1/8	10	M8	M10 x 1.25	3	5	7.5	M6	32.5	6.5	44
40	19	16	12	9	54.5	G1/8	10	M8	M10 x 1.25	3	5	8	M6	38	7	45
50	22	17	16	10.5	65.5	G1/8	13	M10	M12 x 1.25	4	5	8	M8	46.5	8	45
63	22	17	16	10.5	77	G1/8	13	M10	M12 x 1.25	4	5	7.5	M8	56.5	8	49
80	28	20	20	13.5	95.5	G1/8	17	M12	M16 x 1.5	4	3	8	M10	72	9	54
100	28	20	25	13.5	113.5	G1/8	22	M12	M16 x 1.5	4	3	10.5	M10	89	10	67

+ stroke length

Piston Ø	20	25	32	40	50	63	80	100
Mass at 0 mm stroke (-210) in kg	0.274	0.339	0.457	0.574	0.852	1.242	2.066	3.534
Mass at 0 mm stroke (-200) in kg	0.286	0.351	0.480	0.597	0.888	1.278	2.136	3.605
add-on for each 10 mm stroke (total of all cyl. elements)	0.024	0.028	0.029	0.030	0.048	0.057	0.088	0.115

Weight in lbs. = x 2.2046

Piston rod accessories



Rod clevis with pin
FD + RD
Page 9.211



Piston rod nut
FE + RL
Page 9.212



Flexible coupling
FK
Page 9.212



Rod eye
FO + RO
Page 9.212

Mounting accessories



Foot mount
XLB-Ø-01 (Ø 32 – 100)
Page 9.165



Flange mount
NXB-Ø-02 (Ø 20 + 25)
Page 9.165
XLB-Ø-02 (Ø 32 – 100)
Page 9.165



Swivel mount
NXB-Ø-04 (Ø 20 + 25)
Page 9.166
XLB-Ø-05 (Ø 32 – 100)
Page 9.166



Clevis mount with bushing
XLB-Ø-04 (Ø 32 – 100)
Page 9.166



Swivel mount 90°
XLB-Ø-06 (Ø 32 – 100)
Page 9.167



Clevis pin
XLB-Ø-08 (Ø 32 – 100)
Page 9.167



Bearing block
XLB-Ø-09 (Ø 32 – 100)
Page 9.168



Trunnion flange mount
XLB-Ø-11 (Ø 32 – 100)
Page 9.168



Small clevis mount with non rotating pin
XLB-Ø-14 (Ø 32 – 100)
Page 9.169

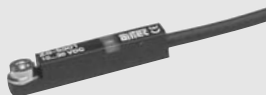


Swivel mount with spherical bearing
XLB-Ø-12 (Ø 32 – 100)
Page 9.169



Clevis mount
RC-30 (Ø 20 + 25)
Page 9.169

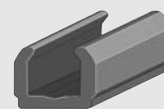
Proximity sensors



Sensors
ZS-
Page 9.220



Connecting cable
KA-
Page 9.221



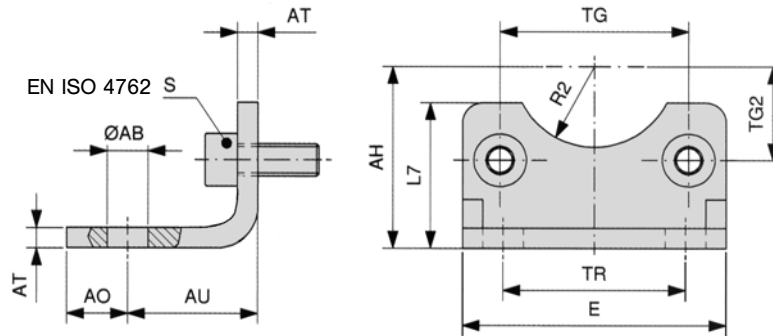
Cover for sensor groove
XLB-011 0,5 m

Mounting accessories for series NYE und NYD

M5 and G1/8 • piston Ø 20 to 100 mm



Foot mount (1 pair)



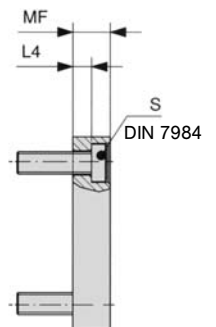
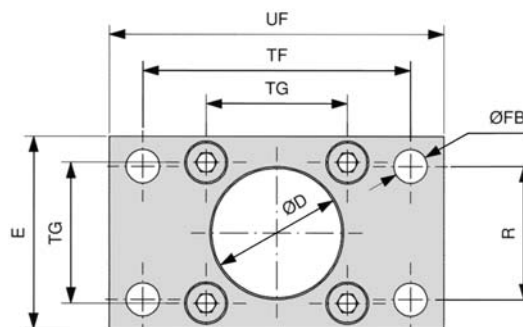
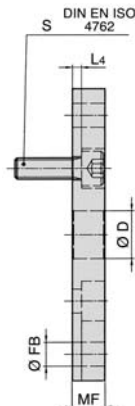
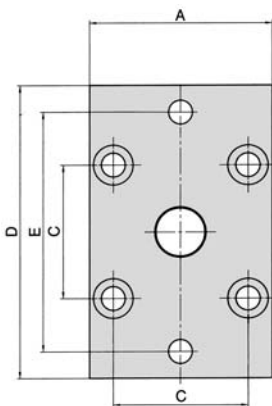
Material: steel (zinc-plated)

