

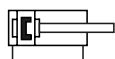
Technical details

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)
	Cylinders in accordance with 2014/34/EU (ATEX) available. (Chapter 13)

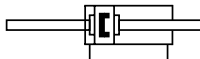


Double acting pneumatic cylinder with magnetic piston for proximity sensors and built-in cushioning rings. Standard stroke lengths in table below, additional lengths on request.

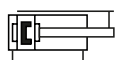
Versions



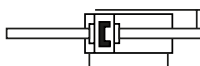
200, 210
double acting, built-in cushioning rings,
with magnetic piston



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

Series		Options	
NYD	standard	ATEX	cylinders in accordance with 2014/34/EU (ATEX)
NYDH	high temperature version		
Piston Ø		Versions	
020	20 mm	200	standard version, male thread
025	25 mm	210	standard version, female thread
032	32 mm	220	non rotating
040	40 mm	600	standard version, male thread
050	50 mm	610	standard version, female thread
063	63 mm	202	high temperature version (with magnetic piston up to 80°C effective), male thread
080	80 mm	602	high temperature version (with magnetic piston up to 80°C effective), female thread
100	100 mm	212	high temperature version (with magnetic piston up to 80°C effective), female thread
		612	high temperature version (with magnetic piston up to 80°C effective), female thread
		222	high temperature version (with magnetic piston up to 80°C effective), non rotating + female thread
		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
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 (ab Ø 32 mm)		

Not all combinations are possible and available.

Series NYD

ISO 21287, double acting

Technical data

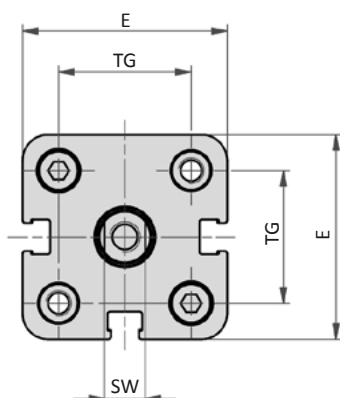
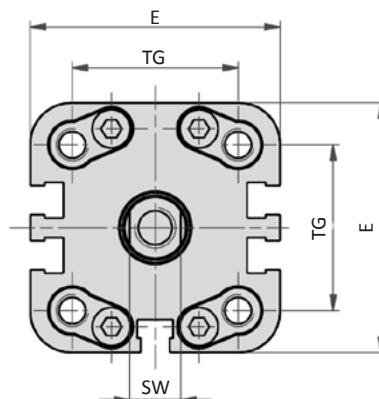
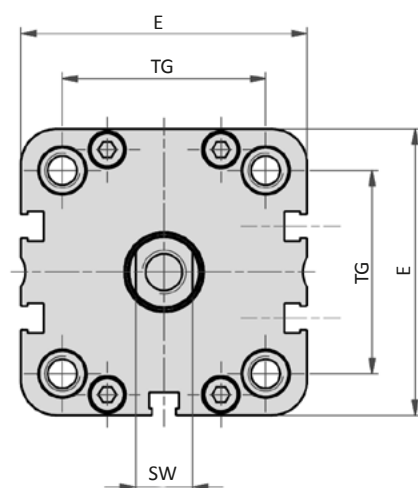
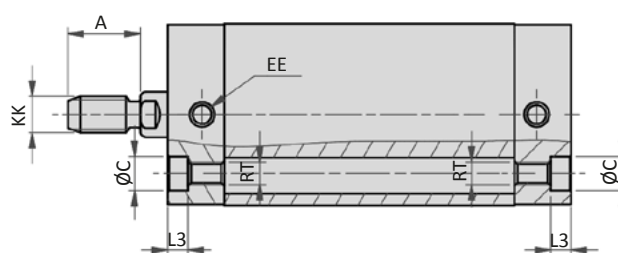
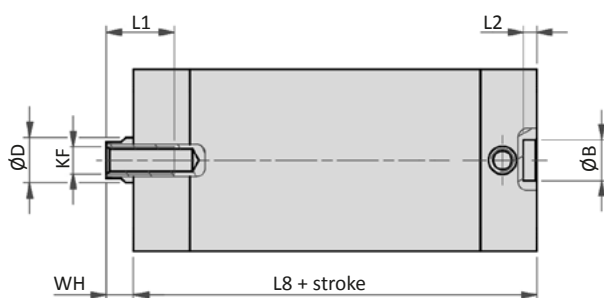
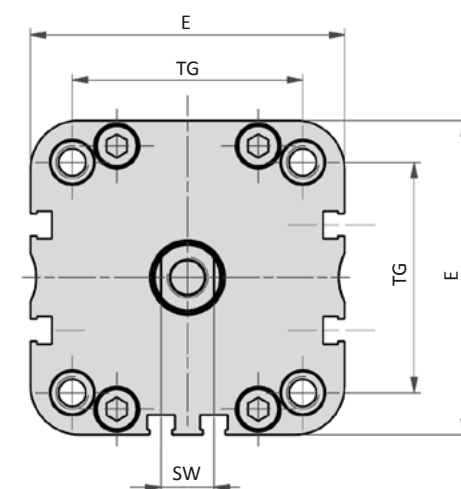
Model-no.:		NYD-020-...	NYD-025-...	NYD-032-...	NYD-040-...	NYD-050-...	NYD-063-...	NYD-080-...	NYD-100-...
Piston Ø (mm)		20	25	32	40	50	63	80	100
Force at 6 bar (N)	Extension	170	265	434	678	1060	1682	2713	4239
	Retraction	127	223	373	617	951	1574	2543	3974
Connection		M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/8
Piston rod thread	male	M8	M8	M10 x 1.25	M10 x 1.25	M12 x 1.25	M12 x 1.25	M16 x 1.5	M16 x 1.5
	female	M6	M6	M8	M8	M10	M10	M12	M12

