

Compact cylinder, double-acting, inches ADN

FESTO



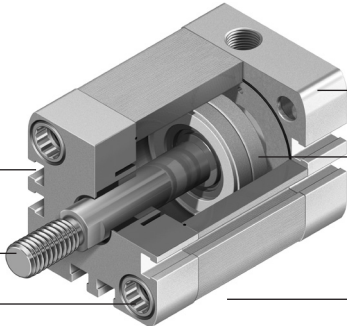
Key features

At a glance

Sensor slots on three sides for flush mounting of proximity switches

Piston rod with choice of male or female thread

Mounting option:
Female thread and through-hole



Centring hole in the end cap suitable for centring pins ZBS

Magnet for contactless position sensing

Integrated cushioning for absorbing residual energy

More than the standard Powerful Convenient Reliable

- The compact cylinders are based on the ISO 21287 standard
- The ADN is characterised by its compact design and wide range of applications thanks to the large number of variants
- The variants can be configured according to individual needs using a modular product system
- Integrated cushioning for absorbing residual energy
- Long service life thanks to exceptional cushioning characteristics and low friction values
- Easy to mount with a comprehensive range of mounting accessories for just about every type of installation
- Highly flexible thanks to the wide range of variants
- Contactless position sensing using proximity switches
- Optimised manufacturing methods, patented technology and more than 40 years of experience in the field of cylinders make Festo and the ADN a great partner

Variants from the modular product system			
Symbol	Key features	Description	
	S2 Through piston rod	The piston rod can be used for attachment at both ends of the cylinder	
	K2 Extended male piston rod thread	–	
	K8 Extended piston rod	–	
	S6 Heat-resistant seals	Temperature resistance up to max. 248 °F	

Type codes

001	Series		005	Cushioning	
ADN	Compact cylinder, double-acting		P	Elastic cushioning rings/plates on both sides	
002	Piston diameter ["]		006	Position sensing	
1/2"	1/2"		A	For proximity sensor	
5/8"	5/8"		007	Piston rod type	
3/4"	3/4"			At one end	
1"	1"		S2	Through piston rod	
1 1/4"	1 1/4"		008	Piston rod thread extension	
1 5/8"	1 5/8"		...K2	0.0393-0.7874	
2"	2"		009	Extended piston rod	
2 1/2"	2 1/2"		...K8	0.0393-15.748	
003	Stroke range ["]		010	Temperature range [°F]	
...	0.039 ... 15.748		S6	Heat-resistant seals max. 248 °F	
004	Piston rod thread type				
A	Male thread				
I	Female thread				

Datasheet

General technical data								
Piston Ø	1/2"	5/8"	3/4"	1"	1 1/4"	1 5/8"	2"	2 1/2"
Stroke	0.039 ... 11.811 in				0.039 ... 15.748 in			
Based on standard	ISO 21287							
Design	Piston Piston rod Profile barrel							
Mode of operation	Double-acting							
Pneumatic connection	10-32 UNF-2B				1/8 NPT			
Piston rod thread								
[I] Inside	4-48 UNF-2B	8-36 UNF-2B	10-32 UNF-2B		5/16-24 UNF-2B		3/8-24 UNF-2B	
[A] Outside	10-32 UNF-2A		5/16-24 UNF-2A		3/8-24 UNF-2A		1/2-20 UNF-2A	
Cushioning	Elastic cushioning rings/plates at both ends							
Position sensing	Via proximity switch							
Type of mounting	Either: With through-hole With female thread With accessories							
Mounting position	Any							

Operating and environmental conditions								
Piston Ø	1/2"	5/8"	3/4"	1"	1 1/4"	1 5/8"	2"	2 1/2"
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]							
Note on the operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)							
Operating pressure in MPa								
	0.1 ... 1		0.06 ... 1					
[S2] Through piston rod	0.15 ... 1	0.13 ... 1	0.12 ... 1			0.1 ... 1		0.08 ... 1
[S6] Heat-resistant seals	0.1 ... 1				0.06 ... 1			
Operating pressure in bar								
	1 ... 10		0.6 ... 10					
[S2] Through piston rod	1.5 ... 10	1.3 ... 10	1.2 ... 10			1 ... 10		0.8 ... 10
[S6] Heat-resistant seals	1 ... 10				0.6 ... 10			
Operating pressure in psi								
	14.5 ... 145		8.7... 145					
[S2] Through piston rod	21.8 ... 145	18.9 ... 145	17.4 ... 145			14.5 ... 145		11.6 ... 145
[S6] Heat-resistant seals	14.5 ... 145				8.7... 145			
Ambient temperature ¹⁾								
	−4 ... 176 °F							
[S6] Heat-resistant seals	32 ... 248 °F							
Corrosion resistance class CRC ²⁾	2 - Moderate corrosion stress							

1) Note operating range of proximity switches.

2) More information www.festo.com/x/topic/crc

Weight								
Piston Ø	1/2"	5/8"	3/4"	1"	1 1/4"	1 5/8"	2"	2 1/2"
Basic weight at 0 stroke	0.15 lb	0.16 lb	0.26 lb	0.31 lb	0.53 lb	0.69 lb	1.08 lb	1.44 lb
Additional weight per 0.4 mm stroke	0.02 lb	0.03 lb	0.04 lb	0.05 lb	0.06 lb	0.07 lb	0.1 lb	0.12 lb
Moving mass at 0 stroke	0.02 lb	0.03 lb	0.06 lb	0.1 lb	0.12 lb	0.16 lb	0.28 lb	0.36 lb
Additional moving mass per 0.4 mm stroke	0.01 lb	0.01 lb	0.01 lb	0.01 lb	0.02 lb	0.02 lb	0.03 lb	0.03 lb

Materials								
Piston Ø	1/2"	5/8"	3/4"	1"	1 1/4"	1 5/8"	2"	2 1/2"
Cover material	Anodised wrought aluminium alloy							
Cylinder barrel material	Smooth-anodised wrought aluminium alloy							
Piston rod material	High-alloy steel							
Flange screws material	Steel							
Dynamic seals material	TPE-U(PU)							
LABS (PWIS) conformity	VDMA24364-B1/B2-L							

Datasheet



Note

These specifications represent the maximum values that can be achieved. The maximum permissible impact energy must be observed.

Permissible impact velocity:

$$v = \sqrt{\frac{2 \cdot E}{m_1 + m_2}}$$

Maximum permissible mass:

$$n_2 = \frac{2 \cdot E}{v^2} - m_1$$

V Permissible impact velocity

E Max. impact energy

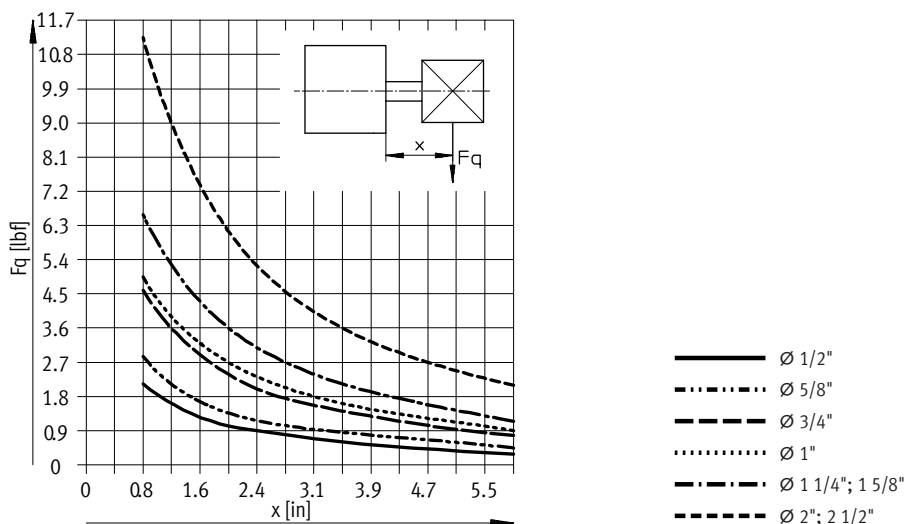
m1 Moving mass (drive)

