

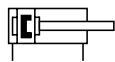
**Technical details**

<b>Operating pressure</b>	1 ... 10 bar
<b>Temperature range</b>	-20°C ... +80°C (NYDH: -10°C ... +150°C)
<b>Medium</b>	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.
<b>Materials</b>	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**



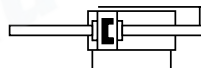
200, 210  
double acting, built-in cushioning rings, with magnetic piston



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	620	non rotating
050	50 mm	202	high temperature version (with magnetic piston up to 80°C effective), male thread
063	63 mm	602	high temperature version (with magnetic piston up to 80°C effective), male thread
080	80 mm	212	high temperature version (with magnetic piston up to 80°C effective), female thread
100	100 mm	612	high temperature version (with magnetic piston up to 80°C effective), female thread
125**	125 mm	222	high temperature version (with magnetic piston up to 80°C effective), non rotating + female thread
622		622	high temperature version (with magnetic piston up to 80°C effective), non rotating + female thread
Stroke (mm)		800	double end, through hollow piston rod, male thread
XXX	max. stroke 250 mm (up to Ø 25 mm), 400 mm (up from Ø 32 mm)	810	double end, through hollow piston rod, female thread
Standard	5, 10, 15, 20, 25, 30, 40, 50, 60*, 80*		
	* 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

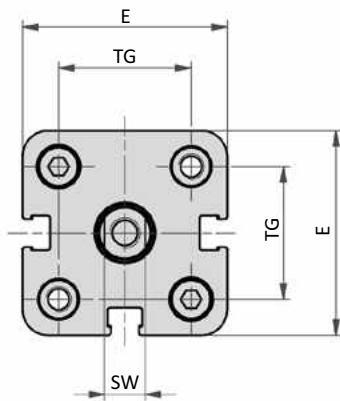
Piston Ø (mm)	20	25	32	40	50	63	80	100
Weight (kg)								
0 mm stroke (-220)	0.163	0.204	0.287	0.373	0.590	0.833	1.398	2.261
each 10 mm stroke	0.028	0.034	0.035	0.038	0.062	0.071	0.114	0.139

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

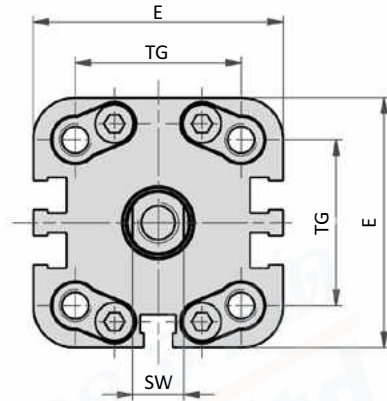
Piston Ø (mm)	20	25	32	40	50	63	80	100
Weight (kg)								
0 mm stroke (-620)	0.172	0.213	0.302	0.388	0.618	0.861	1.452	2.372
each 10 mm stroke	0.034	0.040	0.043	0.046	0.078	0.087	0.140	0.173

Dimensions series NYD (versions 200 and 210)

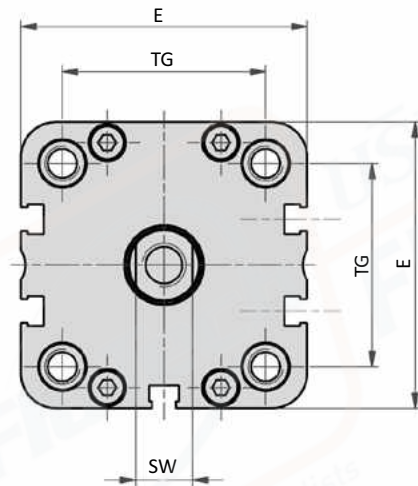
Ø 20 - 25



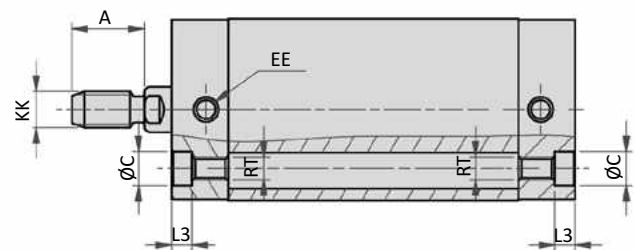
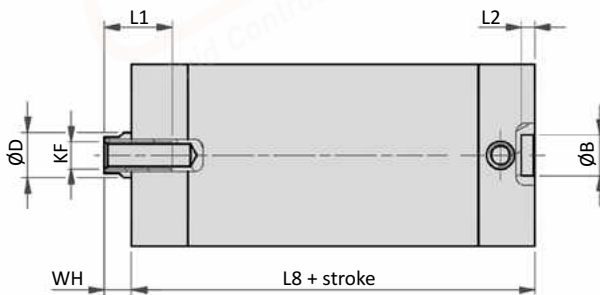
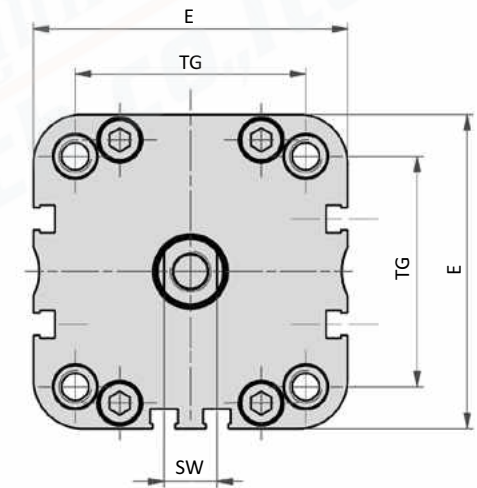
Ø 32



