

# Series XG

## ISO 15552, double acting

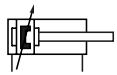
### Technical details

<b>Operating pressure</b>	1 ... 10 bar
<b>Temperature range</b>	-20°C ... +80°C ( XGH: -10°C...+150°C )
<b>Max. stroke</b>	2500 mm
<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, (painted) End caps: Al-die-cast (painted) Piston rod: steel hard chrome plated (optional 1.4301) Seals: PU, NBR (optional FKM)
	Cylinders in accordance with 2014/34/EU (ATEX) available. (Chapter 13)

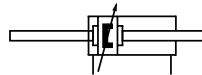


Double acting cylinder with adjustable cushions and magnetic piston for proximity sensors. Standard stroke lengths in table below, additional lengths on request.

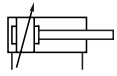
### Versions



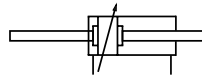
050, 054, 000, 004  
double acting, adjustable cushioning,  
with magnetic piston



450, 454, 400, 404  
double acting, double end piston rod, adjusta-  
ble cushioning, with magnetic piston

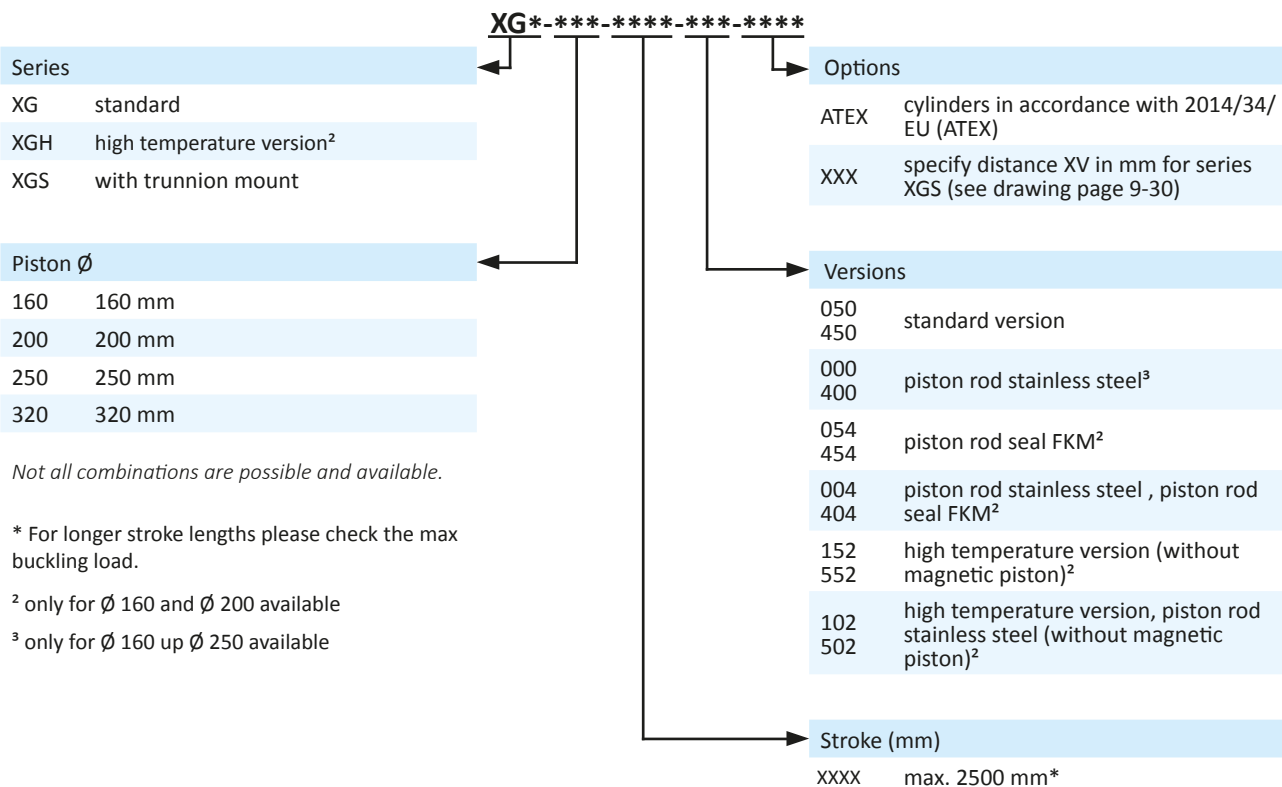


