Short-stroke cylinders ADVC/AEVC

FESTO

Key features

At a glance

- Ø - Diameter 4 ... 100 mm
- \- Stroke length 2.5 ... 25 mm

Short-stroke cylinders are ideal for clamping tasks with short strokes, e.g. in machining jigs.

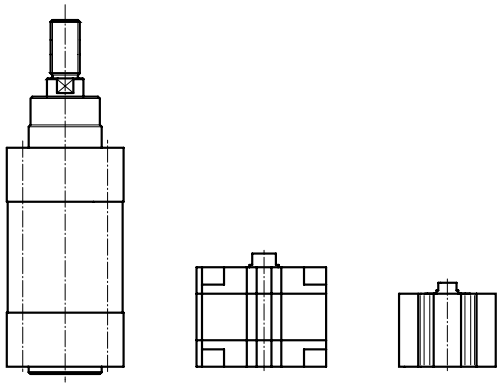
They offer:
- Rapid response when pressure is applied
- Large clamping forces in comparison to their size
- Minimal installation space
- Integrated sensor slots for contacting or contactless proximity sensors
- Hole pattern for mounting as per VDMA 24562 for Ø 32 ... 100 mm

Ø 4 ... 25

Ø 6 ... 25

Ø 32 ... 100

Installation space per 10 mm stroke



Standards-based cylinder

Compact cylinder

Short-stroke cylinder

Type codes

001	Series	
ADVC	Short-stroke cylinder, double-acting	
AEVC	Short-stroke cylinder, single-acting	

002	Piston diameter	
4	4	
6	6	
10	10	
12	12	
16	16	
20	20	
25	25	
32	32	
40	40	
50	50	
63	63	
80	80	
100	100	

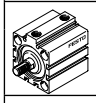
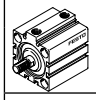
003	Stroke	
2.5	2.5	
5	5	
10	10	
15	15	
20	20	
25	25	

004	Piston rod thread	
A	Male thread	
I	Female thread	
	None	

005	Cushioning	
P	Elastic cushioning rings/plates on both sides	

006	Position sensing	
	None	
A	For proximity sensor	

Product range overview

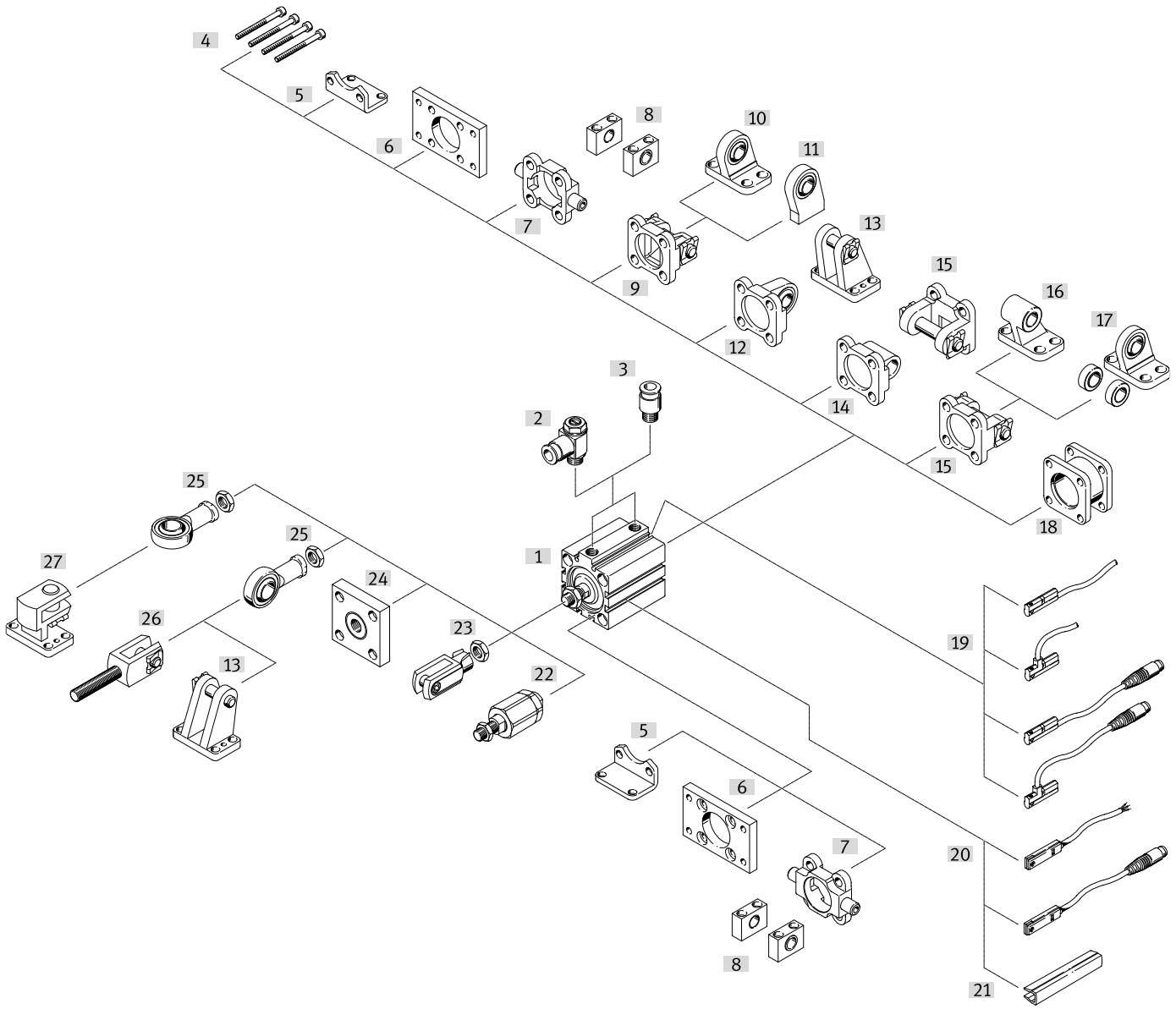
Function	Design	Type	Piston ⌀ [mm]	Stroke [mm]	Position sensing
Double-acting	**Without position sensing**				
		**ADVC** Ø 4 ... 25	4	2.5; 5	–
			6, 10, 12	5, 10	
			16, 20, 25	5, 10, 15, 20, 25	
		**ADVC** Ø 32 ... 100	32, 40	5, 10, 15, 20, 25	–
			50, 63, 80, 100	10, 15, 20, 25	
	With position sensing				
		**ADVC-...-A** Ø 6 ... 25	6, 10, 12	5, 10	■
			16, 20, 25	5, 10, 15, 20, 25	
		**ADVC-...-A** Ø 32 ... 100	32, 40	5, 10, 15, 20, 25	■
			50, 63, 80, 100	10, 15, 20, 25	
Single-acting	**Without position sensing**				
		**AEVC** Ø 4 ... 25	4	2.5; 5	–
			6, 10, 12	5, 10	
			16, 20, 25	5, 10, 25	
		**AEVC** Ø 32 ... 100	32	5, 10, 25	–
			40, 50, 63, 80, 100	10, 25	
	With position sensing				
		**AEVC-...-A** Ø 6 ... 25	6, 10, 12	5, 10	■
			16, 20, 25	5, 10, 25	
		**AEVC-...-A** Ø 32 ... 100	32	5, 10, 25	■
			40, 50, 63, 80, 100	10, 25	

Product range overview

Type	Piston rod			Cushioning	→ Page/Internet
	With male thread	With female thread	Without thread		
Without position sensing					
ADVC Ø 4 ... 25	■	■ from Ø 12	■ Ø 4 ... 12	■	8
ADVC Ø 32 ... 100	■	■	–	■	8
With position sensing					
ADVC-...-A Ø 6 ... 25	■	■ from Ø 12	■ Ø 6 ... 12	■	16
ADVC-...-A Ø 32 ... 100	■	■	–	■	16
Without position sensing					
AEVC Ø 4 ... 25	■	■ from Ø 12	■ Ø 4 ... 12	■	24
AEVC Ø 32 ... 100	■	■	–	■	24
With position sensing					
AEVC-...-A Ø 6 ... 25	■	■ from Ø 12	■ Ø 6 ... 12	■	32
AEVC-...-A Ø 32 ... 100	■	■	–	■	32

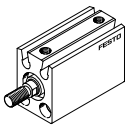
Peripherals overview

⌀ 32 ... 100 mm



⌀ 4 ... 25 mm
Without position sensing

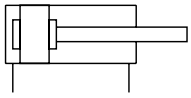
⌀ 6 ... 25 mm
With position sensing



Peripherals overview

Mounting attachments and accessories							
		Description		Piston ø			→ Page/Internet
				4, 6, 12	10, 16 ... 25	32 ... 100	
[1]	Short-stroke cylinder ADVC	Double-acting	Without position sensing	4 ... 100			
			With position sensing	6 ... 100			
	Short-stroke cylinder AEVC	Single-acting	Without position sensing	4 ... 100			
			With position sensing	6 ... 100			
[2]	One-way flow control valve GRLA	For speed regulation		■	■	■	50
[3]	Push-in fitting QS	For connecting compressed air tubing with standard O.D.		■	■	■	qs
[4]	Mounting screws	Not included in the scope of delivery		■ DIN 84	■ DIN 912	■ DIN 912	–
	Mounting screws for ø 80, 100	Not included in the scope of delivery		–	–	■	–
[5]	Foot mounting HNC	For bearing and end caps		–	–	■	39
[6]	Flange mounting FNC	For bearing or end caps		–	–	■	40
[7]	Trunnion flange ZNCF	For bearing or end caps		–	–	■	41
[8]	Trunnion support LNZG	–		–	–	■	42
[9]	Swivel flange SNC	For end caps		–	–	■	43
[10]	Clevis foot LSNG	With spherical bearing		–	–	■	47
[11]	Clevis foot LSNSG	Weld-on, with spherical bearing		–	–	■	47
[12]	Swivel flange SNCS	With spherical bearing for end caps		–	–	■	45
[13]	Clevis foot LBG	–		–	–	■	47
[14]	Swivel flange SNCL	For end caps		–	–	■	46
[15]	Swivel flange SNCB	For end caps		–	–	■	44
[16]	Clevis foot LNG	–		–	–	■	47
[17]	Clevis foot LSN	With spherical bearing		–	–	■	47
[18]	Multi-position kit DPNC	For connecting two cylinders with identical piston diameters to form a multi-position cylinder		–	–	■	38
[19]	Proximity sensor SME/SMT-10	Can be integrated in the cylinder profile barrel		–	■	■	49
[20]	Proximity sensor SME/SMT-8	Can be integrated in the cylinder profile barrel		–	–	■	49
[21]	Slot cover ABP-5-S	For protecting the sensor cable and the sensor slots from contamination		–	–	■	49
[22]	Self-aligning rod coupler FK	For compensating radial and angular deviations		■ ø 12	■	■	48
[23]	Rod clevis SG	Permits a swivelling movement of the cylinder in one plane		–	■	■	48
[24]	Coupling piece KSG	To compensate for radial deviations		–	–	■	48
[25]	Rod eye SGS	With spherical bearing		–	■	■	48
[26]	Rod clevis SGA	With male thread		–	–	■	48
[27]	Right-angle clevis foot LQG	–		–	■	■	47

Data sheet – Double-acting, without position sensing



- Ø - Diameter
  4 ... 100 mm
- I - Stroke length
  2.5 ... 25 mm

General technical data

Piston ø	4	6	10	12	16	20	25	32	40	50	63	80	100
Pneumatic connection	M3	M3	M5	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/4
Piston rod with female thread	–	–	–	■	■	■	■	■	■	■	■	■	■
Piston rod with male thread	■	■	■	■	■	■	■	■	■	■	■	■	■
Piston rod without thread	■	■	■	■	–	–	–	–	–	–	–	–	–
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]												
Note on operating/ pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)												
Design	Piston												
	Piston rod												
Cushioning	Elastic cushioning rings/pads at both ends												
Type of mounting	Via through-hole							Via through-hole					
	–							Via accessories					
Mounting position	Any												

Operating conditions

Piston ø		4	6	10	12	16	20	25	32	40	50	63	80	100
Operating pressure	[MPa]	0.2 ... 0.8	0.15 ... 0.8	0.1 ... 0.8	0.1 ... 1						0.06 ... 1		0.1 ... 1	
	[bar]	2 ... 8	1.5 ... 8	1 ... 8	1 ... 10						0.6 ... 10		1 ... 10	
	[psi]	29 ... 116	21.75 ... 116	14.5 ... 116	14.5 ... 145						8.7 ... 145		14.5 ... 145	
Ambient temperature	[°C]	–20 ... +80												
Corrosion resistance class CRC[1)]		1 – Low corrosion stress												