Ø 40 - 50



Ø 63 - 125



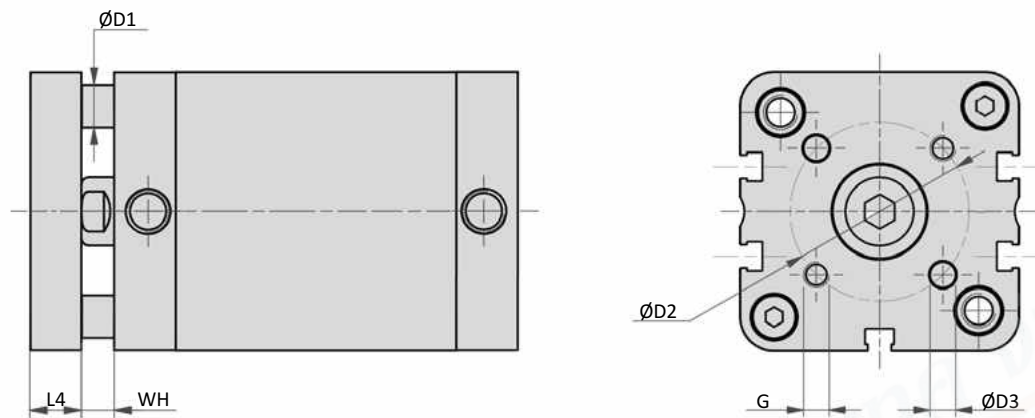
Piston Ø	A	Ø B	Ø C	Ø D	E	EE	KF	KK	L1	L2	L3	L8	RT	SW	TG	WH
20	16	9	7.5	10	36	M5	M6	M8	15	3	4.5	37	M5	8	22	6.5
25	16	9	7.5	10	40	M5	M6	M8	15	3	4.5	39	M5	8	26	6
32	19	9	9	12	49	G1/8	M8	M10 x 1.25	16	3	5	44	M6	10	32.5	6.5
40	19	9	9	12	54.5	G1/8	M8	M10 x 1.25	16	3	5	45	M6	10	38	7
50	22	12	10.5	16	65.5	G1/8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

