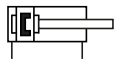


Technical details

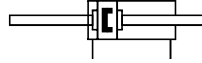
Operating pressure	1 ... 10 bar
Temperature range	-20°C ... +80°C (NYDH: -10°C ... +150°C)
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest 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)



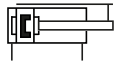
Double acting pneumatic cylinder with magnetic piston for proximity sensors and built-in cushioning rings. Standard stroke lengths in table below, additional lengths on request.

Versions


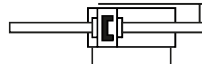
200, 210
double acting, built-in cushioning rings, with magnetic piston



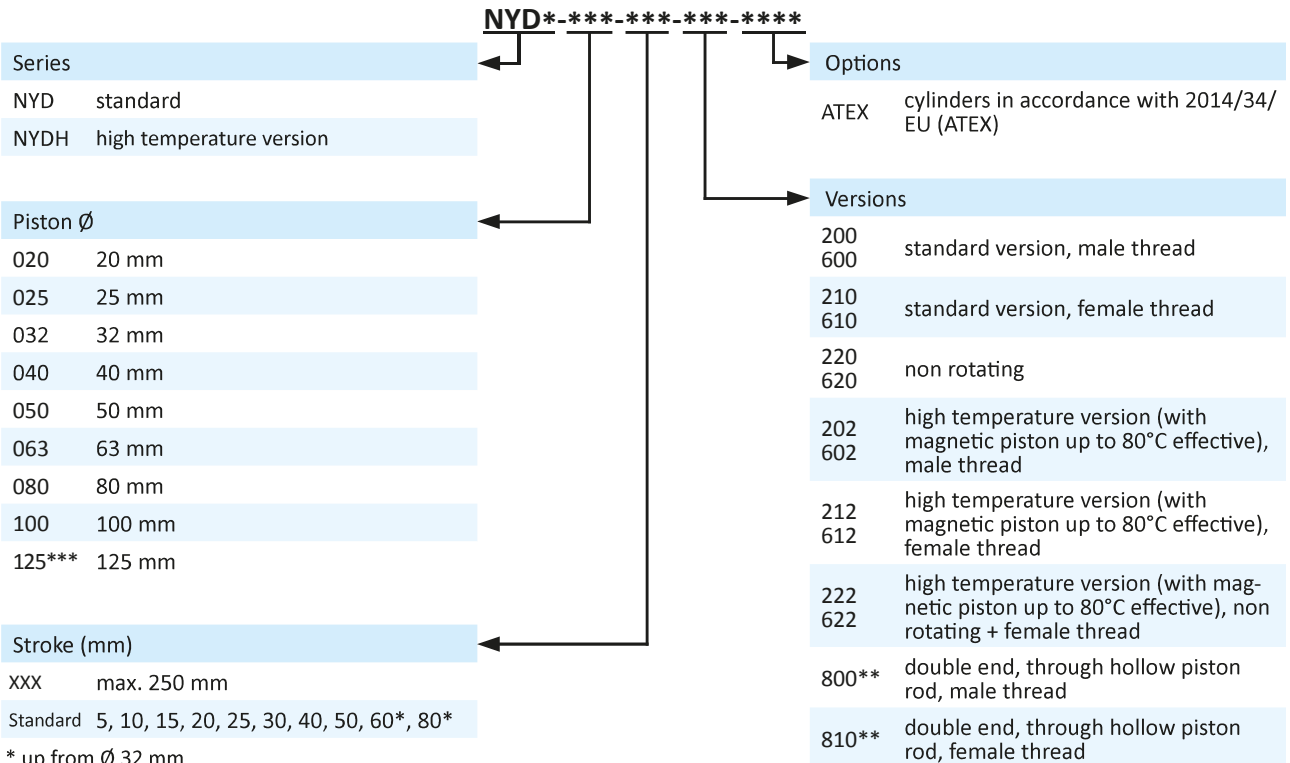
600, 610, 800, 810
double acting, double end piston rod, built-in cushioning rings, with magnetic piston



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


* 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

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-...	
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

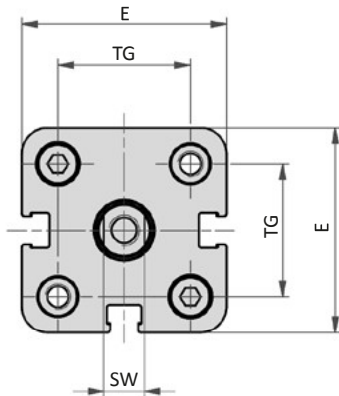
Piston Ø (mm)	20	25	32	40	50	63	80	100	
Weight (kg)	0 mm stroke (-220)	0.163	0.204	0.287	0.373	0.590	0.833	1.398	2.261
	each 10 mm stroke	0.028	0.034	0.035	0.038	0.062	0.071	0.114	0.139

