

Series 88-XSI

ISO 15552, double acting

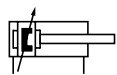
Technical details

Operating pressure	1 ... 10 bar
Temperature range	-20°C ... +80°C
Max. stroke	2.800 mm
Working speed	50 ... 800 mm/s
Medium	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
Materials	cylinder tube: Al (anodized) End caps: Al-Druckguß, (painted) Piston rod: steel hard chrome plated (optional 1.4301) Seals: PU, NBR
	Cylinders in accordance with 2014/34/EU (ATEX) available. (page 29)

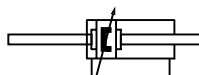


Double acting Al-profile cylinder with integrated sensor grooves, adjustable cushions and magnetic piston for proximity sensors. The sensors can be installed directly into the sensor grooves of the Al-profile. Standard stroke lengths in table below, additional lengths on request.

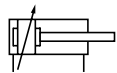
Versions



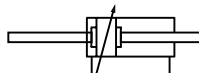
050, 000 double acting, adjustable cushioning, with magnetic piston



450, 400 double acting, double end piston rod, adjustable cushioning, with magnetic piston



150, 100 double acting, adjustable cushioning



550, 500 double acting, double end piston rod, adjustable cushioning

Order code

Series, Version		Options	
88-XSI standard		X	cylinders in accordance with 2014/34/EU (ATEX)
Piston Ø		Versions	
032	32 mm	050	standard version
040	40 mm	450	
050	50 mm	000	piston rod stainless steel
063	63 mm	400	
080	80 mm	150	without magnetic piston
100	100 mm	550	
125	125 mm	100	without magnetic piston, piston rod stainless steel
		500	
		Stroke (mm)	
		XXXX	max. 2.800 mm*
		standard	25, 40, 50, 80, 100, 125, 150, 160, 200, 250, 320, 400, 500 mm

* For longer stroke lengths please check the max buckling load.

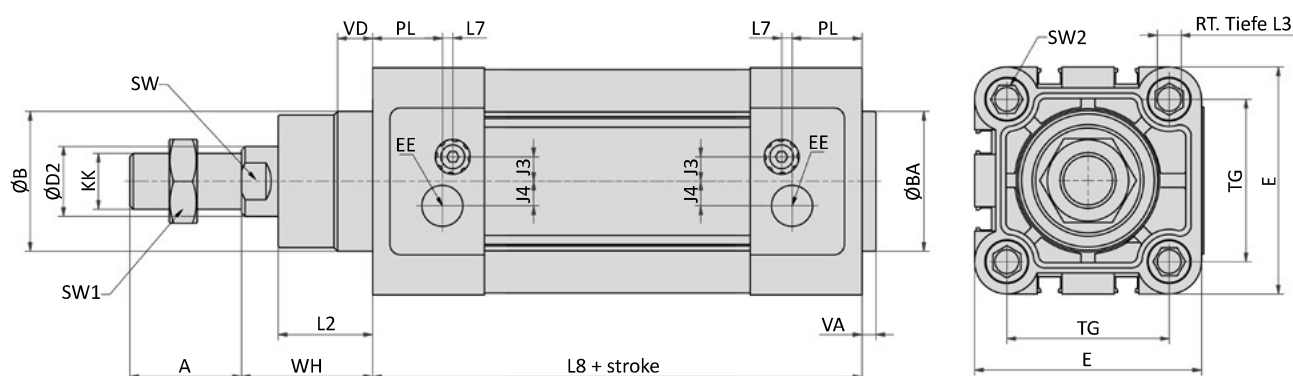
Series 88-XSI

ISO 15552, double acting

Technical data

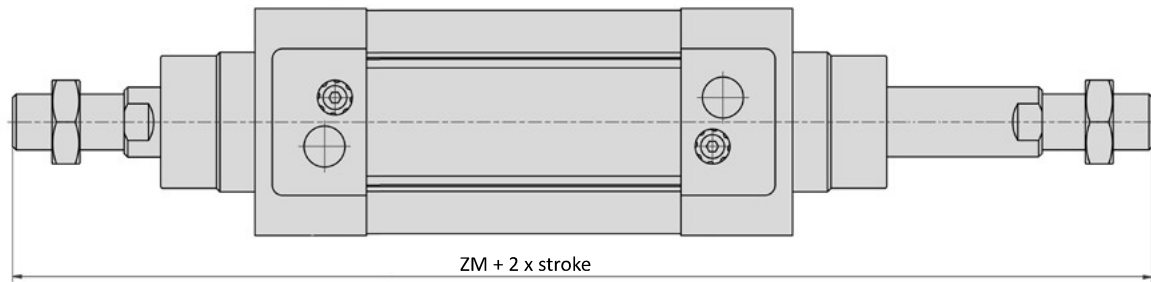
Model-no.:	88-XSI-032-...	88-XSI-040-...	88-XSI-050-...	88-XSI-063-...	88-XSI-080-...	88-XSI-100-...	88-XSI-125-...
Piston Ø (mm)	32	40	50	63	80	100	125
Force at 6 bar (N)	434	678	1060	1682	2713	4239	6623
Extension							
Retraction							
Connection	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2
Piston rod thread	M10 x 1.25	M12 x 1.25	M16 x 1.5	M16 x 1.5	M20 x 1.5	M20 x 1.5	M27 x 2
Cushioning length (mm)	20	20	20	20	26	26	26