1) More information: www.festo.com/x/topic/kbk

Data sheet – Double-acting, without position sensing

Forces [N] and impact energy [J]

Piston ø	4	6	10	12	16	20	25	32	40	50	63	80	100
Theoretical force at 0.6 MPa (6 bar, 87 psi), advancing	7.5	17	47	68	121	189	295	483	754	1178	1870	3016	4712
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	5.7	13	40	51	91	141	247	415	686	1056	1750	2847	4418
Max. impact energy in the end positions	0.003	0.005	0.03	0.06	0.10	0.14	0.18	0.26	0.36	0.60	0.64	0.90	1.20

Product weight [g]

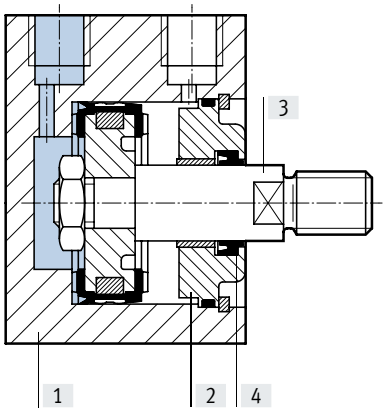
Stroke [mm]	Piston ø												
	4	6	10	12	16	20	25	32	40	50	63	80	100
2.5	3	–	–	–	–	–	–	–	–	–	–	–	–
5	4.2	7.5	20	30	43	80	102	173	250	–	–	–	–
10	–	10	21	35	51	95	116	193	270	388	590	1052	2079
15	–	–	–	–	58	106	129	210	290	411	663	1102	2161
20	–	–	–	–	66	119	145	229	321	447	704	1167	2338
25	–	–	–	–	72	131	157	246	344	481	742	1219	2400

Moving mass [g]

Stroke [mm]	Piston ø												
	4	6	10	12	16	20	25	32	40	50	63	80	100
2.5	0.2	–	–	–	–	–	–	–	–	–	–	–	–
5	0.25	1.2	2.8	6.6	11	22	27	46	69	–	–	–	–
10	–	1.5	3.3	7.7	13	25	30	51	74	127	178	339	719
15	–	–	–	–	15	28	33	56	79	135	186	351	739
20	–	–	–	–	17	31	36	61	84	143	194	363	759
25	–	–	–	–	19	34	39	66	89	151	202	375	779

Materials

Sectional view



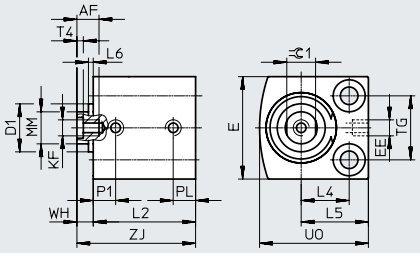
Short-stroke cylinder		ø 4	ø 6 ... 100
[1]	Cylinder barrel	Anodised aluminium	Anodised aluminium
[2]	Cover	Anodised aluminium	Anodised aluminium
[3]	Piston rod	Anodised aluminium	High-alloy steel
[4]	Rod seal	Nitrile rubber	Polyurethane
–	Note on materials	RoHS-compliant	RoHS-compliant
	PWIS conformity	VDMA24364-B1/B2-L	VDMA24364-B1/B2-L
	PWIS criterion	Free of paint-wetting impairment substances to FN 942010	Free of paint-wetting impairment substances to FN 942010

Data sheet – Double-acting, without position sensing

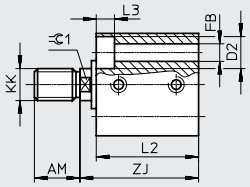
Dimensions Download CAD data ➔ www.festo.com

Ø 4 ... 25 mm

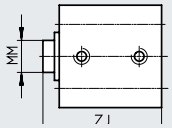
ADVC-...-I-P, piston rod with female thread



ADVC-...-A-P, piston rod with male thread



ADVC-...-P, piston rod without thread



Ø 4 mm:
Do not exceed the maximum screw-in depth of 3 mm and maximum tightening torque of 0.7 Nm.
Ø 10 mm
The bearing cap can protrude up to 0.65 mm depending on the tolerance position.
Ø 12 mm
The bearing cap can protrude up to 0.35 mm depending on the tolerance position.
[1] No undercut with diameter 4/6/10

Data sheet – Double-acting, without position sensing

ø [mm]	Stroke [mm]	AF min.	AM –0.5	D1 ø max.	D2 ø	E max.	EE	FB ø	KF	KK	L2 +0.2	L3
4	2.5	–	6	–	3.3 $^{+0.1}$	10	M3	1.8	–	M2	13	1.8
	5										15.5	
6	5	–	6	–	5 $^{+0.1}$	13	M3	2.9	–	M3	16	2.9
	10										21	
10	5	–	8	7.5	5.8 $^{+0.1}$	18	M5	3.4	–	M4	21	3.4
	10										24	
12	5	8	8	10.7	6 ^{H13}	20	M5	3.4	M3	M5	23	3.4
	10										28	
16	5	10	12	–	8 ^{H13}	25	M5	4.5	M4	M6	23	4.6
	10										28	
	15										33	
	20										38	
	25										43	
20	5	12	12	–	10 ^{H13}	32	M5	5.5	M5	M8	27	5.7
	10										32	
	15										37	
	20										42	
	25										47	
25	5	12	12	–	10 ^{H13}	38	M5	5.5	M5	M8	27.5	5.7
	10										32.5	
	15										37.5	
	20										42.5	
	25										47.5	

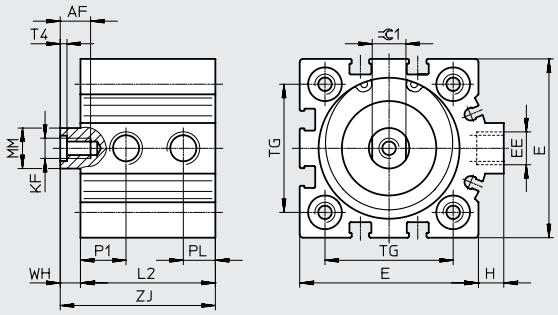
ø [mm]	Stroke [mm]	L4	L5	L6 max.	MM ø	P1	PL	T4	TG ±0.1	UO max.	WH	ZJ ±0.8	⫧1
4	2.5	4	6.5	–	2	3.7	3.2	–	5.8	10	1	14	–
	5											16.5	
6	5	6	9	–	3	4.7	3	–	7	14	1	17	–
	10											22	
10	5	8	11.5	0.7	4	5.2	5.2	–	11	19	1.5	22.5	–
	10					6	5.5					25.5	
12	5	9	13	0.4	6	5.75	5.75	1.5	13	22	4	27	5
	10					9	6					32	
16	5	11.5	16.5	–	8	6	6	2	15	27	4	27	7
	10					7.5						32	
	15											37	
	20											42	
	25											47	
20	5	15	21	–	10	7.5	7	2	20	34	5	32	9
	10											37	
	15											42	
	20											47	
	25											52	
25	5	15.5	21.5	–	10	8	6.5	2	26	37	5	32.5	9
	10											37.5	
	15											42.5	
	20											47.5	
	25											52.5	

Data sheet – Double-acting, without position sensing

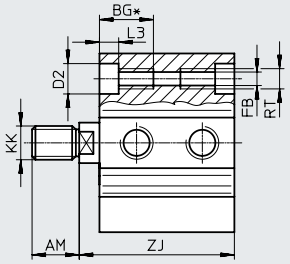
Dimensions Download CAD data ➔ www.festo.com

Ø 32 ... 100 mm

ADVC-...-I-P, piston rod with female thread



ADVC-...-A-P **, piston rod with male thread



⌀ [mm]	AF min.	AM −0.5	BG* min.	D2 ⌀ F9	E max.	EE	FB ⌀	H	KF	KK
32	12	14	21.7	9	45	G1/8	5.2	7	M6	M10x1.25
40	12	14	21.7	9	53.5	G1/8	5.2	7	M6	M10x1.25
50	16	16	22.8	11	63.5	G1/8	6.8	7	M8	M12x1.25
63	16	16	22.8	11	75	G1/8	6.8	7.5	M8	M12x1.25
80	20	22	25	14	93	G1/8	8.5	7	M10	M16x1.5
100	24	28	25	14	113	G1/4	8.5	13	M12	M20x1.5

* Continuous thread with shorter sizes

** Nut for piston rod thread included in the scope of delivery

Data sheet – Double-acting, without position sensing

ø [mm]	Stroke [mm]	L2 +0.2	L3	MM ø	P1	PL	RT	T4	TG ±0.1	WH	ZJ ±0.8	=⊂1
32	5	34	5.7	12	9	8.5	M6	2.6	32.5	6	40	10
	10	39									45	
	15	44									50	
	20	49									55	
	25	54									60	
40	5	34.5	5.7	12	11	9	M6	2.6	38	6	40.5	10
	10	39.5									45.5	
	15	44.5									50.5	
	20	49.5									55.5	
	25	54.5									60.5	
50	10	38	6.8	16	11.3	9.5	M8	3.3	46.5	8	46	13
	15	43									51	
	20	48									56	
	25	53									61	
63	10	45	6.8	16	12.5	11.5	M8	3.3	56.5	8	53	13
	15	50									58	
	20	55									63	
	25	60									68	
80	10	50	9	20	15	15	M10	4.7	72	8	58	17
	15	55									63	
	20	60									68	
	25	65									73	
100	10	59	9	25	16.5	19	M10	6.1	89	10	69	22
	15	64									74	
	20	69									79	
	25	74									84	

Data sheet – Double-acting, without position sensing

Ordering data

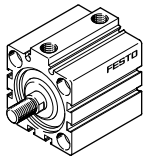
Type	Piston ø [mm]	Stroke [mm]	Piston rod without thread Part no.	Type
	4	2.5	**526897**	**ADVC-4-2,5-P**
		5	**526898**	**ADVC-4-5-P**
	6	5	**526899**	**ADVC-6-5-P**
		10	**526900**	**ADVC-6-10-P**
	10	5	**526903**	**ADVC-10-5-P**
		10	**526904**	**ADVC-10-10-P**
	12	5	**530568**	**ADVC-12-5-P**
		10	**530569**	**ADVC-12-10-P**

Ordering data

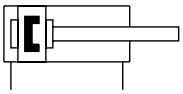
Type	Piston ø [mm]	Stroke [mm]	Piston rod with male thread Part no.	Type	Piston rod with female thread Part no.	Type
	4	2.5	**188054**	**ADVC-4-2,5-A-P**	–	
		5	**188055**	**ADVC-4-5-A-P**		
	6	5	**188066**	**ADVC-6-5-A-P**		
		10	**188067**	**ADVC-6-10-A-P**		
	10	5	**188078**	**ADVC-10-5-A-P**		
		10	**188079**	**ADVC-10-10-A-P**		
	12	5	**188094**	**ADVC-12-5-A-P**	**188090**	**ADVC-12-5-I-P**
		10	**188095**	**ADVC-12-10-A-P**	**188091**	**ADVC-12-10-I-P**
	16	5	**188123**	**ADVC-16-5-A-P**	**188113**	**ADVC-16-5-I-P**
		10	**188124**	**ADVC-16-10-A-P**	**188114**	**ADVC-16-10-I-P**
		15	**188125**	**ADVC-16-15-A-P**	**188115**	**ADVC-16-15-I-P**
		20	**188126**	**ADVC-16-20-A-P**	**188116**	**ADVC-16-20-I-P**
		25	**188127**	**ADVC-16-25-A-P**	**188117**	**ADVC-16-25-I-P**
	20	5	**188155**	**ADVC-20-5-A-P**	**188145**	**ADVC-20-5-I-P**
		10	**188156**	**ADVC-20-10-A-P**	**188146**	**ADVC-20-10-I-P**
		15	**188157**	**ADVC-20-15-A-P**	**188147**	**ADVC-20-15-I-P**
		20	**188158**	**ADVC-20-20-A-P**	**188148**	**ADVC-20-20-I-P**
		25	**188159**	**ADVC-20-25-A-P**	**188149**	**ADVC-20-25-I-P**
	25	5	**188187**	**ADVC-25-5-A-P**	**188177**	**ADVC-25-5-I-P**
		10	**188188**	**ADVC-25-10-A-P**	**188178**	**ADVC-25-10-I-P**
		15	**188189**	**ADVC-25-15-A-P**	**188179**	**ADVC-25-15-I-P**
		20	**188190**	**ADVC-25-20-A-P**	**188180**	**ADVC-25-20-I-P**
		25	**188191**	**ADVC-25-25-A-P**	**188181**	**ADVC-25-25-I-P**