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

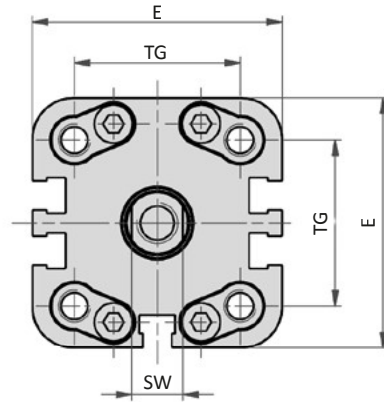
Piston Ø (mm)	20	25	32	40	50	63	80	100	
Weight (kg)	0 mm stroke (-620)	0.172	0.213	0.302	0.388	0.618	0.861	1.452	2.372
	each 10 mm stroke	0.034	0.040	0.043	0.046	0.078	0.087	0.140	0.173

Dimensions series NYD (versions 200 and 210)

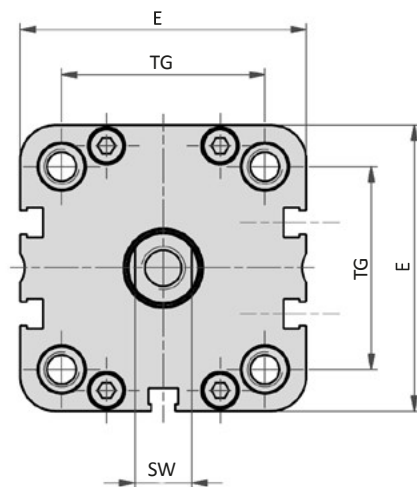
Ø 20 - 25



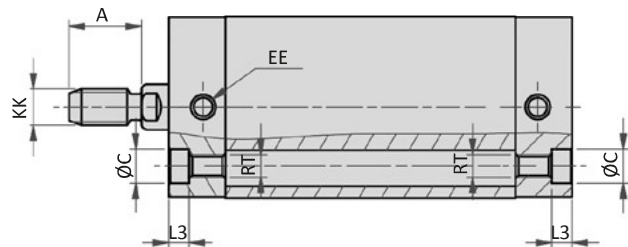
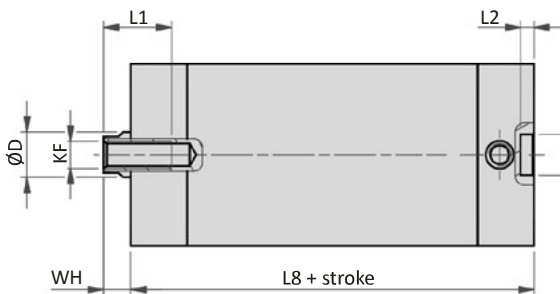
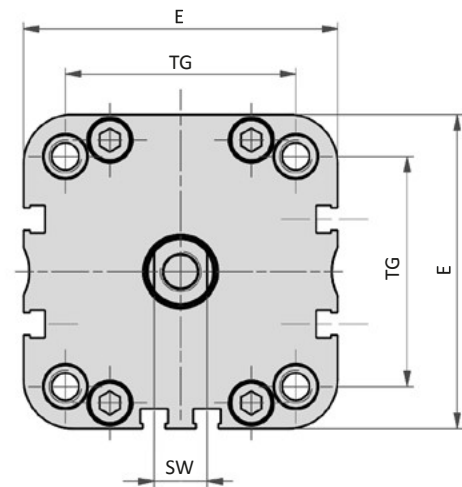
Ø 32