Order number	Ø AB	AH	AO	AU	AT	E	L7	R2	S	TG	TG2	TR
XLB-032-01	7	32	11	24	4	45	30	15	M6 x 20	32.5	16.25	32
XLB-040-01	10	36	8	28	4	52	30	17.5	M6 x 20	38	19	36
XLB-050-01	10	45	15	32	5	65	36	20	M8 x 20	46.5	23.25	45
XLB-063-01	10	50	13	32	5	75	35	22.5	M8 x 20	56.5	28.25	50
XLB-080-01	12	63	14	41	6	95	47	22.5	M10 x 20	72	36	63
XLB-100-01	14.5	71	16	41	6	115	53	27.5	M10 x 20	89	44.5	75
	H14	JS16		± 0.2				H15		± 0.2		JS14

Flange mount

Ø 20 - 25 = NXB-...

Ø 32 - 100 = XLB-...



Material: steel (zinc-plated)

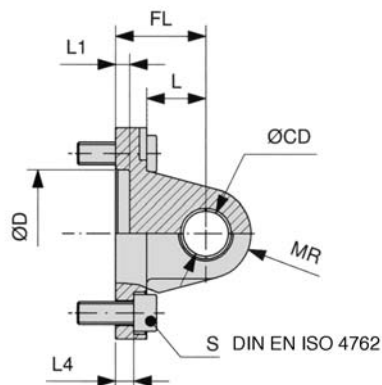
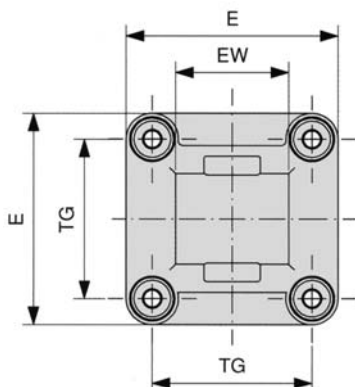
Order number	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
NXB-020-02	12	36	6.6	4.6	10	-	M5 x 20	*55	22	70
NXB-025-02	12	40	6.6	4.6	10	-	M5 x 20	*60	26	76
XLB-032-02	30	45	7	5	10	32	M6 x 20	64	32.5	80
XLB-040-02	35	52	9	5	10	36	M6 x 20	72	38	90
XLB-050-02	40	65	9	6.5	12	45	M8 x 20	90	46.5	110
XLB-063-02	45	75	9	6.5	12	50	M8 x 20	100	56.5	120
XLB-080-02	45	95	12	9	16	63	M10 x 25	126	72	150
XLB-100-02	55	115	14	9	16	75	M10 x 25	150	89	170
	H11		H13	- 0.5	JS14	JS14		*JS13 JS14	± 0.2	

Mounting accessories for series NYE und NYD

M5 and G1/8 • piston Ø 20 to 100 mm



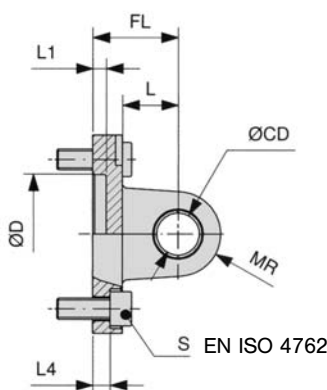
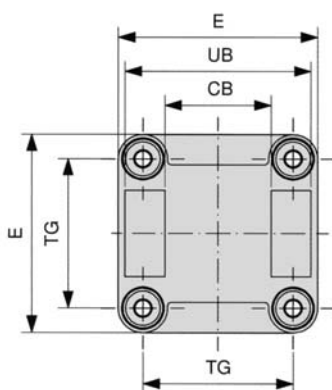
Swivel mount



Material: Al

Order number	Ø CD	Ø D	E	EW	FL	L	L1	L4	MR	S	TG
NXB-020-04	8	12	34	16	20	14	3	2.6	8	M5 x 16	22
NXB-025-04	8	12	38	16	20	14	3	2.6	8	M5 x 16	26
XLB-032-05	10	30	45	26	22	13	5	5.5	10	M6 x 20	32.5
XLB-040-05	12	35	52	28	25	16	5	5.5	12	M6 x 20	38
XLB-050-05	12	40	65	32	27	16	5	6.5	12	M8 x 20	46.5
XLB-063-05	16	45	75	40	32	21	5	6.5	16	M8 x 20	56.5
XLB-080-05	16	45	95	50	36	22	5	10	16	M10 x 25	72
XLB-100-05	20	55	115	60	41	27	5	10	20	M10 x 25	89
	H9	H11		- 0.2 - 0.6	± 0.2			± 0.5			± 0.2

Clevis mount with bushing



Order number XLB-xxx-48 includes the mounting pin.