Data sheet – Double-acting, without position sensing

Ordering data

Type	Piston ø	Stroke	Piston rod with male thread			Piston rod with female thread	
	[mm]	[mm]	Part no.	Type		Part no.	Type
	32	5	**188219**	**ADVC-32-5-A-P**		**188209**	**ADVC-32-5-I-P**
		10	**188220**	**ADVC-32-10-A-P**		**188210**	**ADVC-32-10-I-P**
		15	**188221**	**ADVC-32-15-A-P**		**188211**	**ADVC-32-15-I-P**
		20	**188222**	**ADVC-32-20-A-P**		**188212**	**ADVC-32-20-I-P**
		25	**188223**	**ADVC-32-25-A-P**		**188213**	**ADVC-32-25-I-P**
	40	5	**188247**	**ADVC-40-5-A-P**		**188237**	**ADVC-40-5-I-P**
		10	**188248**	**ADVC-40-10-A-P**		**188238**	**ADVC-40-10-I-P**
		15	**188249**	**ADVC-40-15-A-P**		**188239**	**ADVC-40-15-I-P**
		20	**188250**	**ADVC-40-20-A-P**		**188240**	**ADVC-40-20-I-P**
		25	**188251**	**ADVC-40-25-A-P**		**188241**	**ADVC-40-25-I-P**
	50	10	**188272**	**ADVC-50-10-A-P**		**188264**	**ADVC-50-10-I-P**
		15	**188273**	**ADVC-50-15-A-P**		**188265**	**ADVC-50-15-I-P**
		20	**188274**	**ADVC-50-20-A-P**		**188266**	**ADVC-50-20-I-P**
		25	**188275**	**ADVC-50-25-A-P**		**188267**	**ADVC-50-25-I-P**
	63	10	**188296**	**ADVC-63-10-A-P**		**188288**	**ADVC-63-10-I-P**
		15	**188297**	**ADVC-63-15-A-P**		**188289**	**ADVC-63-15-I-P**
		20	**188298**	**ADVC-63-20-A-P**		**188290**	**ADVC-63-20-I-P**
		25	**188299**	**ADVC-63-25-A-P**		**188291**	**ADVC-63-25-I-P**
	80	10	**188320**	**ADVC-80-10-A-P**		**188312**	**ADVC-80-10-I-P**
		15	**188321**	**ADVC-80-15-A-P**		**188313**	**ADVC-80-15-I-P**
		20	**188322**	**ADVC-80-20-A-P**		**188314**	**ADVC-80-20-I-P**
		25	**188323**	**ADVC-80-25-A-P**		**188315**	**ADVC-80-25-I-P**
	100	10	**188344**	**ADVC-100-10-A-P**		**188336**	**ADVC-100-10-I-P**
		15	**188345**	**ADVC-100-15-A-P**		**188337**	**ADVC-100-15-I-P**
		20	**188346**	**ADVC-100-20-A-P**		**188338**	**ADVC-100-20-I-P**
		25	**188347**	**ADVC-100-25-A-P**		**188339**	**ADVC-100-25-I-P**

Data sheet – Double-acting, with position sensing



- Ø - Diameter
  6 ... 100 mm
- I - Stroke length
  5 ... 25 mm

General technical data

Piston Ø	6	10	12	16	20	25	32	40	50	63	80	100
Pneumatic connection	M3	M5	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/4
Piston rod with female thread	–	–	■	■	■	■	■	■	■	■	■	■
Piston rod with male thread	■	■	■	■	■	■	■	■	■	■	■	■
Piston rod without thread	■	■	■	–	–	–	–	–	–	–	–	–
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]											
Note on operating/ pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)											
Design	Piston											
	Piston rod											
Cushioning	Elastic cushioning rings/pads at both ends											
Position sensing	Via proximity sensor											
Type of mounting	Via through-hole						Via through-hole					
	–						Via accessories					
Mounting position	Any											

Operating conditions

Piston Ø		6	10	12	16	20	25	32	40	50	63	80	100
Operating pressure	[MPa]	0.15 ... 0.8	0.1 ... 0.8	0.1 ... 1						0.06 ... 1		0.1 ... 1	
	[bar]	1.5 ... 8	1 ... 8	1 ... 10						0.6 ... 10		1 ... 10	
	[psi]	21.75 ... 116	14.5 ... 116	14.5 ... 145						8.7 ... 145		14.5 ... 145	
Ambient temperature	[°C]	–20 ... +80 (observe operating range of proximity sensors)											
Corrosion resistance class CRC[1)]		1 – Low corrosion stress											

1) More information: www.festo.com/x/topic/kbk

Data sheet – Double-acting, with position sensing

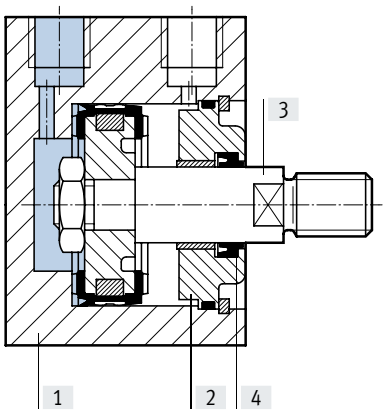
Forces [N] and impact energy [J]												
Piston ø	6	10	12	16	20	25	32	40	50	63	80	100
Theoretical force at 0.6 MPa (6 bar, 87 psi), advancing	17	47	68	121	189	295	483	754	1178	1870	3016	4712
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	13	40	51	91	141	247	415	686	1056	1750	2847	4418
Max. impact energy in the end positions	0.005	0.03	0.06	0.10	0.14	0.18	0.26	0.36	0.60	0.64	0.90	1.20

Product weight [g]												
Stroke [mm]	Piston ø											
	6	10	12	16	20	25	32	40	50	63	80	100
5	14	29	57	79	120	151	184	298	–	–	–	–
10	17	35	64	90	134	168	201	323	459	626	1176	2200
15	–	–	–	100	148	183	225	344	488	701	1233	2325
20	–	–	–	110	160	200	239	370	528	740	1297	2290
25	–	–	–	120	178	217	242	377	553	778	1348	2366

Moving mass [g]												
Stroke [mm]	Piston ø											
	6	10	12	16	20	25	32	40	50	63	80	100
5	1.7	3.2	8.5	15	26	32	50	66	–	–	–	–
10	2	3.7	9.6	17	29	35	55	71	116	158	289	555
15	–	–	–	19	32	38	60	76	124	166	301	575
20	–	–	–	21	35	41	65	81	132	174	313	595
25	–	–	–	23	38	44	70	86	140	182	325	615

Materials

Sectional view



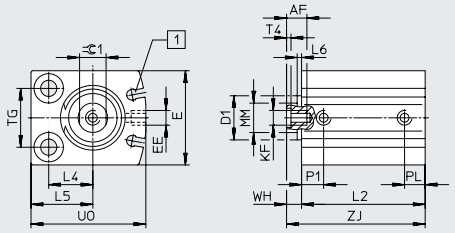
Short-stroke cylinder		
[1]	Cylinder barrel	Anodised aluminium
[2]	Cover	Anodised aluminium
[3]	Piston rod	High-alloy steel
[4]	Rod seal	Polyurethane
–	Note on materials	RoHS-compliant
	PWIS conformity	VDMA24364-B1/B2-L
	PWIS criterion	Free of paint-wetting impairment substances to FN 942010

Data sheet – Double-acting, with position sensing

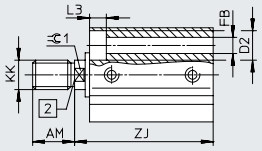
Dimensions Download CAD data ➔ www.festo.com

Ø 6 ... 25 mm

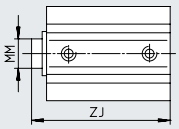
ADVC-...-I-P-A, piston rod with female thread



ADVC-...-A-P-A, piston rod with male thread



ADVC-...-P-A, piston rod without thread



Ø 10 mm
The bearing cap can protrude up to 0.65 mm depending on the tolerance position.
Ø 12 mm
The bearing cap can protrude up to 0.35 mm depending on the tolerance position.
[1] No undercut with diameter 6/10
[2] Slot for proximity sensor SME/SMT-10

ø [mm]	Stroke [mm]	AF min.	AM –0.5	D1 ø max.	D2 ø	E max.	EE	FB ø	KF	KK	L2 +0.2	L3
6	5	–	6	–	5 +0.1	16	M3	2.9	–	M3	25.5	2.9
	10										30.5	
10	5	–	8	7.5	5.8 +0.1	21	M5	3.4	–	M4	27	3.4
	10										32	
12	5	8	8	10.7	6 H13	24	M5	3.4	M3	M5	36	3.4
	10										41	
16	5	10	12	–	8 H13	28	M5	4.5	M4	M6	35	4.6
	10										40	
	15										45	
	20										50	
	25										55	
20	5	12	12	–	10 H13	32	M5	5.5	M5	M8	37	5.7
	10										42	
	15										47	
	20										52	
	25										57	
25	5	12	12	–	10 H13	38	M5	5.5	M5	M8	37	5.7
	10										42	
	15										47	
	20										52	
	25										57	

Data sheet – Double-acting, with position sensing

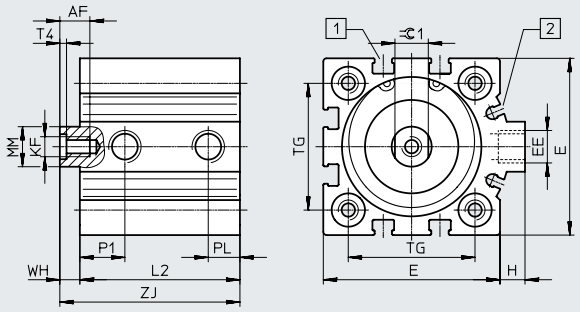
ø [mm]	Stroke [mm]	L4	L5	L6 max.	MM ø	P1	PL	T4	TG ±0.1	UO max.	WH	ZJ ±0.8	=⊂1
6	5	5	8	–	3	5.2	3	–	10	16	1	26.5	–
	10											31.5	
10	5	7	10.5	0.7	4	6	6	–	14	22	1.5	28.5	–
	10											33.5	
12	5	8	12	0.4	6	7	6	1.5	16	26	4	40	5
	10											45	
16	5	12	17	–	8	8	6	2	18	32	4	39	7
	10											44	
	15											49	
	20											54	
	25											59	
20	5	15	21	–	10	7.5	7	2	20	39	5	42	9
	10											47	
	15											52	
	20											57	
	25											62	
25	5	15.5	21.5	–	10	10	6	2	26	42	5	42	9
	10											47	
	15											52	
	20											57	
	25											62	

Data sheet – Double-acting, with position sensing

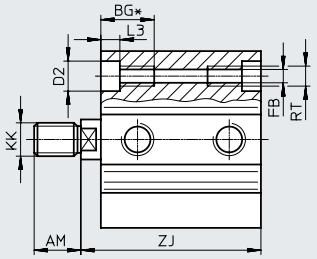
Dimensions Download CAD data ➔ www.festo.com

ø 32 ... 100 mm

ADVC-...-I-P-A, piston rod with female thread



ADVC-...-A-P-A **, piston rod with male thread



[1] Slot for proximity sensor SME/SMT-8

[2] Slot for proximity sensor SME/SMT-10

ø [mm]	AF min.	AM −0.5	BG* min.	D2 ø F9	E max.	EE	FB ø	H	KF	KK
32	12	14	21.7	9	45	G1/8	5.2	7	M6	M10x1.25
40	12	14	21.7	9	53.5	G1/8	5.2	7	M6	M10x1.25
50	16	16	22.8	11	63.5	G1/8	6.8	7	M8	M12x1.25
63	16	16	22.8	11	75	G1/8	6.8	7.5	M8	M12x1.25
80	20	22	25	14	93	G1/8	8.5	7	M10	M16x1.5
100	24	28	25	14	113	G1/4	8.5	13	M12	M20x1.5

* Continuous thread with shorter sizes

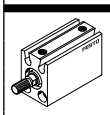
** Nut for piston rod thread included in the scope of delivery

Data sheet – Double-acting, with position sensing

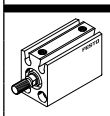
ø [mm]	Stroke [mm]	L2 +0.2	L3	MM ø	P1	PL	RT	T4	TG ±0.1	WH	ZJ ±0.8	=G1
32	5	38	5.7	12	9	8.5	M6	2.6	32.5	6	44	10
	10	43									49	
	15	48									54	
	20	53									59	
	25	58									64	
40	5	43	5.7	12	13.5	9.5	M6	2.6	38	6	49	10
	10	48									54	
	15	53									59	
	20	58									64	
	25	63									69	
50	10	48	6.8	16	11.3	9.5	M8	3.3	46.5	8	56	13
	15	53									61	
	20	58									66	
	25	63									71	
63	10	51	6.8	16	12.5	10.5	M8	3.3	56.5	8	59	13
	15	56									64	
	20	61									69	
	25	66									74	
80	10	59	9	20	15	8.5	M10	4.7	72	8	67	17
	15	64									72	
	20	69									77	
	25	74									82	
100	10	68	9	25	16.5	10.5	M10	6.1	89	10	78	22
	15	73									83	
	20	78									88	
	25	83									93	