Dimensions series 88-XSI

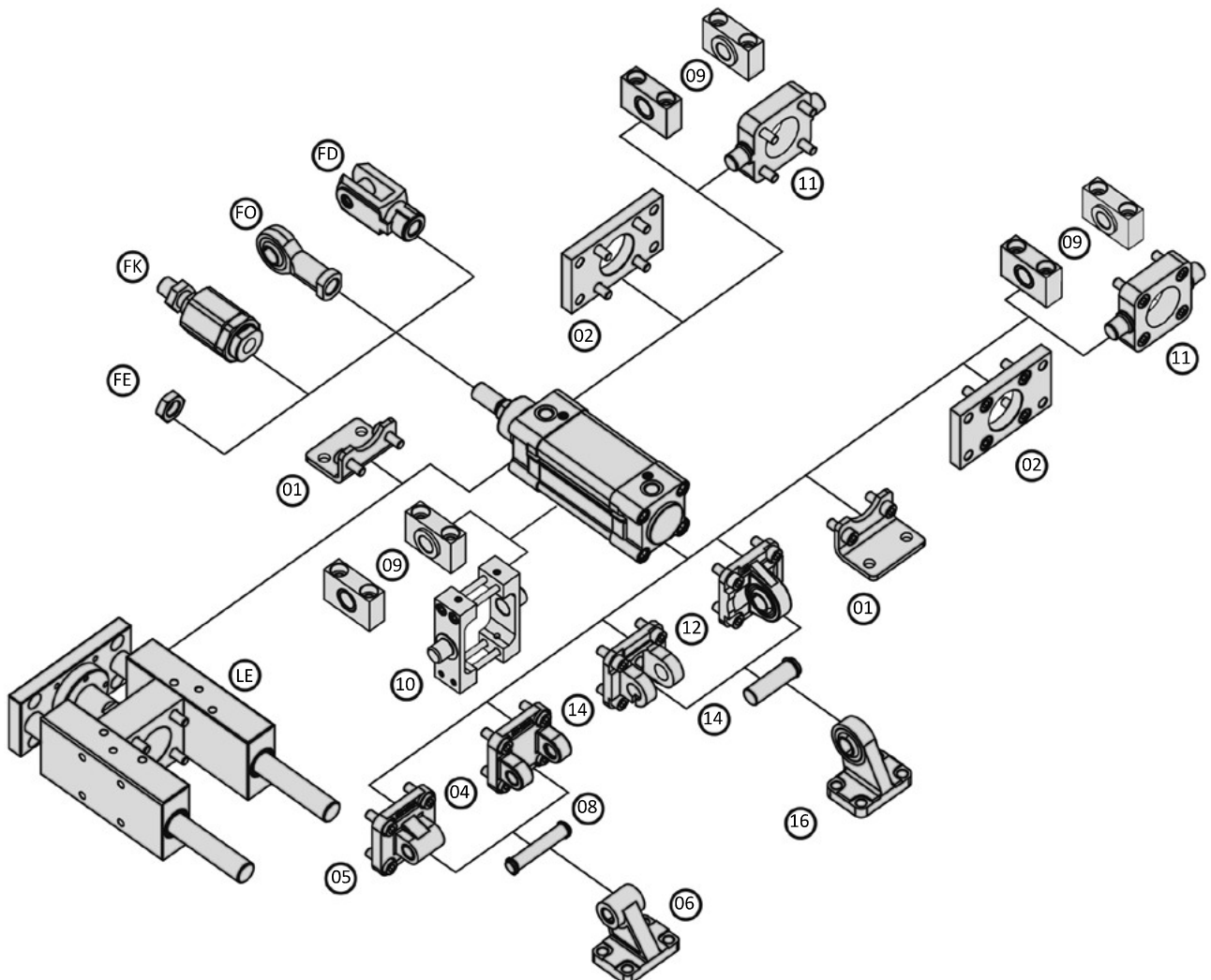


Piston Ø	A	Ø B	Ø BA	Ø D2	E	EE	J3	J4	KK	L2	L3
32	22	30	30	12	45	G1/8	6.5	5	M10 x 1.25	16	12
40	24	35	35	16	52	G1/4	7	7	M12 x 1.25	20	12
50	32	40	40	20	65	G1/4	9	7	M16 x 1.5	27	12
63	32	45	45	20	76	G3/8	9	8	M16 x 1.5	26	12
80	40	45	45	25	94	G3/8	12	10	M20 x 1.5	35	15
100	40	55	55	25	112	G1/2	14	10	M20 x 1.5	40	15
125	54	60	60	32	134	G1/2	14	10	M27 x 2	46	20

Piston Ø	L7	L8	PL	RT	SW	SW1	SW2	TG	VA	VD	WH
32	3	94	15	M6	10	17	6	32.5	4	10	27
40	3	105	17.5	M6	13	19	6	38	4	10	30
50	3	106	20	M8	17	24	8	46.5	4	10	37.5
63	5	121	22	M8	17	24	8	56.5	4	10	36
80	5	128	23	M10	22	30	10	72	5	10	48
100	5	138	26	M10	22	30	10	89	6	10	52
125	5	160	29	M12	27	41	12	110	7	10	63