152, 102  
double acting, adjustable cushioning



552, 502  
double acting, double end piston rod, adjusta-  
ble cushioning

### Order code



Not all combinations are possible and available.

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

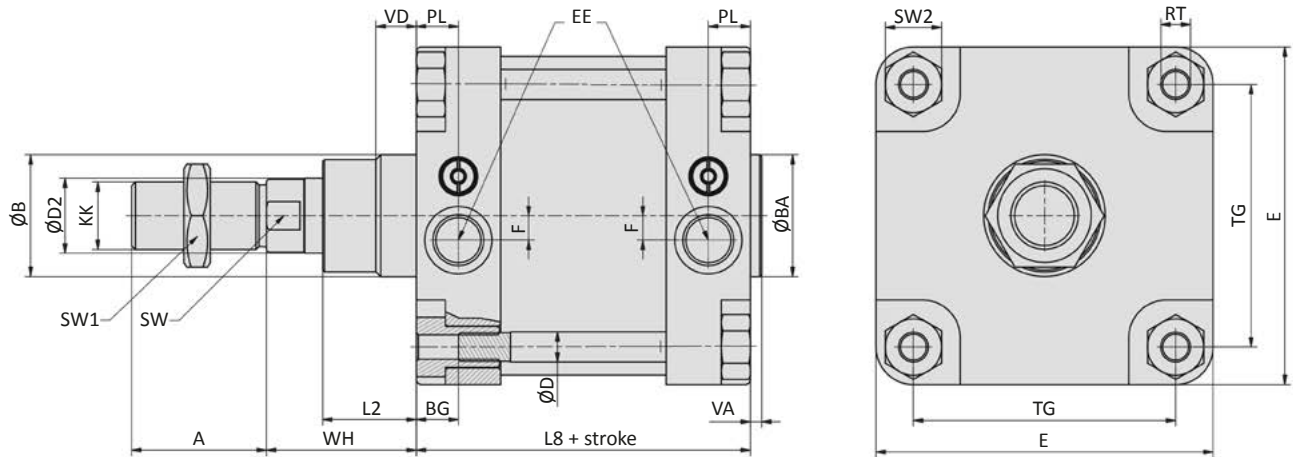
<sup>2</sup> only for Ø 160 and Ø 200 available

<sup>3</sup> only for Ø 160 up Ø 250 available



**Technical data**

Model-no.:	XG-160-...	XG-200-...	XG-250-...	XG-320-...
Piston $\varnothing$ (mm)	160	200	250	320
Force at 6 bar (N)	Extension	10852	16956	26494
	Retraction	10174	16278	25434
Connection	G3/4	G3/4	G1	G1
Piston rod thread	M36 x 2	M36 x 2	M42 x 2	M48 x 2
Cushioning length (mm)	50	50	60	65

**Dimensions series XG**


Piston $\varnothing$	A	$\varnothing B$	$\varnothing BA$	BG	$\varnothing D$	$\varnothing D2$	E	EE	F	KK	L2
160	72	65	65	22.5	16	40	180	G3/4	13	M36 x 2	50
200	72	75	75	22.5	16	40	220	G3/4	13	M36 x 2	55
250	84	90	90	25	20	50	268	G1	15	M42 x 2	67
320	96	110	110	28	25	63	340	G1	0	M48 x 2	82