Data sheet – Double-acting, with position sensing

Ordering data

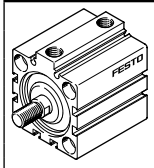
Type	Piston ø	Stroke	Piston rod without thread	
	[mm]	[mm]	Part no.	Type
	6	5	**526901**	**ADVC-6-5-P-A**
		10	**526902**	**ADVC-6-10-P-A**
	10	5	**526905**	**ADVC-10-5-P-A**
		10	**526906**	**ADVC-10-10-P-A**
	12	5	**530572**	**ADVC-12-5-P-A**
		10	**530573**	**ADVC-12-10-P-A**

Ordering data

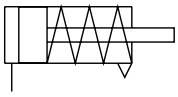
Type	Piston ø	Stroke	Piston rod with male thread			Piston rod with female thread	
	[mm]	[mm]	Part no.	Type		Part no.	Type
	6	5	**188064**	**ADVC-6-5-A-P-A**		–	
		10	**188065**	**ADVC-6-10-A-P-A**			
	10	5	**188076**	**ADVC-10-5-A-P-A**			
		10	**188077**	**ADVC-10-10-A-P-A**			
	12	5	**188092**	**ADVC-12-5-A-P-A**		**188088**	**ADVC-12-5-I-P-A**
		10	**188093**	**ADVC-12-10-A-P-A**		**188089**	**ADVC-12-10-I-P-A**
	16	5	**188118**	**ADVC-16-5-A-P-A**		**188108**	**ADVC-16-5-I-P-A**
		10	**188119**	**ADVC-16-10-A-P-A**		**188109**	**ADVC-16-10-I-P-A**
		15	**188120**	**ADVC-16-15-A-P-A**		**188110**	**ADVC-16-15-I-P-A**
		20	**188121**	**ADVC-16-20-A-P-A**		**188111**	**ADVC-16-20-I-P-A**
		25	**188122**	**ADVC-16-25-A-P-A**		**188112**	**ADVC-16-25-I-P-A**
	20	5	**188150**	**ADVC-20-5-A-P-A**		**188140**	**ADVC-20-5-I-P-A**
		10	**188151**	**ADVC-20-10-A-P-A**		**188141**	**ADVC-20-10-I-P-A**
		15	**188152**	**ADVC-20-15-A-P-A**		**188142**	**ADVC-20-15-I-P-A**
		20	**188153**	**ADVC-20-20-A-P-A**		**188143**	**ADVC-20-20-I-P-A**
		25	**188154**	**ADVC-20-25-A-P-A**		**188144**	**ADVC-20-25-I-P-A**
	25	5	**188182**	**ADVC-25-5-A-P-A**		**188172**	**ADVC-25-5-I-P-A**
		10	**188183**	**ADVC-25-10-A-P-A**		**188173**	**ADVC-25-10-I-P-A**
		15	**188184**	**ADVC-25-15-A-P-A**		**188174**	**ADVC-25-15-I-P-A**
		20	**188185**	**ADVC-25-20-A-P-A**		**188175**	**ADVC-25-20-I-P-A**
		25	**188186**	**ADVC-25-25-A-P-A**		**188176**	**ADVC-25-25-I-P-A**

Data sheet – Double-acting, with position sensing

Ordering data

Type	Piston ø	Stroke	Piston rod with male thread			Piston rod with female thread	
	[mm]	[mm]	Part no.	Type		Part no.	Type
	32	5	**188214**	**ADVC-32-5-A-P-A**		**188204**	**ADVC-32-5-I-P-A**
		10	**188215**	**ADVC-32-10-A-P-A**		**188205**	**ADVC-32-10-I-P-A**
		15	**188216**	**ADVC-32-15-A-P-A**		**188206**	**ADVC-32-15-I-P-A**
		20	**188217**	**ADVC-32-20-A-P-A**		**188207**	**ADVC-32-20-I-P-A**
		25	**188218**	**ADVC-32-25-A-P-A**		**188208**	**ADVC-32-25-I-P-A**
	40	5	**188242**	**ADVC-40-5-A-P-A**		**188232**	**ADVC-40-5-I-P-A**
		10	**188243**	**ADVC-40-10-A-P-A**		**188233**	**ADVC-40-10-I-P-A**
		15	**188244**	**ADVC-40-15-A-P-A**		**188234**	**ADVC-40-15-I-P-A**
		20	**188245**	**ADVC-40-20-A-P-A**		**188235**	**ADVC-40-20-I-P-A**
		25	**188246**	**ADVC-40-25-A-P-A**		**188236**	**ADVC-40-25-I-P-A**
	50	10	**188268**	**ADVC-50-10-A-P-A**		**188260**	**ADVC-50-10-I-P-A**
		15	**188269**	**ADVC-50-15-A-P-A**		**188261**	**ADVC-50-15-I-P-A**
		20	**188270**	**ADVC-50-20-A-P-A**		**188262**	**ADVC-50-20-I-P-A**
		25	**188271**	**ADVC-50-25-A-P-A**		**188263**	**ADVC-50-25-I-P-A**
	63	10	**188292**	**ADVC-63-10-A-P-A**		**188284**	**ADVC-63-10-I-P-A**
		15	**188293**	**ADVC-63-15-A-P-A**		**188285**	**ADVC-63-15-I-P-A**
		20	**188294**	**ADVC-63-20-A-P-A**		**188286**	**ADVC-63-20-I-P-A**
		25	**188295**	**ADVC-63-25-A-P-A**		**188287**	**ADVC-63-25-I-P-A**
	80	10	**188316**	**ADVC-80-10-A-P-A**		**188308**	**ADVC-80-10-I-P-A**
		15	**188317**	**ADVC-80-15-A-P-A**		**188309**	**ADVC-80-15-I-P-A**
		20	**188318**	**ADVC-80-20-A-P-A**		**188310**	**ADVC-80-20-I-P-A**
		25	**188319**	**ADVC-80-25-A-P-A**		**188311**	**ADVC-80-25-I-P-A**
	100	10	**188340**	**ADVC-100-10-A-P-A**		**188332**	**ADVC-100-10-I-P-A**
		15	**188341**	**ADVC-100-15-A-P-A**		**188333**	**ADVC-100-15-I-P-A**
		20	**188342**	**ADVC-100-20-A-P-A**		**188334**	**ADVC-100-20-I-P-A**
		25	**188343**	**ADVC-100-25-A-P-A**		**188335**	**ADVC-100-25-I-P-A**

Data sheet – Single-acting, without position sensing



- Ø - Diameter
  4 ... 100 mm
- I - Stroke length
  2.5 ... 25 mm

General technical data

Piston ø	4	6	10	12	16	20	25	32	40	50	63	80	100
Pneumatic connection	M3	M3	M5	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/4
Piston rod with female thread	–	–	–	■	■	■	■	■	■	■	■	■	■
Piston rod with male thread	■	■	■	■	■	■	■	■	■	■	■	■	■
Piston rod without thread	■	■	■	■	–	–	–	–	–	–	–	–	–
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]												
Note on operating/ pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)												
Design	Piston												
	Piston rod												
Cushioning	Elastic cushioning rings/pads at both ends												
Type of mounting	Via through-hole							Via through-hole					
	–							Via accessories					
Mounting position	Any												

Operating conditions

Piston ø		4	6	10	12	16	20	25	32	40	50	63	80	100
Operating pressure	[MPa]	0.25 ... 0.8		0.15 ... 0.8	0.15 ... 1				0.1 ... 1					
	[bar]	2.5 ... 8		1.5 ... 8	1.5 ... 10				1 ... 10					
	[psi]	36.25 ... 116		21.75 ... 116	21.75 ... 145				14.5 ... 145					
Ambient temperature	[°C]	–20 ... +80												
Corrosion resistance class CRC[1)]		1 – Low corrosion stress												

1) More information: www.festo.com/x/topic/kbk

Data sheet – Single-acting, without position sensing

Forces [N] and impact energy [J]													
Piston ø	4	6	10	12	16	20	25	32	40	50	63	80	100
Theoretical force at 0.6 MPa (6 bar, 87 psi), advancing	5	11	41	59	105	170	270	450	700	1120	1800	2900	4500
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	1	3	3	4	5	10[1)]	15	22	28	40	50	85	140
Max. impact energy in the end positions	0.003	0.005	0.03	0.06	0.10	0.14	0.18	0.26	0.36	0.60	0.64	0.90	1.20

1) AEVC-20-5-... = 5 N

Note

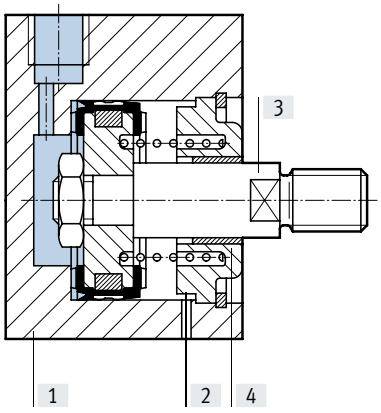
The degree of friction depends on the mounting position and the type of load involved. Single-acting cylinders should as far as possible be operated without lateral forces.

Product weight [g]													
Stroke [mm]	Piston ø												
	4	6	10	12	16	20	25	32	40	50	63	80	100
2.5	3	–	–	–	–	–	–	–	–	–	–	–	–
5	4.3	7.6	16	21	37	57	94	117	–	–	–	–	–
10	–	11	21	34	49	87	110	169	234	306	460	1150	2050
25	–	–	–	–	81	132	167	224	337	466	667	1354	2405

Moving mass [g]													
Stroke [mm]	Piston ø												
	4	6	10	12	16	20	25	32	40	50	63	80	100
2.5	0.15	–	–	–	–	–	–	–	–	–	–	–	–
5	0.2	1	2	4.4	8	14	22	40	–	–	–	–	–
10	–	1.4	2.6	6.9	11	21	25	48	65	105	157	327	678
25	–	–	–	–	19	32	37	62	83	140	191	365	739

Materials

Sectional view



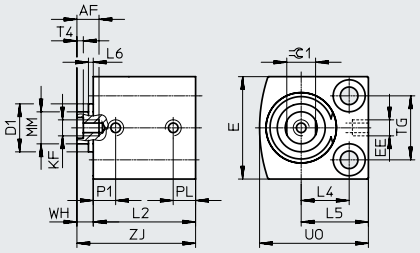
Short-stroke cylinder		ø 4	ø 6 ... 100
[1]	Cylinder barrel	Anodised aluminium	Anodised aluminium
[2]	Cover	Anodised aluminium	Anodised aluminium
[3]	Piston rod	Anodised aluminium	High-alloy steel
[4]	Rod seal	NBR	Polyurethane
–	Note on materials	RoHS-compliant	RoHS-compliant
	PWIS conformity	VDMA24364-B1/B2-L	VDMA24364-B1/B2-L
	PWIS criterion	Free of paint-wetting impairment substances to FN 942010	Free of paint-wetting impairment substances to FN 942010

Data sheet – Single-acting, without position sensing

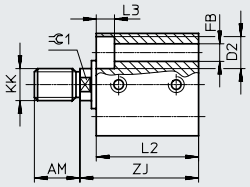
Dimensions Download CAD data ➔ www.festo.com

Ø 4 ... 25 mm

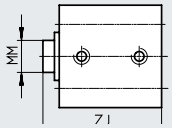
AEVC-...-I-P, piston rod with female thread



AEVC-...-A-P, piston rod with male thread



AEVC-...-P, piston rod without thread



Ø 10 mm

The bearing cap can protrude up to 0.65 mm depending on the tolerance position.

Ø 12 mm

The bearing cap can protrude up to 0.35 mm depending on the tolerance position.

