

Technical details

Operating pressure	1 ... 10 bar
Temperature range	-30°C ... +80°C (0 ... +150°C for high temperature version)
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: stainless steel End caps: Al (anodized) Piston rod: stainless steel Seals: PU, NBR
	Cylinders in accordance with 2014/34/EU (ATEX) available. (Chapter 13)



Double acting pneumatic cylinder with magnetic piston and built-in cushioning rings or adjustable cushions. Standard stroke lengths in table below, additional lengths on request.

Versions

	HM double acting, with magnetic piston		HMDE double acting, double end piston rod, with magnetic piston
	HMP double acting, adjustable cushioning, with magnetic piston		HMPDE double acting, double end piston rod, adjustable cushioning, with magnetic piston
	HDH double acting, high temperature version		
	HDHP double acting, adjustable cushioning, high temperature version		

Order code

	H****-**-***-****	
Series	←	Options
HM standard		ATEX cylinders in accordance with 2014/34/EU (ATEX)
HMP		
HMDE		
HMPDE		Stroke (mm)
HDH		XXX max. stroke 900 mm
HDHP		Standard# 25, 40, 50, 80, 100, 125, 160, 200, 250, 320, 400, 500 mm
		Piston-Ø
		32 32mm
		40 40 mm
		50 50 mm
		63 63 mm

only for series HM and HMP in consideration of max. stroke

Series HM

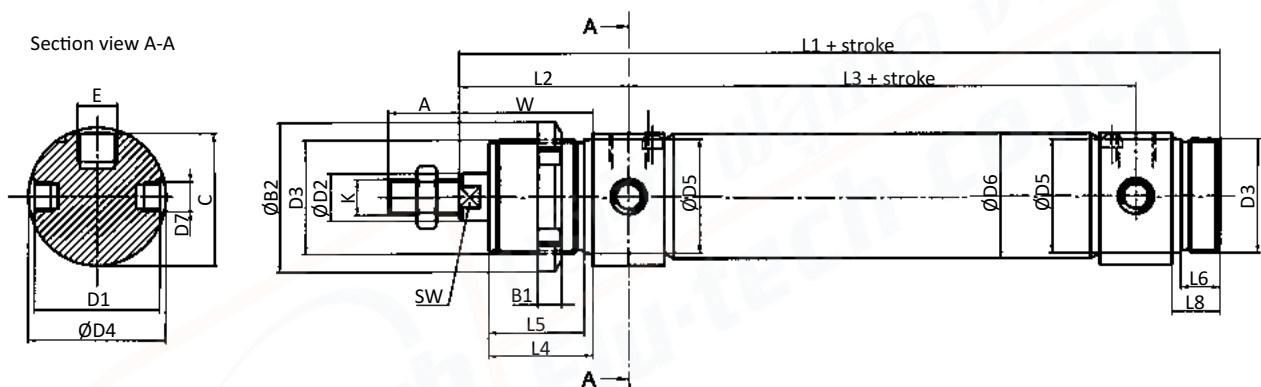
double acting

Technical data

Model-no.:	Hxx-32-...	Hxx-40-...	Hxx-50-...	Hxx-63-...
Piston \varnothing (mm)	32	40	50	63
Force at 6 bar (N)	Extension	434	678	1060
	Retraction	373	570	890
Connection	G1/8	G1/4	G1/4	G3/8
Piston rod thread	M10	M12	M16	M16
Cushioning length (mm)*	22,5	24,5	29,5	29,5

* only for series HMP, HMPDE, HDHP

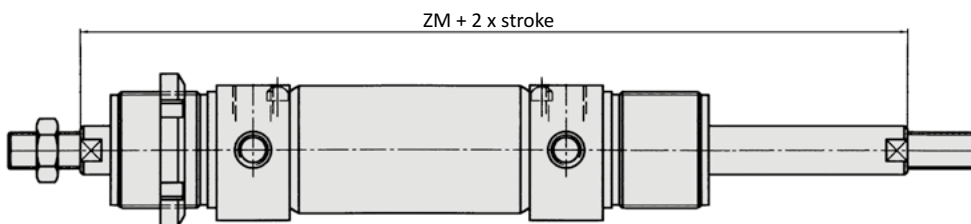
Dimensions series HM, HMP, HDH, HDHP



Piston- \varnothing	A	B1	B2	C	D1	D2	D3	D4	D5	D6	D7
32	20	7	45	36,5	35	12	M30 x 1,5	38	30	33,6	M8 x 1
40	24	8	50	44	42	16	M38 x 1,5	46	38	41,6	M10 x 1
50	32	9	58	55	53	20	M45 x 1,5	57	45	52,4	M12 x 1,5
63	32	9	58	67,5	66	20	M45 x 1,5	70	45	65,4	M14 x 1,5

