

Compact cylinder, single-acting AEN-S

FESTO



Characteristics

At a glance Link [aen-s](#)

- Very compact design: shorter than comparable cylinders
- Reduced housing length: saving materials and weight
- Reduced housing width: for space-critical applications
- Design by Festo: visually compelling

Diagrams Link [aen-s](#)



The diagrams shown in this document are also available online. These can be used to display precise values.

Design type

[S] Short

Particularly suitable for applications where space is critical

Piston rod thread type

[A] Male thread

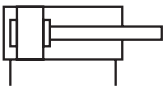


[I] Female thread



Cushioning

[P] Elastic cushioning rings/plates on both sides



The drive is fitted with elastic polymer end-position cushioning.

Benefits:

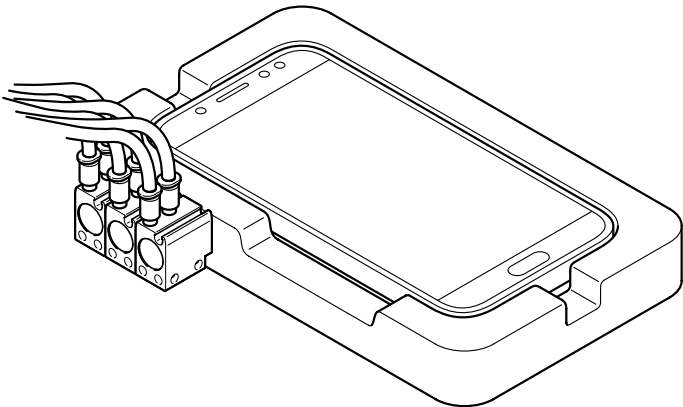
- No adjustment required
- Saves time

Position sensing

[A] For proximity sensor

By using proximity switches, any position can be detected.

Application example



- Endurance testing of smartphone buttons

Type code

001	Series	
AEN	Compact cylinder, single-acting	
002	Design type	
S	Short	
003	Piston diameter [mm]	
6	6	
10	10	
12	12	
16	16	
20	20	
25	25	
32	32	
40	40	
50	50	
63	63	

004	Stroke [mm]	
5	5	
10	10	
25	25	
005	Piston rod thread type	
A	Male thread	
I	Female thread	
006	Cushioning	
	No cushioning	
P	Elastic cushioning rings/plates on both sides	
007	Position sensing	
	None	
A	For proximity sensor	

Datasheet

General technical data

General technical data										
Piston diameter	6 mm	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Stroke	5 mm, 10 mm			5 mm, 10 mm, 25 mm					10 mm, 25 mm	
Design	Piston Piston rod									
Mode of operation	Pushing							Pushing, Single-acting	Pushing	
Piston-rod end	Male thread Female thread									
Pneumatic connection	M3		M5						G1/8	
Cushioning	No cushioning		Elastic cushioning rings/plates at both ends							
Position detection	Via proximity switch									
Type of mounting	With through-hole		Either: With through-hole Via female thread With accessories							
Mounting position	optional									

Operating and environmental conditions

Operating and environmental conditions										
Piston diameter	6 mm	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Operating pressure ¹⁾	0.25 ... 0.8 MPa	0.15 ... 0.8 MPa	0.1 ... 1 MPa		0.06 ... 1 MPa	0.1 ... 1 MPa				
Operating pressure ²⁾	2.5 ... 8 bar	1.5 ... 8 bar	1 ... 10 bar		0.6 ... 10 bar	1 ... 10 bar				
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]									
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)									
Ambient temperature ⁴⁾	-10 ... 60°C		0 ... 80°C							
Corrosion resistance class CRC ⁵⁾	1 - Low corrosion stress 2 - Moderate corrosion stress		1 - Low corrosion stress							

¹⁾ The minimum pressure specifications only apply after 10 double strokes.

²⁾ The minimum pressure specifications only apply after 10 double strokes.

⁴⁾ Note operating range of proximity switches.

⁵⁾ Corrosion resistance class for each individual type → Ordering information.

More information www.festo.com/x/topic/kbk

Forces – AEN-S-6 ... 12

Piston diameter	6 mm		10 mm		12 mm	
Stroke	5 mm	10 mm	5 mm	10 mm	5 mm	10 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	13 N		41.7 N		60 N	
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	4 N		5.3 N		6 N	8 N

Forces – AEN-S-16 ... 32

Piston diameter	16 mm			20 mm			25 mm			32 mm		
Stroke	5 mm	10 mm	25 mm	5 mm	10 mm	25 mm	5 mm	10 mm	25 mm	5 mm	10 mm	25 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	95 N			162 N			259 N			439 N		
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	8 N	9.5 N	25 N	13 N	17 N	26 N	18 N	22 N	35 N	44 N	42 N	

Forces without position sensing – AEN-S-40 ... 63

Piston diameter	40 mm			50 mm		63 mm	
Stroke	5 mm	10 mm	25 mm	10 mm	25 mm	10 mm	25 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	754 N			1,178 N		1,870 N	
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	37 N	46.1 N	54 N	66.2 N	71.5 N	69.9 N	89.6 N