Dimensions series 88-XSI (addition at double end piston rod)


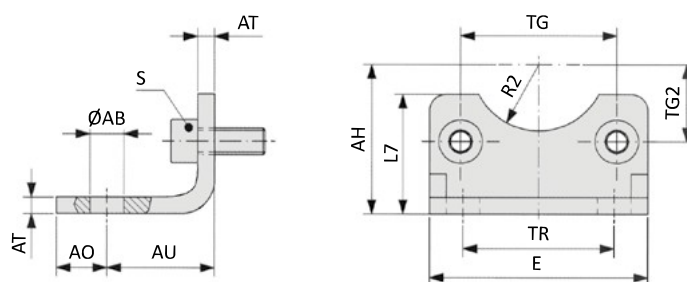
Piston Ø (mm)	32	40	50	63	80	100	125
ZM	146	165	180	195	220	240	290

Mounting the add-on parts XLB-xxx-yy


Series SLX, XL and 88-XSI

Mounting accessories

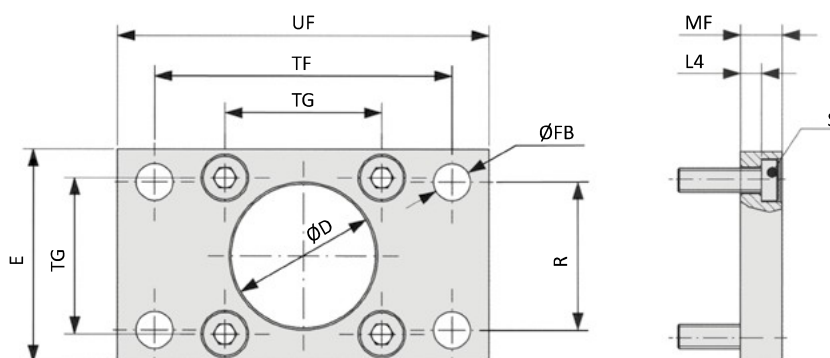
XLB-xxx-01 Foot mount



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

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

XLB-xxx-02 Flange mount



Model-no.:	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
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		JS14	± 0.2 *± 0.3	

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

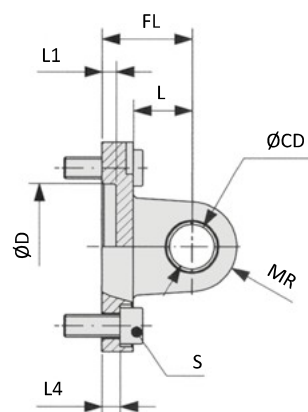
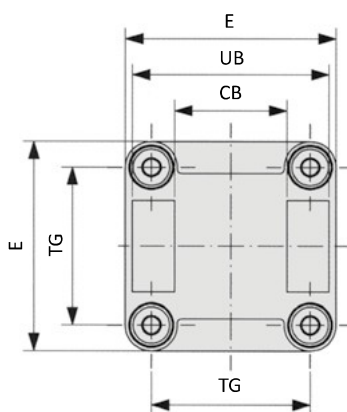
Series SLX, XL and 88-XSI