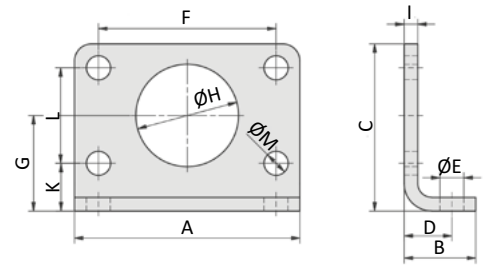
Piston- \varnothing	E	K	L1	L2	L3	L4	L5	L6	L8	SW	W
32	G1/8	M10	148	47	78	30	27	12	14	10	38
40	G1/4	M12	174	57	89	35	32	13	16	13	45
50	G1/4	M16	188	62	96	38	35	15	18	17	50
63	G3/8	M16	192	63	98	38	35	15	18	17	50

Additional dimensions Series HMDE, HMPDE



Piston- \varnothing	32	40	50	63
ZM	172	203	220	224

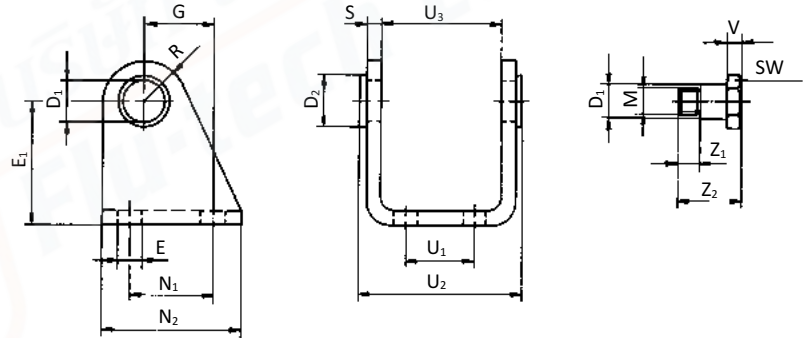
RA-xx Foot mount



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
RA-50	90	30	70	20	9	70	40	45	6	20	40	9
RA-63	96	30	80	20	9	76	45	45	6	20	50	9

Material: steel, zinc plated

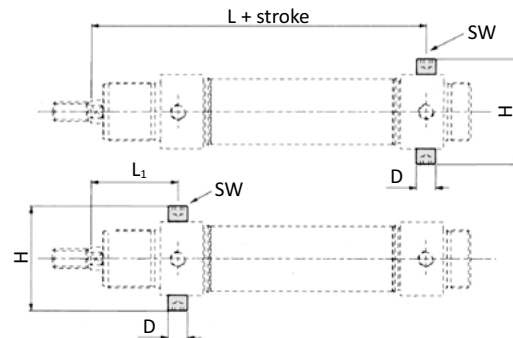
RC-xx Clevis mount



Model-no.:	D ₁	D ₂	E	E ₁	G	M	N ₁	N ₂	R	S	U ₁	U ₂	U ₃	V	Z ₁	Z ₁	SW
RC-32	10	15	7	35	20	M8 x 1	24	40	12	4	20	50,1	38,1	4	6	18	13
RC-40	12	20	9	40	27	M10 x 1	30	50	13	5	28	60,1	46,1	5	7	21,6	17
RC-50	14	23	9	45	30	M12 x 1,5	34	54	14	6	36	74,1	57,1	6	9	26,4	19
RC-63	16	23	9	50	34	M14 x 1,5	35	65	16	6	42	88,1	70,1	6	16	35	19

Material: steel, zinc plated; 2 screws are included.