m2 Moving payload

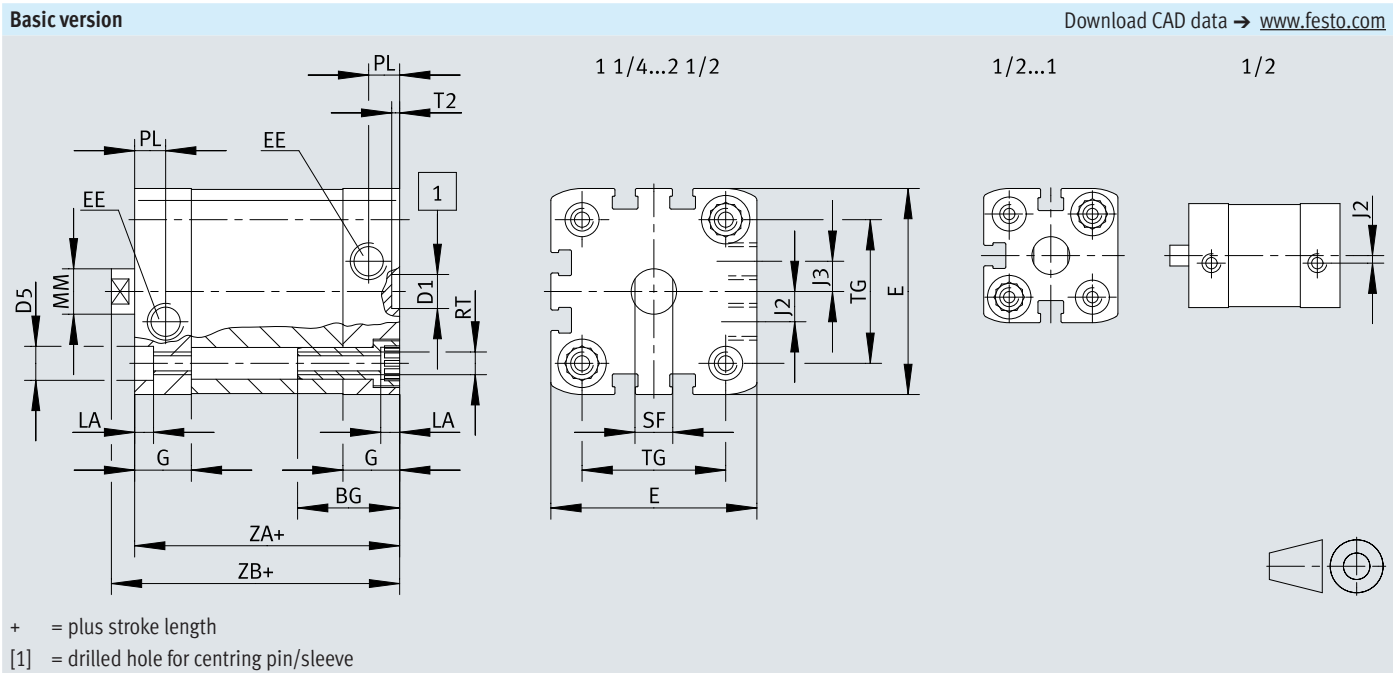
Forces and impact energy

Piston Ø	1/2"	5/8"	3/4"	1"	1 1/4"	1 5/8"	2"	2 1/2"
Theoretical force at 0.6 MPa (6 bar, 87 psi), advancing								
	15.3 lbf	27.2 lbf	42.3 lbf	66.3 lbf	108.6 lbf	169.5 lbf	264.8 lbf	420.4 lbf
[S2] Through piston rod	11.5 lbf	20.2 lbf	31.7 lbf	55.5 lbf	93.3 lbf	154.2 lbf	237.6 lbf	393.4 lbf
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting								
	11.5 lbf	20.2 lbf	31.7 lbf	55.5 lbf	93.3 lbf	154.2 lbf	237.6 lbf	393.4 lbf
[S2] Through piston rod	11.5 lbf	20.2 lbf	31.7 lbf	55.5 lbf	93.3 lbf	154.2 lbf	237.6 lbf	393.4 lbf
Impact energy in the end positions								
	0.052 ft-lbf	0.111 ft-lbf	0.148 ft-lbf	0.221 ft-lbf	0.295 ft-lbf	0.516 ft-lbf	0.738 ft-lbf	0.959 ft-lbf
[S6] Heat-resistant seals	0.03 ft-lbf	0.06 ft-lbf	0.07 ft-lbf	0.11 ft-lbf	0.15 ft-lbf	0.26 ft-lbf	0.37 ft-lbf	0.48 ft-lbf

Max. lateral force F_q as a function of projection x



Dimensions



Dimensions

∅	BG	D1 ∅	D5 ∅	E	EE	G	J2	J3	PW
[in]	min.	H9	F9	+0.01					+0.01
1/2"	0.67	0.35	0.24	1.08	10-32 UNF-2B	0.41	0.08	–	0.14
5/8"	0.67	0.35	0.24	1.14	10-32 UNF-2B	0.43	0.1	0.1	0.14
3/4"	0.77	0.35	0.35	1.4	10-32 UNF-2B	0.47	0.1	0.1	0.2
1"	0.77	0.35	0.35	1.56	10-32 UNF-2B	0.47	0.1	0.1	0.2
1 1/4"	1.02	0.35	0.35	1.85	1/8-27 NPT	0.59	0.24	0.24	0.2
1 5/8"	1.02	0.35	0.35	2.15	1/8-27 NPT	0.59	0.31	0.31	0.2
2"	1.06	0.47	0.47	2.58	1/8-27 NPT	0.59	0.31	0.31	0.2
2 1/2"	1.06	0.47	0.47	2.97	1/8-27 NPT	0.59	0.45	0.45	0.2

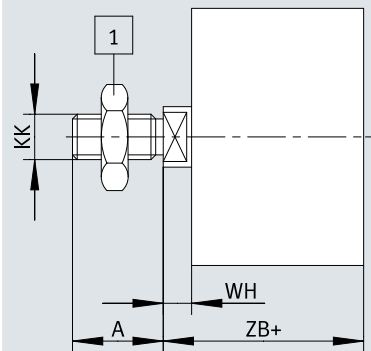
∅	MM ∅	PL	RT	ST	T2	TG	ZA	ZB
[in]	h8	+0.01		h13		±0.01	±0.01	+0.05
1/2"	0.24	0.24	M4	0.2	0.08	0.63	1.38	1.54
5/8"	0.31	0.24	M4	0.28	0.08	0.71	1.38	1.56
3/4"	0.39	0.24	M5	0.35	0.08	0.87	1.46	1.67
1"	0.39	0.24	M5	0.35	0.08	1.02	1.54	1.75
1 1/4"	0.47	0.32	M6	0.39	0.08	1.28	1.73	1.97
1 5/8"	0.47	0.32	M6	0.39	0.08	1.5	1.77	2.01
2"	0.63	0.32	M8	0.51	0.1	1.83	1.77	2.07
2 1/2"	0.63	0.32	M8	0.51	0.1	2.22	1.93	2.22

Dimensions

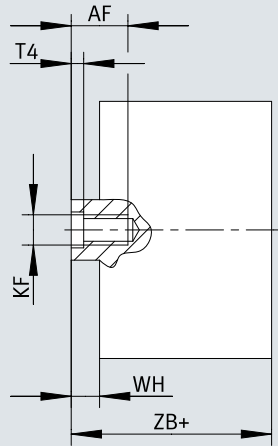
Versions

Download CAD data → www.festo.com

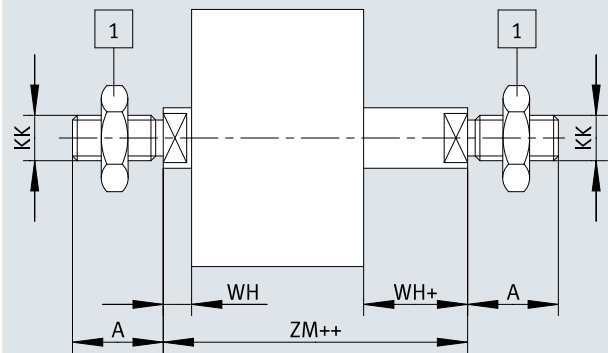
A – Male thread



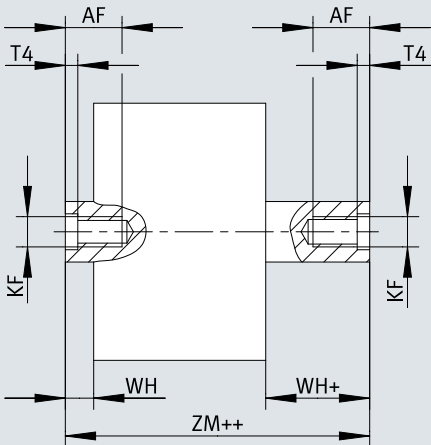
I – Female thread



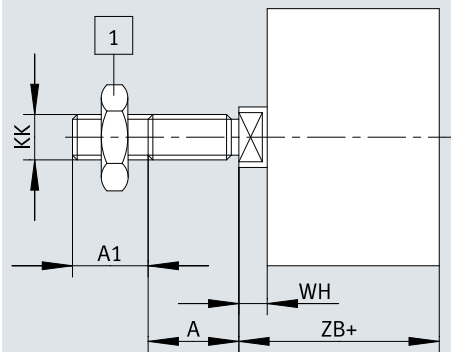
S2 – Through piston rod
With male thread



With female thread



K2 – Extended male piston rod thread

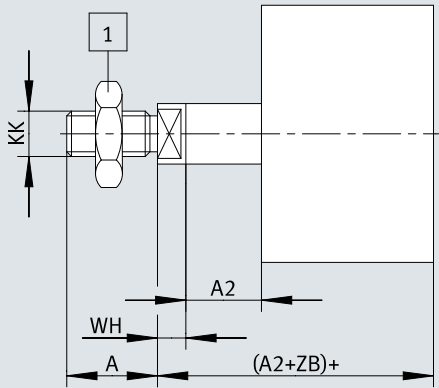


Dimensions

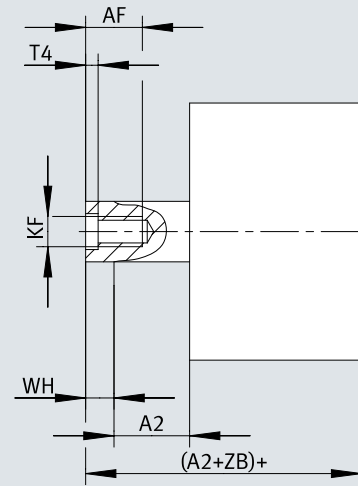
Versions

Download CAD data → www.festo.com

K8 – Extended piston rod
With male thread



With female thread



+ = plus stroke length

++ = plus 2x stroke length

[1] = Hex nut DIN 439-B only with 1 1/4" ... 2 1/2"

∅	A	A1	A2	AF	B ∅	D7 ∅	D9 ∅	L5
[in]	-0.02			min.				
1/2"	0.39	0.04 ... 0.39	0.04 ... 11.81	0.31	–	–	–	–
5/8"	0.47	0.04 ... 0.39	0.04 ... 11.81	0.39	–	0.18	0.13	0.12
3/4"	0.63	0.04 ... 0.79	0.04 ... 11.81	0.55	0.71	0.24	0.15	0.08
1"	0.63	0.04 ... 0.79	0.04 ... 11.81	0.55	0.71	0.24	0.15	0.08
1 1/4"	0.75	0.04 ... 0.79	0.04 ... 15.75	0.63	1.06	0.31	0.18	0.12
1 5/8"	0.75	0.04 ... 0.79	0.04 ... 15.75	0.63	1.06	0.31	0.18	0.12
2"	0.87	0.04 ... 0.79	0.04 ... 15.75	0.79	1.22	0.39	0.24	0.14
2 1/2"	0.87	0.04 ... 0.79	0.04 ... 15.75	0.79	1.22	0.39	0.24	0.14