[1] No undercut with diameter 4/6/10

Data sheet – Single-acting, without position sensing

ø [mm]	Stroke [mm]	AF min.	AM –0.5	D1 ø max.	D2 ø	E max.	EE	FB ø	KF	KK	L2 +0.2	L3
4	2.5	–	6	–	$3.3^{+0.1}$	10	M3	1.8	–	M2	13	1.8
	5										15.5	
6	5	–	6	–	$5^{+0.1}$	13	M3	2.9	–	M3	16	2.9
	10										23.4	
10	5	–	8	7.5	$5.8^{+0.1}$	18	M5	3.4	–	M4	16	3.4
	10										23	
12	5	8	8	10.7	6^{H13}	20	M5	3.4	M3	M5	16	3.4
	10										27.5	
16	5	10	12	–	8^{H13}	25	M5	4.5	M4	M6	20	4.6
	10										27.5	
	25										47	
20	5	8	12	–	10^{H13}	32	M5	5.5	M5	M8	20	5.7
	10	12									30.5	
	25										48.5	
25	5	12	12	–	10^{H13}	38	M5	5.5	M5	M8	26.1	5.7
	10										31.1	
	25										50.2	

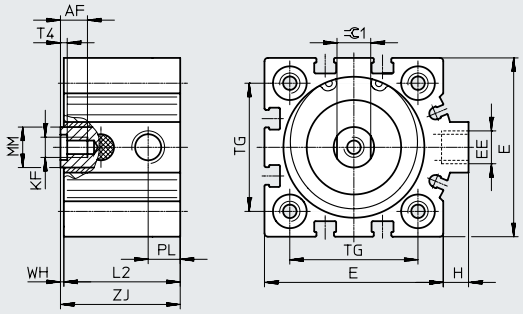
ø [mm]	Stroke [mm]	L4	L5	L6 max.	MM ø	PL	T4	TG ±0.1	UO max.	WH	ZJ ±0.8	=⌀1
4	2.5	4	6.5	–	2	3.2	–	5.8	10	1	14	–
	5										16.5	
6	5	6	9	–	3	3	–	7	14	1	17	–
	10										24.4	
10	5	8	11.5	0.7	4	5.5	–	11	19	1	17	–
	10										24	
12	5	9	13	0.4	6	6	1.5	13	22	1	17	–
	10										28.5	
16	5	11.5	16.5	–	8	6	2	15	27	1	21	7
	10										28.5	
	25										48	
20	5	15	21	–	10	7	2	20	34	1	21	9
	10										31.5	
	25										49.5	
25	5	15.5	21.5	–	10	6.5	2	26	37	1	27.1	9
	10										32.1	
	25										51.2	

Data sheet – Single-acting, without position sensing

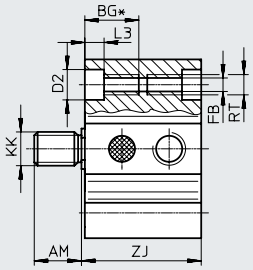
Dimensions Download CAD data ➔ www.festo.com

Ø 32 ... 100 mm

AEVC-...-I-P, piston rod with female thread



AEVC-...-A-P **, piston rod with male thread



Data sheet – Single-acting, without position sensing

ø [mm]	Stroke [mm]	AF min.	AM –0.5	BG* min.	D2 ø F9	E max.	EE	FB ø	H	KF	KK
32	5	12	14	21.7	9	45	G1/8	5.2	7	M6	M10x1.25
	10										
	25										
40	10	12	14	21.7	9	53.5	G1/8	5.2	7	M6	M10x1.25
	25										
50	10	16	16	22.8	11	63.5	G1/8	6.8	7	M8	M12x1.25
	25										
63	10	16	16	22.8	11	75	G1/8	6.8	7.5	M8	M12x1.25
	25										
80	10	20	22	25	14	93	G1/8	8.5	7	M10	M16x1.5
	25										
100	10	24	28	25	14	113	G1/4	8.5	13	M12	M20x1.5
	25										

ø [mm]	Stroke [mm]	L2 +0.2	L3	MM ø	PL	RT	T4	TG ±0.1	WH	ZJ ±0.8	=⌀1
32	5	26	5.7	12	9.5	M6	2.6	32.5	1	27	10
	10	35								36	
	25	50								51	
40	10	34.5	5.7	12	9.5	M6	2.6	38	1	35.5	10
	25	54.5								55.5	
50	10	30.6	6.8	16	9.5	M8	3.3	46.5	0.5	31.1	13
	25	53								53.5	
63	10	35	6.8	16	11.5	M8	3.3	56.5	1	36	13
	25	57								58	
80	10	52	9	20	15	M10	4.7	72	1	53	17
	25	67								68	
100	10	59	9	25	19	M10	6.1	89	1	60	22
	25	74								75	

* Continuous thread with shorter sizes

** Nut for piston rod with external thread included in the scope of delivery.

Data sheet – Single-acting, without position sensing

Ordering data

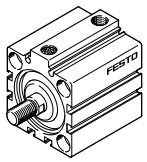
Type	Piston ø [mm]	Stroke [mm]	Piston rod without thread Part no.	Type
	4	2.5	**188050**	**AEVC-4-2,5-P**
		5	**188051**	**AEVC-4-5-P**
	6	5	**188058**	**AEVC-6-5-P**
		10	**188059**	**AEVC-6-10-P**
	10	5	**188070**	**AEVC-10-5-P**
		10	**188071**	**AEVC-10-10-P**
	12	5	**530566**	**AEVC-12-5-P**
		10	**530567**	**AEVC-12-10-P**

Ordering data

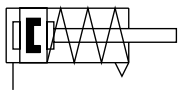
Type	Piston ø [mm]	Stroke [mm]	Piston rod with male thread Part no.	Type	Piston rod with female thread Part no.	Type
	4	2.5	**188052**	**AEVC-4-2,5-A-P**	–	
		5	**188053**	**AEVC-4-5-A-P**		
	6	5	**188062**	**AEVC-6-5-A-P**		
		10	**188063**	**AEVC-6-10-A-P**		
	10	5	**188074**	**AEVC-10-5-A-P**		
		10	**188075**	**AEVC-10-10-A-P**		
	12	5	**188086**	**AEVC-12-5-A-P**	**188082**	**AEVC-12-5-I-P**
		10	**188087**	**AEVC-12-10-A-P**	**188083**	**AEVC-12-10-I-P**
	16	5	**188105**	**AEVC-16-5-A-P**	**188099**	**AEVC-16-5-I-P**
		10	**188106**	**AEVC-16-10-A-P**	**188100**	**AEVC-16-10-I-P**
		25	**188107**	**AEVC-16-25-A-P**	**188101**	**AEVC-16-25-I-P**
	20	5	**188137**	**AEVC-20-5-A-P**	**188131**	**AEVC-20-5-I-P**
		10	**188138**	**AEVC-20-10-A-P**	**188132**	**AEVC-20-10-I-P**
		25	**188139**	**AEVC-20-25-A-P**	**188133**	**AEVC-20-25-I-P**
	25	5	**188169**	**AEVC-25-5-A-P**	**188163**	**AEVC-25-5-I-P**
		10	**188170**	**AEVC-25-10-A-P**	**188164**	**AEVC-25-10-I-P**
		25	**188171**	**AEVC-25-25-A-P**	**188165**	**AEVC-25-25-I-P**

Data sheet – Single-acting, without position sensing

Ordering data

Type	Piston ø	Stroke	Piston rod with male thread			Piston rod with female thread	
	[mm]	[mm]	Part no.	Type		Part no.	Type
	32	5	**188201**	**AEVC-32-5-A-P**		**188195**	**AEVC-32-5-I-P**
		10	**188202**	**AEVC-32-10-A-P**		**188196**	**AEVC-32-10-I-P**
		25	**188203**	**AEVC-32-25-A-P**		**188197**	**AEVC-32-25-I-P**
	40	10	**188230**	**AEVC-40-10-A-P**		**188226**	**AEVC-40-10-I-P**
		25	**188231**	**AEVC-40-25-A-P**		**188227**	**AEVC-40-25-I-P**
	50	10	**188258**	**AEVC-50-10-A-P**		**188254**	**AEVC-50-10-I-P**
		25	**188259**	**AEVC-50-25-A-P**		**188255**	**AEVC-50-25-I-P**
	63	10	**188282**	**AEVC-63-10-A-P**		**188278**	**AEVC-63-10-I-P**
		25	**188283**	**AEVC-63-25-A-P**		**188279**	**AEVC-63-25-I-P**
	80	10	**188306**	**AEVC-80-10-A-P**		**188302**	**AEVC-80-10-I-P**
		25	**188307**	**AEVC-80-25-A-P**		**188303**	**AEVC-80-25-I-P**
	100	10	**188330**	**AEVC-100-10-A-P**		**188326**	**AEVC-100-10-I-P**
		25	**188331**	**AEVC-100-25-A-P**		**188327**	**AEVC-100-25-I-P**

Data sheet – Single-acting, with position sensing



- Ø - Diameter
  6 ... 100 mm
- I - Stroke length
  2.5 ... 25 mm

General technical data

Piston ø	6	10	12	16	20	25	32	40	50	63	80	100
Pneumatic connection	M3	M5	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/4
Piston rod with female thread	–	–	■	■	■	■	■	■	■	■	■	■
Piston rod with male thread	■	■	■	■	■	■	■	■	■	■	■	■
Piston rod without thread	■	■	■	–	–	–	–	–	–	–	–	–
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]											
Note on operating/ pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)											
Design	Piston											
	Piston rod											
Cushioning	Elastic cushioning rings/pads at both ends											
Position sensing	Via proximity sensor											
Type of mounting	Via through-hole						Via through-hole					
	–						Via accessories					
Mounting position	Any											

Operating conditions

Piston ø		6	10	12	16	20	25	32	40	50	63	80	100
Operating pressure	[MPa]	0.25 ... 0.8	0.15 ... 0.8	0.15 ... 1				0.1 ... 1					
	[bar]	2.5 ... 8	1.5 ... 8	1.5 ... 10				1 ... 10					
	[psi]	36.25 ... 116	21.75 ... 116	21.75 ... 145				14.5 ... 145					
Ambient temperature	[°C]	–20 ... +80 (observe operating range of proximity sensors)											
Corrosion resistance class CRC[1)]		1 – Low corrosion stress											

1) More information: www.festo.com/x/topic/kbk

Data sheet – Single-acting, with position sensing

Forces [N] and impact energy [J]												
Piston Ø	6	10	12	16	20	25	32	40	50	63	80	100
Theoretical force at 0.6 MPa (6 bar, 87 psi), advancing	11	41	59	105	170	270	450	700	1120	1800	2900	4500
Theoretical force at 0.6 MPa (6 bar, 87 psi), retracting	3	3	4	5	10[1)]	15	22	28	40	50	85	140
Max. impact energy in the end positions	0.005	0.03	0.06	0.10	0.14	0.18	0.26	0.36	0.60	0.64	0.90	1.20

1) AEVC-20-5-... = 5 N

Note

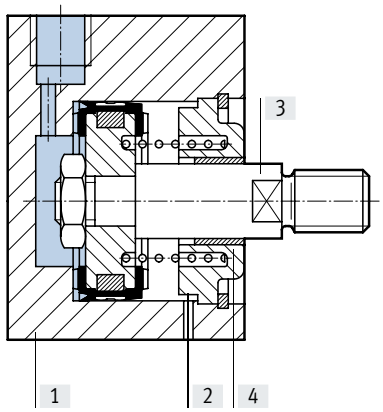
The degree of friction depends on the mounting position and the type of load involved. Single-acting cylinders should as far as possible be operated without lateral forces.