Mounting accessories

XLB-xxx-04 Clevis mount with bushing



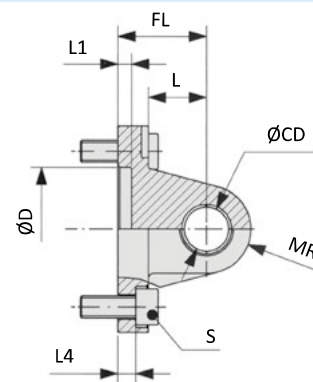
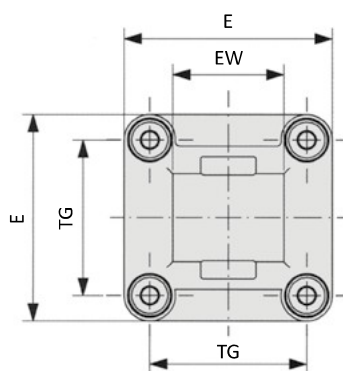
Inclusive clevis pin
order no.: **XLB-xxx-48**



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.

XLB-xxx-05 Swivel mount



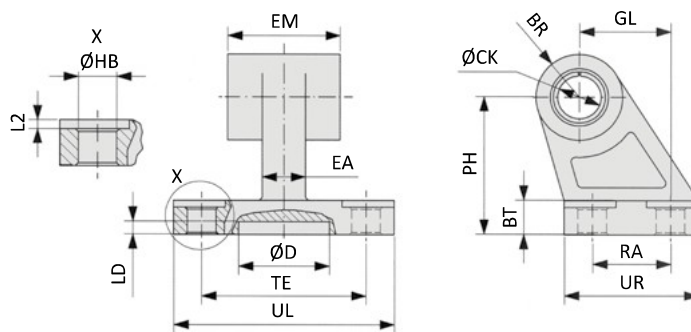
Model-no.:	Ø CD	Ø D	E	EW	FL	L	L1	L4	MR	S	TG
XLB-032-05	10	30	45	26	22	13	5	5.5	10	M6 x 20	32.5
XLB-040-05	12	35	52	28	25	16	5	5.5	12	M6 x 20	38
XLB-050-05	12	40	65	32	27	16	5	6.5	12	M8 x 20	46.5
XLB-063-05	16	45	75	40	32	21	5	6.5	16	M8 x 20	56.5
XLB-080-05	16	45	95	50	36	22	5	10	16	M10 x 25	72
XLB-100-05	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; 4 screws in accordance with EN ISO 4762 are included.

Series SLX, XL and 88-XSI

Mounting accessories

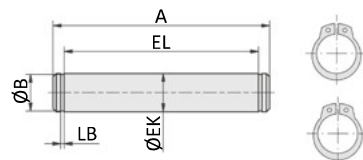
XLB-xxx-06 Swivel mount 90°



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
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		

Materials: Al, bushing steel and PTFE

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	

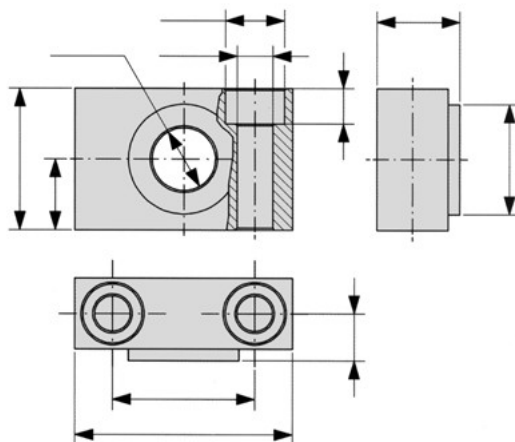
Materials: steel, zinc plated; 2 snap rings are included.

Model-no.:	SW1	SW2	Ø TD	TK	TL	TM	UW
XLB-032-10	3	2.5	12	25	12	50	65
XLB-040-10	3	3	16	25	16	63	75
XLB-050-10	3	4	16	30	16	75	95
XLB-063-10	3	4	20	30	20	90	105
XLB-080-10	3	4	20	30	20	110	130
XLB-100-10	4	5	25	40	25	132	145
XLB-125-10	4	6	25	40	25	160	175
<i>tolerances and adjustments</i>			e9		h14		