∅	KF	KK	T4	VD	WH	ZB	ZM
[in]					+0.05	+0.05	+0.02
1/2"	4-48 UNF-2B	10-32 UNF-2A	0.06	–	0.17	1.54	1.75
5/8"	8-36 UNF-2B	10-32 UNF-2A	0.06	–	0.19	1.56	1.8
3/4"	10-32 UNF-2B	5/16 UNF-2A	0.1	0.2	0.22	1.67	1.95
1"	10-32 UNF-2B	5/16 UNF-2A	0.1	0.2	0.22	1.75	2.03
1 1/4"	5/16-24 UNF-2B	3/8 UNF-2A	0.13	0.25	0.24	1.97	2.26
1 5/8"	5/16-24 UNF-2B	3/8 UNF-2A	0.13	0.25	0.24	2.01	2.31
2"	3/8-24 UNF-2B	1/2 UNF-2A	0.19	0.25	0.32	2.09	2.44
2 1/2"	3/8-24 UNF-2B	1/2 UNF-2A	0.19	0.25	0.32	2.25	2.57

Ordering data

With female thread		Piston Ø	Stroke	Part no.	Type
	1/2"	1/2"	0.25 in	557025	ADN-1/2"-1/4"-I-P-A
			0.5 in	557026	ADN-1/2"-1/2"-I-P-A
			0.75 in	557027	ADN-1/2"-3/4"-I-P-A
			1 in	557028	ADN-1/2"-1"-I-P-A
			1.25 in	557029	ADN-1/2"-1 1/4"-I-P-A
			1.5 in	557030	ADN-1/2"-1 1/2"-I-P-A
	5/8"	5/8"	0.25 in	557039	ADN-5/8"-1/4"-I-P-A
			0.5 in	557040	ADN-5/8"-1/2"-I-P-A
			0.75 in	557041	ADN-5/8"-3/4"-I-P-A
			1 in	557042	ADN-5/8"-1"-I-P-A
			1.25 in	557043	ADN-5/8"-1 1/4"-I-P-A
			1.5 in	557044	ADN-5/8"-1 1/2"-I-P-A
			2 in	557045	ADN-5/8"-2"-I-P-A
	3/4"	3/4"	0.25 in	557055	ADN-3/4"-1/4"-I-P-A
			0.5 in	557056	ADN-3/4"-1/2"-I-P-A
			0.75 in	557057	ADN-3/4"-3/4"-I-P-A
			1 in	557058	ADN-3/4"-1"-I-P-A
			1.25 in	557059	ADN-3/4"-1 1/4"-I-P-A
			1.5 in	557060	ADN-3/4"-1 1/2"-I-P-A
			2 in	557061	ADN-3/4"-2"-I-P-A
			2.5 in	557062	ADN-3/4"-2 1/2"-I-P-A
	1"	1"	0.25 in	557072	ADN-1"-1/4"-I-P-A
			0.5 in	557073	ADN-1"-1/2"-I-P-A
			0.75 in	557074	ADN-1"-3/4"-I-P-A
			1 in	557075	ADN-1"-1"-I-P-A
			1.25 in	557076	ADN-1"-1 1/4"-I-P-A
			1.5 in	557077	ADN-1"-1 1/2"-I-P-A
			2 in	557078	ADN-1"-2"-I-P-A
			2.5 in	557079	ADN-1"-2 1/2"-I-P-A
	1 1/4"	1 1/4"	0.25 in	557090	ADN-1 1/4"-1/4"-I-P-A
			0.5 in	557091	ADN-1 1/4"-1/2"-I-P-A
			0.75 in	557092	ADN-1 1/4"-3/4"-I-P-A
			1 in	557093	ADN-1 1/4"-1"-I-P-A
			1.25 in	557094	ADN-1 1/4"-1 1/4"-I-P-A
			1.5 in	557095	ADN-1 1/4"-1 1/2"-I-P-A
			2 in	557096	ADN-1 1/4"-2"-I-P-A
			2.5 in	557097	ADN-1 1/4"-2 1/2"-I-P-A
			3 in	557098	ADN-1 1/4"-3"-I-P-A
	1 5/8"	1 5/8"	0.25 in	557109	ADN-1 5/8"-1/4"-I-P-A
			0.5 in	557110	ADN-1 5/8"-1/2"-I-P-A
			0.75 in	557111	ADN-1 5/8"-3/4"-I-P-A
			1 in	557112	ADN-1 5/8"-1"-I-P-A
			1.25 in	557113	ADN-1 5/8"-1 1/4"-I-P-A
			1.5 in	557114	ADN-1 5/8"-1 1/2"-I-P-A
			2 in	557115	ADN-1 5/8"-2"-I-P-A
			2.5 in	557116	ADN-1 5/8"-2 1/2"-I-P-A
			3 in	557117	ADN-1 5/8"-3"-I-P-A
	2"	2"	0.25 in	557128	ADN-2"-1/4"-I-P-A
			0.5 in	557129	ADN-2"-1/2"-I-P-A
			0.75 in	557130	ADN-2"-3/4"-I-P-A
			1 in	557131	ADN-2"-1"-I-P-A
			1.25 in	557132	ADN-2"-1 1/4"-I-P-A
			1.5 in	557133	ADN-2"-1 1/2"-I-P-A
			2 in	557134	ADN-2"-2"-I-P-A
			2.5 in	557135	ADN-2"-2 1/2"-I-P-A
			3 in	557136	ADN-2"-3"-I-P-A

Ordering data

With female thread	Piston Ø	Stroke	Part no.	Type
	2 1/2"	0.5 in	557146	ADN-2 1/2"-1/2"-I-P-A
		0.75 in	557147	ADN-2 1/2"-3/4"-I-P-A
		1 in	557148	ADN-2 1/2"-1"-I-P-A
		1.25 in	557149	ADN-2 1/2"-1 1/4"-I-P-A
		1.5 in	557150	ADN-2 1/2"-1 1/2"-I-P-A
		2 in	557151	ADN-2 1/2"-2"-I-P-A
		2.5 in	557152	ADN-2 1/2"-2 1/2"-I-P-A
		3 in	557153	ADN-2 1/2"-3"-I-P-A

With male thread	Piston Ø	Stroke	Part no.	Type
	1/2"	0.25 in	557019	ADN-1/2"-1/4"-A-P-A
		0.5 in	557020	ADN-1/2"-1/2"-A-P-A
		0.75 in	557021	ADN-1/2"-3/4"-A-P-A
		1 in	557022	ADN-1/2"-1"-A-P-A
		1.25 in	557023	ADN-1/2"-1 1/4"-A-P-A
		1.5 in	557024	ADN-1/2"-1 1/2"-A-P-A
	5/8"	0.25 in	557032	ADN-5/8"-1/4"-A-P-A
		0.5 in	557033	ADN-5/8"-1/2"-A-P-A
		0.75 in	557034	ADN-5/8"-3/4"-A-P-A
		1 in	557035	ADN-5/8"-1"-A-P-A
		1.25 in	557036	ADN-5/8"-1 1/4"-A-P-A
		1.5 in	557037	ADN-5/8"-1 1/2"-A-P-A
		2 in	557038	ADN-5/8"-2"-A-P-A
	3/4"	0.25 in	557047	ADN-3/4"-1/4"-A-P-A
		0.5 in	557048	ADN-3/4"-1/2"-A-P-A
		0.75 in	557049	ADN-3/4"-3/4"-A-P-A
		1 in	557050	ADN-3/4"-1"-A-P-A
		1.25 in	557051	ADN-3/4"-1 1/4"-A-P-A
		1.5 in	557052	ADN-3/4"-1 1/2"-A-P-A
		2 in	557053	ADN-3/4"-2"-A-P-A
		2.5 in	557054	ADN-3/4"-2 1/2"-A-P-A
	1"	0.25 in	557064	ADN-1"-1/4"-A-P-A
		0.5 in	557065	ADN-1"-1/2"-A-P-A
		0.75 in	557066	ADN-1"-3/4"-A-P-A
		1 in	557067	ADN-1"-1"-A-P-A
		1.25 in	557068	ADN-1"-1 1/4"-A-P-A
		1.5 in	557069	ADN-1"-1 1/2"-A-P-A
		2 in	557070	ADN-1"-2"-A-P-A
		2.5 in	557071	ADN-1"-2 1/2"-A-P-A
	1 1/4"	0.25 in	557081	ADN-1 1/4"-1/4"-A-P-A
		0.5 in	557082	ADN-1 1/4"-1/2"-A-P-A
		0.75 in	557083	ADN-1 1/4"-3/4"-A-P-A
		1 in	557084	ADN-1 1/4"-1"-A-P-A
		1.25 in	557085	ADN-1 1/4"-1 1/4"-A-P-A
		1.5 in	557086	ADN-1 1/4"-1 1/2"-A-P-A
		2 in	557087	ADN-1 1/4"-2"-A-P-A
		2.5 in	557088	ADN-1 1/4"-2 1/2"-A-P-A
	1 5/8"	0.25 in	557089	ADN-1 1/4"-3"-A-P-A
		0.25 in	557100	ADN-1 5/8"-1/4"-A-P-A
		0.5 in	557101	ADN-1 5/8"-1/2"-A-P-A
		0.75 in	557102	ADN-1 5/8"-3/4"-A-P-A
		1 in	557103	ADN-1 5/8"-1"-A-P-A
		1.25 in	557104	ADN-1 5/8"-1 1/4"-A-P-A
		1.5 in	557105	ADN-1 5/8"-1 1/2"-A-P-A
		2 in	557106	ADN-1 5/8"-2"-A-P-A
		2.5 in	557107	ADN-1 5/8"-2 1/2"-A-P-A
		3 in	557108	ADN-1 5/8"-3"-A-P-A