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

Dimensions series NYD (versions 200 and 210)
Ø 20 - 25

Ø 32

Ø 40 - 50

Ø 63 - 100


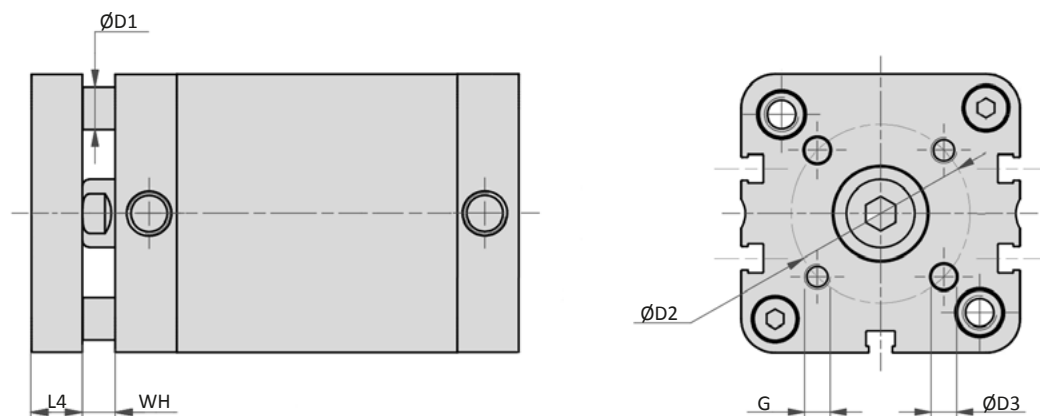
Piston Ø	A	Ø B	Ø C	Ø D	E	EE	KF	KK	L1	L2	L3	L8	RT	SW	TG	WH
20	16	9	7.5	10	36	M5	M6	M8	15	3	4.5	37	M5	8	22	6.5
25	16	9	7.5	10	40	M5	M6	M8	15	3	4.5	39	M5	8	26	6
32	19	9	9	12	49	G1/8	M8	M10 x 1.25	16	3	5	44	M6	10	32.5	6.5
40	19	9	9	12	54.5	G1/8	M8	M10 x 1.25	16	3	5	45	M6	10	38	7
50	22	12	10.5	16	65.5	G1/8	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