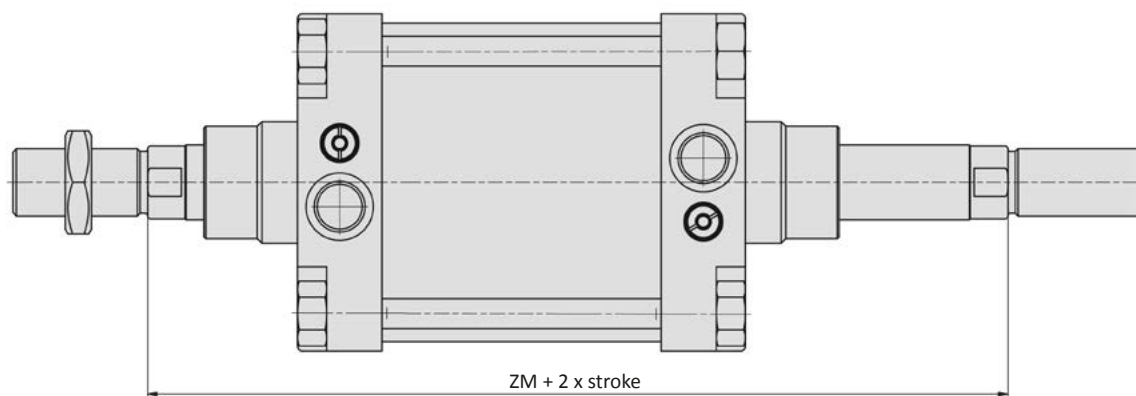
Piston $\varnothing$	L8	PL	RT	SW	SW1	SW2	TG	VA	VD	WH
160	179.5	22.5	M16	36	55	30	140	6	21.5	80
200	180	22.5	M16	36	55	30	175	6	26.5	95
250	200	31	M20	46	65	36	220	10	20	105
320	220	31	M24	55	75	46	270	10	20	120

Piston $\varnothing$ (mm)	160	200	250	320
Weight 0 mm stroke (kg)	15.0	20.0	28.5	48.4
Weight each 100 mm stroke (kg)	2.0	2.5	3.8	6.2

## Series XG

ISO 15552, double acting

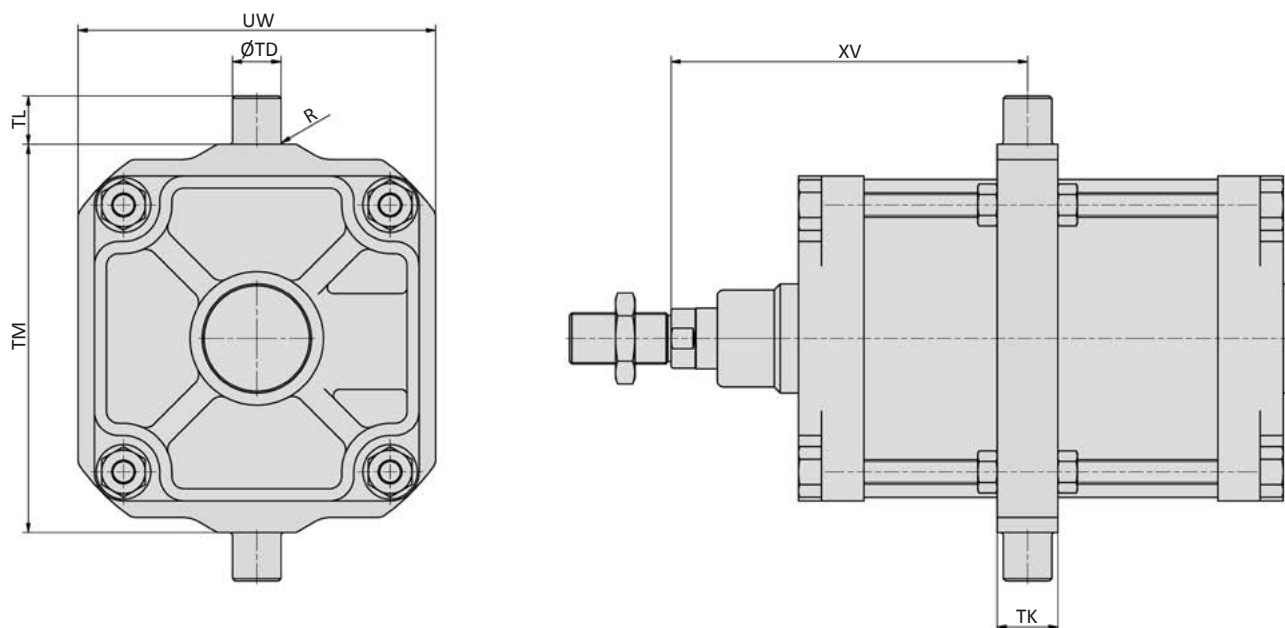
### Dimensions series XG (addition at double end piston rod)