Ø 40 - 50



Ø 63 - 125



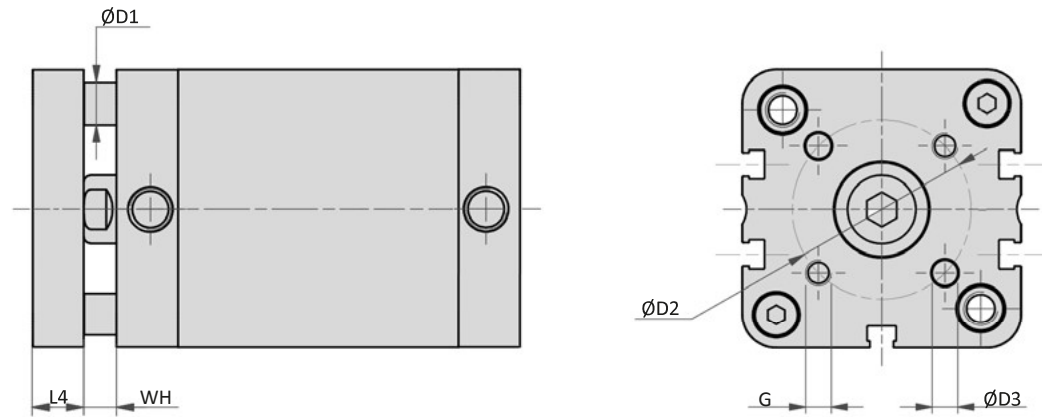
Piston Ø	A	Ø B	Ø C	Ø D	E	EE	KF	KK	L1	L2	L3	L8	RT	SW	TG	WH
20	16	9	7.5	10	36	M5	M6	M8	15	3	4.5	37	M5	8	22	6.5
25	16	9	7.5	10	40	M5	M6	M8	15	3	4.5	39	M5	8	26	6
32	19	9	9	12	49	G1/8	M8	M10 x 1.25	16	3	5	44	M6	10	32.5	6.5
40	19	9	9	12	54.5	G1/8	M8	M10 x 1.25	16	3	5	45	M6	10	38	7
50	22	12	10.5	16	65.5	G1/8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

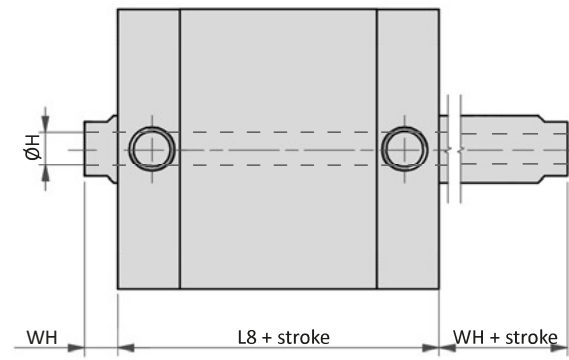
ISO 21287, double acting

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

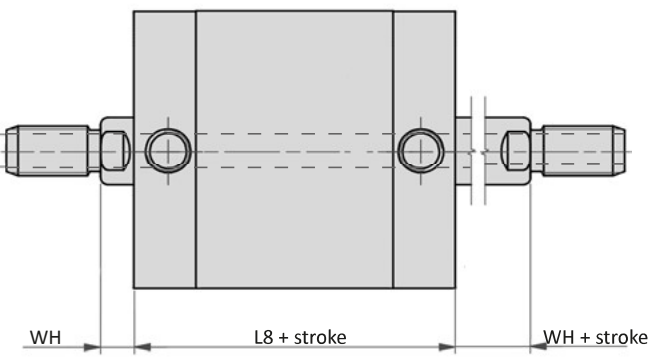
Version 220



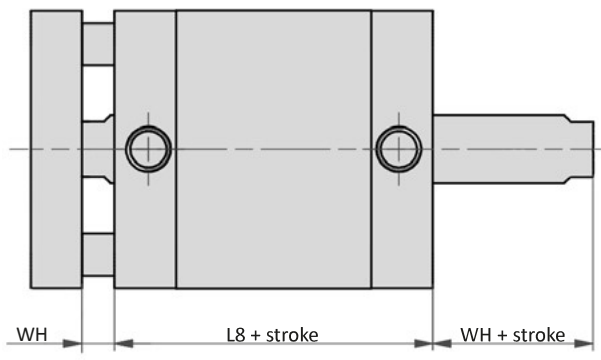
Versions 610, 810



Versions 600, 800



Version 620



Piston \varnothing	$\varnothing D1$	$\varnothing D2$	$\varnothing D3$	G	$\varnothing H^*$	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

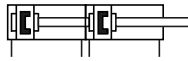
Technical details

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

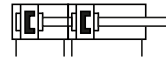


A back to back mounting of cylinders with same piston diameter is available up to 4 positions.
Combining 2 to 3 cylinders with same piston diameter but different stroke lengths provides a max. of 4* positions.
Multiplying the force will be achieved by adding several cylinders with same diameter and same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