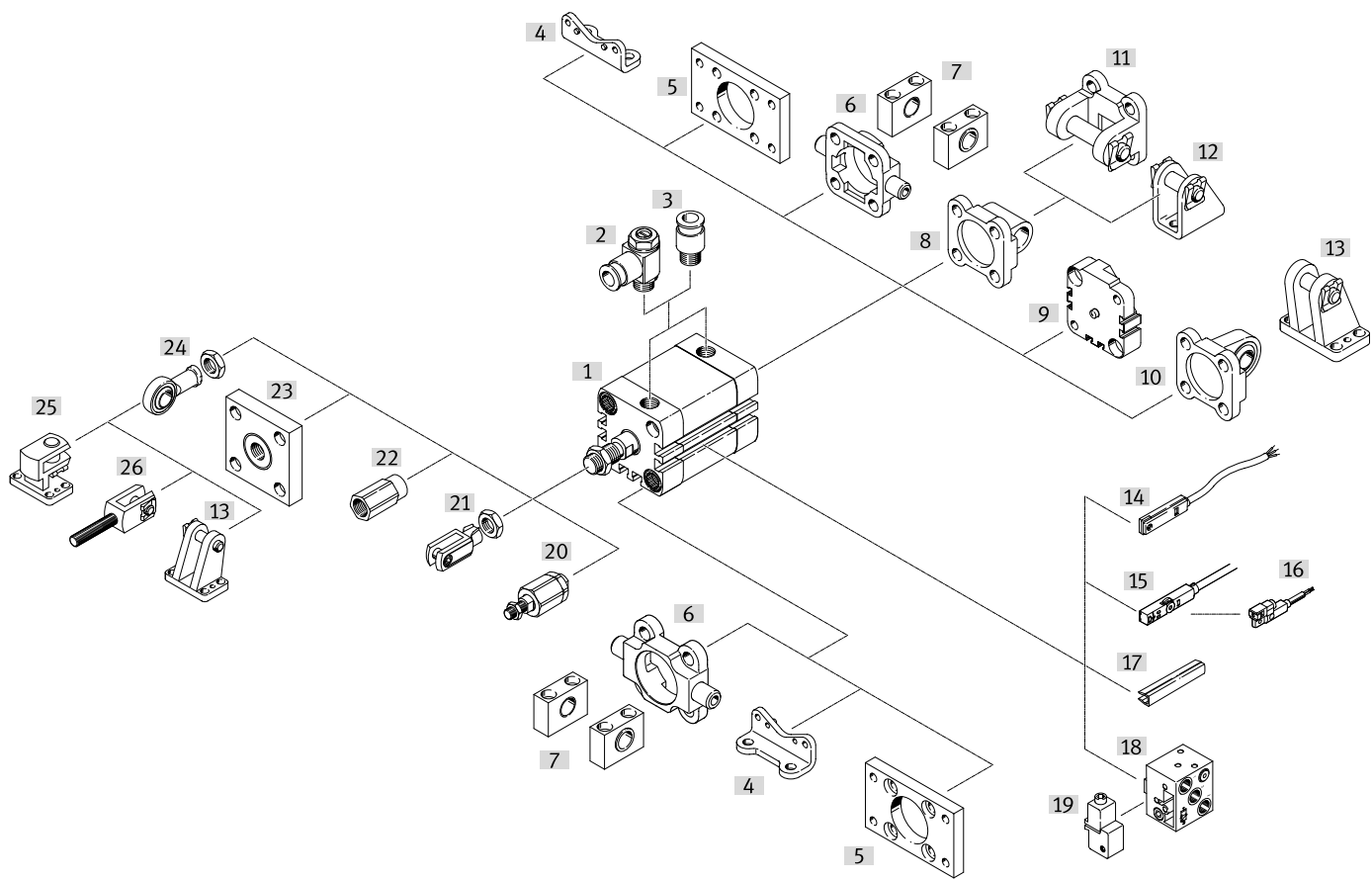
Ordering data

With male thread				
	Piston Ø	Stroke	Part no.	Type
	2"	0.25 in	557119	ADN-2"-1/4"-A-P-A
		0.5 in	557120	ADN-2"-1/2"-A-P-A
		0.75 in	557121	ADN-2"-3/4"-A-P-A
		1 in	557122	ADN-2"-1"-A-P-A
		1.25 in	557123	ADN-2"-1 1/4"-A-P-A
		1.5 in	557124	ADN-2"-1 1/2"-A-P-A
		2 in	557125	ADN-2"-2"-A-P-A
		2.5 in	557126	ADN-2"-2 1/2"-A-P-A
		3 in	557127	ADN-2"-3"-A-P-A
	2 1/2"	0.5 in	557138	ADN-2 1/2"-1/2"-A-P-A
		0.75 in	557139	ADN-2 1/2"-3/4"-A-P-A
		1 in	557140	ADN-2 1/2"-1"-A-P-A
		1.25 in	557141	ADN-2 1/2"-1 1/4"-A-P-A
		1.5 in	557142	ADN-2 1/2"-1 1/2"-A-P-A
		2 in	557143	ADN-2 1/2"-2"-A-P-A
		2.5 in	557144	ADN-2 1/2"-2 1/2"-A-P-A
		3 in	557145	ADN-2 1/2"-3"-A-P-A

Ordering data – Modular product system

Modular product system	Piston rod thread type	Piston Ø	Stroke	Part no.	Type
	Male thread/ female thread	1/2"	0.039 ... 11.8110 in	557018	ADN-1/2"- -
		5/8"		557031	ADN-5/8"- -
		3/4"		557046	ADN-3/4"- -
		1"		557063	ADN-1"- -
		1 1/4"	0.039 ... 15.7480 in	557080	ADN-1 1/4"- -
		1 5/8"		557099	ADN-1 5/8"- -
		2"		557118	ADN-2"- -
		2 1/2"		557137	ADN-2 1/2"- -

Peripherals overview



Accessories

Mounting attachments and accessories		Description	→ Page/Internet
[1]	Compact cylinder ADN	Double-acting cylinder	4
[2]	One-way flow control valve GRLA	For regulating speed	26
[3]	Push-in fitting QS	For connecting tubing with standard O.D.	qs
[4]	Foot mounting HNA	For bearing or end caps	16
[5]	Flange mounting FNC	For bearing or end caps	17
[6]	Trunnion flange ZNCF	For bearing caps	24
[7]	Trunnion support LNZG	For trunnion flange ZNCF	25
[8]	Swivel flange SNCL	For end caps	18
[9]	Multi-position kit DPNA	For connecting two cylinders with the same piston diameter to form a multi-position cylinder	21
[10]	Swivel flange SNCS	For end caps	19
[11]	Swivel flange SNCB	For swivel flange SNCL	23
[12]	Clevis foot LBN	For swivel flange SNCL	22
[13]	Clevis foot LBG	For swivel flange SNCS	20
[14]	Proximity switch SME-8	Can be integrated in the cylinder profile barrel	26
[15]	Proximity switch SME/SMT-8M	Can be integrated in the cylinder profile barrel	26
[16]	Proximity switch SMT-8G	Inserted into the slot lengthwise	26
[17]	Slot cover ABP-5-S	For protecting the sensor cables and the sensor slots from contamination	28
[18]	Proximity switch SMPO-8E	Pneumatic output signal	28
[19]	Mounting kit SMB-8E	For proximity switch SMPO-8E	28
[20]	Self-aligning rod coupler FK	To compensate for radial and angular deviations	26
[21]	Rod clevis SG	Permits a swivelling movement of the cylinder in one plane	26
[22]	Adapter AD	For mounting a suction cup on a hollow piston rod	ad
[23]	Coupling piece KSZ	To compensate for radial deviations	26
[24]	Rod eye SGS	With spherical bearing	26
[25]	Right-angle clevis foot LQG	For rod eye SGS	26
[26]	Rod clevis SGA	With male thread	26

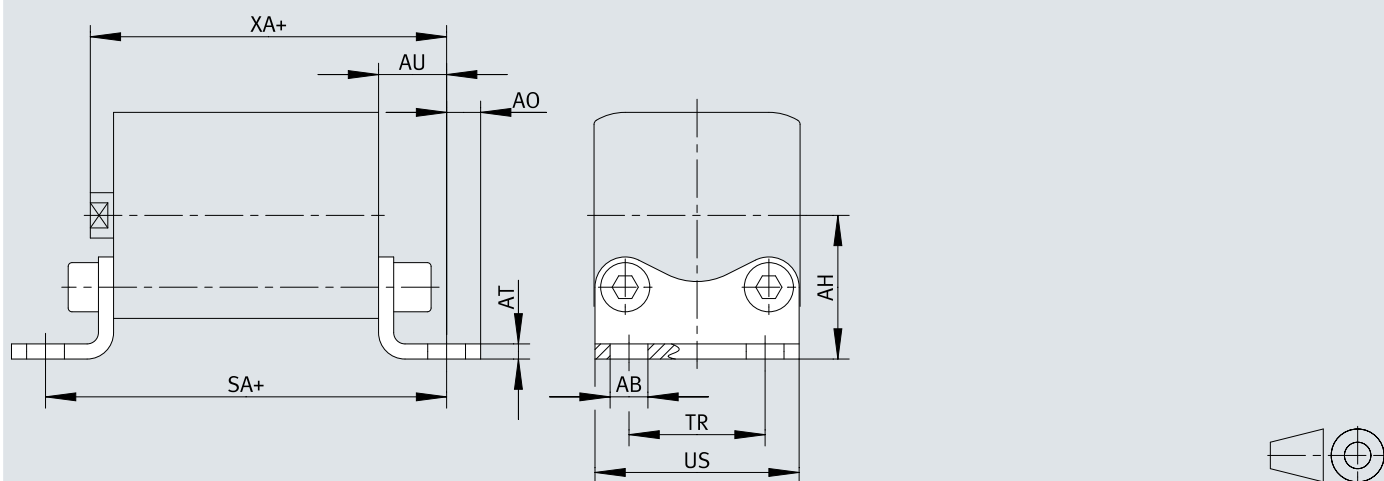
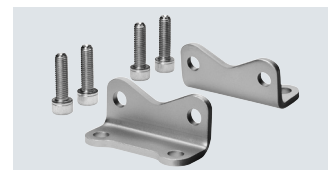
Accessories