Material: Al

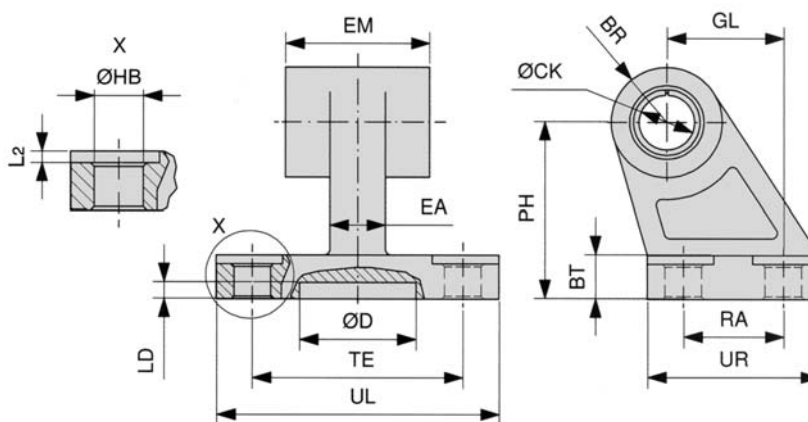
Order number	CB	Ø CD	Ø D	E	FL	L	L1	L4	MR	S	TG	UB
XLB-032-04	26	10	30	45	22	13	5	5.5	10	M6 x 20	32.5	45
XLB-040-04	28	12	35	52	25	16	5	5.5	12	M6 x 20	38	52
XLB-050-04	32	12	40	65	27	16	5	6.5	12	M8 x 20	46.5	60
XLB-063-04	40	16	45	75	32	21	5	6.5	16	M8 x 20	56.5	70
XLB-080-04	50	16	45	95	36	22	5	10	16	M10 x 25	72	90
XLB-100-04	60	20	55	115	41	27	5	10	20	M10 x 25	89	110
	H14	H9	H11		± 0.2			± 0.5			± 0.2	h13

Mounting accessories for series NYE und NYD

M5 and G1/8 • piston Ø 20 to 100 mm



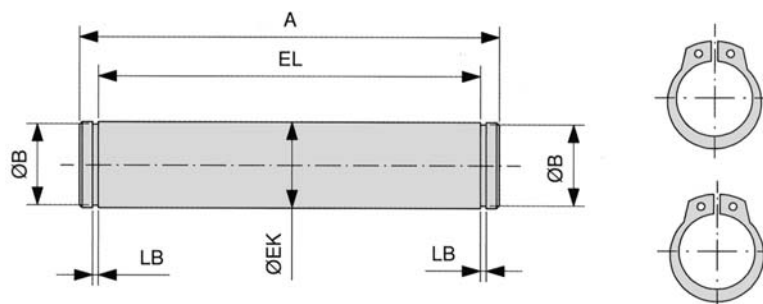
Swivel mount 90°



Material: Al

Order number	BR	BT	Ø CK	Ø D	EA	EM	GL	Ø HB	L ₂	LD	PH	RA	TE	UL	UR
XLB-032-06	10	8	10	21	10	26	21	6.6	1.6	3	32	18	38	51	31
XLB-040-06	11	10	12	21	15	28	24	6.6	1.6	3	36	22	41	54	35
XLB-050-06	13	12	12	21	16	32	33	9	1.6	3	45	30	50	65	45
XLB-063-06	15	14	16	21	16	40	37	9	1.6	3	50	35	52	67	50
XLB-080-06	15	14	16	21	20	50	47	11	2.5	3	63	40	66	86	60
XLB-100-06	19	17	20	11	20	60	55	11	2.5	3	71	50	76	96	70
			H9				JS14	H13			JS15	JS14	JS14		

Clevis pin



Material: steel (zinc-plated)

Snap rings are included.