Datasheet

Forces with position sensing – AEN-S-40 ... 63

Piston diameter	40 mm			50 mm		63 mm	
Stroke	5 mm	10 mm	25 mm	10 mm	25 mm	10 mm	25 mm
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	700 N			1,106 N		1,780 N	
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	38 N	46 N	54 N	66.2 N	71.5 N	69.9 N	89.6 N

Impact energy without position sensing

Piston diameter	6 mm	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Impact energy in end positions	0.006 J	0.012 J	0.022 J	0.038 J	0.055 J	0.09 J	0.18 J	0.32 J	0.6 J	0.64 J

Impact energy with position sensing

Piston diameter	6 mm	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Impact energy in end positions	0.006 J	0.012 J	0.022 J	0.038 J	0.055 J	0.3 J	0.4 J	0.7 J	1 J	1.3 J

Weight without position sensing – AEN-S-6 ... 10

Piston diameter	6 mm			10 mm	
Stroke	5 mm		10 mm		10 mm
Product weight	9.2 g		15 g		17 g
Moving mass	1.5 g		2.3 g		5.3 g

Weight with position sensing – AEN-S-6 ... 10

Piston diameter	6 mm			10 mm	
Stroke	5 mm		10 mm		10 mm
Product weight	10.9 g		15 g		19 g
Moving mass	1.6 g		2.4 g		5.7 g

Weight without position sensing – AEN-S-12 ... 63

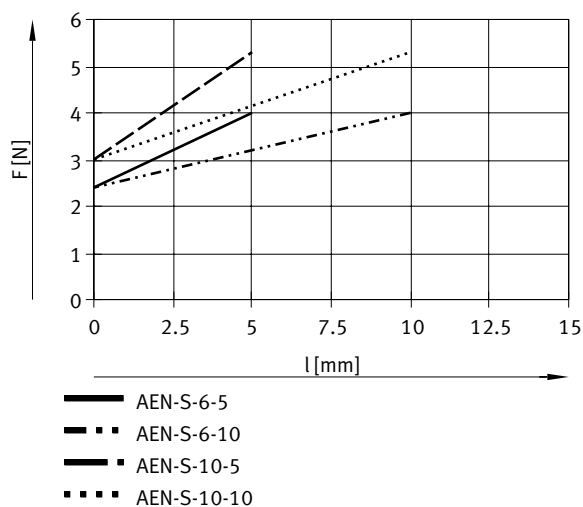
Piston diameter	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Basic weight for 0 mm stroke	26 g	32.5 g	51 g	70 g	107 g	186 g	310 g	505 g
Additional weight per 10 mm stroke	15 g	18 g	26 g	30 g	36 g	45 g	63 g	76 g
Moving mass for 0 mm stroke	3.5 g	6 g	11 g	17 g	31 g	56 g	105 g	175 g
Additional moving mass per 10 mm stroke	2 g	4 g	6 g		9 g		16 g	

Weight with position sensing – AEN-S-12 ... 63

Piston diameter	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Basic weight for 0 mm stroke	33 g	42 g	65 g	88 g	117 g	304 g	324 g	499 g
Additional weight per 10 mm stroke	15 g	18 g	26 g	30 g	36 g	45 g	63 g	77 g
Moving mass for 0 mm stroke	6 g	11 g	18 g	25 g	37 g	62 g	104 g	151 g
Additional moving mass per 10 mm stroke	2 g	4 g	6 g		9 g		16 g	

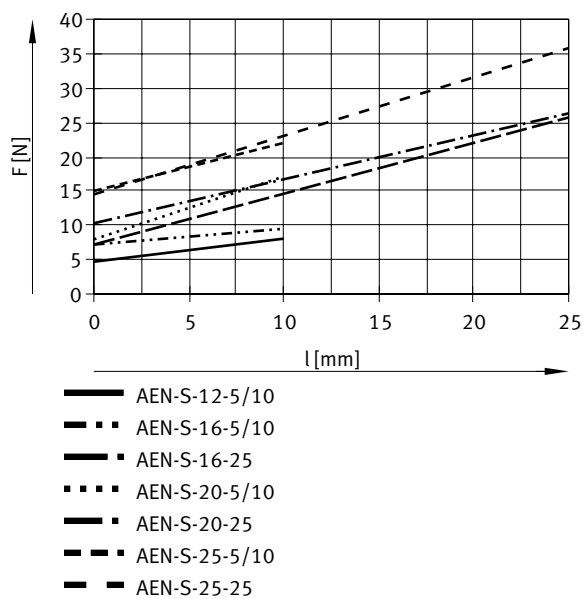
Datasheet

Theoretical spring force, retracting – AEN-S-6 ... 10



The degree of friction depends on the mounting position and the type of load.
Where possible, single-acting cylinders should be operated without lateral force.