Foot mounting HNA

Material:

Galvanised steel

RoHS-compliant



+ = plus stroke length

Dimensions and ordering data

For $\varnothing$	AB $\varnothing$	AH	AO	AT	AU	SA	TR
[in]	H14	JS14		± 0.02	± 0.01		± 0.01
1/2"	0.23	0.83	0.2	0.12	0.51	2.4	0.63
5/8"	0.23	0.87	0.19	0.12	0.51	2.4	0.71
3/4"	0.28	1.06	0.25	0.16	0.63	2.72	0.87
1"	0.28	1.14	0.25	0.16	0.63	2.8	1.02
1 1/4"	0.28	1.32	0.28	0.16	0.63	2.99	1.26
1 5/8"	0.39	1.5	0.35	0.16	0.71	3.19	1.42
2"	0.39	1.77	0.31	0.2	0.83	3.43	1.77
2 1/2"	0.39	1.97	0.31	0.2	0.83	3.58	1.97

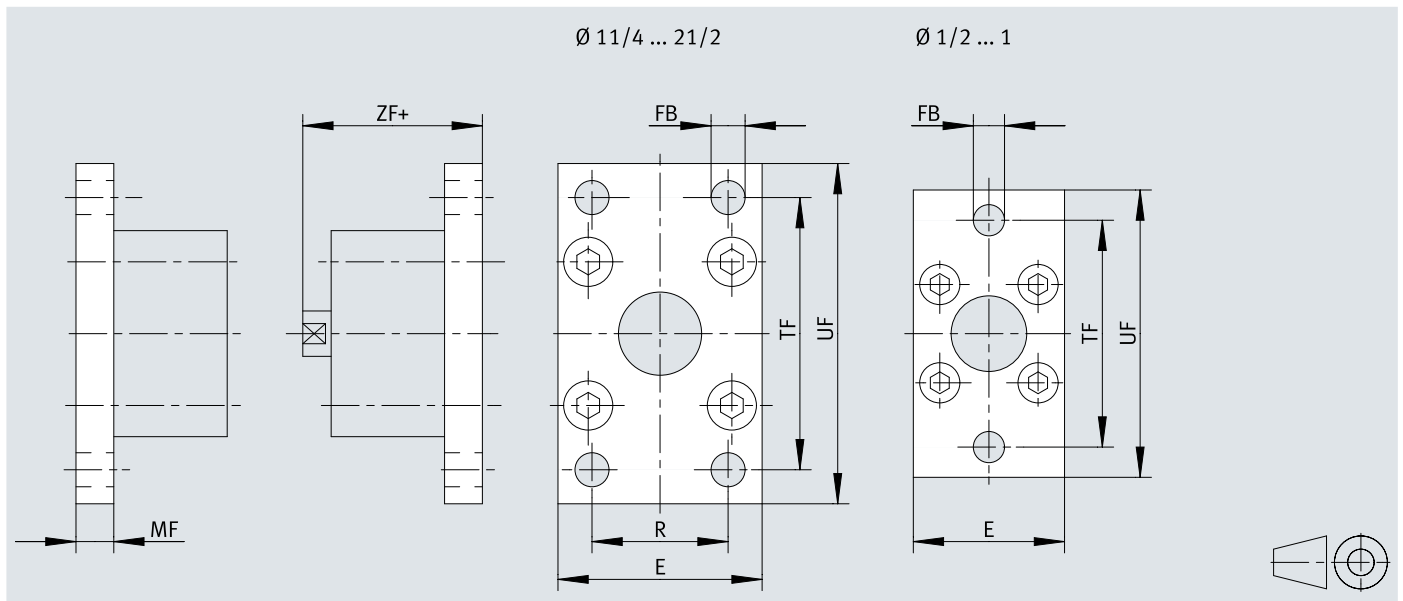
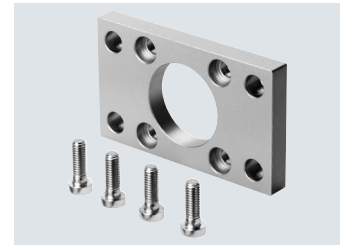
For $\varnothing$	US	XA	CRC ¹⁾	Weight	Part no.	Type
[in]	-0.02			[g]		
1/2"	1.02	2.06	1 - low	39	537237	HNA-12
5/8"	1.08	2.08	1 - low	42	537238	HNA-16
3/4"	1.36	2.31	1 - low	84	537239	HNA-20
1"	1.52	2.39	1 - low	90	537240	HNA-25
1 1/4"	1.81	2.61	1 - low	123	537241	HNA-32
1 5/8"	2.13	2.72	1 - low	157	537242	HNA-40
2"	2.52	2.92	1 - low	278	537243	HNA-50
2 1/2"	2.95	3.08	1 - low	328	537244	HNA-63

1) More information www.festo.com/x/topic/crc

Accessories

Flange mounting FNC

Material:
Galvanised steel
RoHS-compliant



Dimensions and ordering data											
For Ø	E	FB	MF	R	TF	UF	ZF	CRC ¹⁾	Weight	Part no.	Type
[in]		Ø				±0.04			[g]		
1/2"	1.1	0.22	0.31	—	1.57	1.97	1.86	1 - low	79	537245	FNC-12
5/8"	1.14	0.22	0.31	—	1.69	2.17	1.89	1 - low	88	537246	FNC-16
3/4"	1.42	0.26	0.31	—	2.17	2.76	2	1 - low	141	537247	FNC-20
1"	1.57	0.26	0.31	—	2.36	2.99	2.07	1 - low	165	537248	FNC-25
1 1/4"	1.77	0.28	0.39	1.26	2.52	3.15	2.37	1 - low	221	174376	FNC-32
1 5/8"	2.13	0.35	0.39	1.42	2.83	3.54	2.41	1 - low	291	174377	FNC-40
2"	2.56	0.35	0.47	1.77	3.54	4.33	2.57	1 - low	536	174378	FNC-50
2 1/2"	2.95	0.35	0.47	1.97	3.94	4.72	2.72	1 - low	679	174379	FNC-63

1) More information www.festo.com/x/topic/crc

Accessories

Swivel flange SNCL

Material:

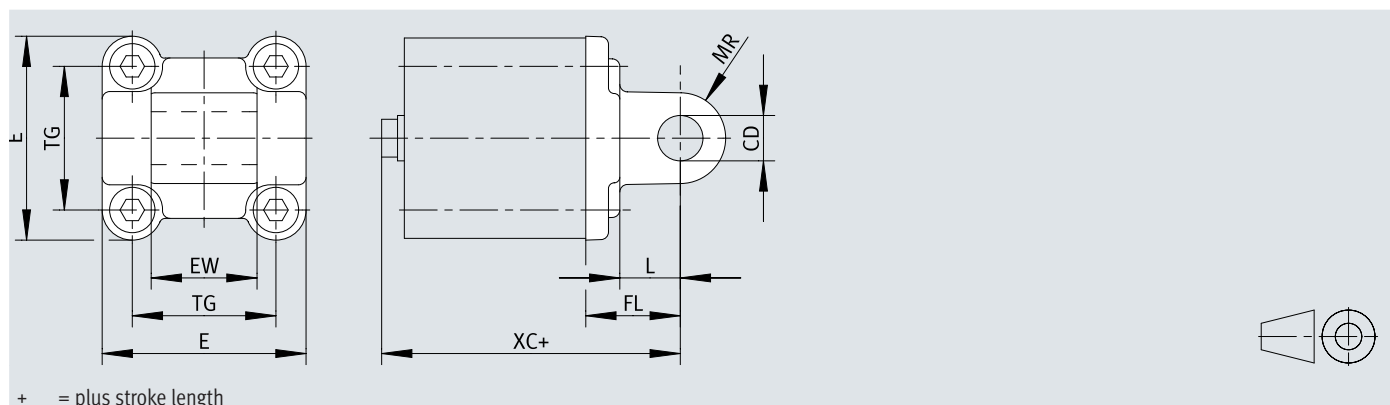
SNCL-12 ... 25:

Wrought aluminium alloy

SNCL-32 ... 63:

Die-cast aluminium

RoHS-compliant



Dimensions and ordering data						
For $\varnothing$	CD $\varnothing$ H10	E	EW	FL ± 0.01	L	MR
[in]						
1/2"	0.24	0.98 _{-0.02}	0.47 h12	0.63	0.39	0.24
5/8"	0.24	1.08 _{-0.02}	0.47 h12	0.63	0.39	0.24
3/4"	0.31	1.36 _{-0.02}	0.63 h12	0.79	0.55	0.31
1"	0.31	1.52 _{-0.02}	0.63 h12	0.79	0.55	0.31
1 1/4"	0.39	1.77 _{+0.01/-0.02}	1.02 _{-0.01/-0.02}	0.87	0.51	0.39
1 5/8"	0.47	2.13 _{-0.02}	1.1 _{-0.01/-0.02}	0.98	0.63	0.47
2"	0.47	2.52 _{-0.02}	1.26 _{-0.01/-0.02}	1.06	0.63	0.47
2 1/2"	0.63	2.95 _{-0.02}	1.57 _{-0.01/-0.02}	1.26	0.83	0.63

For $\varnothing$	TG	XC	CRC ¹⁾	Weight [g]	Part no.	Type
[in]						
1/2"	0.63	2.17	2 - moderate	20	537790	SNCL-12
5/8"	0.71	2.2	2 - moderate	21	537791	SNCL-16
3/4"	0.87	2.47	2 - moderate	38	537792	SNCL-20
1"	1.02	2.55	2 - moderate	41	537793	SNCL-25
1 1/4"	1.28	2.84	1 - low	71	174404	SNCL-32
1 5/8"	1.5	2.97	1 - low	95	174405	SNCL-40
2"	1.83	3.16	1 - low	158	174406	SNCL-50
2 1/2"	2.22	3.51	1 - low	225	174407	SNCL-63