Piston Ø (mm)	160	200	250	320
ZM	340	370	410	460

Piston Ø (mm)	160	200	250	320	
Weight (kg)	0 mm stroke	16.9	22.5	32.3	54.8
	each 100 mm stroke	3.3	3.5	4.0	6.4

### Dimensions series XGS (addition at mounted trunnion mount)

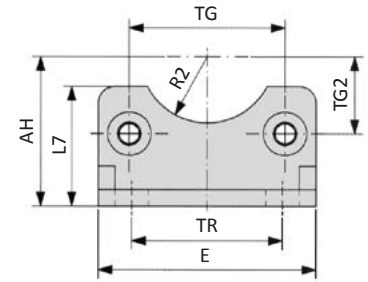
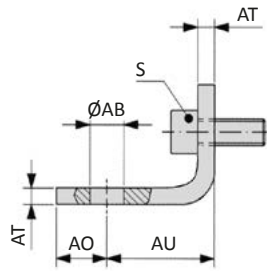


Piston Ø	R	Ø TD	TK	TL	TM	UW	XV <sub>min</sub>
160	2.5	32	40	32	200	190	153
200	2.5	32	40	32	250	240	168
250	2.5	40	50	40	320	295	200
320	2.5	50	70	50	400	370	231

Piston Ø (mm)	160	200	250	320	
Weight (kg)	0 mm stroke	19.2	27.3	41.0	72.6
	each 100 mm stroke	2.0	2.5	3.8	6.2



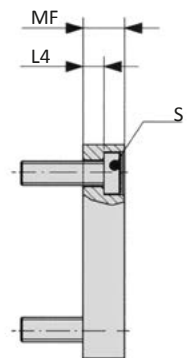
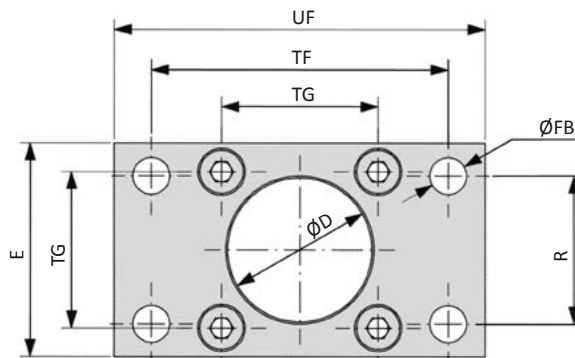
**VLB-xxx-01 Foot mount**



Model-no.:	Ø AB	AH	AO	AU	AT	E	L7	R2	S	TG	TG2	TR
<b>VLB-160-01</b>	18	115	15	60	9	180	100	32.5	M16 x 30	140	70	115
<b>VLB-200-01</b>	22	135	30	70	12	220	100	37.5	M16 x 30	175	87.7	135
<b>VLB-250-01</b>	26	165	25	75	14	270	150	45	M20 x 40	220	110	165
<i>tolerances and adjustments</i>	H14	JS16		± 0.2	± 1			H15		± 0.3		JS14