Series SLX, XL and 88-XSI

Mounting accessories

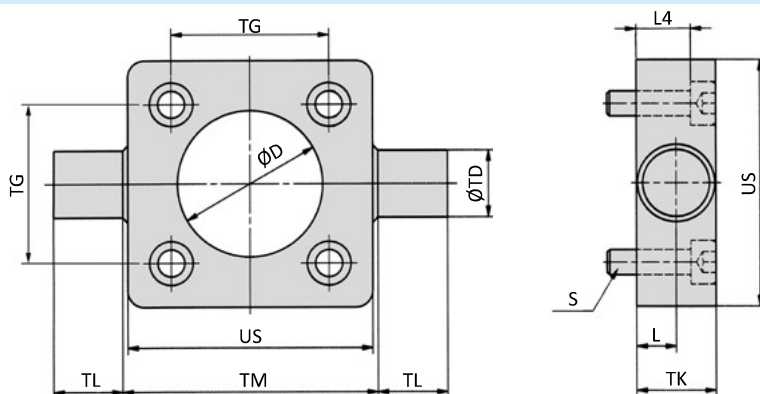
XLB-xxx-09 Bearing block



Model-no.:	for cylinder Ø	Ø A	Ø B	C	Ø CR	FK	FN	Ø HB	LA	NH	TH	UL
XLB-032-09	32	11	22	10.5	12	15	30	6.6	7	18	32	46
XLB-040-09	40, 50	15	28	12	16	18	36	9	9	21	36	55
XLB-063-09	63, 80	18	32	13	20	20	40	11	11	23	42	65
XLB-100-09	100, 125	20	39	16	25	25	50	14	13	28.5	50	75
<i>tolerances and adjustments</i>					H9	± 0.1		H13			± 0.2	

Materials: steel, zinc plated; bronze bushing

XLB-xxx-11 Trunnion mount



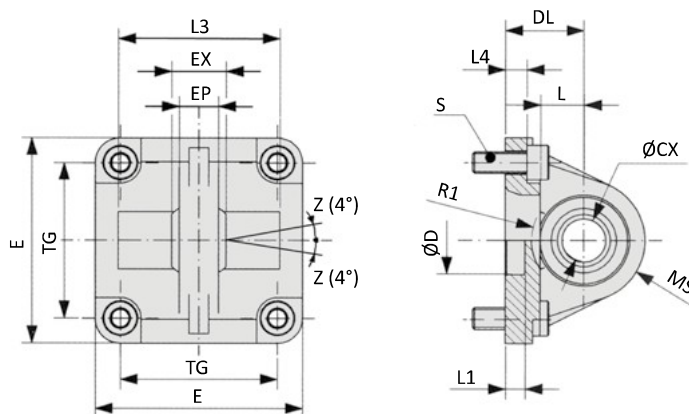
Model-no.:	Ø D	L	L4	S	Ø TD	TG	TK	TL	TM	US
XLB-032-11	30	6.5	8	M6 x 20	12	32.5	14	12	50	46
XLB-040-11	35	9	13	M6 x 25	16	38	19	16	63	59
XLB-050-11	40	9	11	M8 x 25	16	46.5	19	16	75	69
XLB-063-11	45	11.5	16	M8 x 30	20	56.5	24	20	90	84
XLB-080-11	45	11.5	14	M10 x 30	20	72	24	20	110	102
XLB-100-11	55	14	19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

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

Series SLX, XL and 88-XSI

Mounting accessories

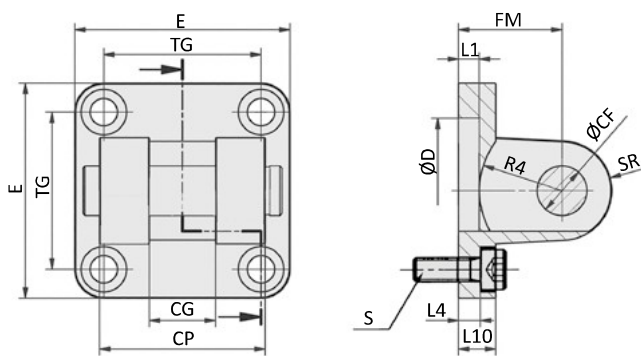
XLB-xxx-12 Swivel mount with spherical bearing



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.