Series NYD

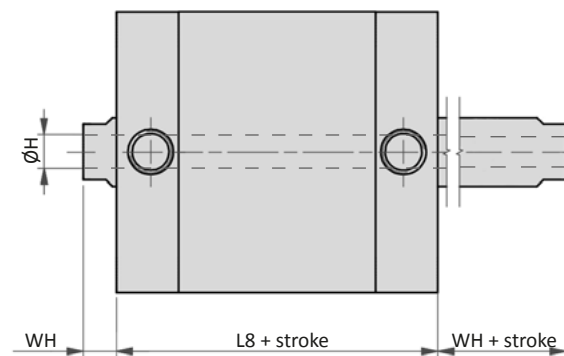
ISO 21287, double acting

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

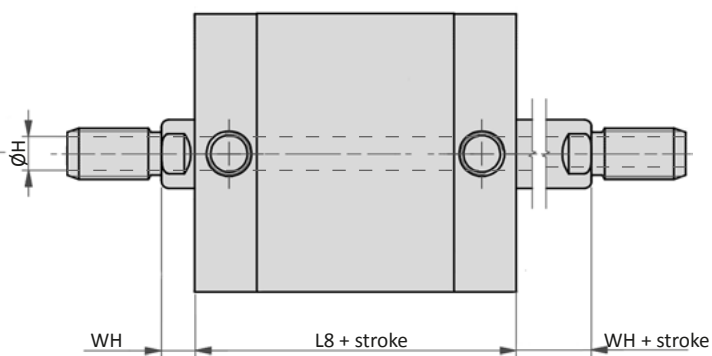
Version 220



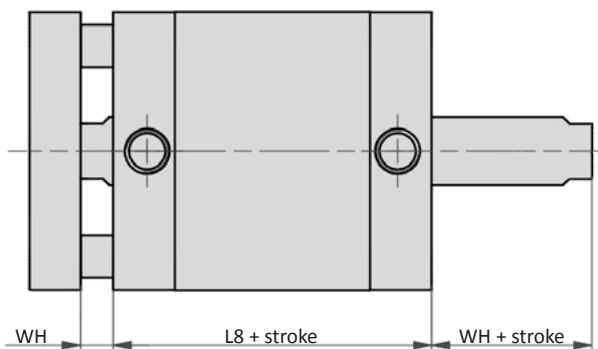
Versions 610, 810



Versions 600, 800



Version 620



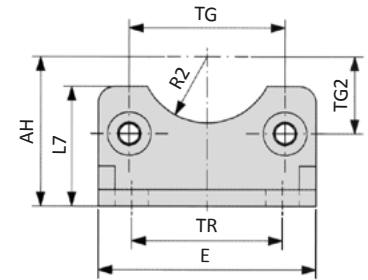
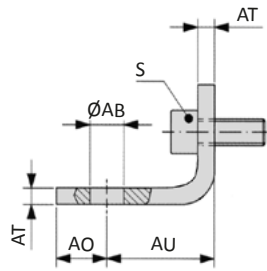
Piston Ø	Ø D1	Ø D2	Ø D3	G	Ø H*	L4	L8	WH
20	5	17	4	M4	4	8	37	6.5
25	6	22	5	M5	4	8	39	6
32	6	28	5	M5	5	10	44	6.5
40	8	33	5	M5	5	10	45	7
50	10	42	6	M6	6	12	45	8
63	10	50	6	M6	6	12	49	8
80	14	65	8	M8	8	14	54	9
100	14	80	10	M10	10	14	67	10

* only for versions 800 and 810

Series NYD

Mounting accessories

XLB-xxx-01 Foot mount



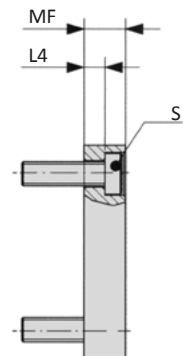
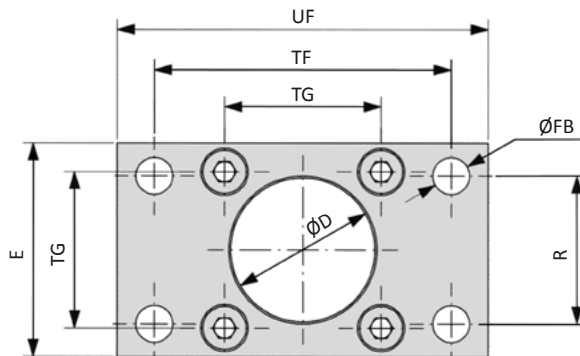
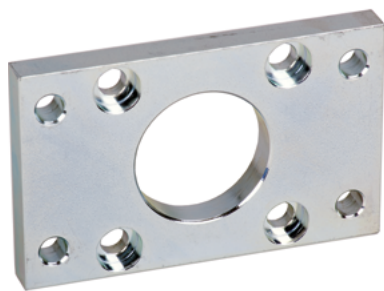
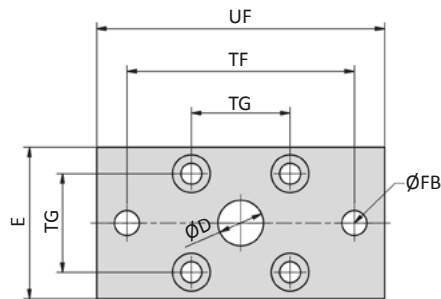
Model-no.:	Ø AB	AH	AO	AU	AT	E	L7	R2	S	TG	TG2	TR
XLB-032-01	7	32	11	24	4	45	30	15	M6 x 16	32.5	16.25	32
XLB-040-01	10	36	8	28	4	52	30	17.5	M6 x 16	38	19	36
XLB-050-01	10	45	15	32	5	65	36	20	M8 x 20	46.5	23.25	45
XLB-063-01	10	50	13	32	5	75	35	22.5	M8 x 20	56.5	28.25	50
XLB-080-01	12	63	14	41	6	95	47	22.5	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
<i>tolerances and adjustments</i>	H14	JS16		± 0.2				H15		± 0.2 *± 0.3		JS14