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

**VLB-xxx-02 Flange mount**



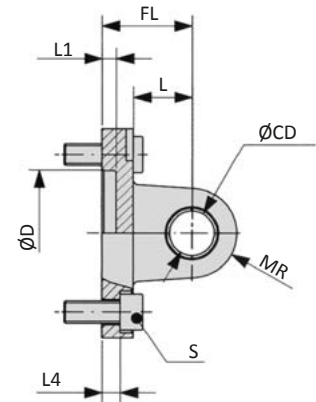
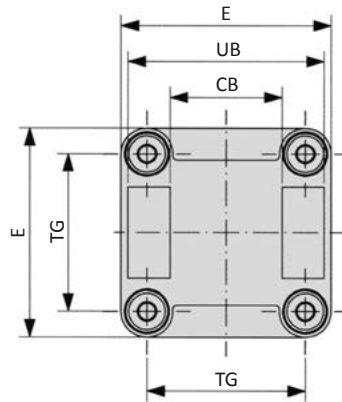
Model-no.:	Ø D	E	Ø FB	L4	MF	R	S	TF	TG	UF
<b>VLB-160-02</b>	65	180	18	9.5	20	115	M16 x 30	230	140	260
<b>VLB-200-02</b>	75	220	22	12.5	25	135	M16 x 30	270	175	300
<b>VLB-250-02</b>	90	285	26	10.5	25	165	M20 x 30	330	220	400
<b>VLB-320-02</b>	110	350	33	15	30	200	M24 x 40	400	270	470
<i>tolerances and adjustments</i>	H11		H13	0 - 0.5	JS14	JS14		JS14	± 0.3	

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



## Series XG Mounting accessories

### VLB-xxx-04 Clevis mount with bushing

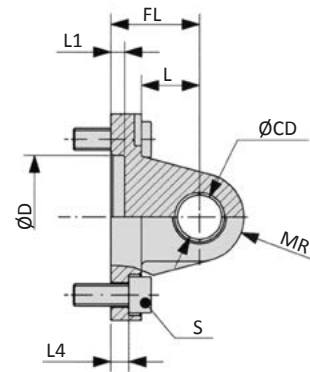
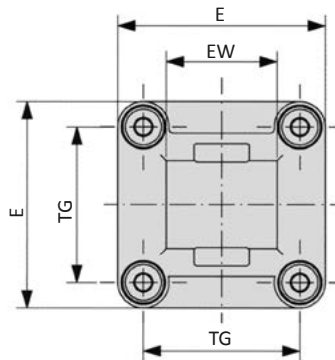


Inclusive clevis pin  
order no: **VLB-xxx-48**

Model-no.:	CB	Ø CD	Ø D	E	FL	L	L1	L4	MR	S	TG	UB
<b>VLB-160-04</b>	90	30	65	180	55	35	7	10	25	M16 x 30	140	170
<b>VLB-200-04</b>	90	30	75	220	60	35	7	11	25	M16 x 30	175	170
<b>VLB-250-04</b>	110	40	90	270	70	45	-	11	40	M20 x 30	220	200
<b>VLB-320-04</b>	120	45	110	350	80	50	-	15	45	M24 x 40	270	220
<i>tolerances and adjustments</i>	H14	H9	H11		± 0.2			± 0.5			± 0.3	h13

Materials: Al, bushing steel and PTFE (Ø 250 and 320 without bushing); 4 screws in accordance with EN ISO 4762 are included.

### VLB-xxx-05 Swivel mount

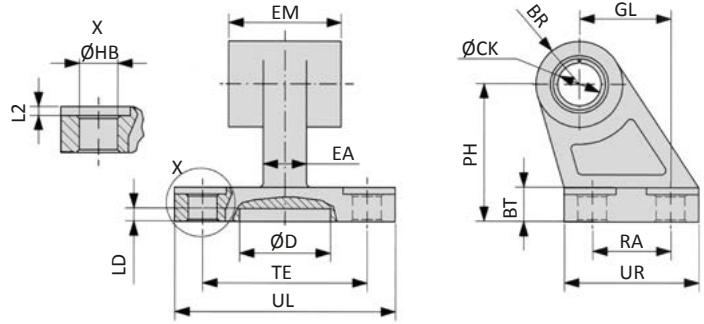


Model-no.:	Ø CD	Ø D	E	EW	FL	L	L1	L4	MR	S	TG
<b>VLB-160-05</b>	30	65	180	90	55	35	7	10	25	M16 x 30	140
<b>VLB-200-05</b>	30	75	220	90	60	35	7	11	25	M16 x 30	175
<b>VLB-250-05</b>	40	90	270	110	70	45	11	11	40	M20 x 30	220
<b>VLB-320-05</b>	45	110	350	120	80	50	15	15	45	M24 x 40	270
<i>tolerances and adjustments</i>	H9	H11		-0.5 -1.2	± 0.2			± 0.5			± 0.3