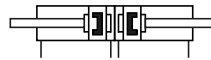
Versions



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

Series		Versions	
NYDK2	high force cylinder, 2 x force	without	only NYM2 and NYM3
NYDK3	high force cylinder, 3 x force	200	standard version, male thread
NYDK4	high force cylinder, 4 x force	210	standard version, female thread
NYM2	multiple positioning cylinder, 2 strokes, 3 positions	Stroke (mm) XXX XXX XXX stroke 1, stroke 2, stroke 3** **stroke 2 and stroke 3 only for multiple positioning cylinder	
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		

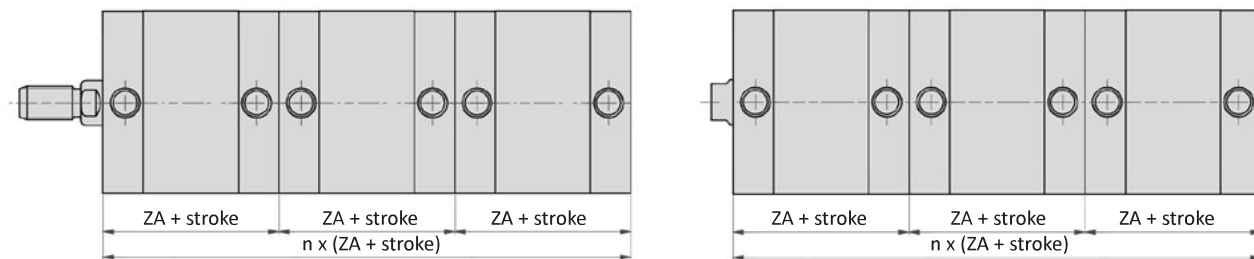
* only for NYM2 and NYM3

Series NYD

High force and multiple positioning cylinder, double acting

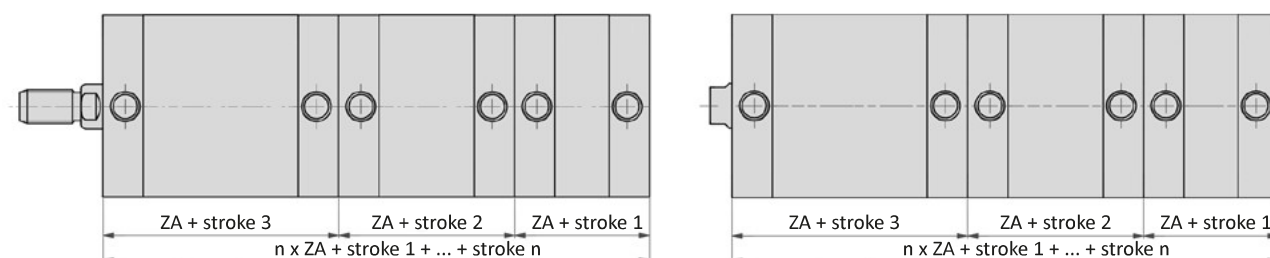
Dimensions series NYD (versions NYDK, NYM, NYR)

Version NYDK



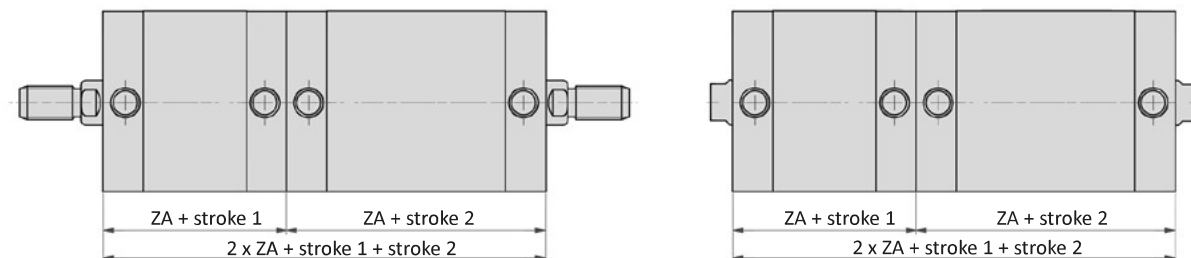
! For cylinder applications for NYDK3 and NYDK4 check mounting advices with our technical department.