material: steel, zinc plated; 2 x 2 screws in accordance with EN ISO 4762 are included.

Series NYD

Mounting accessories

NXB-xxx-02, XLB-xxx-02 Flange mount



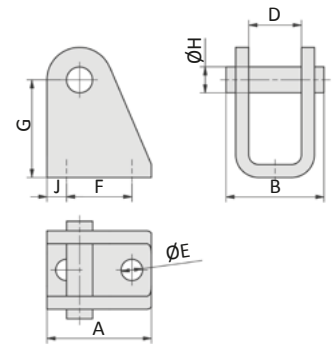
Model-no.:	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
NXB-020-02	12	36	6.6	4.6	10	-	M5 x 20	55*	22	70
NXB-025-02	12	40	6.6	4.6	10	-	M5 x 20	60*	26	76
XLB-032-02	30	45	7	5	10	32	M6 x 20	64	32.5	80
XLB-040-02	35	52	9	5	10	36	M6 x 20	72	38	90
XLB-050-02	40	65	9	6.5	12	45	M8 x 20	90	46.5	110
XLB-063-02	45	75	9	6.5	12	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
<i>tolerances and adjustments</i>	H11		H13	- 0.5	JS14	JS14		*JS13 JS14	± 0.2	

material: steel, zinc plated; 4 screws in accordance with DIN 7984 are included.

Series NYD

Mounting accessories

RC-xx Clevis mount



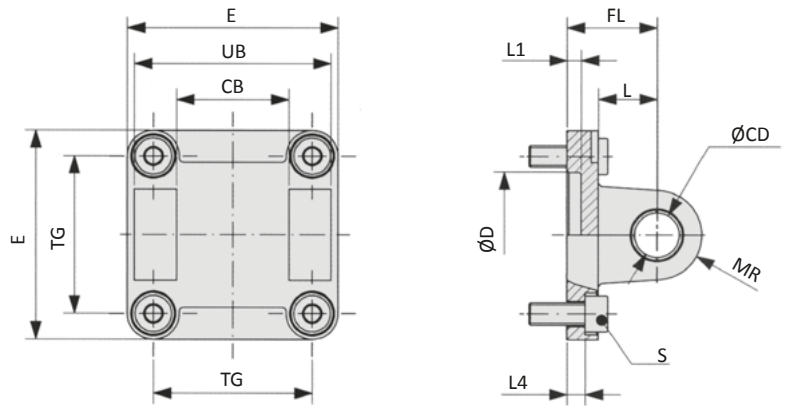
Model-no.:	A	B	D	Ø E	F	G	Ø H	J
RC-30	32	30	16.1	6.6	20	30	8	6

material: steel, zinc plated, 2 snap rings are included.

XLB-xxx-04 Clevis mount with bushing



Inclusive clevis pin
order no: **XLB-xxx-48**



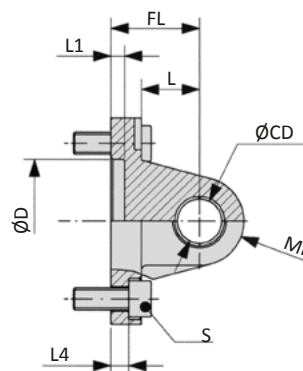
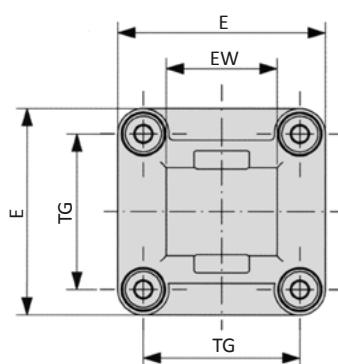
Model-no.:	CB	Ø CD	Ø D	E	FL	L	L1	L4	MR	S	TG	UB
XLB-032-04	26	10	30	45	22	13	5	5.5	10	M6 x 20	32.5	45
XLB-040-04	28	12	35	52	25	16	5	5.5	12	M6 x 20	38	52
XLB-050-04	32	12	40	65	27	16	5	6.5	12	M8 x 20	46.5	60
XLB-063-04	40	16	45	75	32	21	5	6.5	16	M8 x 20	56.5	70
XLB-080-04	50	16	45	95	36	22	5	10	16	M10 x 25	72	90
XLB-100-04	60	20	55	115	41	27	5	10	20	M10 x 25	89	110
<i>tolerances and adjustments</i>	H14	H9	H11		± 0.2			± 0.5			± 0.2	h13