Product weight [g]												
Stroke [mm]	Piston Ø											
	6	10	12	16	20	25	32	40	50	63	80	100
5	14	31	58	81	120	151	190	–	–	–	–	–
10	18	35	64	89	136	168	205	316	475	660	1210	2244
25	–	–	–	131	189	235	260	383	580	780	1367	2372

Moving mass [g]												
Stroke [mm]	Piston Ø											
	6	10	12	16	20	25	32	40	50	63	80	100
5	1.5	3	8.5	15	26	32	49	–	–	–	–	–
10	1.8	3.5	9.5	17	29	35	54	70	116	155	284	546
25	–	–	–	26	40	47	67	83	140	179	321	604

Materials

Sectional view



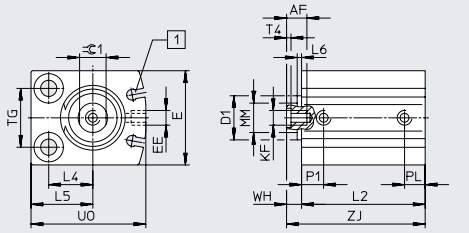
Short-stroke cylinder		
[1]	Cylinder barrel	Anodised aluminium
[2]	Cover	Anodised aluminium
[3]	Piston rod	High-alloy steel
[4]	Rod seal	Polyurethane
–	Note on materials	RoHS-compliant
	PWIS conformity	VDMA24364-B1/B2-L
	PWIS criterion	Free of paint-wetting impairment substances to FN 942010

Data sheet – Single-acting, with position sensing

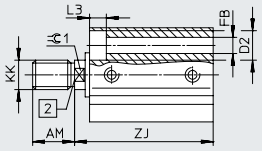
Dimensions Download CAD data ➔ www.festo.com

Ø 6 ... 25 mm

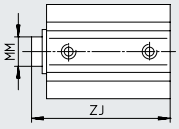
AEVC-...-I-P-A, piston rod with female thread



AEVC-...-A-P-A, piston rod with male thread



AEVC-...-P-A, piston rod without thread



Ø 10 mm
The bearing cap can protrude up to 0.65 mm depending on the tolerance position.
Ø 12 mm
The bearing cap can protrude up to 0.35 mm depending on the tolerance position.
[1] No undercut with diameter 6/10
[2] Slot for proximity sensor SME/SMT-10

Data sheet – Single-acting, with position sensing

ø [mm]	Stroke [mm]	AF min.	AM –0.5	D1 ø max.	D2 ø	E max.	EE	FB ø	KF	KK	L2 +0.2	L3
6	5	–	6	–	5 +0.1	16	M3	2.9	–	M3	25.5	2.9
	10										30.5	
10	5	–	8	7.5	5.8 +0.1	21	M5	3.4	–	M4	27	3.4
	10										32	
12	5	8	8	10.7	6 H13	24	M5	3.4	M3	M5	36	3.4
	10										41	
16	5	10	12	–	8 H13	28	M5	4.5	M4	M6	35	4.6
	10										40	
	25										59.5	
20	5	12	12	–	10 H13	32	M5	5.5	M5	M8	37	5.7
	10										42	
	25										60	
25	5	12	12	–	10 H13	38	M5	5.5	M5	M8	37	5.7
	10										42	
	25										61.1	

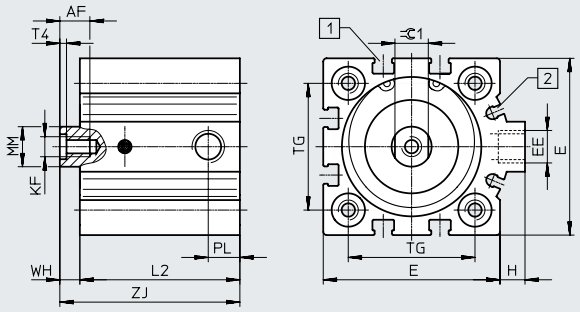
ø [mm]	Stroke [mm]	L4	L5	L6 max.	MM ø	PL	T4	TG ±0.1	UO max.	WH	ZJ ±0.8	⌀1
6	5	5	8	–	3	3	–	10	16	1	26.5	–
	10										31.5	
10	5	7	10.5	0.7	4	6	–	14	22	1.5	28.5	–
	10										33.5	
12	5	8	12	0.4	6	6	1.5	16	26	4	40	5
	10										45	
16	5	12	17	–	8	6	2	18	32	4	39	7
	10										44	
	25										63.5	
20	5	15	21	–	10	7	2	20	39	5	42	9
	10										47	
	25										65	
25	5	15.5	21.5	–	10	6	2	26	42	5	42	9
	10										47	
	25										66.1	

Data sheet – Single-acting, with position sensing

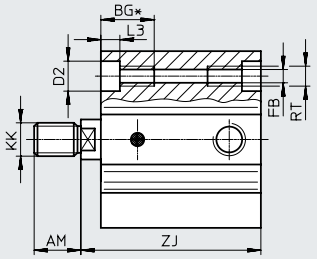
Dimensions Download CAD data ➔ www.festo.com

Ø 32 ... 100 mm

AEVC-...-I-P, piston rod with female thread



AEVC-...-A-P **, piston rod with male thread



ø	Stroke	AF	AM	BG*	D2 ø	E	EE	FB ø	H	KF	KK	L2	L3	MM ø	PL	RT	T4	TG	WH	ZJ	⊂1
	[mm]	min.	–0.5	min.	F9	max.						+0.2						±0.1		±0.8	
32	5	12	14	21.7	9	45	G1/8	5.2	7	M6	M10x1.25	38	5.7	12	8.5	M6	2.6	32.5	6	44	10
	10											43								49	
	25											58								64	
40	10	12	14	21.7	9	53.5	G1/8	5.2	7	M6	M10x1.25	48	5.7	12	9.5	M6	2.6	38	6	54	10
	25											63								69	
50	10	16	16	22.8	11	63.5	G1/8	6.8	7	M8	M12x1.25	50	6.8	16	9.5	M8	3.3	46.5	8	58	13
	25											65								73	
63	10	16	16	22.8	11	75	G1/8	6.8	7.5	M8	M12x1.25	51	6.8	16	10.5	M8	3.3	56.5	8	59	13
	25											66								74	
80	10	20	22	25	14	93	G1/8	8.5	7	M10	M16x1.5	59	9	20	8.5	M10	4.7	72	8	67	17
	25											74								82	
100	10	24	28	25	14	113	G1/4	8.5	13	M12	M20x1.5	68	9	25	10.5	M10	6.1	89	10	78	22
	25											83								93	

* Continuous thread with shorter sizes

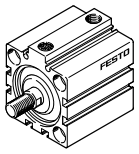
** Nut for piston rod with external thread included in the scope of delivery.

Data sheet – Single-acting, with position sensing

Ordering data

Type	Piston ø	Stroke	Piston rod with male thread		Piston rod with female thread		Piston rod without thread	
	[mm]	[mm]	Part no.	Type	Part no.	Type	Part no.	Type
	6	5	**188060**	**AEVC-6-5-A-P-A**	–		**188056**	**AEVC-6-5-P-A**
		10	**188061**	**AEVC-6-10-A-P-A**			**188057**	**AEVC-6-10-P-A**
	10	5	**188072**	**AEVC-10-5-A-P-A**	–		**188068**	**AEVC-10-5-P-A**
		10	**188073**	**AEVC-10-10-A-P-A**			**188069**	**AEVC-10-10-P-A**
	12	5	**188084**	**AEVC-12-5-A-P-A**	**188080**	**AEVC-12-5-I-P-A**	**530570**	**AEVC-12-5-P-A**
		10	**188085**	**AEVC-12-10-A-P-A**	**188081**	**AEVC-12-10-I-P-A**	**530571**	**AEVC-12-10-P-A**
	16	5	**188102**	**AEVC-16-5-A-P-A**	**188096**	**AEVC-16-5-I-P-A**	–	
		10	**188103**	**AEVC-16-10-A-P-A**	**188097**	**AEVC-16-10-I-P-A**		
		25	**188104**	**AEVC-16-25-A-P-A**	**188098**	**AEVC-16-25-I-P-A**		
	20	5	**188134**	**AEVC-20-5-A-P-A**	**188128**	**AEVC-20-5-I-P-A**	–	
		10	**188135**	**AEVC-20-10-A-P-A**	**188129**	**AEVC-20-10-I-P-A**		
		25	**188136**	**AEVC-20-25-A-P-A**	**188130**	**AEVC-20-25-I-P-A**		
	25	5	**188166**	**AEVC-25-5-A-P-A**	**188160**	**AEVC-25-5-I-P-A**	–	
		10	**188167**	**AEVC-25-10-A-P-A**	**188161**	**AEVC-25-10-I-P-A**		
		25	**188168**	**AEVC-25-25-A-P-A**	**188162**	**AEVC-25-25-I-P-A**		

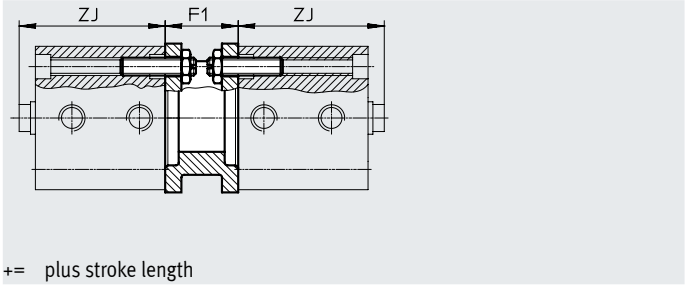
Ordering data

Type	Piston ø	Stroke	Piston rod with male thread		Piston rod with female thread	
	[mm]	[mm]	Part no.	Type	Part no.	Type
	32	5	**188198**	**AEVC-32-5-A-P-A**	**188192**	**AEVC-32-5-I-P-A**
		10	**188199**	**AEVC-32-10-A-P-A**	**188193**	**AEVC-32-10-I-P-A**
		25	**188200**	**AEVC-32-25-A-P-A**	**188194**	**AEVC-32-25-I-P-A**
	40	10	**188228**	**AEVC-40-10-A-P-A**	**188224**	**AEVC-40-10-I-P-A**
		25	**188229**	**AEVC-40-25-A-P-A**	**188225**	**AEVC-40-25-I-P-A**
	50	10	**188256**	**AEVC-50-10-A-P-A**	**188252**	**AEVC-50-10-I-P-A**
		25	**188257**	**AEVC-50-25-A-P-A**	**188253**	**AEVC-50-25-I-P-A**
	63	10	**188280**	**AEVC-63-10-A-P-A**	**188276**	**AEVC-63-10-I-P-A**
		25	**188281**	**AEVC-63-25-A-P-A**	**188277**	**AEVC-63-25-I-P-A**
	80	10	**188304**	**AEVC-80-10-A-P-A**	**188300**	**AEVC-80-10-I-P-A**
		25	**188305**	**AEVC-80-25-A-P-A**	**188301**	**AEVC-80-25-I-P-A**
	100	10	**188328**	**AEVC-100-10-A-P-A**	**188324**	**AEVC-100-10-I-P-A**
		25	**188329**	**AEVC-100-25-A-P-A**	**188325**	**AEVC-100-25-I-P-A**

Accessories

Multi-position kit DPNC

Material:
Flange:
Wrought aluminium alloy
Threaded pins, hex nuts: Galvanised steel
RoHS-compliant



+= plus stroke length

Dimensions and ordering data

For ø	Stroke	F1	ZJ				Weight	Part no.	Type
			Without position sensing		With position sensing				
[mm]	[mm]		ADVC	AEVC	ADVC	AEVC	[g]		
32	5	27	35	22	39	39	292	**174418**	**DPNC-32**
	10, 15, 20, 25			26					
40	5, 10	27	35.5	25.5	44	44	410	**174419**	**DPNC-40**
	15, 20, 25			30.5					
50	10	32	36	21.1	46	48	335	**174420**	**DPNC-50**
	15, 20, 25			28.5					
63	10	28	43	26	49	49	390	**174421**	**DPNC-63**
	15, 20, 25			33					
80	10, 15, 20, 25	38	48	43	57	57	847	**174422**	**DPNC-80**
100	10, 15, 20, 25	38	59	50	68	68	1200	**174423**	**DPNC-100**

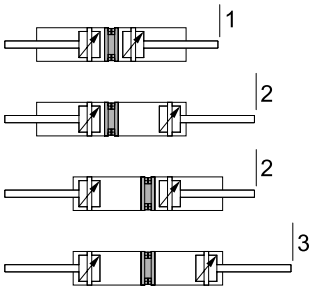
Connecting two cylinders with identical piston diameters to form a 3- or 4-position cylinder

A 3- or 4-position cylinder consists of two separate cylinders whose piston rods advance in opposing directions. This means that depending on actuation and stroke division, this type of cylinder can assume up to four positions. In each case the cylinder is driven precisely against a stop.

Note that when one end of the piston rod is fixed, the cylinder barrel executes the movement. The line connections to the cylinder must therefore be flexible.

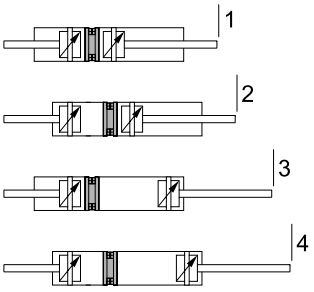
To achieve 3 positions

Two cylinders with identical stroke length must be connected together.



To achieve 4 positions

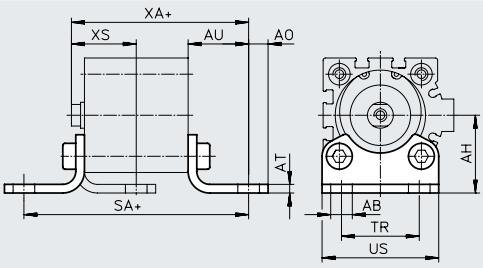
Two cylinders with different stroke lengths must be connected together.