Version NYM



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

Version NYR



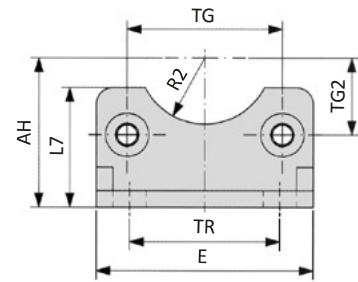
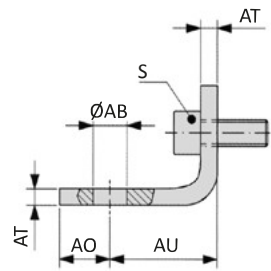
Piston Ø (mm)	20	25	32	40	50	63	80	100
ZA	37	39	44	45	45	49	54	67
0 mm stroke (-200/-AG)	0.286	0.351	0.480	0.597	0.888	1.278	2.136	3.605
0 mm stroke (-210/-IG)	0.274	0.339	0.457	0.574	0.852	1.242	2.066	3.534
Weight (kg)								
surcharge for 3rd and more cylinders	0.143	0.173	0.240	0.296	0.417	0.617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

Series NYD

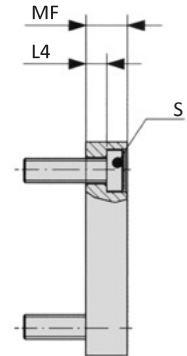
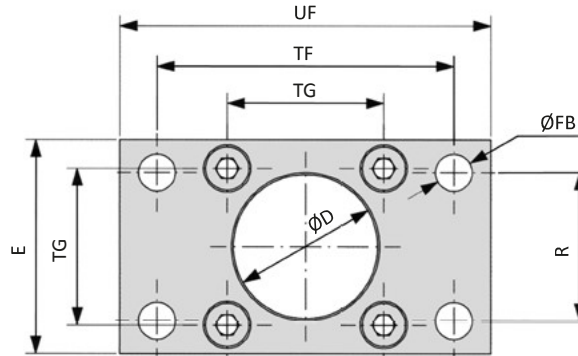
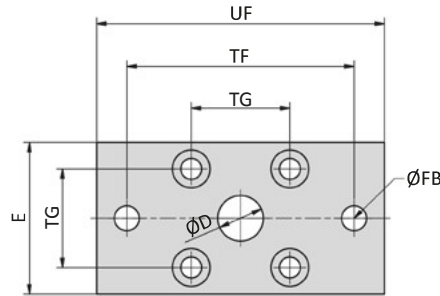
Mounting accessories

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
XLB-125-01	16.5	90	25	45	8	140	70	30	M12 x 25	110*	55	90
<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.

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


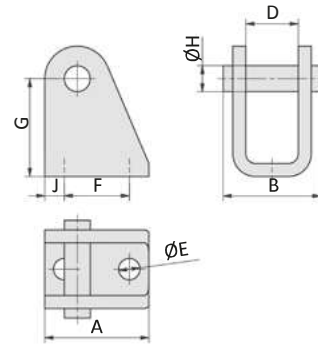
Model-no.:	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
NXB-020-02	12	36	6.6	4.6	10	-	M5 x 20	55*	22	70
NXB-025-02	12	40	6.6	4.6	10	-	M5 x 20	60*	26	76
XLB-032-02	30	45	7	5	10	32	M6 x 20	64	32.5	80
XLB-040-02	35	52	9	5	10	36	M6 x 20	72	38	90
XLB-050-02	40	65	9	6.5	12	45	M8 x 20	90	46.5	110
XLB-063-02	45	75	9	6.5	12	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
XLB-125-02	60	140	16	10.5	20	90	M12 x 25	180	110*	205
<i>tolerances and adjustments</i>	H11		H13	- 0.5	JS14	JS14		*JS13 JS14	± 0.2 *± 0.3	

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

Series NYD

Mounting accessories

RC-xx Clevis mount



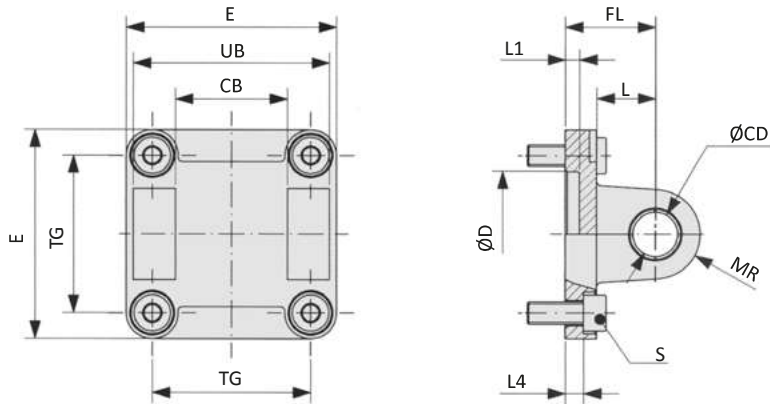
Model-no.:	A	B	D	Ø E	F	G	Ø H	J
RC-30	32	30	16.1	6.6	20	30	8	6