materials: Al, bushing steel and PTFE; 4 screws in accordance with EN ISO 4762 are included.

Series NYD

Mounting accessories

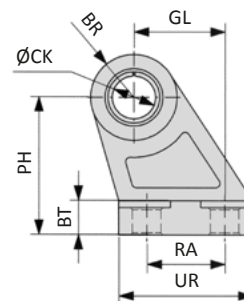
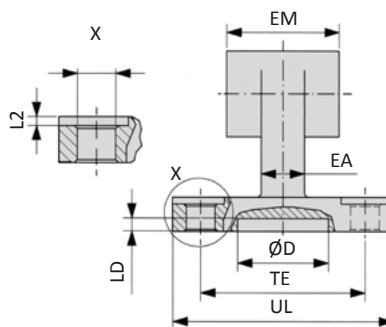
NXB-xxx-04, XLB-xxx-05 Swivel mount



Model-no.:	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
tolerances and adjustments	H9	H11			± 0.2			± 0.5			± 0.2

materials: Al, bushing steel and PTFE (only XLB); 4 screws in accordance with EN ISO 4762 are included.

XLB-xxx-06 Swivel mount 90°



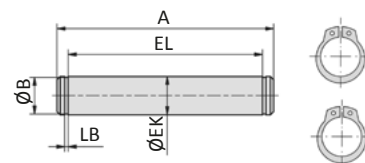
Model-no.:	BR	BT	ØCK	Ø D	EA	EM	GL	ØHB	L2	LD	PH	RA	TE	UL	UR
XLB-032-06	10	8	10	21	10	26	21	6.6	1.6	3	32	18	38	51	31
XLB-040-06	11	10	12	21	15	28	24	6.6	1.6	3	36	22	41	54	35
XLB-050-06	13	12	12	21	16	32	33	9	1.6	3	45	30	50	65	45
XLB-063-06	15	14	16	21	16	40	37	9	1.6	3	50	35	52	67	50
XLB-080-06	15	14	16	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
tolerances and adjustments			H9				JS14	H13			JS15	JS14	JS14		

material: Al, bushing steel and PTFE

Series NYD

Mounting accessories

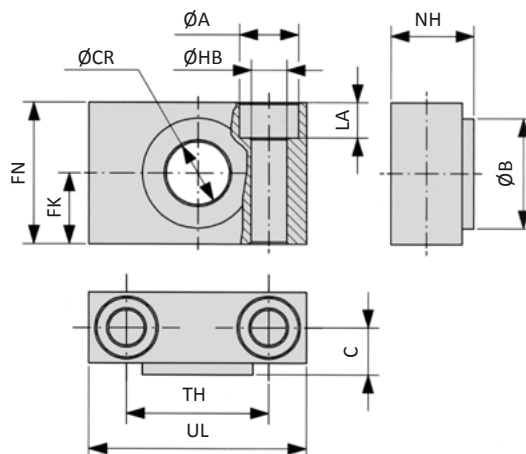
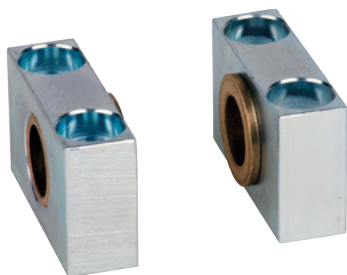
XLB-xxx-08 Clevis pin



Model-no.:	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
tolerances and adjustments			e8	+ 2	

material: steel, zinc plated; 2 snap rings are included.