RG-xx Threaded bolts



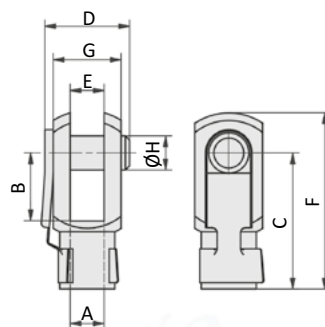
Model-no.:	D	H	L	L ₁	SW
RG-32	10	51	125	47	5
RG-40	12	61	146	57	6
RG-50	14	75	158	62	6
RG-63	16	90	162	64	8

Material: steel, zinc plated

Series HM

Mounting accessories

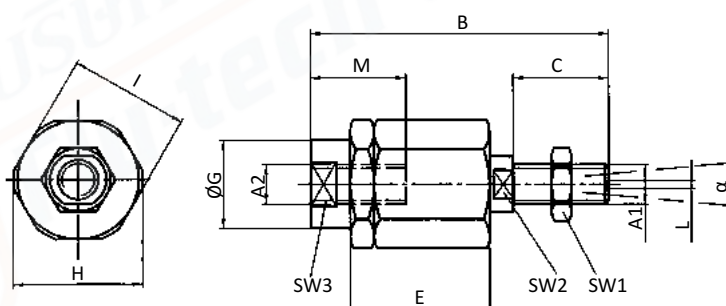
RD-xx Rod clevis



Model-no.:	for cylinder \varnothing	A	B	C	D	E	F	G	$\varnothing H$
RD-32	32	M10	20	40	26	10	52	20	10
RD-40	40	M12	24	48	32	12	62	24	12
RD-63	50, 63	M16	32	64	36	16	83	32	16

Material: steel, zinc plated

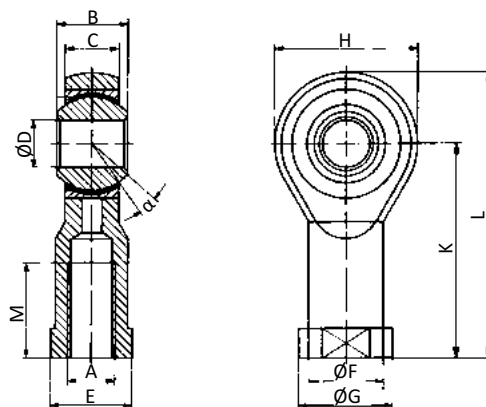
FK-xx Flexible coupling



Model-no.:	for cylinder \varnothing	A1, A2	B	C	D	E	$\varnothing G$	H	I	L	M	SW1	SW2	SW3	α
FK-33	32	M10	71,5	20	7,5	35	22	32	30	2	22	12	19	17	8°
FK-41	40	M12	75,5	24	7,5	35	22	32	30	2	22	12	20	19	9°

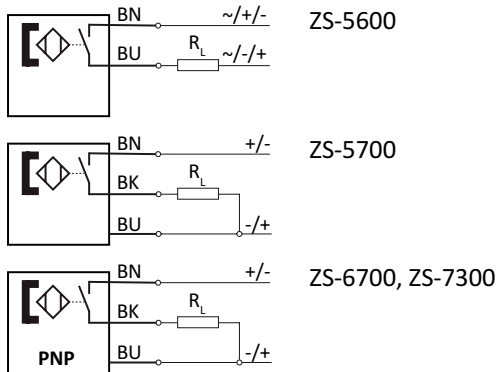
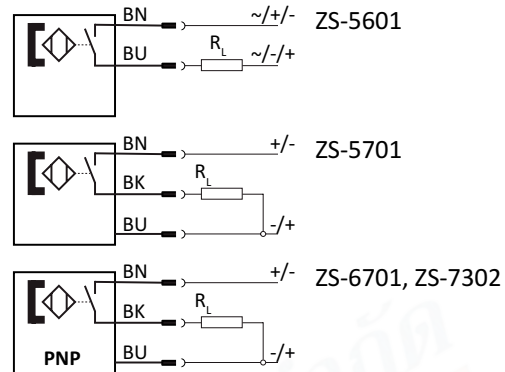
Material: steel, zinc plated

RO-xx Rod eye



Model-no.:	for cylinder \varnothing	A	B	C	$\varnothing D$	E	$\varnothing F$	$\varnothing G$	H	K	L	M	α
RO-32	32	M10	14	10,5	10	17	15	19	28	43	57	20	13°
RO-40	40	M12	16	12	12	19	17,5	22	32	50	66	22	13°
RO-50	50, 63	M16	21	15	16	22	22	27	42	64	85	28	15°

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 socket 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	 <p>sensor mounting</p>