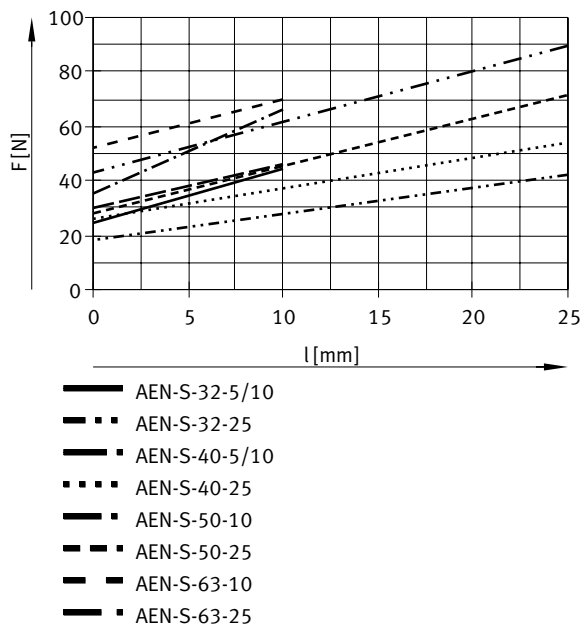
Theoretical spring force, retracting – AEN-S-12 ... 25



The degree of friction depends on the mounting position and the type of load.
Where possible, single-acting cylinders should be operated without lateral force.

Datasheet

Theoretical spring force, retracting – AEN-S-32 ... 63



The degree of friction depends on the mounting position and the type of load.
Where possible, single-acting cylinders should be operated without lateral force.

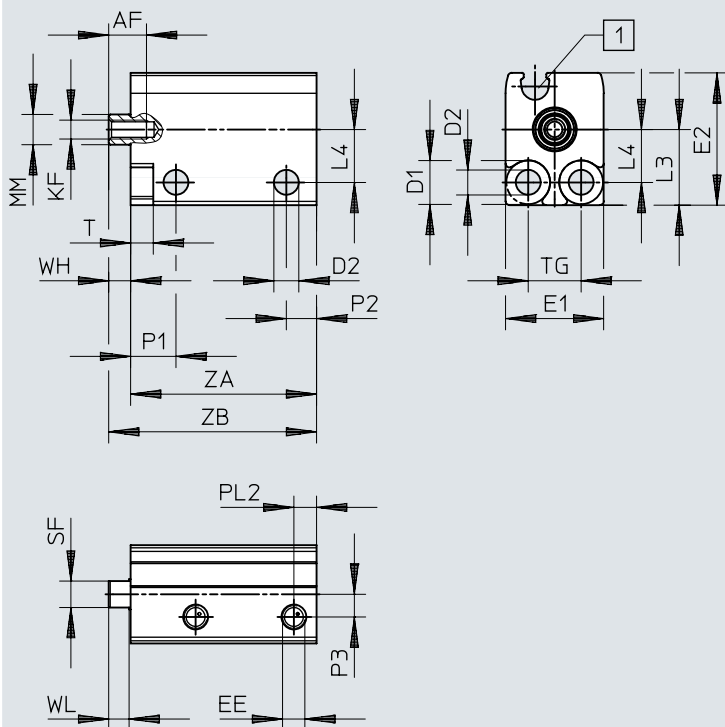
Materials

Piston diameter	6 mm	10 mm	12 mm	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Material housing	Wrought aluminium alloy, Anodised		Anodised wrought aluminium alloy							
Material cover	Wrought aluminium alloy		Anodised wrought aluminium alloy							
Material piston rod	High-alloy stainless steel									
Material dynamic seals	NBR TPE-U(PU)									
Note on materials	RoHS-compliant									
LABS (PWIS) conformity	VDMA24364-B2-L									

Dimensions

Dimensions – AEN-S-6 ... 10 – with female thread

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[1] C-slot for proximity switch

	AF min.	D1 ø H13	D2 ø	EE	E1 max.	E2 max.	KF	L3	L4	MM ø
AEN-S-6	5	5,8	3,3	M3	13	17,5	M2,5	10	7	4
AEN-S-10	6				13,5	20,5	M3	11	8	6