XLB-xxx-09 Bearing block



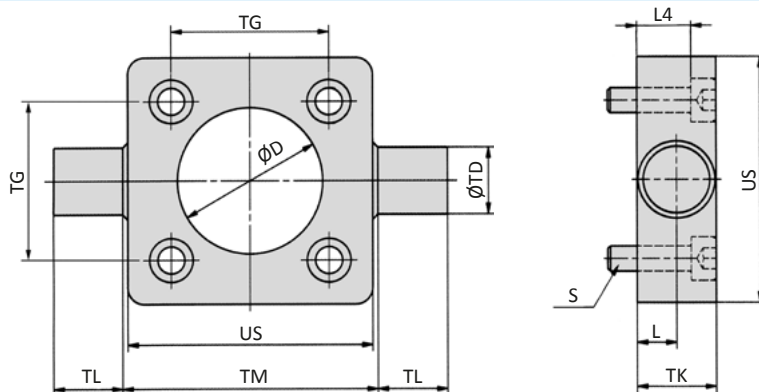
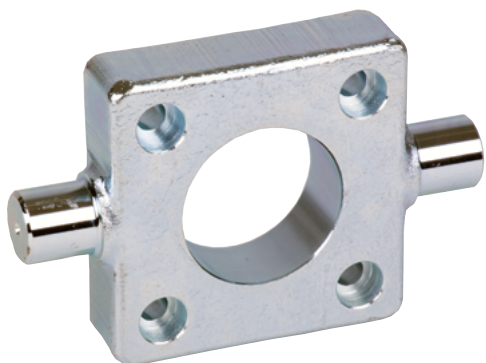
Model-no.:	Ø A	Ø B	C	Ø CR	FK	FN	Ø HB	LA	NH	TH	UL
XLB-032-09	11	22	10.5	12	15	30	6.6	7	18	32	46
XLB-040-09	15	28	12	16	18	36	9	9	21	36	55
XLB-063-09	18	32	13	20	20	40	11	11	23	42	65
XLB-100-09	20	39	16	25	25	50	14	13	28.5	50	75
tolerances and adjustments				H9	± 0.1		H13			± 0.2	

materials: Al, bronze bushing

Series NYD

Mounting accessories

XLB-xxx-11 Trunnion mount

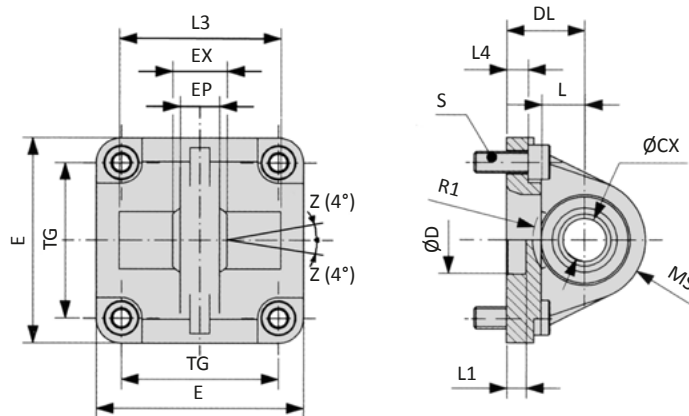
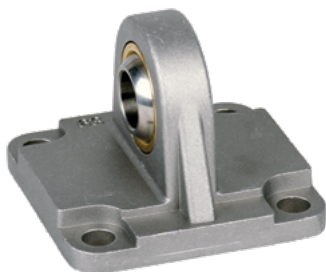


Model-no.:	Ø D	L	L4	S	Ø TD	TG	TK	TL	Ø TM	US
XLB-032-11	30	6.5	8	M6 x 20	12	32.5	14	12	50	46
XLB-040-11	35	9	13	M6 x 25	16	38	19	16	63	59
XLB-050-11	40	9	11	M8 x 25	16	46.5	19	16	75	69
XLB-063-11	45	11.5	16	M8 x 30	20	56.5	24	20	90	84
XLB-080-11	45	11.5	14	M10 x 30	20	72	24	20	110	102
XLB-100-11	55	14	19	M10 x 35	25	89	29	25	132	125

tolerances and adjustments

H 11 + 0.2 e9 ± 0.2 h14 h14
material: steel, zinc plated; 4 screws in accordance with EN ISO 4762 are included.