Accessories

Foot mounting HNC

Material:
Galvanised steel



+= plus stroke length

Dimensions and ordering data

For Ø	Stroke	AB	AH	AO	AT	AU	SA				TR	US
		Ø					Without position sensing		With position sensing			
[mm]	[mm]						ADVC	AEVC	ADVC	AEVC		
32	5	7	32	6.5	4	24	77	69	81	81	32	45
	10, 15, 20, 25							73				
40	5, 10	10	36	9	4	28	85.5	80.5	94	94	36	54
	15, 20, 25							85.5				
50	10	10	45	9.5	5	32	92	84.6	102	104	45	64
	15, 20, 25							92				
63	10	10	50	12.5	5	32	99	89	105	105	50	75
	15, 20, 25							96				
80	10, 15, 20, 25	12	63	15	6	41	122	124	131	131	63	93
100	10, 15, 20, 25	14.5	71	17.5	6	41	131	131	140	140	75	110

For Ø	Stroke	XA				XS				CRC[1]	Weight	Part no.	Type
		Without position sensing		With position sensing		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	59	46	63	63	26	21	26	26	2	144	**174369**	**HNC-32**
	10, 15, 20, 25		50										
40	5, 10	63.5	53.5	72	72	30	25	30	30	2	193	**174370**	**HNC-40**
	15, 20, 25		58.5										
50	10	68	53.1	78	80	35	27.5	35	35	2	353	**174371**	**HNC-50**
	15, 20, 25		60.5										
63	10	75	58	81	81	35	28	35	35	2	436	**174372**	**HNC-63**
	15, 20, 25		65										
80	10, 15, 20, 25	89	84	98	98	43	36	43	43	2	829	**174373**	**HNC-80**
100	10, 15, 20, 25	100	91	109	109	45	36	45	45	2	1009	**174374**	**HNC-100**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

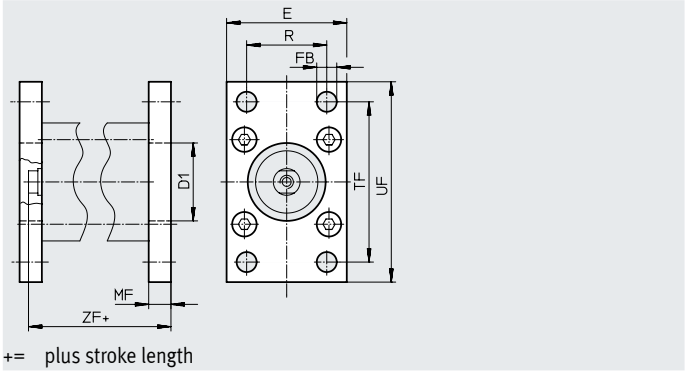
Note

Screws with special lengths are required to fit diameters 80 mm and 100 mm. ➔ page 50

Accessories

Flange mounting FNC

Material:
Galvanised steel
RoHS-compliant



+= plus stroke length

Dimensions and ordering data

For ø	Stroke	D1	E	FB	MF	R	TF	UF
		ø		ø				
[mm]	[mm]	H11		H13				
32	5	30	45	7	10	32	64	80
	10, 15, 20, 25							
40	5, 10	35	54	9	10	36	72	90
	15, 20, 25							
50	10	40	65	9	12	45	90	110
	15, 20, 25							
63	10	45	75	9	12	50	100	120
	15, 20, 25							
80	10, 15, 20, 25	45	93	12	16	63	126	150
100	10, 15, 20, 25	55	110	14	16	75	150	175

For ø	Stroke	ZF				CRC[1)]	Weight	Part no.	Type
		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	45	32	49	49	1	221	**174376**	**FNC-32**
	10, 15, 20, 25		36						
40	5, 10	45.5	35.5	54	54	1	291	**174377**	**FNC-40**
	15, 20, 25		40.5						
50	10	48	33.5	58	60	1	536	**174378**	**FNC-50**
	15, 20, 25		40.5						
63	10	55	38	61	61	1	679	**174379**	**FNC-63**
	15, 20, 25		45						
80	10, 15, 20, 25	64	59	73	73	1	1495	**174380**	**FNC-80**
100	10, 15, 20, 25	75	66	84	84	1	2041	**174381**	**FNC-100**

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

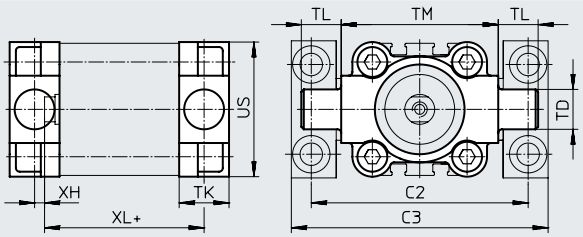
Note

Screws with special lengths are required to fit diameters 80 mm and 100 mm. ➔ page 50

Accessories

Trunnion flange ZNCF

Material:
Stainless-steel casting
RoHS-compliant



+= plus stroke length

Dimensions and ordering data

For Ø [mm]	Stroke [mm]	C2	C3	D1 Ø H11	TD Ø e9	TK	TL	TM	US	XH
32	5	71	86	30	12	16	12	50	45	2
	10, 15, 20, 25									
40	5, 10	87	105	35	16	20	16	63	54	4
	15, 20, 25									
50	10	99	117	40	16	24	16	75	64	4
	15, 20, 25									
63	10	116	136	45	20	24	20	90	75	4
	15, 20, 25									
80	10, 15, 20, 25	136	156	45	20	28	20	110	93	6
100	10, 15, 20, 25	164	189	55	25	38	25	132	110	9

For Ø	Stroke	XL				CRC[1)]	Weight	Part no.	Type
		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	43	30	47	47	2	150	**174411**	**ZNCF-32**
	10, 15, 20, 25		34						
40	5, 10	45.5	35.5	54	54	2	285	**174412**	**ZNCF-40**
	15, 20, 25		40.5						
50	10	48	33.1	58	60	2	473	**174413**	**ZNCF-50**
	15, 20, 25		40.5						
63	10	55	38	61	61	2	687	**174414**	**ZNCF-63**
	15, 20, 25		45						
80	10, 15, 20, 25	62	57	71	71	2	1296	**174415**	**ZNCF-80**
100	10, 15, 20, 25	78	69	87	87	2	2254	**174416**	**ZNCF-100**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

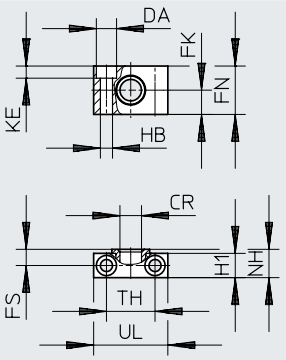
Note

Screws with special lengths are required to fit diameters 80 mm and 100 mm. ➔ page 50

Accessories

Trunnion support LNZG

Material:
Trunnion support: Anodised aluminium
Plain bearing: Plastic
RoHS-compliant



Dimensions and ordering data

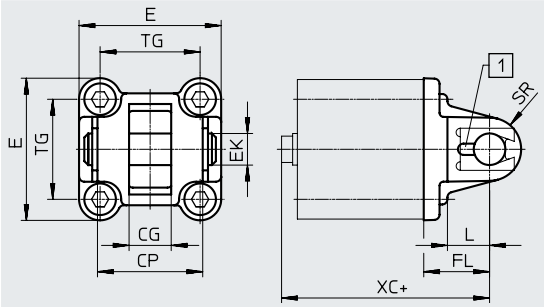
For ø [mm]	CR ø D11	DA ø H13	FK ø ±0.1	FN	FS	H1	HB ø H13	KE	NH	TH ±0.2	UL	CRC[1)]	Weight [g]	Part no.	Type
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	83	**32959**	**LNZG-32**
40, 50	16	15	18	36	12	18	9	9	21	36	55	2	129	**32960**	**LNZG-40/50**
63, 80	20	18	20	40	13	20	11	11	23	42	65	2	178	**32961**	**LNZG-63/80**
100	25	20	25	50	16	24.5	14	13	28.5	50	75	2	306	**32962**	**LNZG-100/125**

1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Accessories

Swivel flange SNC

Material:
Die-cast aluminium
RoHS-compliant



+= plus stroke length
[1] The pivot pin is secured against rotation with a spring pin

Dimensions and ordering data

For Ø	Stroke	CG	CP	EK	FL	L	SR
				Ø			
[mm]	[mm]	H14	h14	h9	±0.2		
32	5	14	34	10	22	13	10
	10, 15, 20, 25						
40	5, 10	16	40	12	25	16	12
	15, 20, 25						
50	10	21	45	16	27	16	12
	15, 20, 25						
63	10	21	51	16	32	21	16
	15, 20, 25						
80	10, 15, 20, 25	25	65	20	36	22	16
100	10, 15, 20, 25	25	75	20	41	27	20

For Ø	Stroke	XC				CRC[1)]	Weight	Part no.	Type
		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	57	44	61	61	1	93	**174383**	**SNC-32**
	10, 15, 20, 25		48						
40	5, 10	60.5	50.5	69	69	1	140	**174384**	**SNC-40**
	15, 20, 25		55.5						
50	10	63	48.1	73	75	1	234	**174385**	**SNC-50**
	15, 20, 25		55.5						
63	10	75	58	81	81	1	331	**174386**	**SNC-63**
	15, 20, 25		65						
80	10, 15, 20, 25	84	79	93	93	1	618	**174387**	**SNC-80**
100	10, 15, 20, 25	100	91	109	109	1	865	**174388**	**SNC-100**

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

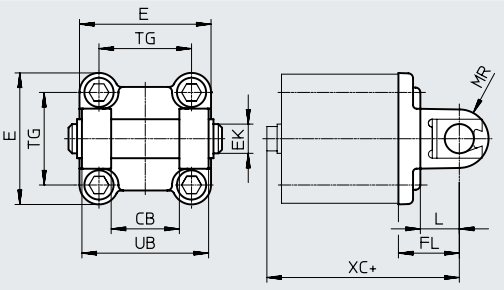
Note

Screws with special lengths are required to fit diameters 80 mm and 100 mm. ➔ page 50

Accessories

Swivel flange SNCB

Material:
Die-cast aluminium
RoHS-compliant



+= plus stroke length

Dimensions and ordering data

For ø	Stroke	CB	EK ø	FL	L	MR	UB
[mm]	[mm]	H14	E8	±0.2			h14
32	5	26	10	22	13	8.5	45
	10, 15, 20, 25						
40	5, 10	28	12	25	16	12	52
	15, 20, 25						
50	10	32	12	27	16	12	60
	15, 20, 25						
63	10	40	16	32	21	16	70
	15, 20, 25						
80	10, 15, 20, 25	50	16	36	22	16	90
100	10, 15, 20, 25	60	20	41	27	20	110

For ø	Stroke	XC				CRC[1]	Weight	Part no.	Type
		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	57	44	61	61	1	103	**174390**	**SNCB-32**
	10, 15, 20, 25		48						
40	5, 10	60.5	50.5	69	69	1	155	**174391**	**SNCB-40**
	15, 20, 25		55.5						
50	10	63	48.1	73	75	1	232	**174392**	**SNCB-50**
	15, 20, 25		55.5						
63	10	75	58	81	81	1	375	**174393**	**SNCB-63**
	15, 20, 25		65						
80	10, 15, 20, 25	84	79	93	93	1	636	**174394**	**SNCB-80**
100	10, 15, 20, 25	100	91	109	109	1	1035	**174395**	**SNCB-100**

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

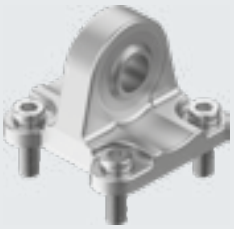
Note

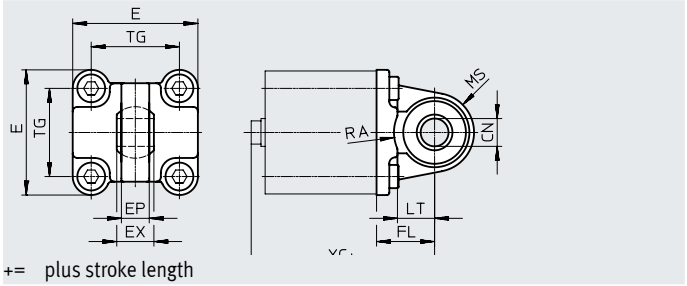
Screws with special lengths are required to fit diameters 80 mm and 100 mm. → page 50

Accessories

Swivel flange SNCS

Material:
SNCS 32 ... 50:
Die-cast aluminium
SNCS 63 ... 100:
Wrought aluminium alloy
RoHS-compliant





Dimensions and ordering data

For Ø	Stroke	CN Ø	E	EP	EX	FL	LT	MS	RA	TG
[mm]	[mm]			±0.2		±0.2			+1	
32	5	$10^{+0.013}$	$45^{+0.2/-0.5}$	10.5	14	22	13	$15^{+0.5}$	14.5	32.5
	10, 15, 20, 25									
40	5, 10	$12^{+0.015}$	$54_{-0.5}$	12	16	25	16	$17^{+0.5}$	17.5	38
	15, 20, 25									
50	10	$16^{+0.015}$	$64_{-0.6}$	15	21	27	16	$20^{+0.5}$	18.5	46.5
	15, 20, 25									
63	10	$16^{+0.015}$	$74.5^{\pm 0.5}$	15	21	32	21	$23_{-0.5}$	23	56.5
	15, 20, 25									
80	10, 15, 20, 25	$20^{+0.018}$	$92.2^{\pm 0.8}$	18	25	36	22	$28_{-0.5}$	25	72
100	10, 15, 20, 25	$20^{+0.018}$	$109^{+1/-0.7}$	18	25	41	27	$30^{\pm 0.5}$	95	89