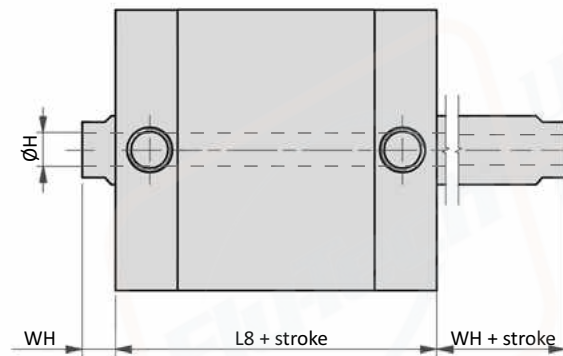
ISO 21287, double acting

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

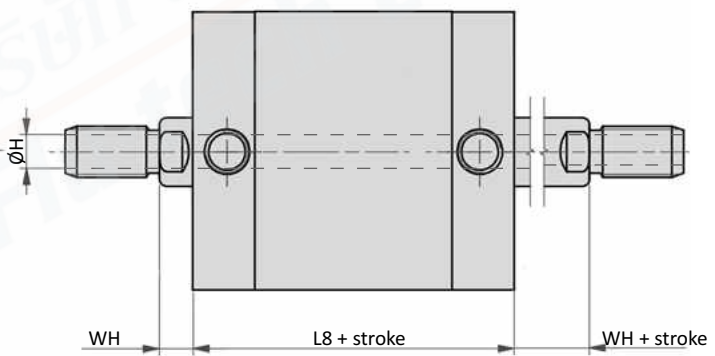
### Version 220



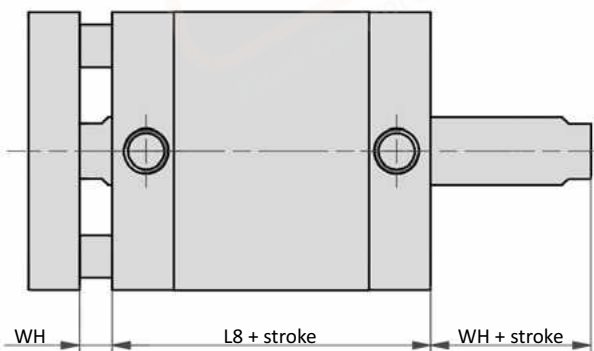
### Versions 610, 810



### Versions 600, 800



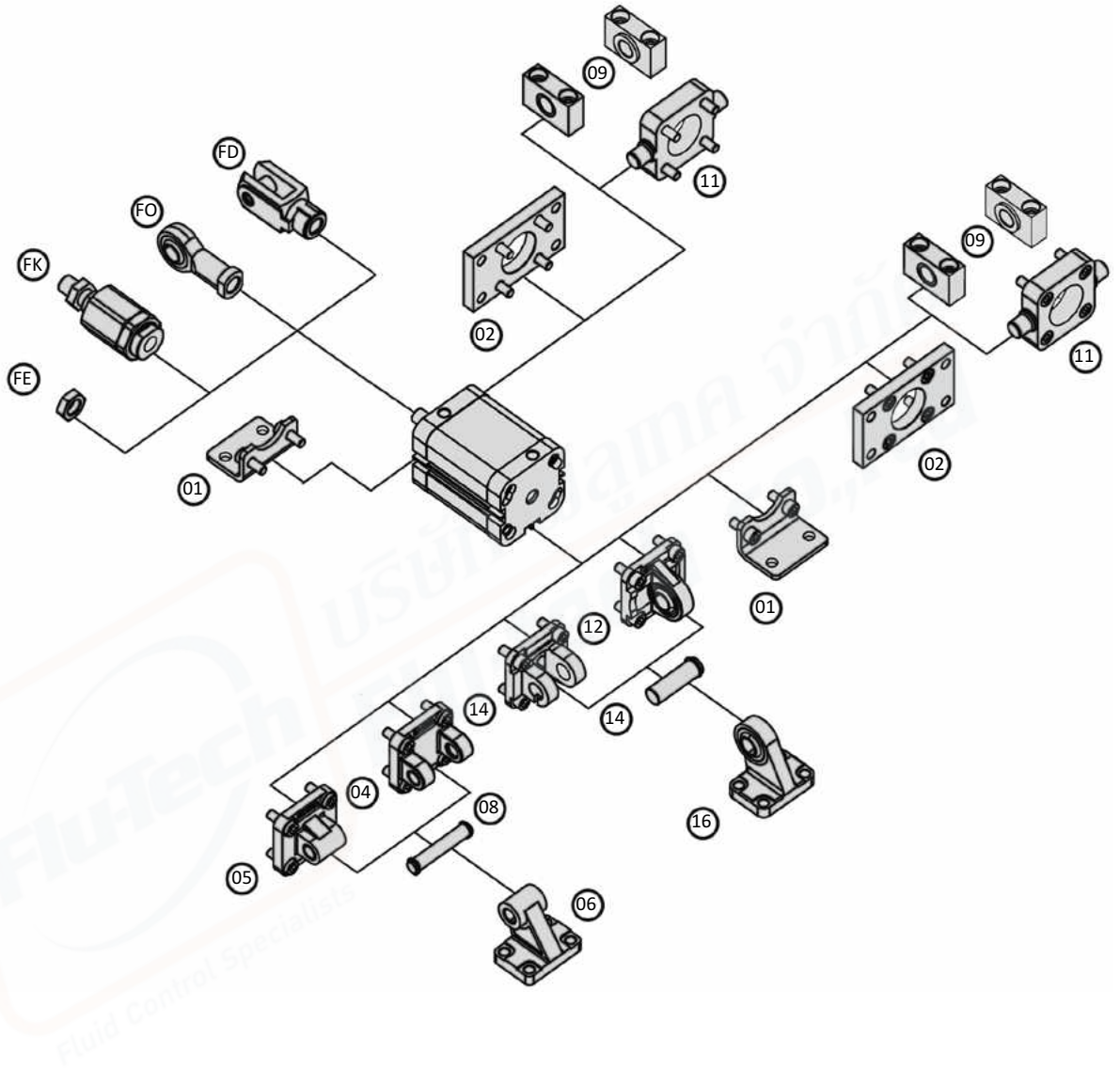
### Version 620



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

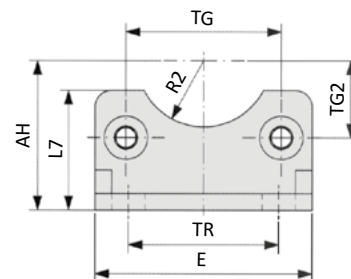
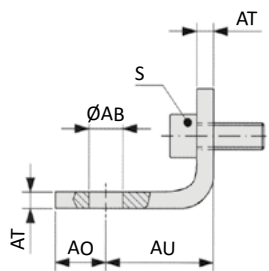
Mounting accessories XLB-xxx-yy



## Series NYD

### Mounting accessories

#### XLB-xxx-01 Foot mount

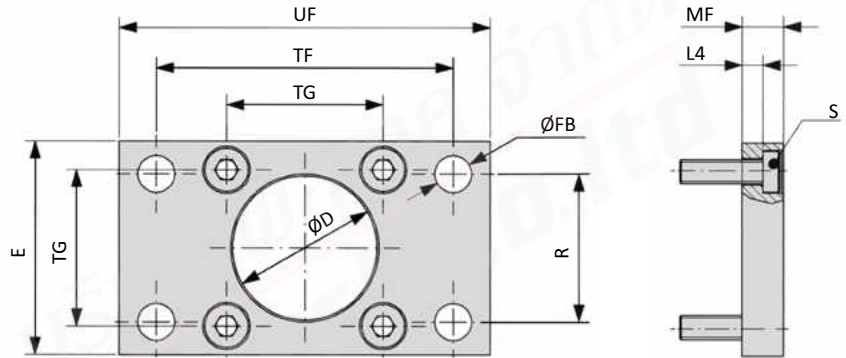
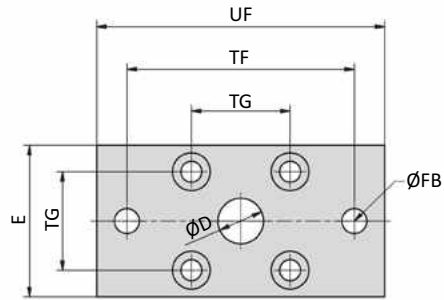


Model-no.:	Ø AB	AH	AO	AU	AT	E	L7	R2	S	TG	TG2	TR
<b>XLB-032-01</b>	7	32	11	24	4	45	30	15	M6 x 16	32.5	16.25	32
<b>XLB-040-01</b>	10	36	8	28	4	52	30	17.5	M6 x 16	38	19	36
<b>XLB-050-01</b>	10	45	15	32	5	65	36	20	M8 x 20	46.5	23.25	45
<b>XLB-063-01</b>	10	50	13	32	5	75	35	22.5	M8 x 20	56.5	28.25	50
<b>XLB-080-01</b>	12	63	14	41	6	95	47	22.5	M10 x 20	72	36	63
<b>XLB-100-01</b>	14.5	71	16	41	6	115	53	27.5	M10 x 20	89	44.5	75
<b>XLB-125-01</b>	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**

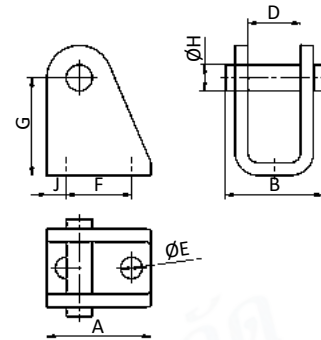


Model-no.:	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
<b>NXB-020-02</b>	12	36	6.6	4.6	10	-	M5 x 20	55*	22	70
<b>NXB-025-02</b>	12	40	6.6	4.6	10	-	M5 x 20	60*	26	76
<b>XLB-032-02</b>	30	45	7	5	10	32	M6 x 20	64	32.5	80
<b>XLB-040-02</b>	35	52	9	5	10	36	M6 x 20	72	38	90
<b>XLB-050-02</b>	40	65	9	6.5	12	45	M8 x 20	90	46.5	110
<b>XLB-063-02</b>	45	75	9	6.5	12	50	M8 x 20	100	56.5	120
<b>XLB-080-02</b>	45	95	12	9	16	63	M10 x 25	126	72	150
<b>XLB-100-02</b>	55	115	14	9	16	75	M10 x 25	150	89	170
<b>XLB-125-02</b>	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

