

Series HMU

Mini cylinders, double acting

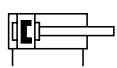
Technical details

Operating pressure	1 ... 10 bar								
Temperature range	-20°C ... +80°C								
Max. stroke	900 mm								
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	<table border="0"> <tr> <td>Cylinder tube:</td> <td>stainless steel</td> </tr> <tr> <td>End caps:</td> <td>Al (anodized)</td> </tr> <tr> <td>Piston rod:</td> <td>stainless steel</td> </tr> <tr> <td>Seals:</td> <td>PU, NBR</td> </tr> </table>	Cylinder tube:	stainless steel	End caps:	Al (anodized)	Piston rod:	stainless steel	Seals:	PU, NBR
Cylinder tube:	stainless steel								
End caps:	Al (anodized)								
Piston rod:	stainless steel								
Seals:	PU, NBR								

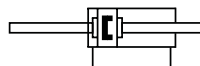


Double acting pneumatic cylinder with magnetic piston and built-in cushioning rings or adjustable cushions.

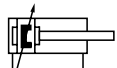
Versions



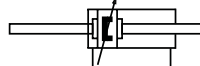
HMU
double acting, with magnetic piston



HMUDE
double acting, double end piston rod, with magnetic piston



HMUP
double acting, adjustable cushioning, with magnetic piston



HMUPDE
double acting, double end piston rod, adjustable cushioning, with magnetic piston

Order code

Series		Options	
HMU		RG	piston rod thread according to ISO
HMUDE			
HMUPDE			
Version		Stroke (mm)	
without	standard version	XXX	max. 900 mm
S	lateral air connection, rear	Standard#	25, 40, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500 mm
Z	central air connection, rear		
		Piston Ø	
		32	32 mm
		40	40 mm

HMU***-**-**-***-**-**

only for series HMU and HMUP

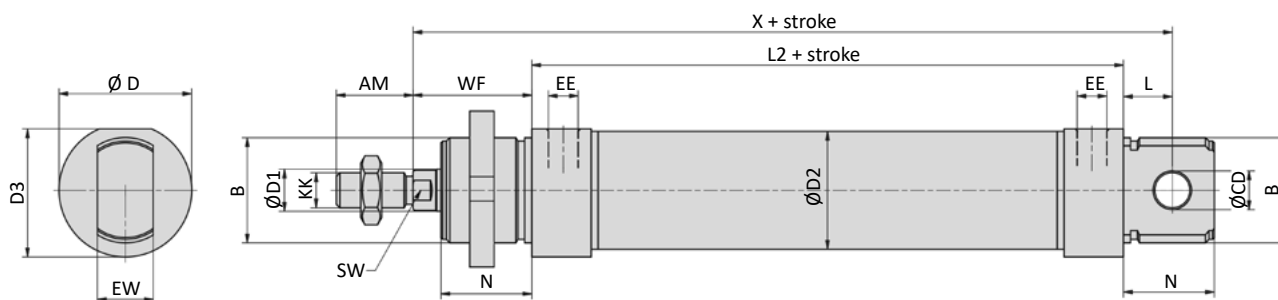
Series HMU

Mini cylinders, double acting

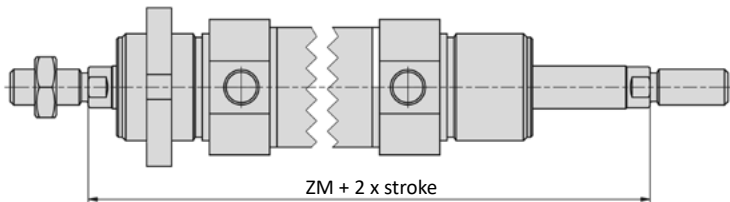
Technical data

Model-no.:	HMU-32-...	HMU-40-...	HMUP-32-...	HMUP-40-...
Piston \varnothing (mm)	32	40	32	40
Force at 6 bar (N)	Extension	678	434	678
	Retraction	570	373	570
Connection	G1/8	G1/4	G1/8	G1/4
Piston rod thread	M10 x 1.25	M12 x 1.25	M10 x 1.25	M12 x 1.25
Cushioning length (mm)	-	-	22.5	24.5