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

XLB-xxx-04 Clevis mount with bushing

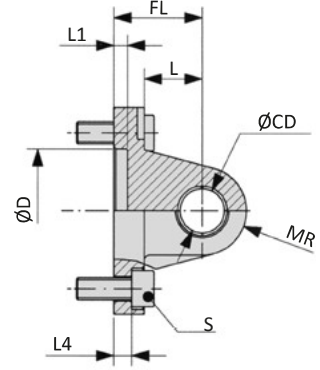
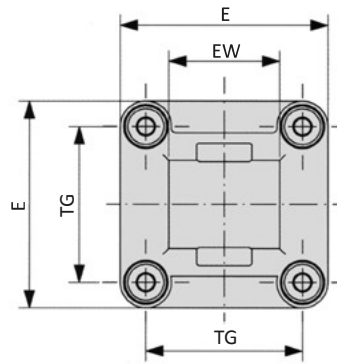


Inclusive clevis pin
order no: XLB-xxx-48



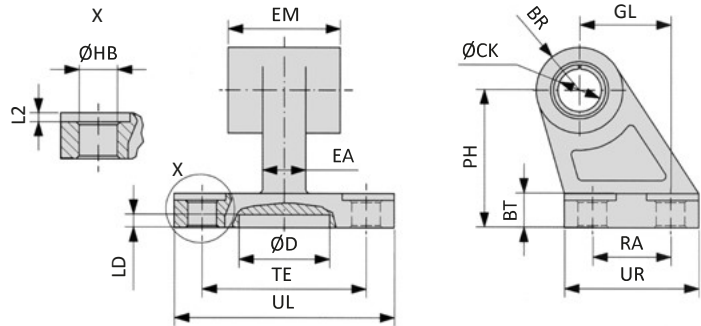
Model-no.:	CB	Ø CD	Ø D	E	FL	L	L1	L4	MR	S	TG	UB
XLB-032-04	26	10	30	45	22	13	5	5.5	10	M6 x 20	32.5	45
XLB-040-04	28	12	35	52	25	16	5	5.5	12	M6 x 20	38	52
XLB-050-04	32	12	40	65	27	16	5	6.5	12	M8 x 20	46.5	60
XLB-063-04	40	16	45	75	32	21	5	6.5	16	M8 x 20	56.5	70
XLB-080-04	50	16	45	95	36	22	5	10	16	M10 x 25	72	90
XLB-100-04	60	20	55	115	41	27	5	10	20	M10 x 25	89	110
XLB-125-04	70	25	60	140	50	30	7	10	25	M12 x 25	110*	130
<i>tolerances and adjustments</i>	H14	H9	H11		± 0.2			± 0.5			± 0.2 * ± 0.3	h13

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

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
XLB-125-05	25	60	140	70	50	30	7	10	25	M12 x 25	110*
<i>tolerances and adjustments</i>	H9	H11			± 0.2			± 0.5			± 0.2 *± 0.3

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

XLB-xxx-06 Swivel mount 90°


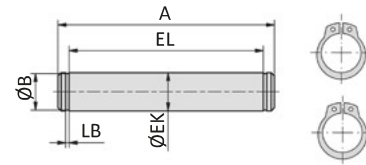
Model-no.:	BR	BT	ØCK	Ø D	EA	EM	GL	ØHB	L2	LD	PH	RA	TE	UL	UR
XLB-032-06	10	8	10	21	10	26	21	6.6	1.6	3	32	18	38	51	31
XLB-040-06	11	10	12	21	15	28	24	6.6	1.6	3	36	22	41	54	35
XLB-050-06	13	12	12	21	16	32	33	9	1.6	3	45	30	50	65	45
XLB-063-06	15	14	16	21	16	40	37	9	1.6	3	50	35	52	67	50
XLB-080-06	15	14	16	21	20	50	47	11	2.5	3	63	40	66	86	60
XLB-100-06	19	17	20	21	20	60	55	11	2.5	3	71	50	76	96	70
XLB-125-06	22.5	20	25	21	30	70	70	14	3.2	3	90	60	94	124	90
<i>tolerances and adjustments</i>			H9				JS14	H13			JS15	JS14	JS14		