1) More information www.festo.com/x/topic/crc

Accessories

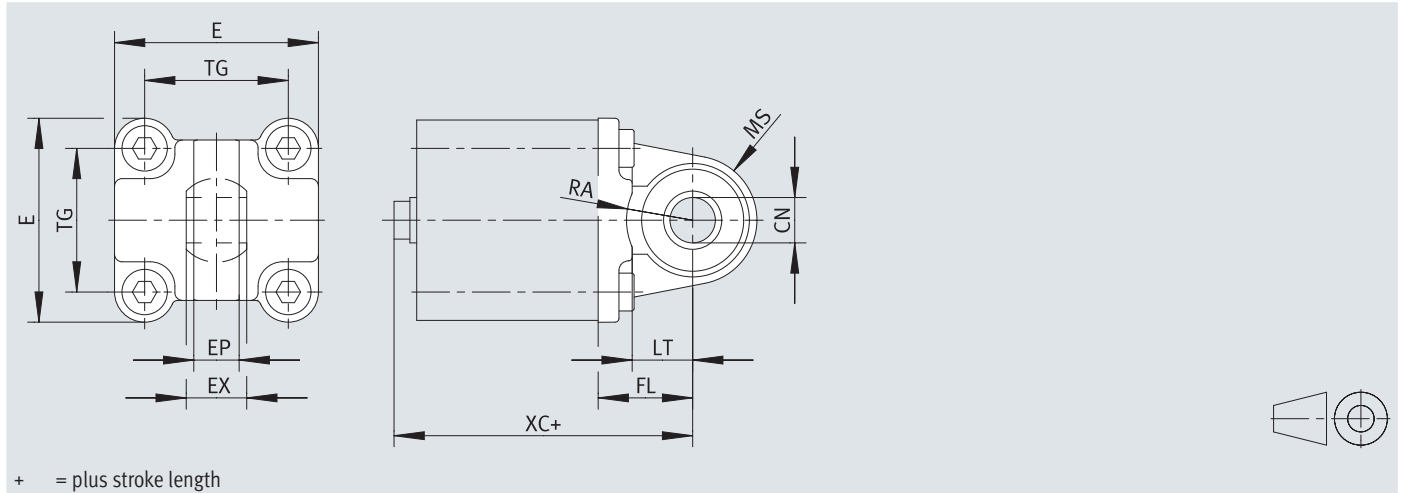
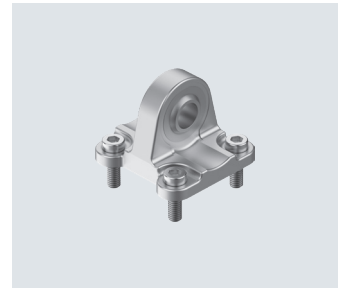
Swivel flange SNCS

Material:

SNCS-32 ... 50: Die-cast aluminium

SNCS-63: Wrought aluminium alloy

RoHS-compliant



Dimensions and ordering data

For $\varnothing$	CN $\varnothing$	E	EP	EX	FL	LT	MS	RA
[in]			± 0.01		± 0.01			$+0.039$
1 1/4"	0.39 $+0.001$	1.77 $+0.01/-0.02$	0.41	0.55	0.87	0.51	0.59 $+0.02$	0.57
1 5/8"	0.47 $+0.001$	2.13 -0.02	0.47	0.63	0.98	0.63	0.67 $+0.02$	0.69
2"	0.63 $+0.001$	2.52 -0.02	0.59	0.83	1.06	0.63	0.79 $+0.02$	0.73
2 1/2"	0.63 $+0.001$	2.93 ± 0.02	0.59	0.83	1.26	0.83	0.91 -0.02	0.91

For $\varnothing$	TG	XC	CRC ¹⁾	Weight	Part no.	Type
[in]				[g]		
1 1/4"	1.28	2.84	1 - low	86	174397	SNCS-32
1 5/8"	1.5	2.97	1 - low	122	174398	SNCS-40
2"	1.83	3.16	1 - low	216	174399	SNCS-50
2 1/2"	2.22	3.51	2 - moderate	281	174400	SNCS-63

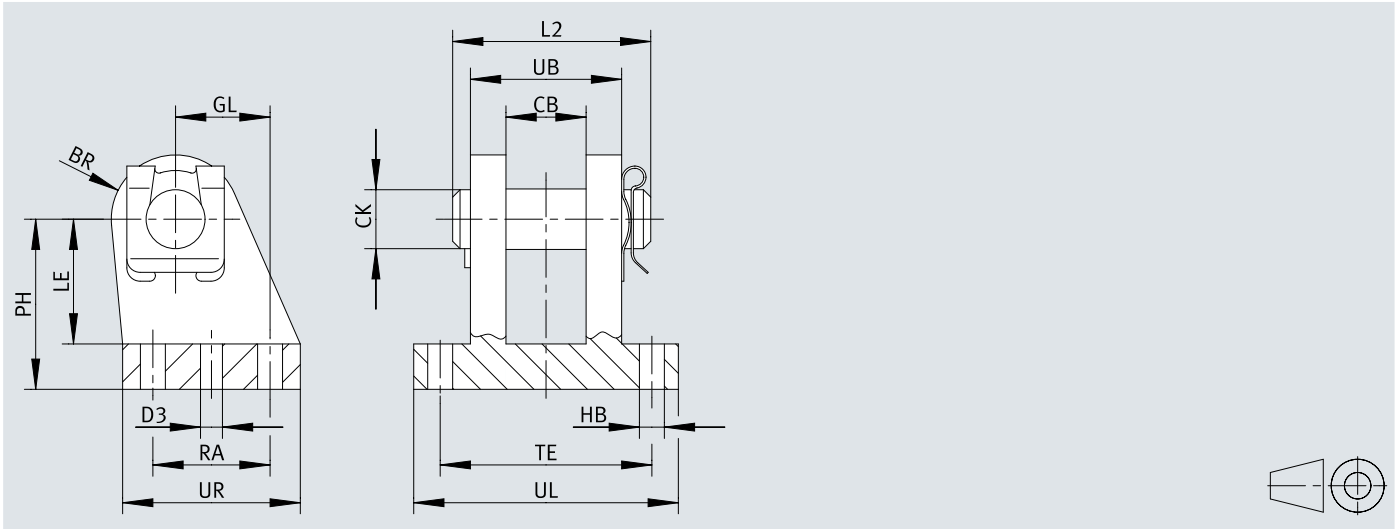
1) More information www.festo.com/x/topic/crc

Accessories

Clevis foot LBG

The pivot pin is secured against rotation with a spring pin.

Material:
Cast stainless steel
RoHS-compliant



Dimensions and ordering data										
For $\varnothing$	BR	CB	CK $\varnothing$	D3 $\varnothing$	GL	HB $\varnothing$	L2	LE	PH	RA
[in]										
1 1/4"	0.47	0.56	0.39	0.19	0.63	0.27	1.38	0.94	1.26	0.79
1 5/8"	0.55	0.63	0.47	0.23	0.79	0.27	1.54	1.02	1.42	1.02
2"	0.59	0.83	0.63	0.23	0.98	0.36	1.97	1.3	1.77	1.22
2 1/2"	0.67	0.83	0.63	0.31	0.98	0.36	1.97	1.5	1.97	1.22

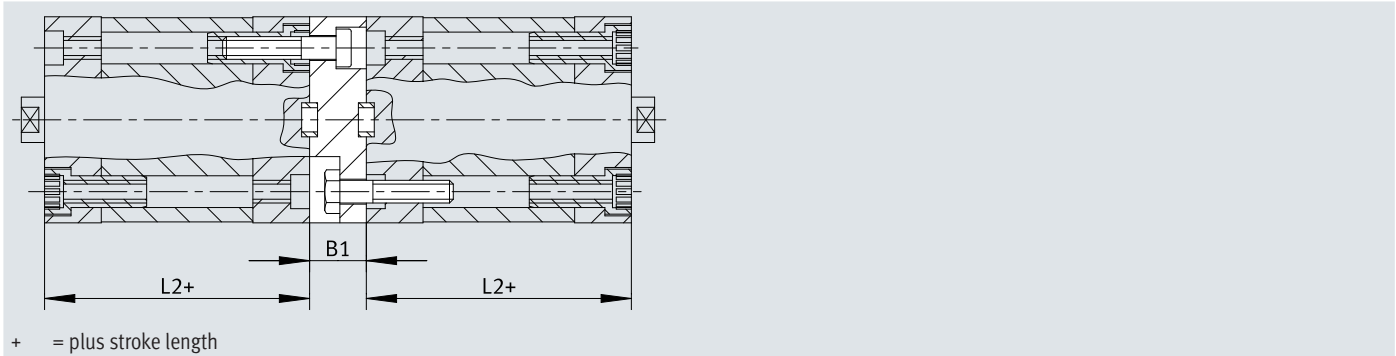
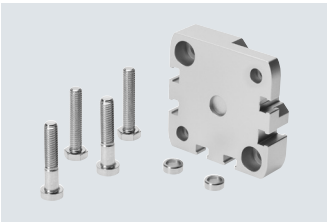
For $\varnothing$	TE	UB	UL	UR	CRC ¹⁾	Weight	Part no.	Type
[in]						[g]		
1 1/4"	1.65	1.1	2.2	1.42	2 - moderate	220	31761	LBG-32
1 5/8"	1.73	1.18	2.28	1.63	2 - moderate	300	31762	LBG-40
2"	2.2	1.57	2.76	1.85	2 - moderate	540	31763	LBG-50
2 1/2"	2.2	1.57	2.76	1.93	2 - moderate	580	31764	LBG-63

1) More information www.festo.com/x/topic/crc

Accessories

Multi-position kit DPNA

Material:
Flange: Wrought aluminium alloy
Screws: Galvanised steel
RoHS-compliant