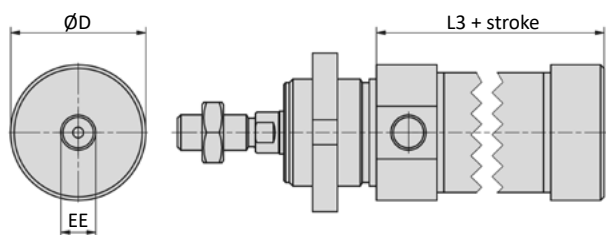
Dimensions series HMU, HMUP



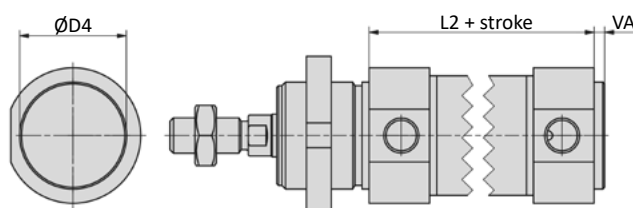
double end piston rod



Version -Z



Version -S

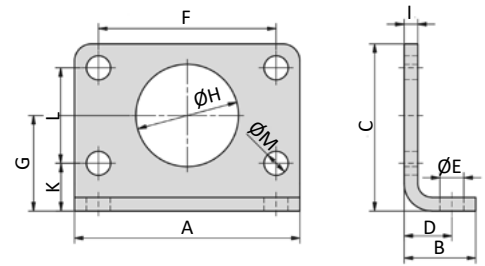
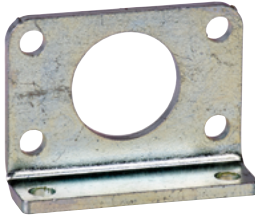


Piston \varnothing	AM	B	\varnothing CD	\varnothing D	\varnothing D1	\varnothing D2	D3	\varnothing D4	EE	EW
32	22	M30 x 1.5	10	38	12	33.6	36.5	30	G1/8	16
40	24	M38 x 1.5	12	46	16	41.6	44	38	G1/4	18

Piston \varnothing	KK	L	L2	L3	N	SW	VA	WF	X	ZM
32	M10 x 1.25	14	69.5	65.5	26	10	3	34	117.5	137.5
40	M12 x 1.25	16	84.5	77.5	30	13	4	39	139.5	162.5

Series HMU Mounting accessories

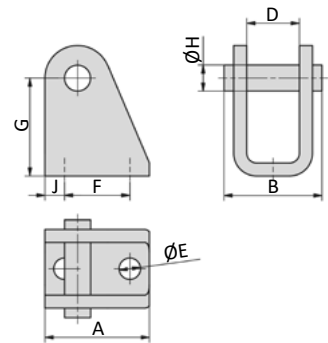
RA-xx Foot mount



Model-no.:	A	B	C	D	Ø E	F	G	Ø H	I	K	L	Ø M
RA-32	66	21	49	14	7	52	28	30	4	14	28	7
RA-40	80	30	58	20	9	60	33	38	5	18	30	9

material: steel, zinc plated

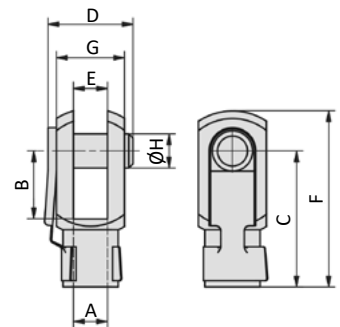
RC-xx-1 Clevis mount



Model-no.:	A	B	D	Ø E	F	G	Ø H	J
RC-32-1	35	31.3	16.1	6.6	24	35	10	5.5
RC-40-1	45	35.5	18.1	9	30	40	12	7.5