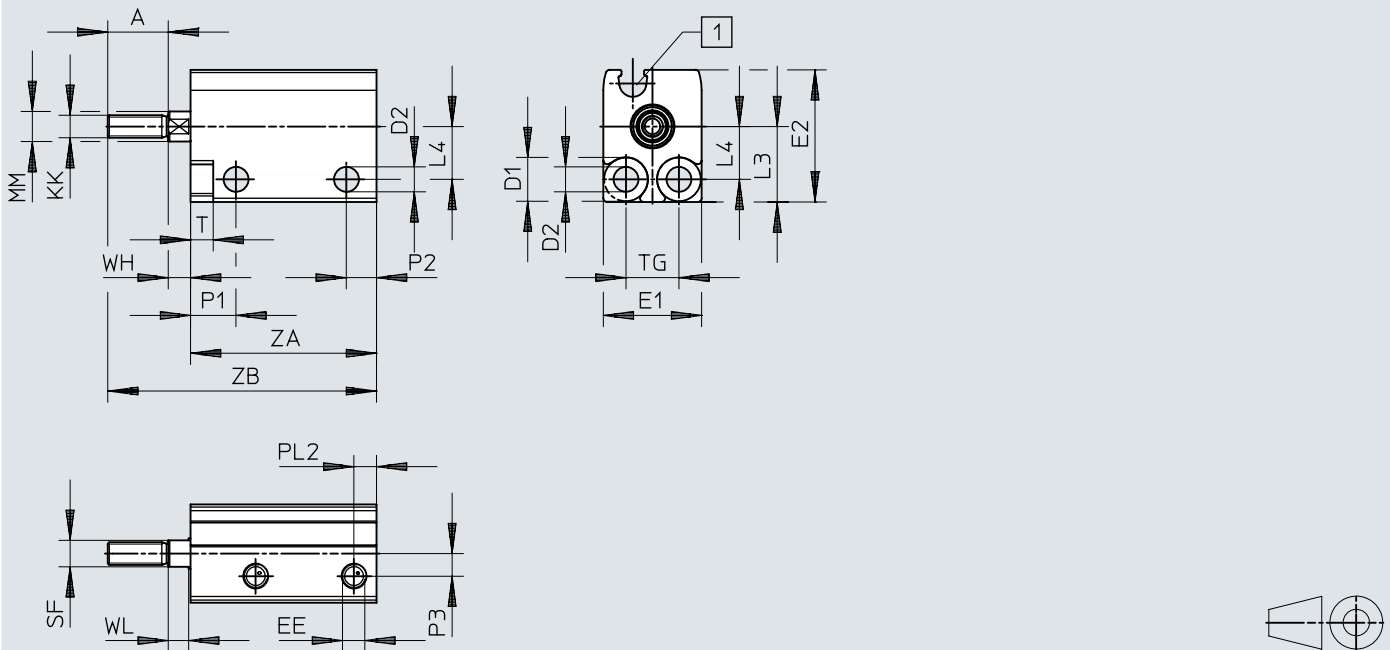
	P1	P2	P3	PL2	SF	T	TG ±0,1	WH	WL
AEN-S-6	6	4	3	3	3,5	3	7	3	2,7
AEN-S-10			3,2		5				

	L ¹⁾ [mm]	2)	ZA +0,3	ZB ±0,35
AEN-S-6	5	–	20,5	23,5
		■	24,5	27,5
	10	–	25,5	28,5
		■	29,5	32,5
AEN-S-10	5	–	20,5	23,5
		■	24,5	27,5
	10	–	25,5	28,5
		■	29,5	32,5

- 1) Stroke
2) Position sensing

Dimensions

Dimensions – AEN-S-6 ... 10 – with male thread

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[1] C-slot for proximity switch

	A	D1 Ø H13	D2 Ø	EE	E1 max.	E2 max.	KK	L3	L4	MM Ø
AEN-S-6	8	5,8	3,3	M3	13	17,5	M3	10	7	4
AEN-S-10	10				13,5	20,5	M4	11	8	6

	P1	P2	P3	PL2	SF	T	TG ±0,1	WH	WL
AEN-S-6	6	4	3	3	3,5	3	7	3	2,7
AEN-S-10			3,2		5				

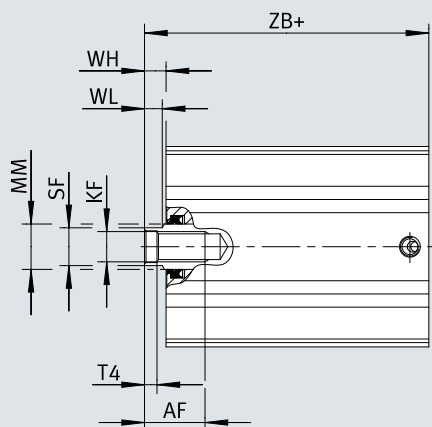
	L ¹⁾ [mm]	2)	ZA +0,3	ZB ±0,35
AEN-S 6	5	–	20,5	31,5
		■	24,5	35,5
	10	–	25,5	36,5
		■	29,5	40,5
AEN-S 10	5	–	20,5	33,5
		■	24,5	37,5
	10	–	25,5	38,5
		■	29,5	42,5

- 1) Stroke
2) Position sensing

Dimensions

Dimensions – AEN-S-12 ... 63 – with female thread

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[1] + = plus stroke length

Dimensions

	AF	KF	MM	SF	T4	WH	WL
	min.		h8	h13		+1	-0,15
AEN-S-12	8	M3	6	5	1,5	2,5	2,7
AEN-S-16	10	M4	8	7	1,5	3	3,5
AEN-S-20	11	M6	10	9	2,6	3	4
AEN-S-25	11	M6	10	9	2,6	3,5	4,2
AEN-S-32	12	M8	12	10	3,3	4	4,7
AEN-S-40	16	M8	12	10	3,3	5	4,7
AEN-S-50	16	M10	16	13	4,7	7	6,5
AEN-S-63	20	M10	16	13	4,7	7	6,5