For Ø	Stroke	XC				CRC[1)]	Weight	Part no.	Type
		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	57	44	61	61	1	86	**174397**	**SNCS-32**
	10, 15, 20, 25		48						
40	5, 10	60.5	50.5	69	69	1	122	**174398**	**SNCS-40**
	15, 20, 25		55.5						
50	10	63	48.1	73	75	1	216	**174399**	**SNCS-50**
	15, 20, 25		55.5						
63	10	75	58	81	81	2	281	**174400**	**SNCS-63**
	15, 20, 25		65						
80	10, 15, 20, 25	84	79	93	93	2	557	**174401**	**SNCS-80**
100	10, 15, 20, 25	100	91	109	109	2	683	**174402**	**SNCS-100**

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).
Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

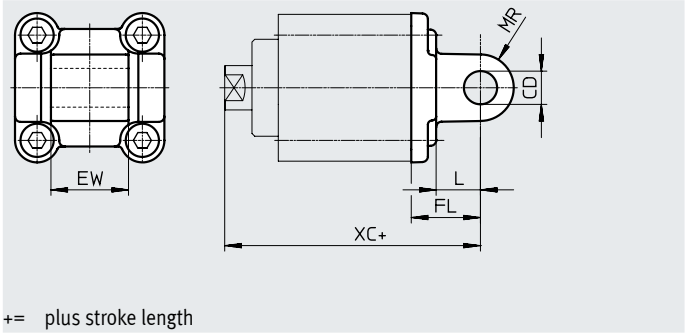
Note

Screws with special lengths are required to fit diameters 80 mm and 100 mm. ➔ page 50

Accessories

Swivel flange SNCL

Material:
Die-cast aluminium
RoHS-compliant



+= plus stroke length

Dimensions and ordering data

For ø	Stroke	CD	EW	FL	L	MR
		ø				
[mm]	[mm]	H9	−0.2/−0.6	±0.2		
32	5	10	26	22	13	10
	10, 15, 20, 25					
40	5, 10	12	28	25	16	12
	15, 20, 25					
50	10	12	32	27	16	12
	15, 20, 25					
63	10	16	40	32	21	16
	15, 20, 25					
80	10, 15, 20, 25	16	50	36	22	16
100	10, 15, 20, 25	20	60	41	27	20

For ø	Stroke	XC				CRC[1)]	Weight	Part no.	Type
		Without position sensing		With position sensing					
[mm]	[mm]	ADVC	AEVC	ADVC	AEVC		[g]		
32	5	57	44	61	61	1	71	**174404**	**SNCL-32**
	10, 15, 20, 25		48						
40	5, 10	60.5	50.5	69	69	1	95	**174405**	**SNCL-40**
	15, 20, 25		55.5						
50	10	63	48.1	73	75	1	158	**174406**	**SNCL-50**
	15, 20, 25		55.5						
63	10	75	58	81	81	1	225	**174407**	**SNCL-63**
	15, 20, 25		65						
80	10, 15, 20, 25	84	79	93	93	1	436	**174408**	**SNCL-80**
100	10, 15, 20, 25	100	91	109	109	1	655	**174409**	**SNCL-100**

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

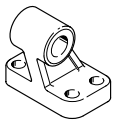
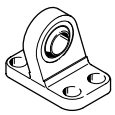
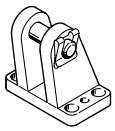
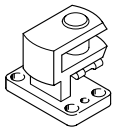
Note

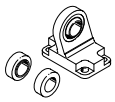
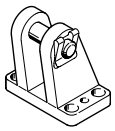
Screws with special lengths are required to fit diameters 80 mm and 100 mm. → page 50

Accessories

Ordering data – Mounting components

Data sheets → Internet: clevis foot

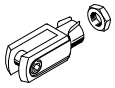
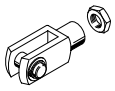
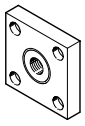
Designation	For ø	Part no.	Type
Clevis foot LNG			
	32	**33890**	**LNG-32**
	40	**33891**	**LNG-40**
	50	**33892**	**LNG-50**
	63	**33893**	**LNG-63**
	80	**33894**	**LNG-80**
	100	**33895**	**LNG-100**
Clevis foot LSNG			
	32	**31740**	**LSNG-32**
	40	**31741**	**LSNG-40**
	50	**31742**	**LSNG-50**
	63	**31743**	**LSNG-63**
	80	**31744**	**LSNG-80**
	100	**31745**	**LSNG-100**
Clevis foot LBG on swivel flange SNCS			
	32	**31761**	**LBG-32**
	40	**31762**	**LBG-40**
	50	**31763**	**LBG-50**
	63	**31764**	**LBG-63**
	80	**31765**	**LBG-80**
	100	**31766**	**LBG-100**
Right angle clevis foot LQG			
	32, 40	**31768**	**LQG-32**
	50, 63	**31769**	**LQG-40**
	80	**31770**	**LQG-50**
		31771	**LQG-63**
	100	**31772**	**LQG-80**
		31773	**LQG-100**

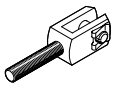
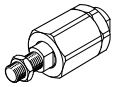
Designation	For ø	Part no.	Type
Clevis foot LSN			
	32	**5561**	**LSN-32**
	40	**5562**	**LSN-40**
	50	**5563**	**LSN-50**
	63	**5564**	**LSN-63**
	80	**5565**	**LSN-80**
	100	**5566**	**LSN-100**
Clevis foot LSNSG			
	32	**31747**	**LSNSG-32**
	40	**31748**	**LSNSG-40**
	50	**31749**	**LSNSG-50**
	63	**31750**	**LSNSG-63**
	80	**31751**	**LSNSG-80**
	100	**31752**	**LSNSG-100**
Clevis foot LBG on rod eye SGS			
	32, 40	**31761**	**LBG-32**
	50, 63	**31762**	**LBG-40**
	80	**31763**	**LBG-50**
		31764	**LBG-63**
	100	**31765**	**LBG-80**
		31766	**LBG-100**

Accessories

Ordering data – Piston rod attachments

Data sheets → Internet: piston rod attachment

Designation	For ø	Part no.	Type
Rod eye SGS			
	10	**9253**	**SGS-M4**
	16	**9254**	**SGS-M6**
	20	**9255**	**SGS-M8**
	25		
	32	**9261**	**SGS-M10x1.25**
	40		
	50	**9262**	**SGS-M12x1.25**
	63		
	80	**9263**	**SGS-M16x1.5**
	100	**9264**	**SGS-M20x1.5**
Rod clevis SG			
	10	**6532**	**SG-M4**
	12	**–**	**–**
	16	**3110**	**SG-M6**
	20	**3111**	**SG-M8**
	25		
	32	**6144**	**SG-M10x1.25**
	40		
	50	**6145**	**SG-M12x1.25**
	63		
	80	**6146**	**SG-M16x1.5**
	100	**6147**	**SG-M20x1.5**
Coupling piece KSG			
	32	**32963**	**KSG-M10x1.25**
	40		
	50	**32964**	**KSG-M12x1.25**
	63		
	80	**32965**	**KSG-M16x1.5**
	100	**32966**	**KSG-M20x1.5**

Designation	For ø	Part no.	Type
Rod clevis SGA			
	32	–	
	40		
	50		
	63		
	32	**32954**	**SGA-M10x1.25**
	40		
	50	**10767**	**SGA-M12x1.25**
	63		
	80	**10768**	**SGA-M16x1.5**
	100	**10769**	**SGA-M20x1.5**
Self-aligning rod coupler FK			
	10	**6528**	**FK-M4**
	12	**30984**	**FK-M5**
	16	**2061**	**FK-M6**
	20	**2062**	**FK-M8**
	25		
	32	**6140**	**FK-M10x1.25**
	40		
	50	**6141**	**FK-M12x1.25**
	63		
	80	**6142**	**FK-M16x1.5**
	100	**6143**	**FK-M20x1.5**

Accessories

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

Data sheets → Internet: smt

	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O contact						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	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**
			Plug M12x1, 3-pin	0.3	**574337**	**SMT-8M-A-PS-24V-E-0.3-M12**
		NPN	Cable, 3-wire	2.5	**574338**	**SMT-8M-A-NS-24V-E-2.5-OE**
			Plug M8x1, 3-pin	0.3	**574339**	**SMT-8M-A-NS-24V-E-0.3-M8D**
N/C contact						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	7.5	**574340**	**SMT-8M-A-PO-24V-E-7.5-OE**

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

Data sheets → Internet: sme

	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O contact						
	Inserted in the slot from above, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	**543862**	**SME-8M-DS-24V-K-2.5-OE**
				5.0	**543863**	**SME-8M-DS-24V-K-5.0-OE**
			Cable, 2-wire	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**
N/C contact						
	Inserted in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	**160251**	**SME-8-O-K-LED-24**

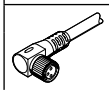
Ordering data – Proximity sensors for C-slot, magneto-resistive

Data sheets → Internet: smt

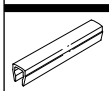
	Type of mounting	Switching output	Electrical connection, outlet direction of connection	Cable length [m]	Part no.	Type
N/O contact						
	Inserted in the slot from above	PNP	Plug M8x1, 3-pin, in-line	0.3	**551375**	**SMT-10M-PS-24V-E-0.3-L-M8D**
			Cable, 3-wire, in-line	2.5	**551373**	**SMT-10M-PS-24V-E-2.5-L-OE**

Ordering data – Connecting cables

Data sheets → Internet: nebu

	Electrical connection, left	Electrical connection, right	Cable length [m]	Part no.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	**541333**	**NEBU-M8G3-K-2.5-LE3**
			5.0	**541334**	**NEBU-M8G3-K-5-LE3**
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	**541363**	**NEBU-M12G5-K-2.5-LE3**
			5.0	**541364**	**NEBU-M12G5-K-5-LE3**
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	**541338**	**NEBU-M8W3-K-2.5-LE3**
			5.0	**541341**	**NEBU-M8W3-K-5-LE3**
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	**541367**	**NEBU-M12W5-K-2.5-LE3**
			5.0	**541370**	**NEBU-M12W5-K-5-LE3**

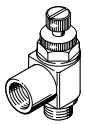
Ordering data – Slot cover for T-slot

	Mounting	Length	Part no.	Type
	Insertable	2x 0.5 m	**151680**	**ABP-5-S**

Accessories

Ordering data – One-way flow control valves

Data sheets → Internet: grl

	Connection Thread	For tubing O.D.	Material	Part no.	Type
For exhaust air					
	M3	3	Metal design	**175041**	**GRLA-M3-QS-3**
	M5	3		**193137**	**GRLA-M5-QS-3-D**
		4		**193138**	**GRLA-M5-QS-4-D**
		6		**193139**	**GRLA-M5-QS-6-D**
	G1/8	3		**193142**	**GRLA-1/8-QS-3-D**
		4		**193143**	**GRLA-1/8-QS-4-D**
		6		**193144**	**GRLA-1/8-QS-6-D**
		8		**193145**	**GRLA-1/8-QS-8-D**
	G1/4	6		**193146**	**GRLA-1/4-QS-6-D**
		8		**193147**	**GRLA-1/4-QS-8-D**
		10		**193148**	**GRLA-1/4-QS-10-D**
For supply air					
	M3	3	Metal design	**175043**	**GRLZ-M3-QS-3**
	M5	3		**193153**	**GRLZ-M5-QS-3-D**
		4		**193154**	**GRLZ-M5-QS-4-D**
		6		**193155**	**GRLZ-M5-QS-6-D**
	G1/8	3		**193156**	**GRLZ-1/8-QS-3-D**
		4		**193157**	**GRLZ-1/8-QS-4-D**
		6		**193158**	**GRLZ-1/8-QS-6-D**
		8		**193159**	**GRLZ-1/8-QS-8-D**

Ordering data – Screws

	For Ø	For accessories	Part no.	Type	PU[1]
	80	HNC, FNC, SNC, SNCB, SNCS,SNCL	**238600**	**DIN 912-M10X30-8.8**	1
		ZNCF	**204138**	**DIN 912-M10X40-10.9**	
	100	HNC, FNC, SNC, SNCB, SNCS,SNCL	**238600**	**DIN 912-M10X30-8.8**	
		ZNCF	**370524**	**DIN 912-M10X50-8.8**	

1) Packaging unit quantity