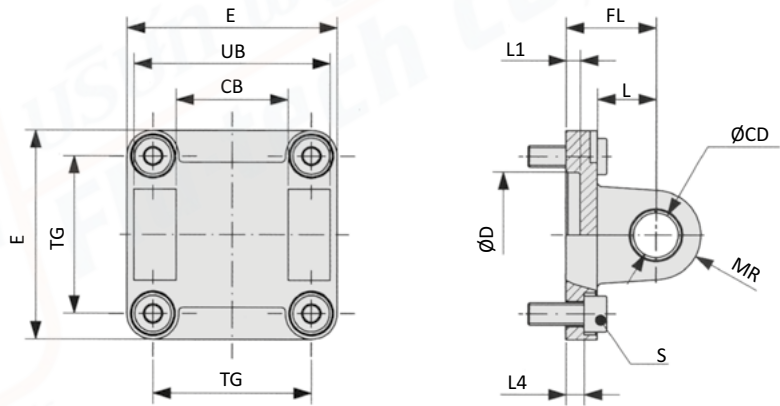
### RC-xx Clevis mount



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**

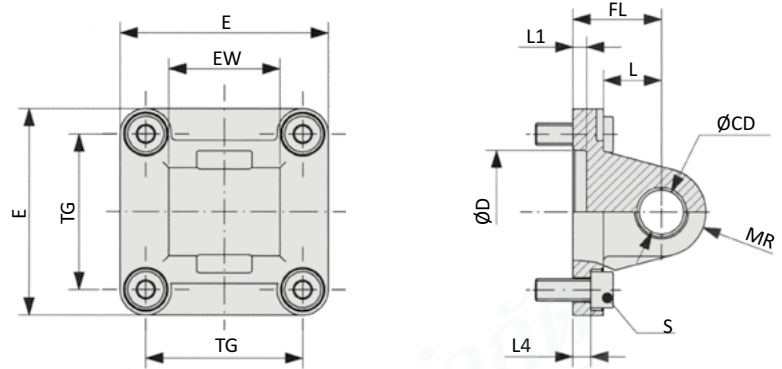
Model-no.:	CB	Ø CD	Ø D	E	FL	L	L1	L4	MR	S	TG	UB
XLB-032-04	26	10	30	45	22	13	5	5.5	10	M6 x 20	32.5	45
XLB-040-04	28	12	35	52	25	16	5	5.5	12	M6 x 20	38	52
XLB-050-04	32	12	40	65	27	16	5	6.5	12	M8 x 20	46.5	60
XLB-063-04	40	16	45	75	32	21	5	6.5	16	M8 x 20	56.5	70
XLB-080-04	50	16	45	95	36	22	5	10	16	M10 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.



## Series NYD Mounting accessories

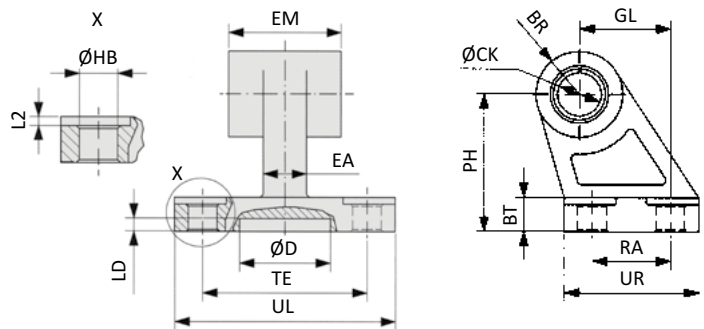
### NXB-xxx-04, XLB-xxx-05 Swivel mount



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
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°



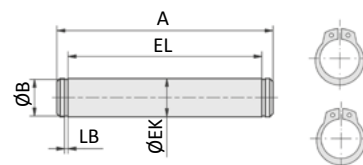
Model-no.:	BR	BT	ØCK	Ø D	EA	EM	GL	ØHB	L2	LD	PH	RA	TE	UL	UR
XLB-032-06	10	8	10	21	10	26	21	6.6	1.6	3	32	18	38	51	31
XLB-040-06	11	10	12	21	15	28	24	6.6	1.6	3	36	22	41	54	35
XLB-050-06	13	12	12	21	16	32	33	9	1.6	3	45	30	50	65	45
XLB-063-06	15	14	16	21	16	40	37	9	1.6	3	50	35	52	67	50
XLB-080-06	15	14	16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

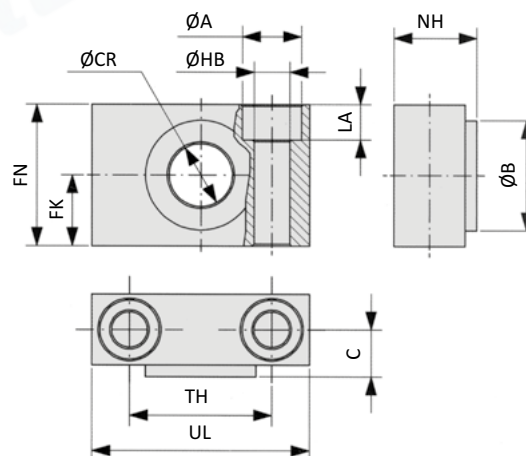
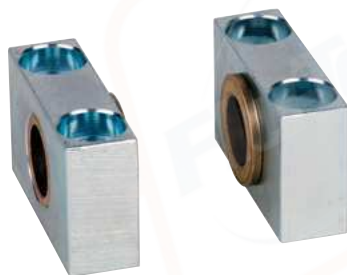
#### XLB-xxx-08 Clevis pin



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.