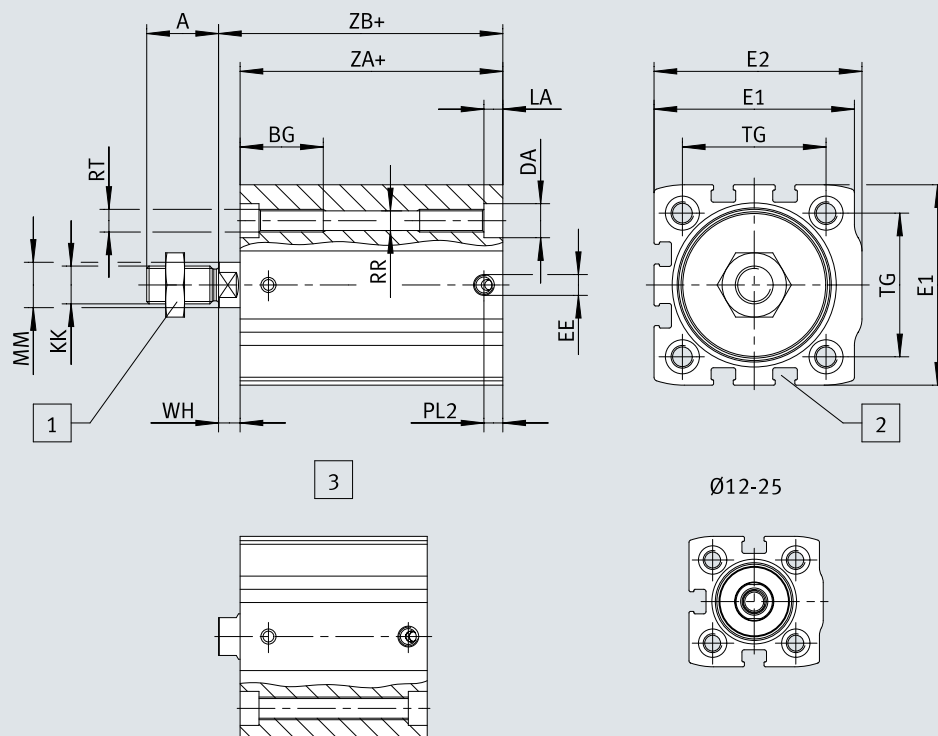
	L ¹⁾	2)	ZB
	[mm]		+1,2
AEN-S-12	5	—	23
		■	27
	10	—	28
		■	32
AEN-S-16	5	—	24
		■	28,5
	10	—	29
		■	33,5
	25	—	46
		■	51,5
AEN-S-20	5	—	25,5
		■	30
	10	—	30,5
		■	35
	25	—	48,5
		■	53
AEN-S-25	5	—	27,5
		■	32
	10	—	32,5
		■	37
	25	—	50,5
		■	55
AEN-S-32	5	—	30,5
		■	34
	10	—	35,5
		■	39
	25	—	53,5
		■	57
AEN-S-40	5	—	36
		■	39,5
	10	—	41
		■	44,5
	25	—	59
		■	62,5
AEN-S-50	10	—	46
		■	49
	25	—	63,5
		■	67
AEN-S-63	10	—	49
		■	52
	25	—	66,5
		■	69,5

1) Stroke

2) Position sensing

Dimensions

Dimensions – AEN-S-12 ... 63 – with male thread (Part 1 of 2)

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[1] Hex nut DIN 439-B only from Ø 32