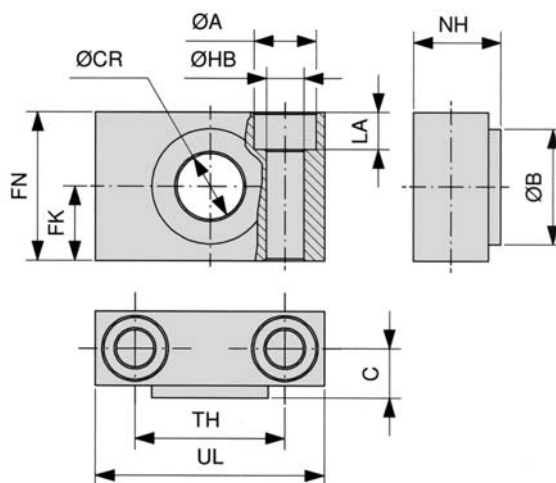
Order number	A	Ø B	Ø EK	EL	LB
XLB-032-08	53	9.6	10	46	1.1
XLB-040-08	60	11.5	12	53	1.1
XLB-050-08	68	11.5	12	61	1.1
XLB-063-08	78	15.2	16	71	1.1
XLB-080-08	98	15.2	16	91	1.1
XLB-100-08	118	19	20	111	1.3
			e8	+ 2	

Mounting accessories for series NYE und NYD

M5 and G1/8 • piston Ø 20 to 100 mm



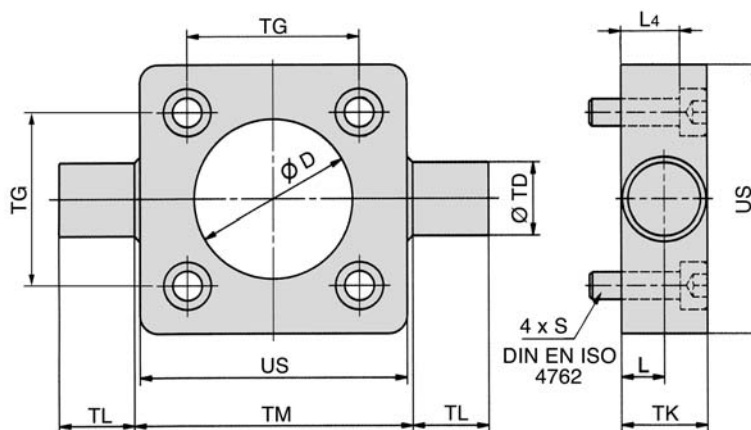
Bearing block



Order number = 1 pair
Material: steel (zinc-plated), bronze

Order number	Ø A	Ø B	C	Ø CR	FK	FN	Ø HB	LA	NH	TH	UL
XLB-032-09	11	22	10.5	12	15	30	6.6	7	18	32	46
XLB-040-09	15	28	12	16	18	36	9	9	21	36	55
XLB-063-09	18	32	13	20	20	40	11	11	23	42	65
XLB-100-09	20	39	16	25	25	50	14	13	28.5	50	75
				H9	± 0.1		H13				± 0.2

Trunnion flange mount



Material: steel (zinc-plated)

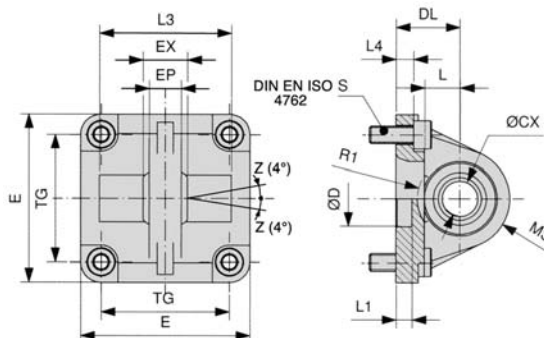
Order number	D	L	L4	S	TD	TG	TK	TL	Ø TM	US
XLB-032-11	30	6.5	8	M6 x 20	12	32.5	14	12	50	46
XLB-040-11	35	9	13	M6 x 25	16	38	19	16	63	59
XLB-050-11	40	9	11	M8 x 25	16	46.5	19	16	75	69
XLB-063-11	45	11.5	16	M8 x 30	20	56.5	24	20	90	84
XLB-080-11	45	11.5	14	M10 x 30	20	72	24	20	110	102
XLB-100-11	55	14	19	M10 x 35	25	89	29	25	132	125
	H11	+ 0.2			e9	± 0.2		h14	h14	