 **Note**
The maximum total stroke length must not be exceeded when combining cylinders and multi-position kits.

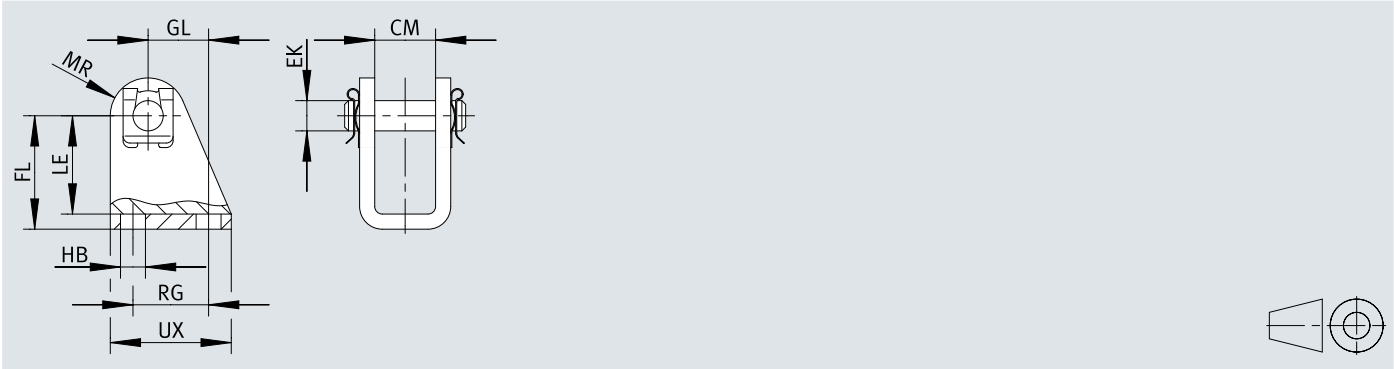
Dimensions and ordering data							
For Ø	L2	B1	Max.	CRC ¹⁾	Weight	Part no.	Type ¹⁾
[in]			overall stroke length		[g]		
1/2"	0.51	1.38	23.6	2 - moderate	28	537263	DPNA-12
5/8"	0.51	1.38			33	537264	DPNA-16
3/4"	0.51	1.46			50	537265	DPNA-20
1"	0.51	1.54			60	537266	DPNA-25
1 1/4"	0.59	1.73	31.5		99	537267	DPNA-32
1 5/8"	0.59	1.77			129	537268	DPNA-40
2"	0.59	1.77			16	537269	DPNA-50
2 1/2"	0.59	1.93			249	537270	DPNA-63

1) More information www.festo.com/x/topic/crc

Accessories

Clevis foot LBN

Material:
Galvanised steel
RoHS-compliant



Dimensions and ordering data							
For $\varnothing$	CM	EK	FL	GL	HB	LE	MR
[in]	+0.02	$\varnothing$			$\varnothing$		
1/2"; 5/8"	0.48	0.24	1.06 _{+0.01/-0.01}	0.51	0.22	0.94	0.28
3/4"; 1"	0.63	0.31	1.18 _{+0.02/-0.01}	0.63	0.26	1.02	0.39

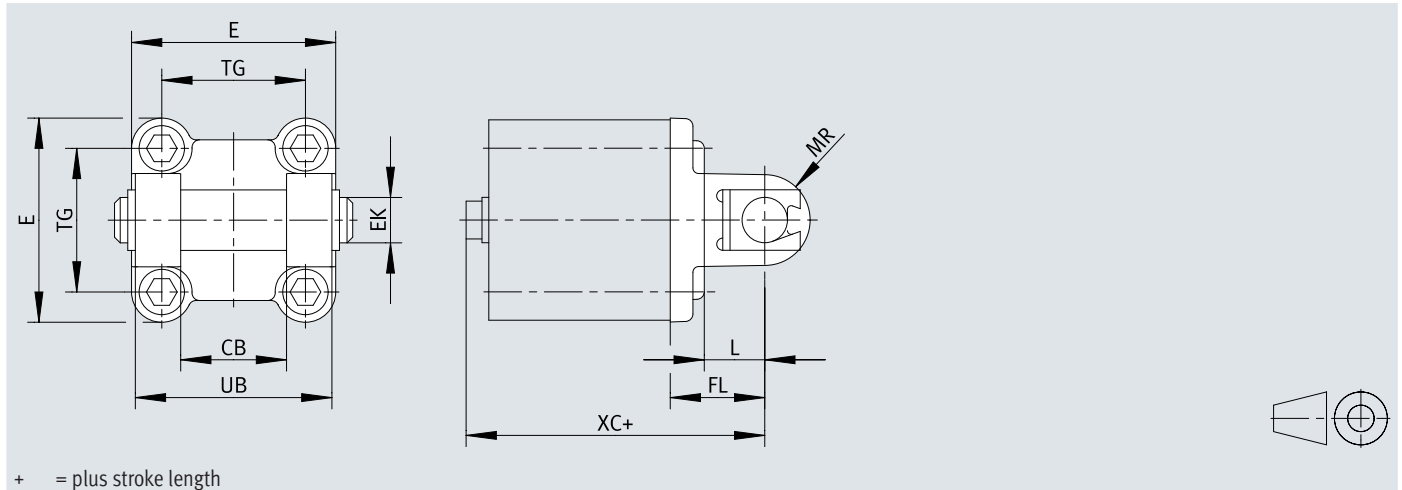
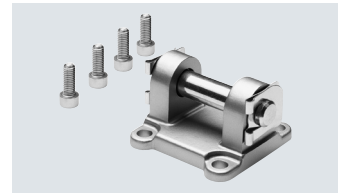
For $\varnothing$	RG	UX	CRC ¹⁾	Weight	Part no.	Type
[in]				[g]		
1/2"; 5/8"	0.59	0.98	1 - low	40	6058	LBN-12/16
3/4"; 1"	0.79	1.26	1 - low	84	6059	LBN-20/25

1) More information www.festo.com/x/topic/crc

Accessories

Swivel flange SNCB

Material:
Die-cast aluminium
RoHS-compliant



Dimensions and ordering data

For $\varnothing$	CB	E	EK $\varnothing$	FL	L	MR	TG
[in]	H14		H10/e8	± 0.01		-0.02	
1 1/4"	1.02	1.77 $+0.01/-0.02$	0.39	0.87	0.51	0.33	1.28
1 5/8"	1.1	2.13 -0.02	0.47	0.98	0.63	0.47	1.5
2"	1.26	2.52 -0.02	0.47	1.06	0.63	0.47	1.83
2 1/2"	1.57	2.95 -0.02	0.63	1.26	0.83	0.63	2.22

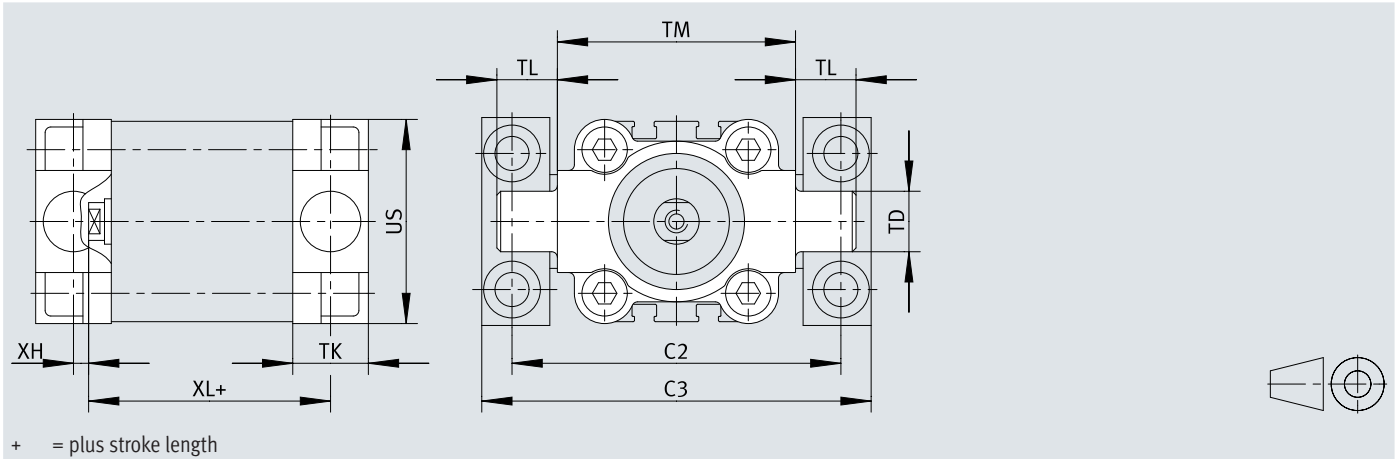
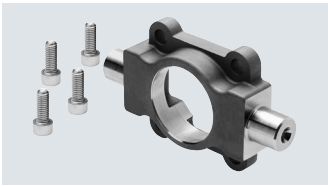
For $\varnothing$	UB	XC	CRC ¹⁾	Weight	Part no.	Type
[in]	h14			[g]		
1 1/4"	1.77	2.83	1 · low	103	174390	SNCB-32
1 5/8"	2.05	2.99	1 · low	155	174391	SNCB-40
2"	2.36	3.15	1 · low	233	174392	SNCB-50
2 1/2"	2.76	3.5	1 · low	375	174393	SNCB-63

1) More information www.festo.com/x/topic/crc

Accessories

Trunnion flange ZNCF

Material:
Cast stainless steel
RoHS-compliant



Dimensions and ordering data							
For $\varnothing$	C2)	C3)	TD $\varnothing$ e9	TK max.	TL h14	TM h14	US
[in]							
1 1/4"	2.8	3.39	0.47	0.63	0.47	1.97	1.77
1 5/8"	3.43	4.13	0.63	0.79	0.63	2.48	2.13
2"	3.9	4.61	0.63	0.94	0.63	2.95	2.52
2 1/2"	4.57	5.35	0.79	0.94	0.79	3.54	2.95