[2] T-slot for proximity switch

[3] Continuous thread Ø 12 ... 25: ZA 0 ... 40, Ø 32 ... 63: ZA 0 ... 50

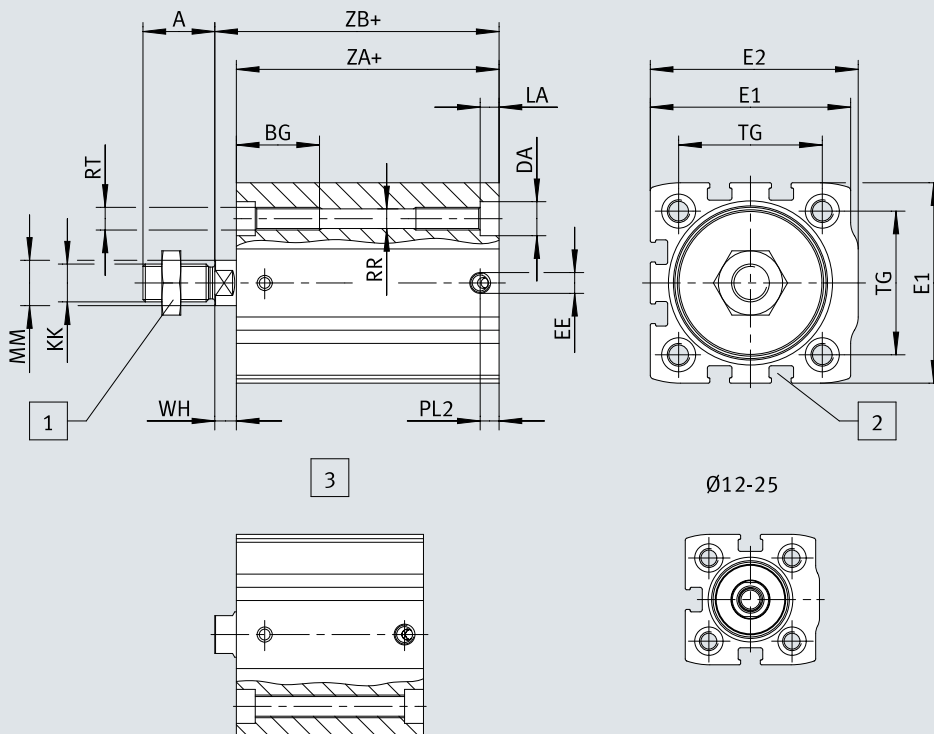
[4] + = plus stroke length

	A	BG	DA	E1	E2	EE	KK
	-0,5	min.	F9				
AEN-S-12	10	19	6	27 $\pm$ 0,15	27,5 $\pm$ 0,15	M5	M5
AEN-S-16	12	19	6	29 $\pm$ 0,15	30 $\pm$ 0,15	M5	M6
AEN-S-20	16	20	7,5	34,5 $\pm$ 0,15	35,5 $\pm$ 0,15	M5	M8
AEN-S-25	16	20	7,5	38,5 $\pm$ 0,15	39,5 $\pm$ 0,15	M5	M8
AEN-S-32	19	22	9	45 $\pm$ 0,15	47 $\pm$ 0,15	M5	M10x1,25
AEN-S-40	19	22	9	53 $\pm$ 0,15	55 $\pm$ 0,15	M5	M10x1,25
AEN-S-50	22	23	11	63 $\pm$ 0,2	66 $\pm$ 0,2	G1/8	M12x1,25
AEN-S-63	22	23	11	75 $\pm$ 0,2	78,5 $\pm$ 0,2	G1/8	M12x1,25

	LA	MM	PL2	RR	RT	TG	WH
	$\pm$ 0,1	h8					+1
AEN-S-12	3,5	6	5	3,5	M4	16	2,5
AEN-S-16	3,5	8	5	3,5	M4	18	3
AEN-S-20	5	10	5	4,2	M5	22	3
AEN-S-25	5	10	5	4,2	M5	26	3,5
AEN-S-32	5	12	5	5,6	M6	32,5	4
AEN-S-40	5	12	5	5,6	M6	38	5
AEN-S-50	5	16	7,5	7,45	M8	46,5	7
AEN-S-63	5	16	8	7,45	M8	56,5	7

Dimensions

Dimensions – AEN-S-12 ... 63 – with male thread (Part 2 of 2)

Download CAD data www.festo.com

- [1] Hex nut DIN 439-B only from Ø 32
- [2] T-slot for proximity switch
- [3] Continuous thread Ø 12 ... 25: ZA 0 ... 40, Ø 32 ... 63: ZA 0 ... 50
- [4] + = plus stroke length

Dimensions

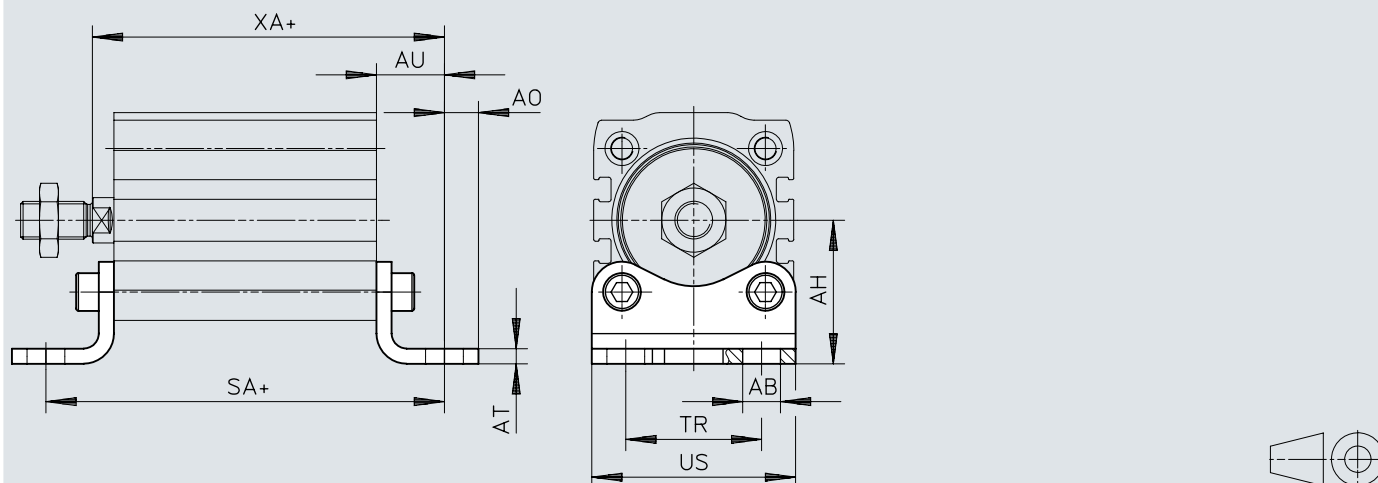
	L ¹⁾ [mm]	2)	ZA +0,2	ZB +1,2
AEN-S-12	5	—	20,5	23
		■	24,5	27
	10	—	25,5	28
		■	29,5	32
AEN-S-16	5	—	21	24
		■	25,5	28,5
	10	—	26	29
		■	30,5	33,5
	25	—	43	46
		■	48,5	51,5
AEN-S-20	5	—	22,5	25,5
		■	27	30
	10	—	27,5	30,5
		■	32	35
	25	—	45,5	48,5
		■	50	53
AEN-S-25	5	—	24	27,5
		■	28,5	32
	10	—	29	32,5
		■	33,5	37
	25	—	47	50,5
		■	51,5	55
AEN-S-32	5	—	26,5	30,5
		■	30	34
	10	—	31,5	35,5
		■	35	39
	25	—	49,5	53,5
		■	53	57
AEN-S-40	5	—	31	36
		■	34,5	39,5
	10	—	36	41
		■	39,5	44,5
	25	—	54	59
		■	57,5	62,5
AEN-S-50	10	—	39	46
		■	42	49
	25	—	56,5	63,5
		■	60	67
AEN-S-63	10	—	42	49
		■	45	52
	25	—	59,5	66,5
		■	62,5	69,5