Mounting accessories for series NYE und NYD

M5 and G1/8 • piston Ø 20 to 100 mm



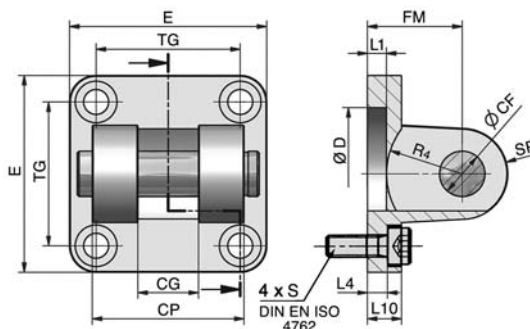
Swivel mount with spherical bearing



Material: Al

Order number	Ø CX	Ø D	DL	E	EP	EX	L	L1	L3	L4	MS	R1	S	TG
XLB-032-12	10	30	22	45	10.5	14	12	7	-	5.5	16	-	M6 x 20	32.5
XLB-040-12	12	35	25	52	12	16	15	7	-	5.5	18	-	M6 x 20	38
XLB-050-12	16	40	27	65	15	21	15	7	51	6.5	21	19	M8 x 20	46.5
XLB-063-12	16	45	32	75	15	21	20	7	-	6.5	23	-	M8 x 20	56.5
XLB-080-12	20	45	36	95	18	25	20	9	74	10	28	24	M10 x 25	72
XLB-100-12	20	55	41	115	18	25	25	9	-	10	30	-	M10 x 25	89
	H7	H11	± 0.2			± 0.1				± 0.5				± 0.2

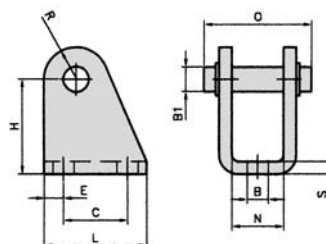
Small clevis mount with non rotating pin



Material: Al, Clevis pin steel (zinc-plated)

Order number	CF	CG	CP	D	E	FM	L1	L4	L10	R4	S	SR	TG
XLB-032-14	10	14	34	30	45	22	5	5.5	9	17	M6 x 20	10	32.5
XLB-040-14	12	16	40	35	52	25	5	5.5	9	20	M6 x 20	12	38
XLB-050-14	16	21	45	40	65	27	5	6.5	11	22	M8 x 20	14	46.5
XLB-063-14	16	21	51	45	75	32	5	6.5	11	25	M8 x 20	18	56.5
XLB-080-14	20	25	65	45	95	36	5	10	14	30	M10 x 25	20	72
XLB-100-14	20	25	75	55	115	41	5	10	14	32	M10 x 25	22	89
	F7	D10	d 12	H11		± 0.2		± 0.5					± 0.2

Clevis mount for Ø 20 + 25



Material: steel (zinc-plated)

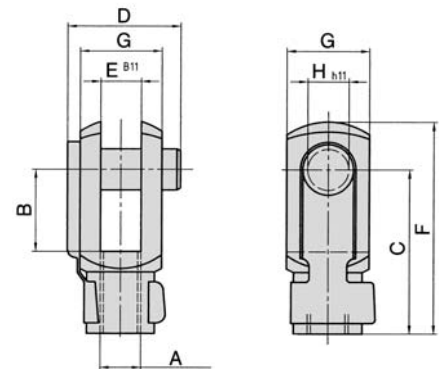
Order number	B	B ₁	C	H	L	N	O	R	S	E
RC-30	6.6	8	20	30	32	16.1	30	10	4	6

Assignment to series

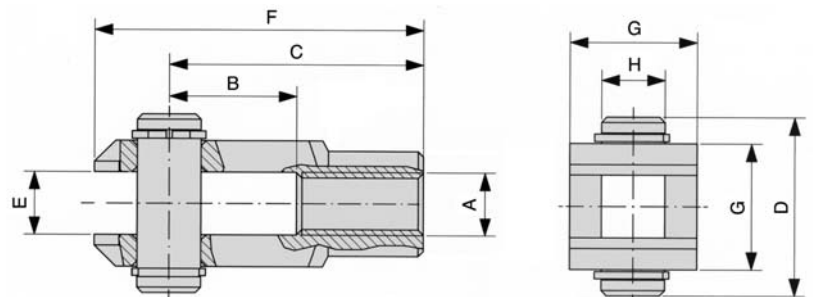
Series	Cylinder Ø	Piston rod thread	Rod clevis	Piston rod nut	Flexible coupling	Rod eye
HE and HM	Ø 8 and 10	M4	RD-10	RL-10	-	-
NXD and NXE	Ø 12	M6	RD-16	RL-16	FK-16	RO-16
HE and HM	Ø 12 and 16					
NXD and NXE	Ø 16	M8	RD-20	RL-20	FK-20	RO-20
HE and HM	Ø 20					
NYD and NYE	Ø 20 and 25					
NXD and NXE	Ø 20 to 40	M10 x 1.25	RD-25	RL-25	FK-32	RO-25
HE and HM	Ø 25					
XL	Ø 32					
NYD and NYE	Ø 32 and 40					
NXD and NXE	Ø 50 and 63	M12 x 1.25	FD-40	FE-40	FK-40	FO-40
XL	Ø 40					
NYD and NYE	Ø 50 and 63					
NXD and NXE	Ø 80	M16 x 1.5	FD-63	FE-63	FK-63	FO-63
XL	Ø 50 and 63					
NYD and NYE	Ø 80 and 100					
NXD and NXE	Ø 100	M20 x 1.5	FD-80	FE-80	FK-80	FO-80
XL	Ø 80 and 100					
XL	Ø 125	M27 x 2	FD-125	FE-125	FK-125	FO-125
XG	Ø 160 and 200	M36 x 2	FD-200	FE-200	FK-200	FO-160/200
XG	Ø 250	M42 x 2	FD-250	FE-250	-	-
XG	Ø 320	M48 x 2	FD-320	FE-320	-	-