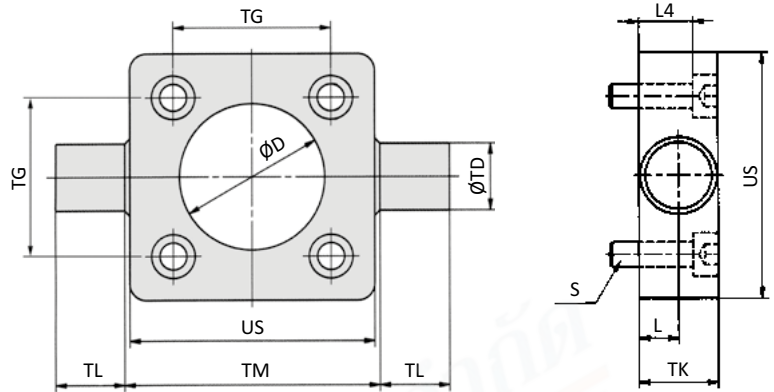
#### XLB-xxx-09 Bearing block



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

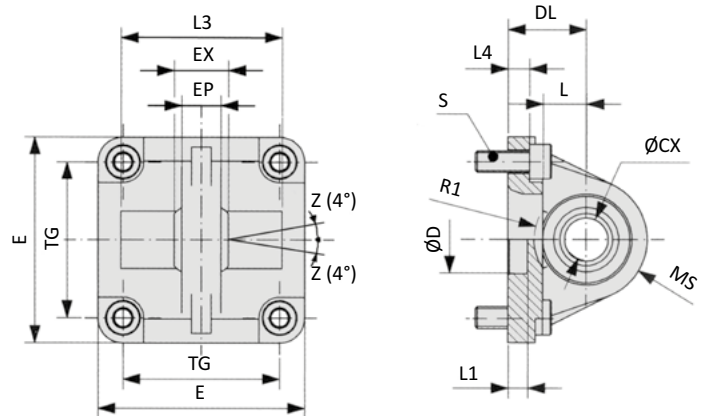
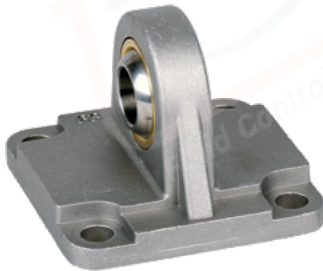
**XLB-xxx-11 Trunnion mount**



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**

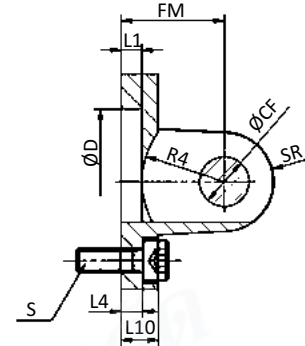
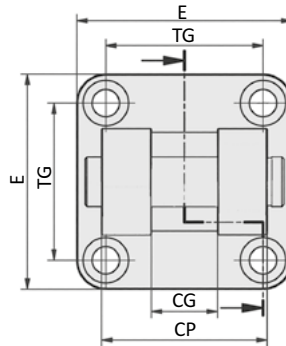
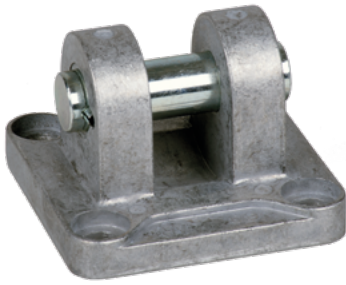


Model-no.:	Ø CX	Ø D	DL	E	EP	EX	L	L1	L3	L4	MS	R1	S	TG	
XLB-032-12	10	30	22	45	10.5	14	12	7	-	5.5	16	-	M6 x 20	32.5	
XLB-040-12	12	35	25	52	12	16	15	7	-	5.5	18	-	M6 x 20	38	
XLB-050-12	16	40	27	65	15	21	15	7	51	6.5	21	19	M8 x 20	46.5	
XLB-063-12	16	45	32	75	15	21	20	7	-	6.5	23	-	M8 x 20	56.5	
XLB-080-12	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												± 0.2 *± 0.3

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

## Series NYD Mounting accessories

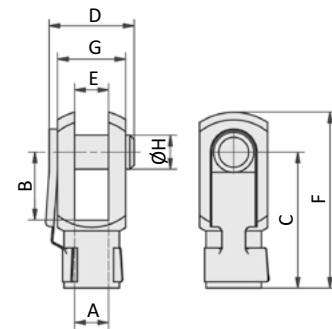
### XLB-xxx-14 Clevis mount small with pin



Model-no.:	Ø CF	CG	CP	Ø D	E	FM	L1	L4	L10	R4	S	SR	TG
<b>XLB-032-14</b>	10	14	34	30	45	22	5	5.5	9	17	M6 x 20	10	32.5
<b>XLB-040-14</b>	12	16	40	35	52	25	5	5.5	9	20	M6 x 20	12	38
<b>XLB-050-14</b>	16	21	45	40	65	27	5	6.5	11	22	M8 x 20	14	46.5
<b>XLB-063-14</b>	16	21	51	45	75	32	5	6.5	11	25	M8 x 20	18	56.5
<b>XLB-080-14</b>	20	25	65	45	95	36	5	10	14	30	M10 x 25	20	72
<b>XLB-100-14</b>	20	25	75	55	115	41	5	10	14	32	M10 x 25	22	89
<b>XLB-125-14</b>	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.

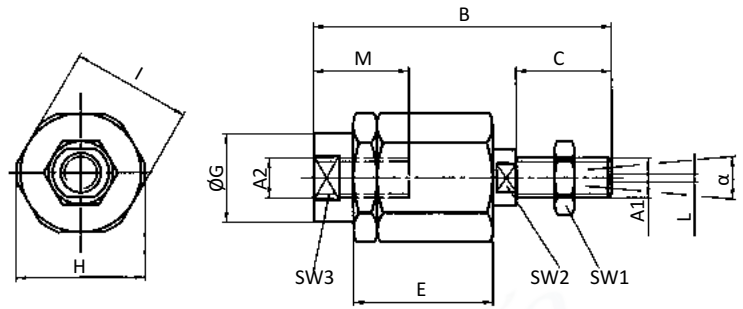
### RD-xx, FD-xx Rod clevis



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

Material: steel, zinc plated

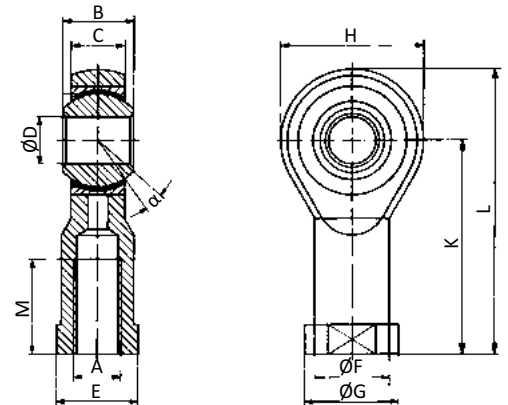
**FK-xx Flexible coupling**



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	75	24	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	30	6°