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

RD-xx, FD-xx Rod clevis



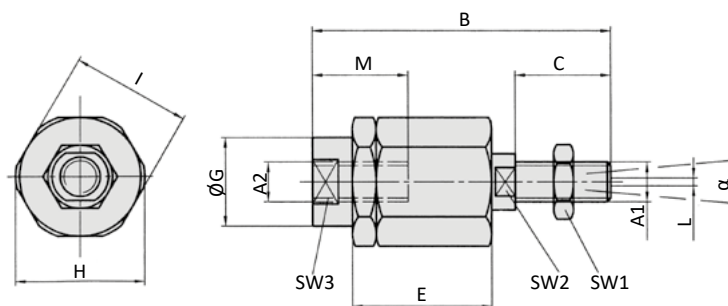
Model-no.:	A	B	C	D	E	F	G	Ø H
RD-25	M10 x 1.25	20	40	26	10	52	20	10
FD-40	M12 x 1.25	24	48	32	12	62	24	12

material: steel, zinc plated

Series HMU

Mounting accessories

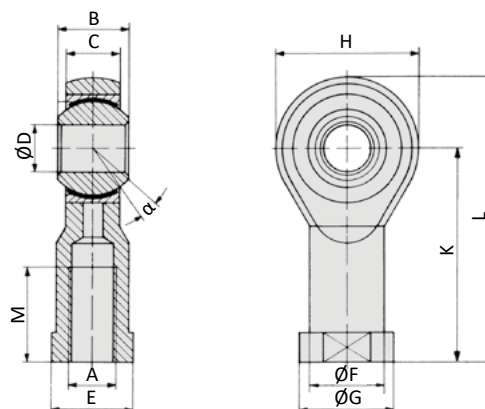
FK-xx Flexible coupling



Model-no.:	A1, A2	B	C	D	E	ØG	H	I	L	M	SW1	SW2	SW3	α
FK-32	M10 x 1.25	71.5	20	7.5	35	22	32	30	2	22	17	12	19	8°
FK-40	M12 x 1.25	75	24	7.5	35	22	32	30	2	22	19	12	19	8°

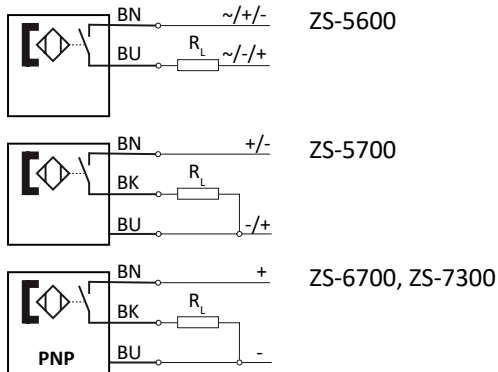
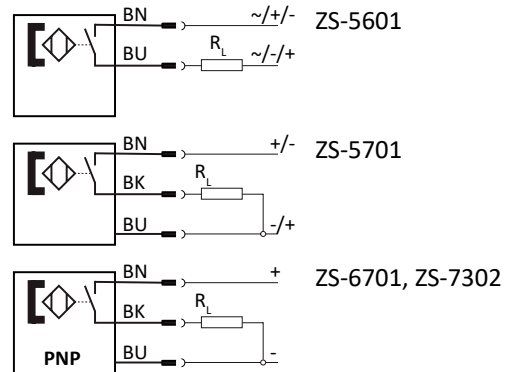
material: steel, zinc plated

RO-xx, FO-xx Rod eye



Model-no.:	A	B	C	ØD	E	ØF	ØG	H	K	L	M	α
RO-25	M10 x 1.25	14	10.5	10	17	15	19	28	43	57	20	13°
FO-40	M12 x 1.25	16	12	12	19	17.5	22	32	50	66	22	13°

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

For this cylinder series separate mounting brackets are necessary for the sensor mounting.

Mounting brackets for proximity sensors

Model-no.:	NT-550
	
Design	sensor mounting