Rod clevis with pin

Order number	A	B	C	D	E	F	G	H
RD-10	M4	8	16	11.5	4	21	8	4
RD-16	M6	12	24	16	6	31	12	6
RD-20	M8	16	32	22	8	42	16	8
RD-25	M10 x 1.25	20	40	26	10	52	20	10
RD-32	M10	20	40	26	10	52	20	10
RD-40	M12	24	48	32	12	62	24	12
RD-63	M16	32	64	36	16	83	32	16
FD-40	M12 x 1.25	24	48	32	12	62	24	12
FD-63	M16 x 1.5	32	64	40	16	83	32	16
FD-80	M20 x 1.5	40	80	50	20	105	40	20
FD-125	M27 x 2	54	110	65	30	148	55	30
FD-200	M36 x 2	72	144	84	35	188	70	35
FD-250	M42 x 2	84	168	104.5	40	232	85	40
FD-320	M48 x 2	96	192	117.5	50	265	96	50



Material: steel (zinc-plated)
spring steel

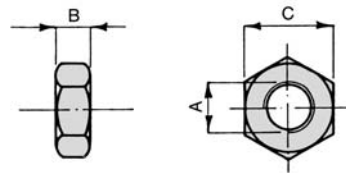


Rod clevis FD-125 to FD-320, pin with snap rings.

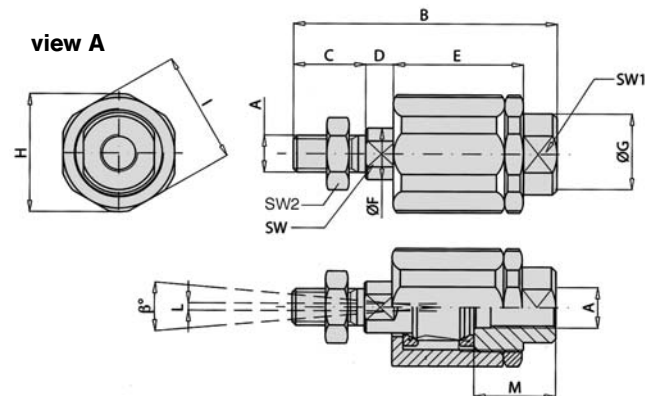
Piston rod accessories

Piston rod nut

Order number	A	B	C
RL-10	M4	3.2	7
RL-16	M6	4	10
RL-20	M8	5	13
RL-25	M10 x 1.25	5	17
RL-32	M10	5	17
RL-40	M12	6	19
RL-50/63	M16	8	24
FE-40	M12 x 1.25	6	19
FE-63	M16 x 1.5	8	24
FE-80	M20 x 1.5	10	30
FE-125	M27 x 2	13.5	41
FE-200	M36 x 2	18	55
FE-250	M42 x 2	21	65
FE-320	M48 x 2	24	75



Material: steel (zinc-plated)



Flexible coupling



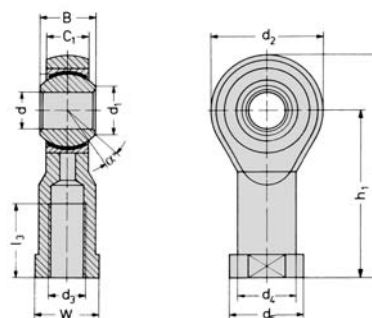
Material: steel (zinc-plated)

Order number	A	B	C	D	E	Ø F	Ø G	Ø H	I	L	M	SW	SW1	SW2	β°
FK-16	M6	35	11	2.5	17.5	6	8.5	14.5	13	1	12.5	5	7	10	6°
FK-20	M8	57	21	5	26	8	12.5	19	17	2	16	7	11	13	8°
FK-32	M10 x 1.25	71.5	20	7.5	35	14	22	32	30	2	22	12	19	17	8°
FK-33	M10	71.5	20	7.5	35	14	22	32	30	2	22	12	19	17	8°
FK-40	M12 x 1.25	75.5	24	7.5	35	14	22	32	30	2	22	12	19	19	8°
FK-41	M12	75.5	24	7.5	35	14	22	32	30	2	22	12	20	19	9°
FK-63	M16 x 1.5	104	32	10	53	22	32	45	41	2	30	20	27	24	6°
FK-80	M20 x 1.5	119	40	10	53	22	32	45	41	2	37	20	27	30	6°
FK-125	M27 x 2	147	54	10	60	32	57	70	65	2	48	24	54	41	8°
FK-200	M36 x 2	190	72	15.5	77	39	57	75	70	2	68	32	54	55	8°