XLB-xxx-14 Clevis mount small with pin



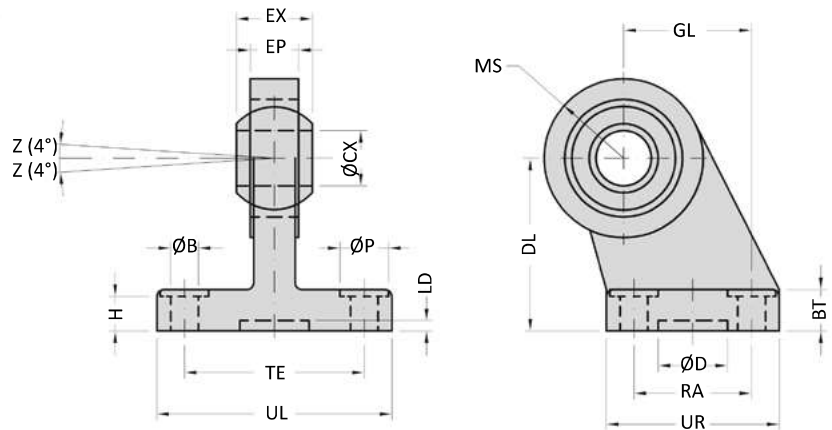
Model-no.:	Ø CF	CG	CP	Ø D	E	FM	L1	L4	L10	R4	S	SR	TG
XLB-032-14	10	14	34	30	45	22	5	5.5	9	17	M6 x 20	10	32.5
XLB-040-14	12	16	40	35	52	25	5	5.5	9	20	M6 x 20	12	38
XLB-050-14	16	21	45	40	65	27	5	6.5	11	22	M8 x 20	14	46.5
XLB-063-14	16	21	51	45	75	32	5	6.5	11	25	M8 x 20	18	56.5
XLB-080-14	20	25	65	45	95	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, clevis pin steel, zinc plated; 4 screws in accordance with EN ISO 4762 are included.

Series SLX, XL and 88-XSI

Mounting accessories

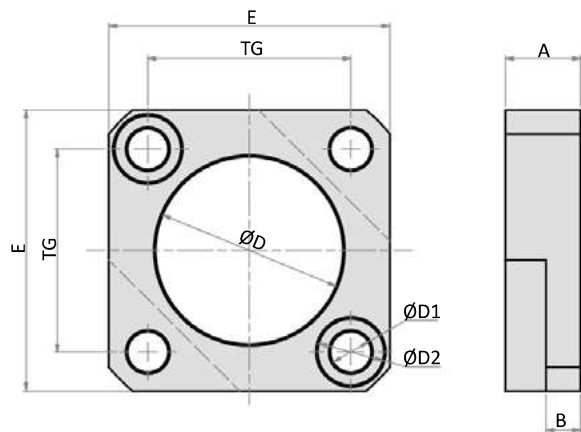
XLB-xxx-16 Swivel mount with spherical bearing 90°



Model-no.:	Ø B	BT	ØCX	ØD	DL	EP	EX	GL	H	LD	MS	ØP	RA	TE	UL	UR
XLB-032-16	6.6	10	10	20	32	10.5	14	21	8.5	3	15	11	18	38	51	31
XLB-040-16	6.6	10	12	20	36	12	16	24	8.5	3	18	11	22	41	54	35
XLB-050-16	9	12	16	20	45	15	21	33	10.5	3	20	15	30	50	65	45
XLB-063-16	9	12	16	20	50	15	21	37	10.5	3	23	15	35	52	67	50
XLB-080-16	11	14	20	20	63	18	25	47	11.5	3	27	18	40	66	86	60
XLB-100-16	11	15	20	20	71	18	25	55	12.5	3	30	18	50	76	96	70
XLB-125-16	13.5	20	30	20	90	25	37	70	17	3	40	20	60	94	124	90
tolerances and adjustments	H13		H7	H13	JS15	max	0 - 0.1	JS15	+0.5 0		max	H13	JS14	JS14	max	max

Materials: steel, bearing steel, bronze bushing

XLB-xxx-23 Multi positioning adapter



Model-no.:	A	B	Ø D	Ø D1	Ø D2	E	TG
XLB-032-23	12	5.5	30	6.5	10.6	45	32.5
XLB-040-23	12	5.5	35	6.5	10.6	50	38
XLB-050-23	16	7.5	40	8.5	13.5	65	46.5
XLB-063-23	16	7.5	45	8.5	13.5	75	56.5
XLB-080-23	20	9	45	10.5	16.5	90	72
XLB-100-23	20	10.5	55	10.5	16.5	105	89
XLB-125-23	30	15	68	12.5	18.5	130	110

Materials: Al
Mounting material is part of the delivery.