For $\varnothing$	XH	XL	CRC ¹⁾	Weight	Part no.	Type
[in]				[g]		
1 1/4"	0.08	2.28	2 - moderate	150	174411	ZNCF-32
1 5/8"	0.16	2.41	2 - moderate	285	174412	ZNCF-40
2"	0.16	2.55	2 - moderate	473	174413	ZNCF-50
2 1/2"	0.16	2.7	2 - moderate	687	174414	ZNCF-63

1) More information www.festo.com/x/topic/crc

Accessories

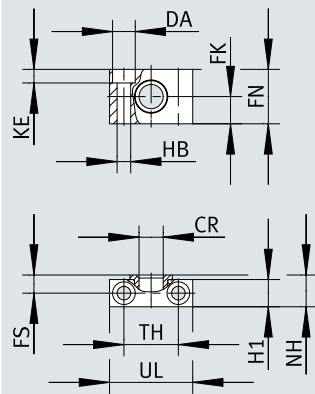
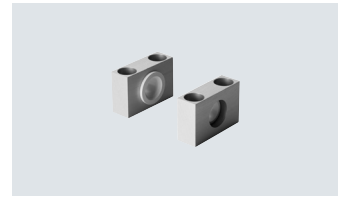
Trunnion support LNZG

Material:

Trunnion support: Anodised aluminium

Plain bearing: Plastic

RoHS-compliant



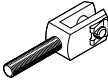
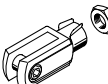
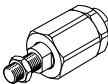
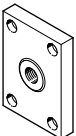
Dimensions and ordering data

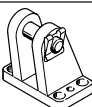
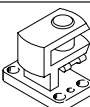
For $\varnothing$	CR $\varnothing$	DA $\varnothing$	FK $\varnothing$	FN	FS	H1	HB $\varnothing$	KE	NH
[in]	D11	H13	± 0.004				H13		
1 1/4"	0.47	0.43	0.59	1.18	0.41	0.59	0.26	0.27	0.71
1 5/8"	0.63	0.59	0.71	1.42	0.47	0.71	0.35	0.35	0.83
2"	0.63	0.59	0.71	1.42	0.47	0.71	0.35	0.35	0.83
2 1/2"	0.79	0.71	0.79	1.57	0.51	0.79	0.43	0.43	0.91

For $\varnothing$	TH	UL	CRC ¹⁾	Weight	Part no.	Type
[in]	± 0.008			[g]		
1 1/4"	1.26	1.81	2 - moderate	83	32959	LNZG-32
1 5/8"	1.42	2.17	2 - moderate	129	32960	LNZG-40/50
2"	1.65	2.56				
2 1/2"	1.97	2.95	2 - moderate	178	32961	LNZG-63/80

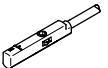
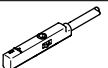
1) More information www.festo.com/x/topic/crc

Accessories

Ordering data – Piston rod attachments				Datasheets → Internet: piston rod attachment			
Designation	For ø	Part no.	Type	Designation	For ø	Part no.	Type
Rod eye SGS				Rod clevis SGA for rod eye SGS			
	1/2", 5/8"	532694	SGS-10-32		SGS-10-32	–	
	3/4", 1"	532695	SGS-5/16-24		SGS-5/16-24		
	1 1/4", 1 5/8"	532696	SGS-3/8-24		SGS-3/8-24	32954	SGA-M10x1.25
	2", 2 1/2"	532697	SGS-1/2-20		SGS-1/2-20	10767	SGA-M12x1.25
Rod clevis SG				Self-aligning rod coupler FK			
	1/2", 5/8"	546552	SG-UNF10-32-B		1/2", 5/8"	532703	FK-10-32
	3/4", 1"	546574	SG-UNF5/16"-24-B		3/4", 1"	532704	FK-5/16-24
	1 1/4", 1 5/8"	546540	SG-UNF3/8"-24-B		1 1/4", 1 5/8"	532705	FK-3/8-24
	2", 2 1/2"	546545	SG-UNF1/2"-20-B		2", 2 1/2"	532706	FK-1/2-20
Coupling piece KSZ							
	1/2", 5/8"	–					
	3/4", 1"						
	1 1/4", 1 5/8"	36129	KSZ-3/8-24-UNF				
	2", 2 1/2"	36130	KSZ-1/2-20-UNF				

Ordering data – Mounting components				Datasheets → Internet: clevis foot			
Designation	For ø	Part no.	Type	Designation	For ø	Part no.	Type
Right-angle clevis foot LBG for rod eye SGS				Right-angle clevis foot LQG for rod eye SGS			
	1 1/4", 1 5/8"	31761	LBG-32		1 1/4", 1 5/8"	31768	LQG-32
	2", 2 1/2"	31762	LBG-40		2", 2 1/2"	31769	LQG-40

Ordering data – One-way flow control valves				Datasheets → Internet: grla			
Connection		Material		Part no.		Type	
For ø		For tubing O.D. Ø					
For exhaust air							
	1/2", 5/8", 3/4", 1"	5/32	Metal design	165008	GRLA-10-32-UNF-QS-5/32-U		
		1/4		192753	GRLA-10-32-UNF-QS-1/4-U		
	1 1/4", 1 5/8", 2", 2 1/2"	5/32		165009	GRLA-1/8-NPT-QS-5/32-U		
		3/16		190941	GRLA-1/8-NPT-QS-3/16-U		
		1/4		165010	GRLA-1/8-NPT-QS-1/4-U		
		5/16		165013	GRLA-1/8-NPT-QS-5/16-U		

Ordering data – Proximity switch for T-slot, magneto-resistive							Datasheets → Internet: smt	
Type of mounting		Switching out-put	Electrical connection	Cable length [m]	Part no.	Type		
N/O								
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-core	2.5	574335	SMT-8M-A-PS-24V-E-2.5-OE		
			Plug M8x1, 3-pin	0.3	574334	SMT-8M-A-PS-24V-E-0.3-M8D		
			1x M12 plug, 3-pin	0.3	574337	SMT-8M-A-PS-24V-E-0.3-M12		
		NPN	Cable, 3-core	2.5	574338	SMT-8M-A-NS-24V-E-2.5-OE		
			1x M8 plug, 3-pin	0.3	574339	SMT-8M-A-NS-24V-E-0.3-M8D		
N/C								
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-core	7.5	574340	SMT-8M-A-PO-24V-E-7.5-OE		

Accessories

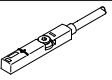
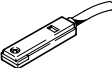
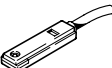
Ordering data – Proximity switch for T-slot, magneto-resistive

Datasheets → Internet: smt

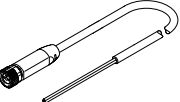
	Type of mounting	Electrical connection, outlet direction of connection	Switching output	Cable length [m]	Part no.	Type
N/O						
	Inserted into the slot lengthwise	Cable, 3-core, crossways	PNP	2.5	547859	SMT-8G-PS-24V-E-2.5Q-OE
		Plug M8x1, 3-pin, crossways		0.3	547860	SMT-8G-PS-24V-E-0.3Q-M8D
		Cable, 3-core, crossways	NPN	2.5	8065028	SMT-8G-NS-24V-E-2.5Q-OE
		Plug M8x1, 3-pin, crossways		0.3	8065027	SMT-8G-NS-24V-E-0.3Q-M8D

Ordering data – Proximity switch for T-slot, magnetic reed

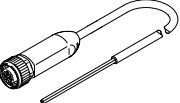
Datasheets → Internet: sme

	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O						
	Inserted in the slot from above, flush with the cylinder profile	Contacting	Cable, 3-core	2.5	543862	SME-8M-DS-24V-K-2.5-OE
				5.0	543863	SME-8M-DS-24V-K-5.0-OE
			Cable, 2-core	2.5	543872	SME-8M-ZS-24V-K-2.5-OE
			Plug M8x1, 3-pin	0.3	543861	SME-8M-DS-24V-K-0.3-M8D
	Inserted in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-core	2.5	150855	SME-8-K-LED-24
			Plug M8x1, 3-pin	0.3	150857	SME-8-S-LED-24
N/C						
	Inserted in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-core	7.5	160251	SME-8-O-K-LED-24

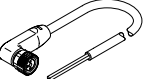
Connecting cables NEBA, straight, M8 connection

	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length [m]	Part no.	Type
	M8x1 A-coded to EN 61076-2-104	Open end	3	2.5	8078223	NEBA-M8G3-U-2.5-N-LE3
				5	8078224	NEBA-M8G3-U-5-N-LE3

Connecting cables NEBA, straight, M12 connection

	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length [m]	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5	8078236	NEBA-M12G5-U-2.5-N-LE3
				5	8078237	NEBA-M12G5-U-5-N-LE3

Connecting cables NEBA, angled, M8 connection

	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length [m]	Part no.	Type
	M8x1 A-coded to EN 61076-2-104	Open end	3	2.5	8078230	NEBA-M8W3-U-2.5-N-LE3
				5	8078231	NEBA-M8W3-U-5-N-LE3

Connecting cables NEBA, angled, M12 connection

	Electrical connection 1, connection technology	Electrical connection 2, connection technology	Electrical connection 2, number of pins/cores	Cable length [m]	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5	8078245	NEBA-M12W5-U-2.5-N-LE3
				5	8078246	NEBA-M12W5-U-5-N-LE3

Accessories

Ordering data – Proximity switch, cuboid shape, pneumatic			Datasheets → Internet: smpo	
	Pneumatic connection		Part no.	Type
3/2-way valve, normally closed				
	Female thread M5		178563	SMPO-8E
Ordering data – Mounting kit for proximity switch SMPO-8E				
Assembly			Part no.	Type
	Clamped in T-slot		178230	SMB-8E
Ordering data – Slot cover for T-slot				
Assembly		Length	Part no.	Type
	Insertable	2x 0.5 m	151680	ABP-5-S