Rod eye



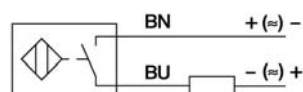
Material: steel (zinc-plated)
stainless steel



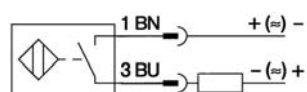
Order number	d ₃	d	d ₁	d ₂	d ₄	d ₅	B	C ₁	W	L ₃	L ₄	h ₁	α
RO-16	M6	6	8.9	20	10	13	9	6.75	11	12	40	30	13
RO-20	M8	8	10.4	24	12.5	16	12	9	14	16	48	36	14
RO-25	M10 x 1.25	10	12.9	28	15	19	14	10.5	17	20	57	43	13
RO-32	M10	10	12.9	28	15	19	14	10.5	17	20	57	43	13
RO-40	M12	12	15.4	32	17.5	22	16	12	19	22	66	50	13
RO-50	M16	16	19.3	42	22	27	21	15	22	28	85	64	15
FO-40	M12 x 1.25	12	15.4	32	17.5	22	16	12	19	22	66	50	13
FO-63	M16 x 1.5	16	19.3	42	22	27	21	15	22	28	85	64	15
FO-80	M20 x 1.5	20	24.3	50	27.5	34	25	18	30	33	102	77	14
FO-125	M27 x 2	30	34.8	70	40	50	37	25	41	51	145	110	17
FO-160/200	M36 x 2	35	37.7	80	46	58	43	28	50	56	165	125	16
FO-250	M42 x 2	40	45.1	91	53	65	49	33	55	60	187	142	16
FO-320	M48 x 2	50	56.6	117	65	75	60	45	65	65	218	162	14

Proximity sensors

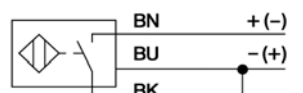
Wiring diagram



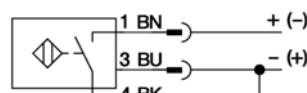
Reed
ZS-5600



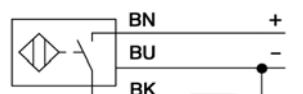
Reed
ZS-5601



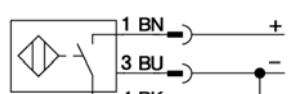
Reed
ZS-5700, ZS-5700-10



Reed
ZS-5701

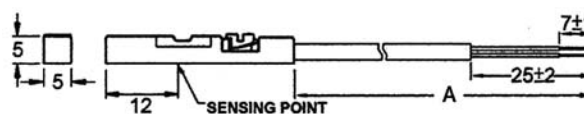


PNP
ZS-6700, ZS-7300



PNP
ZS-6701, ZS-7302 (dimensions for ZS-7302, page 9.221)

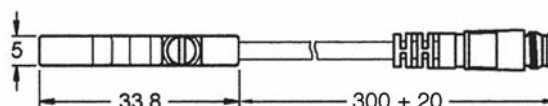
Dimensions



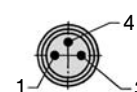
ZS-5600, ZS-6700, ZS-7300; $A = 3.000 \pm 20$

ZS-5700; $A = 5.000 \pm 20$

ZS-5700-10; $A = 10.000 \pm 20$



ZS-5601, ZS-5701, ZS-6701



Function principles

Magnetic field sensors are actuated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminum wall of the cylinder.

Mounting tip

The sensor is firmly fixed in the groove by clockwise rotation of the screw.