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

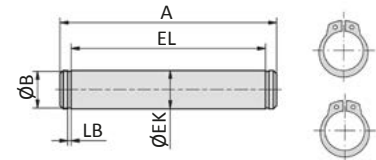


**VLB-xxx-06 Swivel mount 90°**



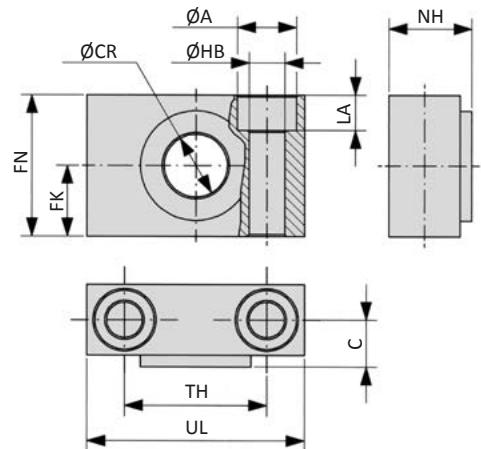
Model-no.:	BR	BT	Ø CK	Ø D	EA	EM	GL	Ø HB	L2	LD	PH	RA	TE	UL	UR
<b>VLB-160-06</b>	31.5	25	30	31	36	90	97	14	4	5	115	88	118	156	126
<b>VLB-200-06</b>	31.5	30	30	31	40	90	105	18	4	5	135	90	122	162	130
<i>tolerances and adjustments</i>			H9			-0.5 -1.5	JS14	H13			JS15	JS14	JS14		
Material: Al															

**VLB-xxx-08 Clevis pin**



Model-no.:	A	Ø B	Ø EK	EL	LB
<b>VLB-200-08</b>	178	28.6	30	171.5	1.60
<b>VLB-250-08</b>	211	37.5	40	202	1.85
<b>VLB-320-08</b>	234	42.5	45	222	1.85
<i>tolerances and adjustments</i>			e8	+ 3 0	
Material: steel, zinc plated; 2 snap rings are included.					

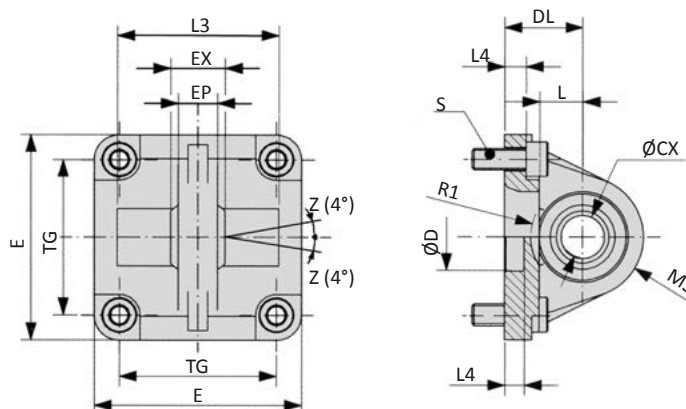
**VLB-xxx-09 Bearing block**



Model-no.:	Ø A	C	Ø CR	FK	FN	Ø HB	LA	NH	TH	UL
<b>VLB-200-09</b>	26	22.5	32	30	60	18	17	40	60	92
<b>VLB-250-09</b>	33	31	40	35	70	22	20	56	70	140
<i>tolerances and adjustments</i>			H9	± 0.2		H13			± 0.3	
Materials: Al, bronze bushing										