Material: steel, zinc plated

**RO-xx, FO-xx Rod eye**

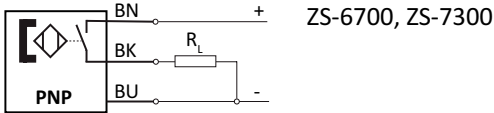
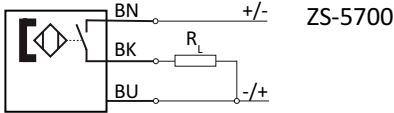
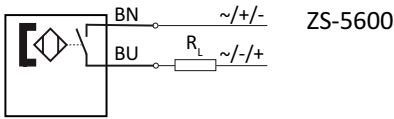


Model-no.:	for cylinder	A	B	C	ØD	E	ØF	ØG	H	K	L	M	α
RO-20	20. 25	M8	12	9	8	14	12.5	16	24	36	48	16	14°
RO-25	32. 40	M10 x 1.25	14	10.5	10	17	15	19	28	43	57	20	13°
FO-40	50. 63	M12 x 1.25	16	12	12	19	17.5	22	32	50	66	22	13°
FO-63	80. 100	M16 x 1.5	21	15	16	22	22	27	42	64	85	28	15°
FO-80	125	M20 x 1.5	25	18	20	30	27.5	34	50	77	102	33	14°

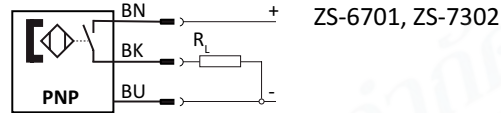
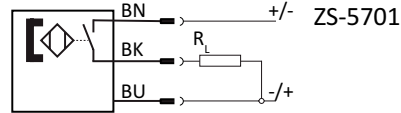
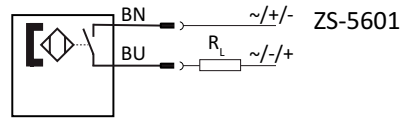
Materials: steel, zinc plated, bearing steel, bronze bushing

## Series ZS Proximity sensors

### Proximity sensors with cable



### Proximity sensors with plug



### Technical data

Model-no.:	ZS-5600	ZS-5601	ZS-5700	ZS-5701
<b>Design</b>	2-pole Reed sensor	2-pole Reed sensor	3-pole Reed sensor	3-pole Reed sensor
<b>Contact function</b>	NO	NO	NO	NO
<b>Rated operational voltage</b>	5 ... 240 V AC / DC	5 ... 60 V AC / DC	5 ... 30 V DC	5 ... 30 V DC
<b>Rated operational current <math>I_e</math></b>	3 ... 100 mA	3 ... 100 mA	≤ 500 mA	≤ 500 mA
<b>Max. voltage drop at <math>I_e</math></b>	≤ 2.5	≤ 2.5	≤ 0.1	≤ 0.1
<b>Breaking capacity</b>	10 W	10 W	10 W	10 W
<b>Cable length</b>	3 m	0.3 m with M8 connection	5 m	0.3 m with M8 connection
<b>Temperature range</b>	-10 ... +70°C	-10 ... +70°C	-10 ... +70°C	-10 ... +70°C
<b>Protection</b>	IP 67	IP 67	IP 67	IP 67
<b>Switching status indication</b>	LED red	LED red	LED yellow	LED yellow
Model-no.:	ZS-6700	ZS-6701	ZS-7300	ZS-7302
<b>Design</b>	3-pole inductive	3-pole inductive	3-pole inductive	3-pole inductive
<b>Contact function</b>	NO	NO	NO	NO
<b>Output</b>	PNP	PNP	PNP	PNP
<b>Rated operational voltage</b>	5 ... 30 V DC	5 ... 30 V DC	10 ... 30 V DC	10 ... 30 V DC
<b>Rated operational current <math>I_e</math></b>	≤ 200 mA	≤ 200 mA	≤ 100 mA	≤ 100 mA
<b>Max. voltage drop at <math>I_e</math></b>	≤ 1.0	≤ 1.0	≤ 2.5	≤ 2.5
<b>Breaking capacity</b>	6 W	6 W	3 W	3 W
<b>Cable length</b>	3 m	0.3 m with M8 connection	6 m	0.3 m with M12 connection
<b>Temperature range</b>	-10 ... +70°C	-10 ... +70°C	-20 ... +60°C	-20 ... +60°C
<b>Protection</b>	IP 67	IP 67	IP 67	IP 67
<b>Switching status indication</b>	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



**Cable with bushing for proximity sensors**


<b>Model-no.:</b>	KA-30	KA-50	KA-51	KA-100	KA-101
<b>Connection</b>	M8, snap-in	M8, snap-in	M8, snap-in	M8, snap-in	M8, snap-in
<b>Version</b>	straight	straight	elbow 90°	straight	elbow 90°
<b>Cable length</b>	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**