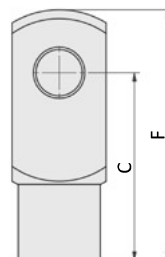
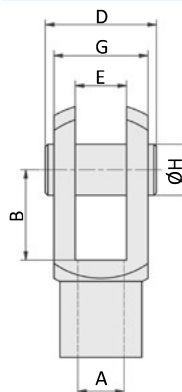
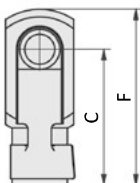
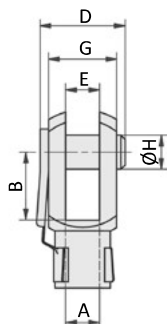
Series SLX, XL and 88-XSI

Mounting accessories

RD-xx, FD-xxx Rod clevis

Spring loaded pin (RD-25, FD-40...80)

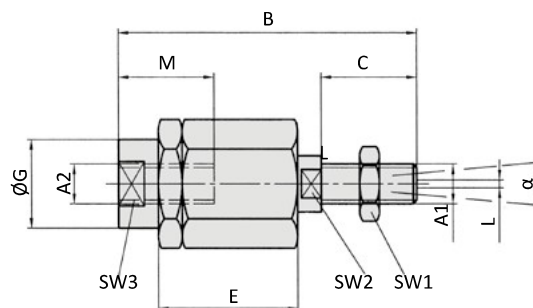
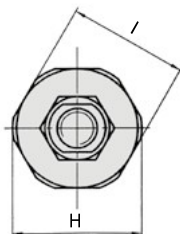
Clevis pin with snap rings (FD-125)



Model-no.:	for cylinder Ø	A	B	C	D	E	F	G	Ø H
RD-25	32	M10 x 1.25	20	40	26	10	52	20	10
FD-40	40	M12 x 1.25	24	48	32	12	62	24	12
FD-63	50, 63	M16 x 1.5	32	64	40	16	83	32	16
FD-80	80, 100	M20 x 1.5	40	80	50	20	105	40	20
FD-125	125	M27 x 2	54	110	65	30	148	55	30

Materials: steel, zinc plated

FK-xxx Flexible coupling



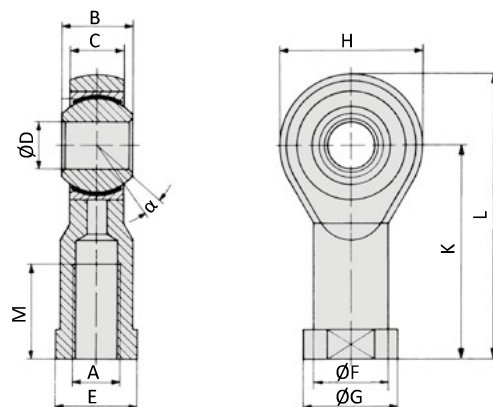
Model-no.:	for cylinder Ø	A1, A2	B	C	D	E	Ø G	H	I	L	M	SW1	SW2	SW3	α
FK-32	32	M10 x 1.25	71.5	20	7.5	35	22	32	30	2	22	17	12	19	8°
FK-40	40	M12 x 1.25	75	24	7.5	35	22	32	30	2	22	19	12	19	8°
FK-63	50, 63	M16 x 1.5	104	32	10	53	32	45	41	2	30	24	20	27	6°
FK-80	80, 100	M20 x 1.5	119	40	10	53	32	45	41	2	37	30	20	30	6°
FK-125	125	M27 x 2	147	54	10	60	57	70	65	2	48	41	24	54	8°

Materials: steel, zinc plated

Series SLX, XL and 88-XSI

Mounting accessories

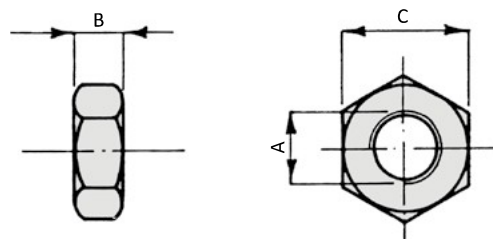
RO-xx, FO-xxx Rod eye



Model-no.:	for cylinder Ø	A	B	C	Ø D	E	Ø F	Ø G	H	K	L	M	α
RO-25	32	M10 x 1.25	14	10.5	10	17	15	19	28	43	57	20	13°
FO-40	40	M12 x 1.25	16	12	12	19	17.5	22	32	50	66	22	13°
FO-63	50, 63	M16 x 1.5	21	15	16	22	22	27	42	64	85	28	15°
FO-80	80, 100	M20 x 1.5	25	18	20	30	27.5	34	50	77	102	33	14°
FO-125	125	M27 x 2	37	25	30	41	40	50	70	110	145	51	17°