Material: Al, bushing steel and PTFE

Series NYD

Mounting accessories

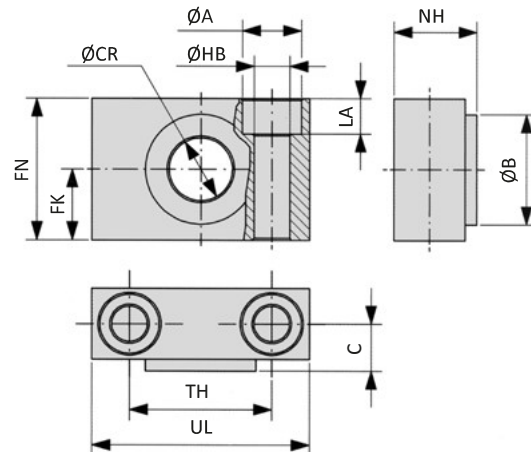
XLB-xxx-08 Clevis pin



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
XLB-125-08	139	23.9	25	132*	1.3
<i>tolerances and adjustments</i>			e8	+2 *+3	

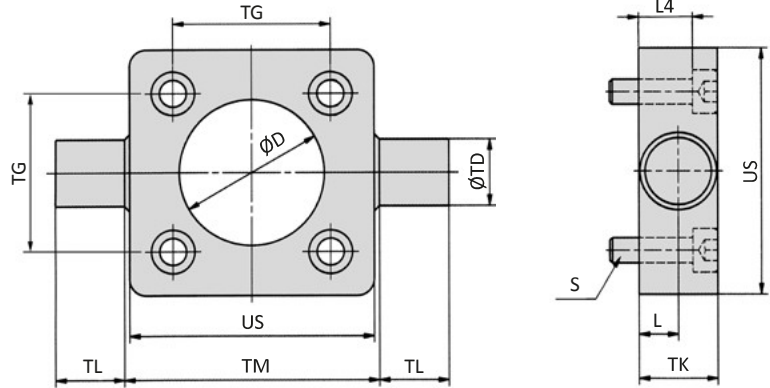
Material: steel, zinc plated; 2 snap rings are included.

XLB-xxx-09 Bearing block



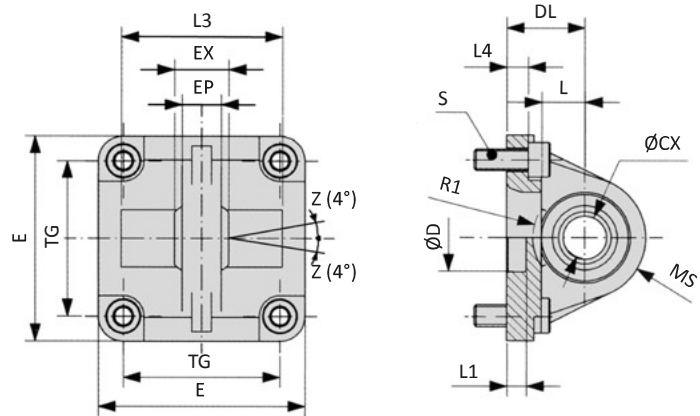
Model-no.:	Ø A	Ø B	C	Ø CR	FK	FN	Ø HB	LA	NH	TH	UL
XLB-032-09	11	22	10.5	12	15	30	6.6	7	18	32	46
XLB-040-09	15	28	12	16	18	36	9	9	21	36	55
XLB-063-09	18	32	13	20	20	40	11	11	23	42	65
XLB-100-09	20	39	16	25	25	50	14	13	28.5	50	75
<i>tolerances and adjustments</i>				H9	± 0.1		H13			± 0.2	

Materials: Al, bronze bushing

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
XLB-125-11	60	15	18	M12 x 35	25	110*	30	25	160	150
<i>tolerances and adjustments</i>	H 11	+ 0.2			e9	± 0.2 *± 0.3		h14	h14	

Material: steel, zinc plated; 4 screws in accordance with EN ISO 4762 are included.