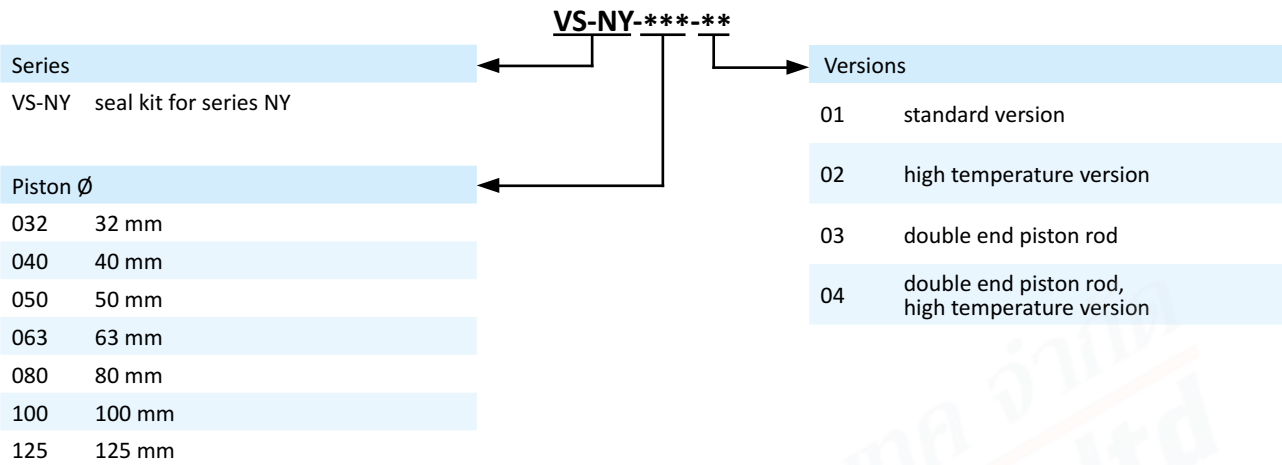
<b>Model-no.:</b>	XLB-011
<b>Design</b>	plastic profile, 50 cm length, blue
<b>For series</b>	XL, NXD, NXE, NYD, NYE, NYSE, LX



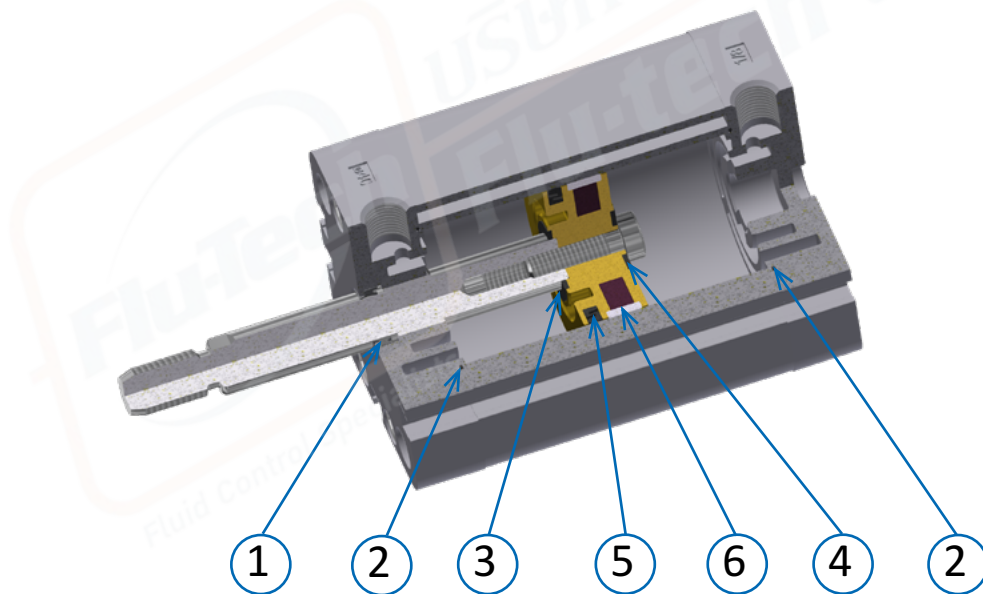
## Series NYD

### Seal kits

#### Order code



#### Content Ø 20 - 25 mm



#### Standard version

Position	Part	Quantity
1	piston rod seal (PUR)	1*
2	O-ring (NBR)	2
3	bumper (neoprene)	1
4	bumper (neoprene)	1
5	piston seal (NBR)	2
6	guide ring (PBT+PTFE)	1
7	grease	1

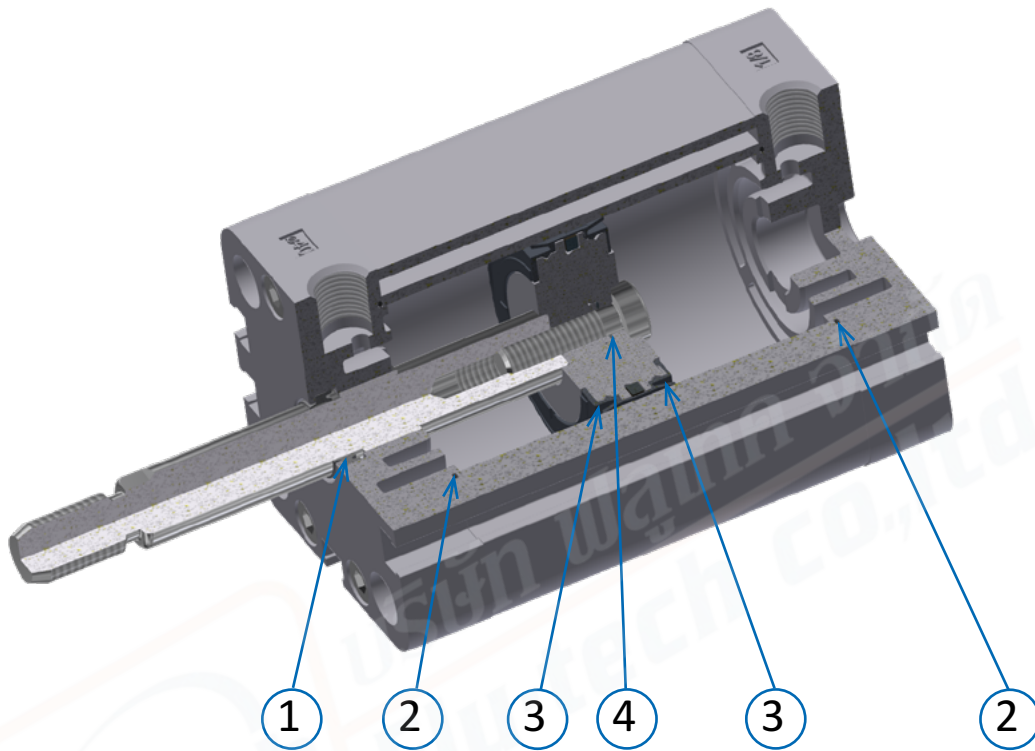
\*2 pieces for version 03

#### High temperature version

Position	Part	Quantity
1	piston rod seal (FKM)	1*
2	O-ring (FKM)	2
3	bumper (neoprene)	1
4	bumper (neoprene)	1
5	piston seal (FKM)	2
6	guide ring (PBT+PTFE)	1
7	grease	1