XLB-xxx-12 Swivel mount with spherical bearing



Model-no.:	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

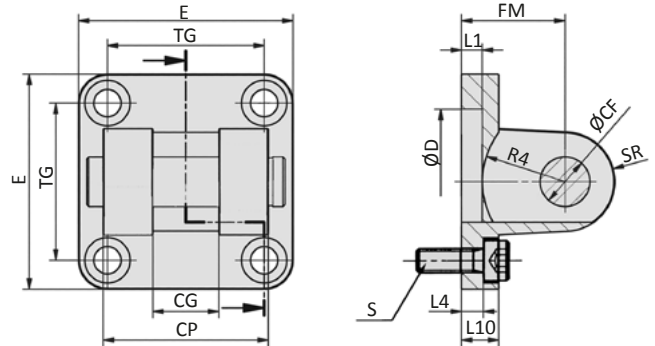
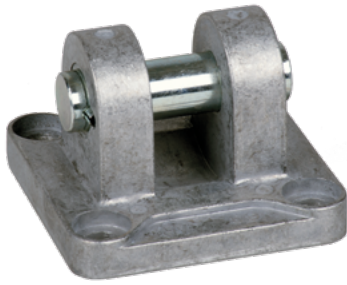
tolerances and adjustments

H7 H11 ± 0.2 ± 0.1 ± 0.5 ± 0.2
materials: Al, bearing steel, bronze bushing; 4 screws in accordance with EN ISO 4762 are included.

Series NYD

Mounting accessories

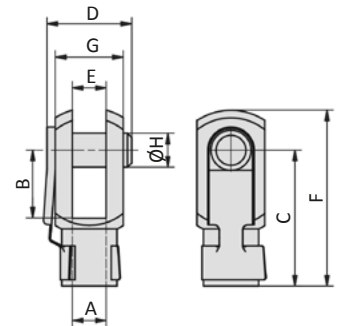
XLB-xxx-14 Clevis mount small with pin



Model-no.:	Ø CF	CG	CP	Ø 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
<i>tolerances and adjustments</i>	F7	D10	d12	H11		± 0.2		± 0.5					± 0.2

materials: Al, bushing steel and PTFE, Clevis pin aus steel, zinc plated; 4 screws in accordance with EN ISO 4762 are included.

RD-xx, FD-xx Rod clevis



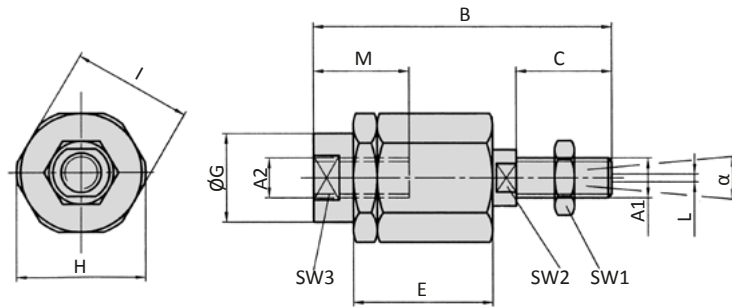
Model-no.:	for cylinder Ø	A	B	C	D	E	F	G	Ø H
RD-20	20, 25	M8	16	32	22	8	42	16	8
RD-25	32, 40	M10 x 1.25	20	40	26	10	52	20	10
FD-40	50, 63	M12 x 1.25	24	48	32	12	62	24	12
FD-63	80, 100	M16 x 1.5	32	64	40	16	83	32	16

material: steel, zinc plated

Series NYD

Mounting accessories

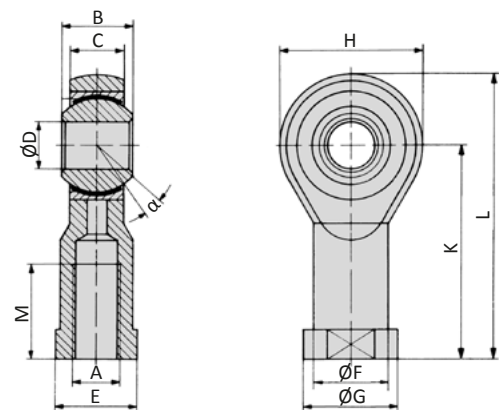
FK-xx Flexible coupling



Model-no.:	for cylinder	A1, A2	B	C	D	E	Ø G	H	I	L	M	SW1	SW2	SW3	α
FK-20	20, 25	M8	57	21	5	26	12.5	19	17	2	16	13	7	11	8°
FK-32	32, 40	M10 x 1.25	71.5	20	7.5	35	22	32	30	2	22	17	12	19	8°
FK-40	50, 63	M12 x 1.25	71.5	20	7.5	35	22	32	30	2	22	19	12	19	8°
FK-63	80, 100	M16 x 1.5	104	32	10	53	32	45	41	2	30	24	20	27	6°