XLB-xxx-12 Swivel mount with spherical bearing


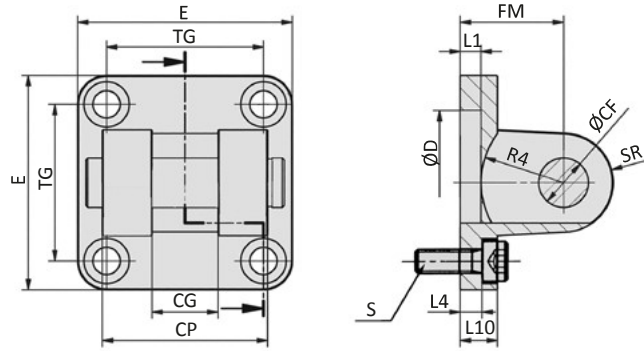
Model-no.:	Ø CX	Ø D	DL	E	EP	EX	L	L1	L3	L4	MS	R1	S	TG
XLB-032-12	10	30	22	45	10.5	14	12	7	-	5.5	16	-	M6 x 20	32.5
XLB-040-12	12	35	25	52	12	16	15	7	-	5.5	18	-	M6 x 20	38
XLB-050-12	16	40	27	65	15	21	15	7	51	6.5	21	19	M8 x 20	46.5
XLB-063-12	16	45	32	75	15	21	20	7	-	6.5	23	-	M8 x 20	56.5
XLB-080-12	20	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
XLB-125-12	30	60	50	140	25	37	30	9	-	10	40	-	M12 x 25	110*
<i>tolerances and adjustments</i>	H7	H11	± 0.2			± 0.1				± 0.5				± 0.2 *± 0.3

Materials: Al, bearing steel, bronze bushing; 4 screws in accordance with EN ISO 4762 are included.

Series NYD

Mounting accessories

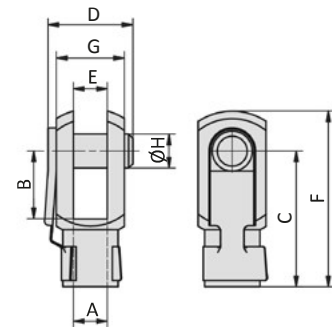
XLB-xxx-14 Clevis mount small with pin



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
XLB-125-14	30	37	97	60	140	50	7	10	20	42	M12 x 25	25	110*
<i>tolerances and adjustments</i>	F7	D10	d12	H11		± 0.2		± 0.5					± 0.2 *± 0.3

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



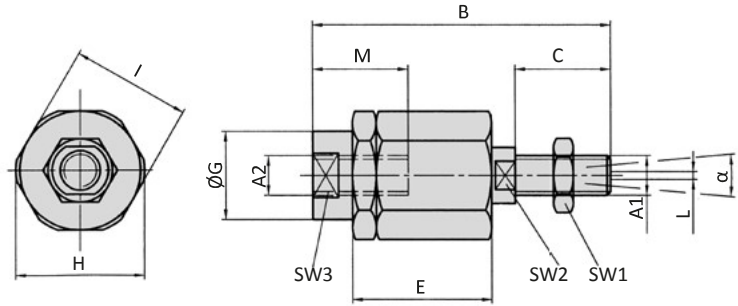
Model-no.:	for cylinder Ø	A	B	C	D	E	F	G	Ø H
RD-20	20. 25	M8	16	32	22	8	42	16	8
RD-25	32. 40	M10 x 1.25	20	40	26	10	52	20	10
FD-40	50. 63	M12 x 1.25	24	48	32	12	62	24	12
FD-63	80. 100	M16 x 1.5	32	64	40	16	83	32	16
FD-80	125	M20 x 1.5	40	80	50	20	105	40	20

Material: steel, zinc plated

Series NYD

Mounting accessories

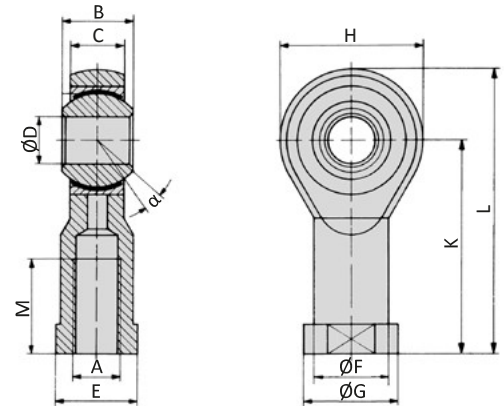
FK-xx Flexible coupling



Model-no.:	for cylinder	A1, A2	B	C	D	E	ØG	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°
FK-80	125	M20 x 1.5	119	40	10	53	32	45	41	2	37	30	20	27	6°

Material: steel, zinc plated

RO-xx, FO-xx Rod eye



Model-no.:	for cylinder	A	B	C	ØD	E	ØF	ØG	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°
FO-80	125	M20 x 1.5	25	18	20	30	27.5	34	50	77	102	33	14°

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

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Proximity sensors