1) Stroke

2) Position sensing

Dimensions

Dimensions – Foot mounting HNA (part 1 of 2)

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[1] + = plus stroke length

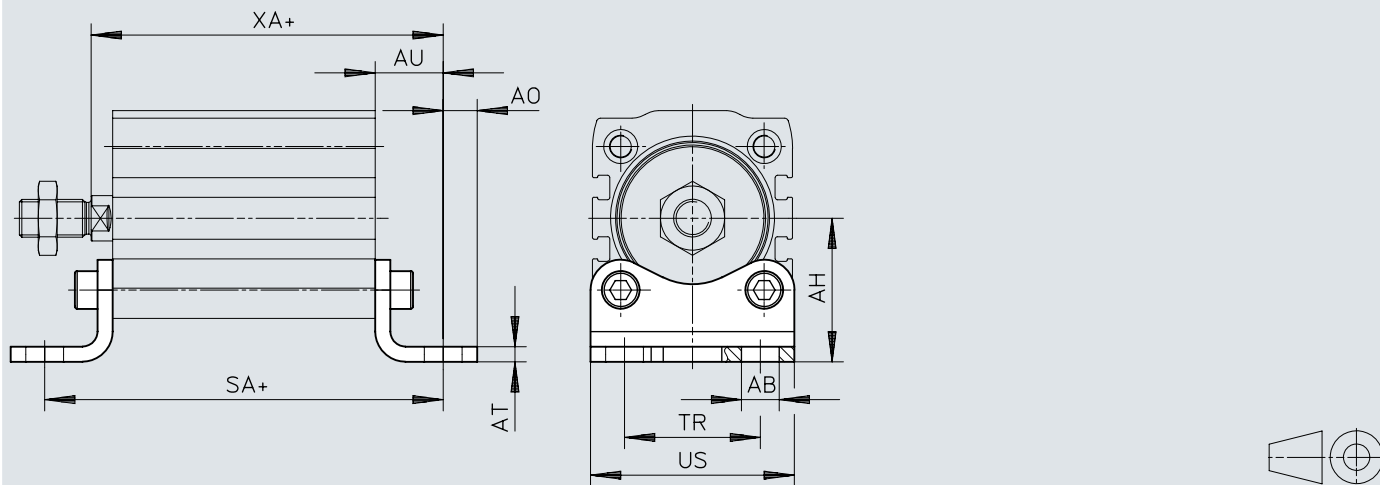
	AB ø	AH	AO	AT	AU	SA ³⁾		TR	US	XA ³⁾	
	H14	JS14		±0,5	±0,2	+0,2	²⁾ +0,2	±0,2	-0,5	+1,2	²⁾ +1,2
HNA-12	5,8	21	5	3	13	41,5	45,5	16	26	31	35
HNA-16	5,8	22	4,75	3	13	42	46,5	18	27,5	32	36,5
HNA-20	7	27	6,25	4	16	49,5	54	22	34,5	36,5	41
HNA-25	7	29	6,25	4	16	51	55,5	26	38,5	38,5	43
HNA-32	7	33,5	7	4	16	53,5	57	32	46	41,5	45
HNA-40	10	38	9	4	18	62	65,5	36	54	49	52,5
HNA-50	10	45	8	5	21	71	74	45	64	57	60
HNA-63	10	50	8	5	21	74	77	50	75	60	63

²⁾ Position sensing³⁾ Deviating dimensions for the strokes 5, 10 and 25

Dimensions

Dimensions – Foot mounting HNA (part 2 of 2)