material: steel, zinc plated

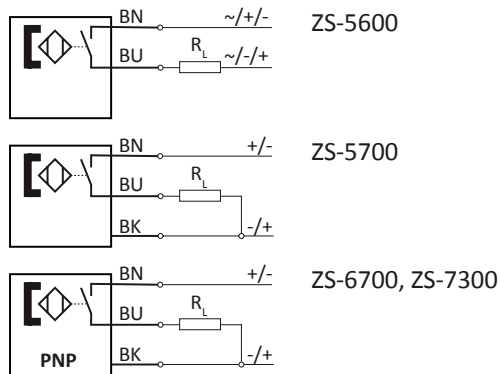
RO-xx, FO-xx Rod eye



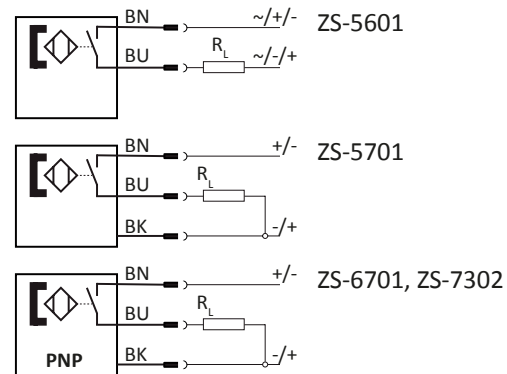
Model-no.:	for cylinder	A	B	C	Ø D	E	Ø F	Ø G	H	K	L	M	α
RO-20	20, 25	M8	12	9	8	14	12.5	16	24	36	48	16	14°
RO-25	32, 40	M10 x 1.25	14	10.5	10	17	15	19	28	43	57	20	13°
FO-40	50, 63	M12 x 1.25	16	12	12	19	17.5	22	32	50	66	22	13°
FO-63	80, 100	M16 x 1.5	21	15	16	22	22	27	42	64	85	28	15°

materials: steel, zinc plated, bearing steel, bronze bushing

Proximity sensors with cable



Proximity sensors with plug



Technical data

Model-no.:	ZS-5600	ZS-5601	ZS-5700	ZS-5701
Design	2-pole Reed sensor	2-pole Reed sensor	3-pole Reed sensor	3-pole Reed sensor
Contact function	NO	NO	NO	NO
Rated operational voltage	5 ... 240 V AC / DC	5 ... 60 V AC / DC	5 ... 30 V DC	5 ... 30 V DC
Rated operational current I_E	3 ... 100 mA	3 ... 100 mA	≤ 500 mA	≤ 500 mA
Max. voltage drop at I_E	≤ 2.5	≤ 2.5	≤ 0.1	≤ 0.1
Breaking capacity	10 W	10 W	10 W	10 W
Cable length	3 m	0.3 m with M8 connection	5 m	0.3 m with M8 connection
Temperature range	-10 ... +70°C	-10 ... +70°C	-10 ... +70°C	-10 ... +70°C
Protection	IP 67	IP 67	IP 67	IP 67
Switching status indication	LED red	LED red	LED yellow	LED yellow

Model-no.:	ZS-6700	ZS-6701	ZS-7300	ZS-7302
Design	3-pole inductive	3-pole inductive	3-pole inductive	3-pole inductive
Contact function	NO	NO	NO	NO
Output	PNP	PNP	PNP	PNP
Rated operational voltage	5 ... 30 V DC	5 ... 30 V DC	10 ... 30 V DC	10 ... 30 V DC
Rated operational current I_E	≤ 200 mA	≤ 200 mA	≤ 100 mA	≤ 100 mA
Max. voltage drop at I_E	≤ 1.0	≤ 1.0	≤ 2.5	≤ 2.5
Breaking capacity	6 W	6 W	3 W	3 W
Cable length	3 m	0.3 m with M8 connection	6 m	0.3 m with M12 connection
Temperature range	-10 ... +70°C	-10 ... +70°C	-20 ... +60°C	-20 ... +60°C
Protection	IP 67	IP 67	IP 67	IP 67
Switching status indication	LED green	LED green	LED yellow	LED yellow
	-	-	II 3G Ex nA T4 II 3D Ex tD A22 IP67 T 125°C	II 3D Ex tc IIIC T125°C Dc X

Series ZS

Proximity sensors

Cable with bushing 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. It is fixed by turning the fixing screw at the sensor clockwise. The cover stripe XLB-011 (see below) can be used for protecting the sensor cable.

Cover for sensor groove

Model-no.:	XLB-011
	
Design	plastic profile, 50 cm length, blue
For series	XL, NXD, NXE, NYD, NYE, NYSE, LX