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

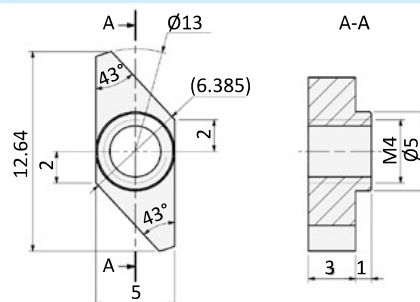
RL-xx, FE-xxx Piston rod nut



Model-no.:	for cylinder Ø	A	B	C
RL-25	32	M10 x 1.25	5	17
FE-40	40	M12 x 1.25	6	19
FE-63	50, 63	M16 x 1.5	8	24
FE-80	80, 100	M20 x 1.5	10	30
FE-125	125	M27 x 2	13.5	41

Materials: steel, zinc plated

NST-T-4-U Slot nut

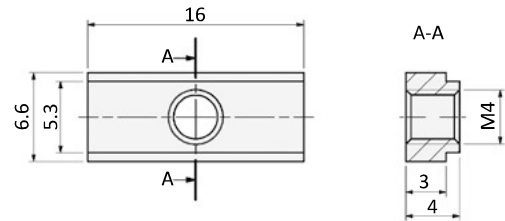


Materials: steel, zinc plated

Series SLX, XL and 88-XSI

Mounting accessories

NST-T-4-V Slot nut



Materials: steel, zinc plated

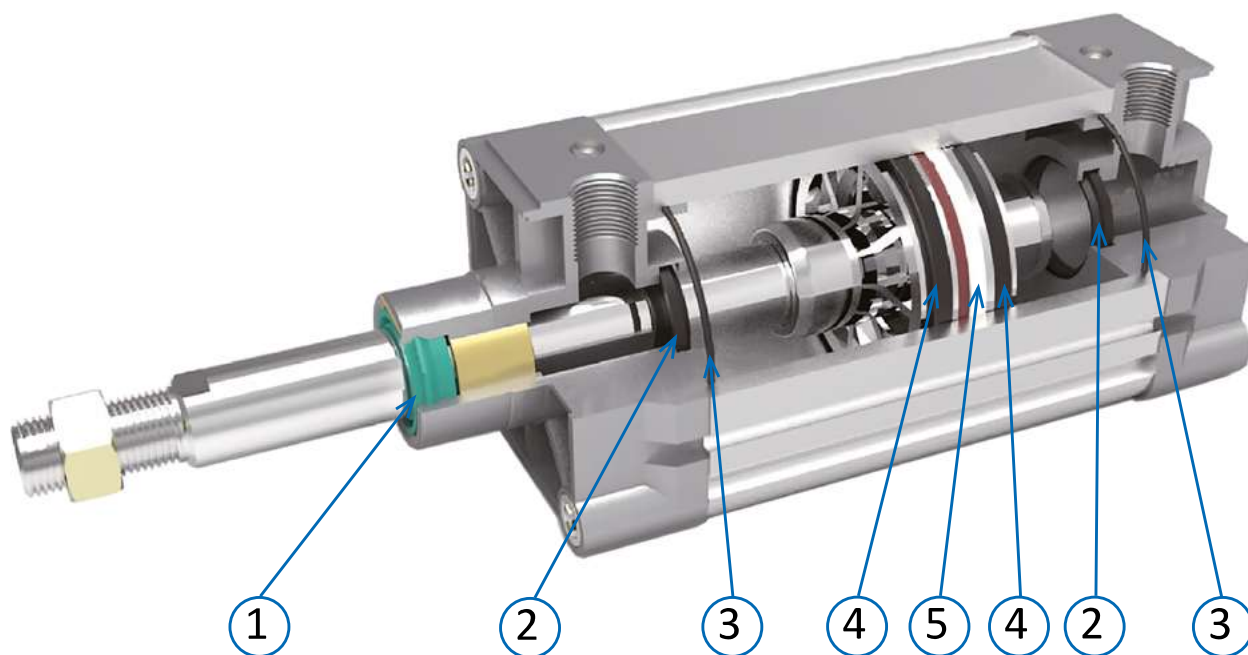
Proximity sensors



Order code

Series		Versions	
VS-88-XSI repair kit for series 88-XSI		01	standard version
Piston Ø			
032	32 mm		
040	40 mm		
050	50 mm		
063	63 mm		
080	80 mm		
100	100 mm		
125	125 mm		

Content



Standard version

Position	Product description	Quantity
1	piston rod seal (PUR)	1
2	damping seal (NBR)	2
3	O-ring, cylinder tube (NBR)	2
4	piston seal (NBR)	2
5	guide ring (PTFE)	1



Please grease the running surfaces after fitting the seals.
We recommend our assembly grease 21-MP-01-00030-50.