Proximity sensors Reed contact



Order number	ZS-5600	ZS-5601	ZS-5700	ZS-5700-10	ZS-5701
Design	2-pole Reed sensor (non-polarized) normally open		3-pole Reed sensor* normally open		
Cable	ø 2.8, PUR				
Cable cross section	n/a				
Cable length	3 m	0.3 m	5 m	10 m	0.3 m
Cable plug	-	M8	-	-	M8
Overtravel speed	n/a				
Max. absolute hysteresis	n/a				
Temperature drift	n/a				
min. absolute repeat accuracy	n/a				
Operating temperature	- 10 °C ... + 70 °C				
Degree of protection	IP 67				
Housing material	Plastic				
Switching status indication	LED red		LED yellow		
Rated operational voltage	5 ... 240 V AC/DC	5 ... 60 V AC/DC	5 ... 30 V DC		
Rated operational current I_E	3 ... 100 mA		≤ 500 mA		
DC	3 ... 100 mA		≤ 500 mA		
AC	3 ... 100 mA		≤ 500 mA		
Breaking capacity	≤ 10 W				
No-load current	n/a		≤ 10 mA		
Max. OFF-state current	0 mA				
Max. switching frequency	≤ 0.2 kHz				
Rated insulation voltage	n/a				
Short-circuit protection	no				
Max. voltage drop at I_E	≤ 2.5 V		≤ 0.1 V		
Wire breakage	no				
Reverse polarity protection	yes				
Vibration resistance	9 g (1.5 mm, 10 – 55 Hz – 10 Hz)				
Shock resistance	30 g (11 ms)				
Explosion proof	-				

* Useable as 2-wire contact, voltage 0 ... 30 V AC / 0 ... 30 V DC, LED has no function.

Proximity sensors

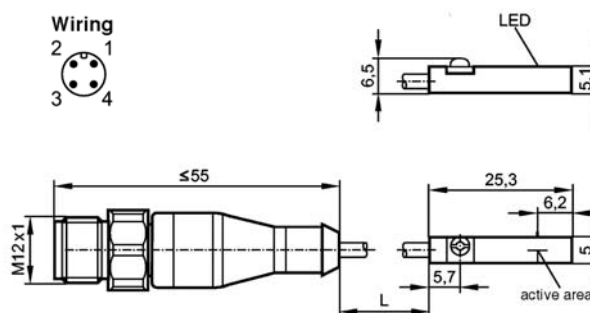
Mounting bracket for round cylinder Ø 8 – 63 mm



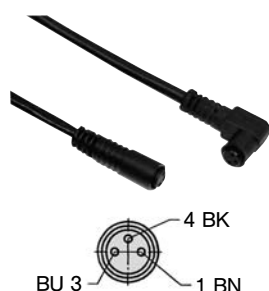
Material: metal,
plastic PA GI/6T

Order number	Piston Ø
NT-250	8 to 25 mm
NT-500	32 to 63 mm

Dimensions for ZS-7302



Connecting cable for ZS-5601, ZS-5701 and ZS-6701



Cable: PUR, black, 3 x 0.25 mm², Ø 3.9, high flexible
Operating voltage 0 ... 48 V AC/DC

Order number	Length of cable	Connection
KA-30	3 m	8 mm sensor snap-in, straight
KA-50	5 m	8 mm sensor snap-in, straight
KA-51	5 m	8 mm sensor snap-in, 90°
KA-100	10 m	8 mm sensor snap-in, straight
KA-101	10 m	8 mm sensor snap-in, 90°

Proximity sensors electronic

Order number	ZS-6700	ZS-6701	ZS-7300	ZS-7302
Design	electronic, magnet-induktive sensor, normally open PNP output			
Cable	Ø 2,8, PUR		n/a	
Cable cross section	n/a		3 x 0,14 mm ²	
Cable lengths	3 m	0,3 m	6 m	0,3 m
Cable plug	-	M8	-	M12
Overtravel speed	n/a		≤ 10 m/s	
Max. absolute hysteresis	n/a		n/a	
Temperatur drift	n/a		≤ 0,1 mm	
Min. absolute repeat accuracy	n/a		≤ 0,2 mm	
Operating temperature	- 10 °C ... + 70 °C		- 25 °C ... + 60 °C	
Degree of protection	IP 67		IP65/IP67	IP 67
Housing material	Plastic		Body: PA; Mounting band: stainless steel	
Switching status indication	LED green		LED yellow	
Rated operational voltage	5 ... 30 V DC		10 ... 30 V DC	
Rated operational current I_E	≤ 200 mA		≤ 100 mA	
DC	-		-	
AC	-		-	
Breaking capacity	6 W		n/a	
No-load current	≤ 10 mA		≤ 10 mA	
Max. OFF-state current	n/a		n/a	
Max. switching frequency	≤ 1 kHz		> 6.000 Hz	> 10.000 Hz
Rated insulation voltage	n/a		n/a	
Short-circuit protection	yes		yes	
Max. voltage drop at I_E	≤ 1,0 V		≤ 2,5 V	
Wire breakage	yes		n/a	
Reverse polarity protection	yes		yes	
Vibration resistance	9 g (1.5 mm, 10 – 55 Hz – 10 Hz)		n/a	
Shock resistance	50 g (11 ms)		n/a	
Explosion proof	-		EX II 3G Ex nA T4 X EX II 3D Ex tD A22 IP67 T125°C X	EX II 3D Ex tc IIIC T125°C Dc X