## Series XG Mounting accessories

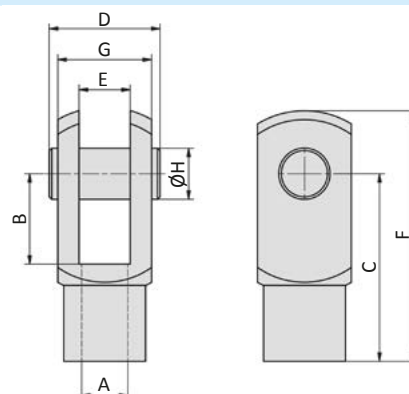
### VLB-xxx-12 Swivel mount with spherical bearing



Model-no.:	Ø CX	Ø D	DL	E	EP	EX	L	L1	L3	L4	MS	R1	S	TG
<b>VLB-160-12</b>	35	65	55	180	28	43	35	7	-	10	45	-	M16 x 30	140
<b>VLB-200-12</b>	35	75	60	220	28	43	35	7	-	11	48	-	M16 x 30	175
<i>tolerances and adjustments</i>	H7	H11	± 0.2			± 0.1				± 0.5				± 0.3

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

### FD-xxx Rod clevis

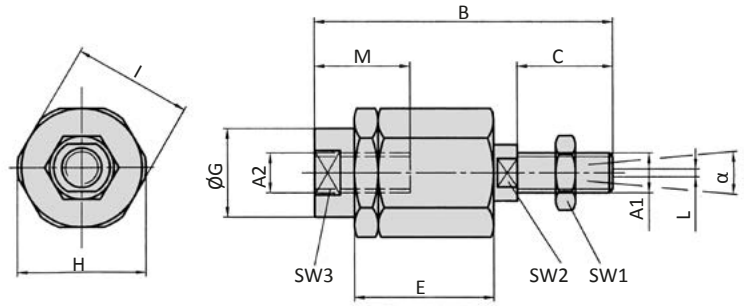


Model-no.:	for cylinder	A	B	C	D	E	F	G	H
<b>FD-200</b>	XG-160, XG-200	M36 x 2	72	144	84	35	188	70	35
<b>FD-250</b>	XG-250	M42 x 2	84	168	104.5	40	232	85	40
<b>FD-320</b>	XG-320	M48 x 2	96	192	117.5	50	265	96	50

Material: steel, zinc plated

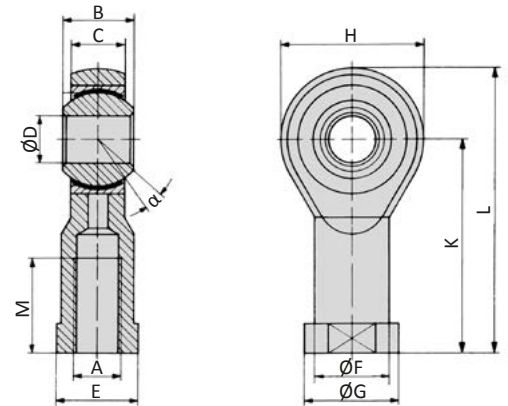


**FK-xxx Flexible coupling**



Model-no.:	for cylinder	A1, A2	B	C	D	E	ØG	H	I	L	M	SW1	SW2	SW3	α
<b>FK-200</b>	XG-160, XG-200	M36 x 2	190	72	15.5	77	57	75	70	2	68	32	54	55	8°
Material: steel, zinc plated															

**FO-xxx Rod eye**



Model-no.:	for cylinder	A	B	C	ØD	E	ØF	ØG	H	K	L	M	α
<b>FO-160/200</b>	XG-160, XG-200	M36 x 2	43	28	35	50	46	58	80	125	165	56	16°
<b>FO-250</b>	XG-250	M42 x 2	49	33	40	55	53	65	91	142	187	60	16°
<b>FO-320</b>	XG-320	M48 x 2	60	45	50	60	65	75	117	162	218	65	14°
Materials: steel, zinc plated, bearing steel, bronze bushing													

**Proximity sensors**