\*2 pieces for version 04

Content  $\varnothing$  32 - 125 mm



**Standard version**

Position	Part	Quantity
1	piston rod seal (PUR)	1*
2	O-ring (NBR)	2
3	piston seal (PUR)	2
4	O-ring (NBR)	1
5	grease	1

\*2 pieces for version 03

**High temperature version**

Position	Part	Quantity
1	piston rod seal (FKM)	1*
2	O-ring (FKM)	2
3	piston seal (FKM)	2
4	O-ring (FKM)	1
5	grease	1

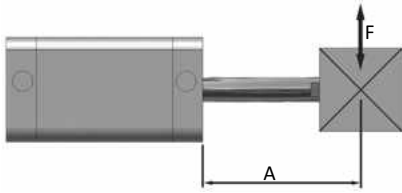
\*2 pieces for version 04

**Air consumption cylinder (NI for a single stroke of 100 mm, based upon extension)**

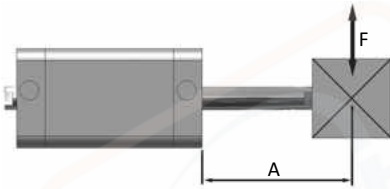
Piston-Ø	Pressure in bar						
	2	3	4	5	6	7	8
20	0,09	0,13	0,16	0,19	0,22	0,25	0,28
25	0,15	0,20	0,25	0,29	0,34	0,39	0,44
32	0,24	0,32	0,40	0,48	0,56	0,64	0,72
40	0,38	0,50	0,63	0,75	0,88	1,01	1,13
50	0,59	0,79	0,98	1,18	1,37	1,57	1,77
63	0,94	1,25	1,56	1,87	2,18	2,49	2,81
80	1,51	2,01	2,51	3,02	3,52	4,02	4,52
100	2,36	3,14	3,93	4,71	5,50	6,28	7,07
125	3,72	4,96	6,21	7,42	8,64	9,91	11,14

**Required flow rate (NI/min at p = 6 bar)**

Piston-Ø	speed (m/s)				
	0,25	0,5	1	1,5	2
20	33	66	132	198	264
25	52	103	206	309	412
32	84	169	338	506	675
40	132	264	528	791	1055
50	206	412	824	1236	1649
63	327	654	1309	1963	2617
80	528	1055	2110	3165	4220
100	824	1649	3297	4946	6594
125	1288	2576	5152	7727	10303

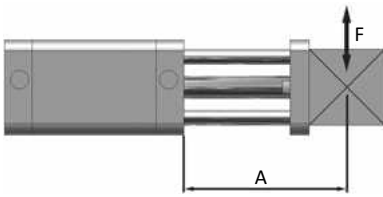
**Permissible side load F (N), series NYD, version 200 and 210**


Piston-Ø	Distance A (mm)									
	25	30	40	50	60	70	80	90	100	125
20 + 25	12	11	9	7	6	5	4	3	3	-
32 + 40	23	20	16	12	10	8	7	7	6	4
50 + 63	38	34	28	22	18	15	13	12	11	3
80	49	43	35	28	24	20	18	17	16	12
100	93	82	67	55	46	40	37	34	31	23

**Permissible side load F (N), series NYD, version 600 and 610**


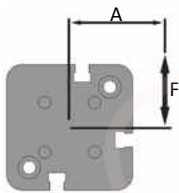
Piston-Ø	Distance A (mm)									
	25	30	40	50	60	70	80	90	100	125
20 + 25	32	30	26	21	19	16	14	13	12	9
32 + 40	47	43	38	32	28	26	22	20	18	13
50 + 63	83	78	68	59	51	46	41	38	36	27
80	112	108	93	83	74	67	60	57	54	40
100	194	181	160	144	130	118	108	101	96	72

**Permissible side load F (N), series NYD, version 220**



Piston-Ø	Distance A (mm)									
	25	30	40	50	60	70	80	90	100	125
25	59	53	43	37	31	27	24	23	22	15
32	76	68	58	49	43	38	35	34	32	24
40	112	101	84	72	62	56	50	47	46	34
50 + 63	145	130	108	92	83	74	66	61	56	42
80 + 100	200	180	155	135	120	110	100	90	80	60

**Permissible tourque F x A (Nm), series NYD, version 220**



Piston-Ø	Distance A (mm)											
	10	15	20	25	30	40	50	60	70	80	90	100
20	1,0	0,85	0,8	0,7	0,6	0,4	0,35	0,35	0,3	0,25	0,2	0,2
25	2,0	1,75	1,6	1,3	1,2	0,9	0,75	0,6	0,5	0,45	0,45	0,4
32	2,7	2,5	2,2	2,0	1,8	1,6	1,3	1,1	1,0	0,9	0,9	0,8
40	5,0	4,0	3,5	3,3	3,0	2,5	2,2	2,0	1,8	1,5	1,4	1,3
50	8,8	7,6	6,7	6,0	5,4	4,6	4,0	3,5	3,0	2,8	2,6	2,4
63	10,7	9,4	8,3	7,4	6,7	5,5	4,8	4,2	3,8	3,5	3,2	2,9
80	17,5	15,3	13,7	12,4	11,3	9,6	8,5	7,6	7,0	6,3	5,8	5,3
100	20,0	19,0	17,0	15,5	14,0	12,0	10,5	9,5	8,5	7,7	7,0	6,5