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[1] + = plus stroke length

Dimensions

	L ¹⁾ [mm]	2)	SA +0,2	XA +1,2
HNA-12	5	—	46,5	36
		■	50,5	40
	10	—	51,5	41
		■	55,5	45
HNA-16	5	—	47	37
		■	51,5	41,5
	10	—	52	42
		■	56,5	46,5
	25	—	69	59
		■	74,5	64,5
HNA-20	5	—	54,5	41,5
		■	59	46
	10	—	59,5	46,5
		■	64	51
	25	—	77,5	64,5
		■	82	69
HNA-25	5	—	56	43,5
		■	60,5	48
	10	—	61	48,5
		■	65,5	53
	25	—	79	66,5
		■	83,5	71
HNA-32	5	—	58,5	46,5
		■	62	50
	10	—	63,5	51,5
		■	67	55
	25	—	81,5	69,5
		■	85	73
HNA-40	5	—	67	54
		■	70,5	57,5
	10	—	72	59
		■	75,5	62,5
	25	—	90	77
		■	93,5	80,5
HNA-50	10	—	81	67
		■	84	70
	25	—	98,5	84,5
		■	102	88
HNA-63	10	—	84	70
		■	87	73
	25	—	101,5	87,5
		■	104,5	90,5

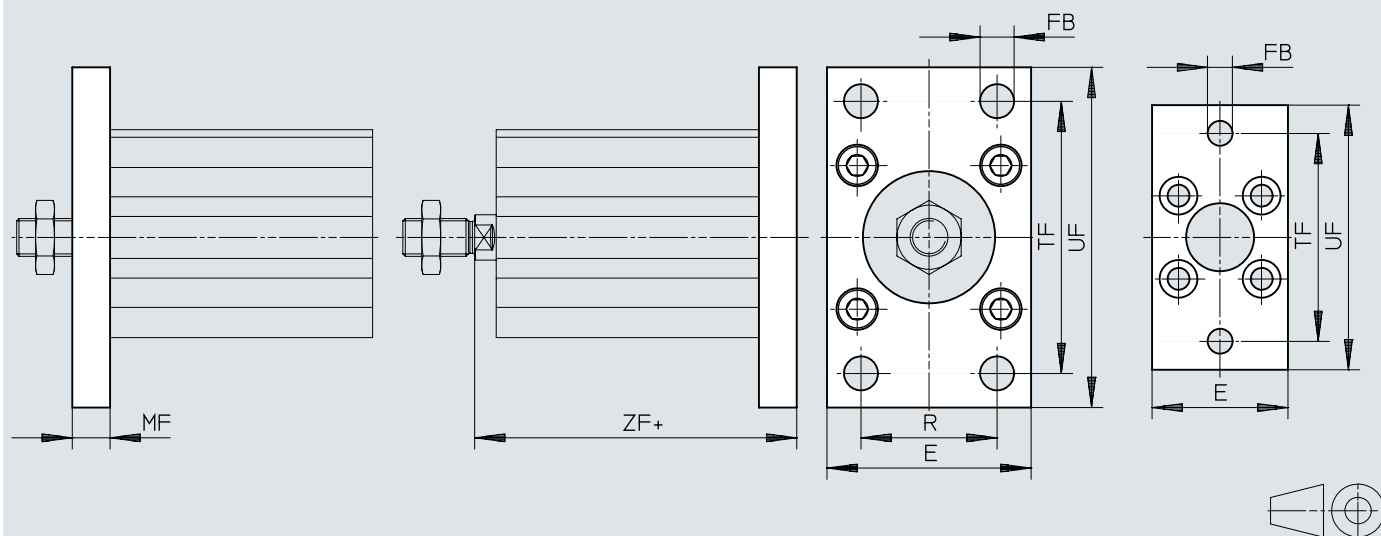
1) Stroke

2) Position sensing

Dimensions

Dimensions – Flange mounting FNC

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[1] + = plus stroke length

Dimensions

	E	FB ø	MF	R	TF	UF ±1	ZF	
							+0,2	²⁾ +0,2
FNC-12	28	5,5	8	–	40	50	26	30
FNC-16	29	5,5	8	–	43	55	27	31,5
FNC-20	36	6,6	8	–	55	70	28,5	33
FNC-25	40	6,6	8	–	60	76	30,5	35
FNC-32	45	7	10	32	64	80	35,5	39
FNC-40	54	9	10	36	72	90	41	44,5
FNC-50	65	9	12	45	90	110	48	51
FNC-63	75	9	12	50	100	120	51	54

	L ¹⁾ [mm]	²⁾	ZF +0,2
FNC-12	5	–	31
		■	35
	10	–	36
		■	40
FNC-16	5	–	32
		■	36,5
	10	–	37
		■	41,5
	25	–	54
		■	59,5
FNC-20	5	–	33,5
		■	38
	10	–	38,5
		■	43
	25	–	56,5
		■	61
FNC-25	5	–	35,5
		■	40
	10	–	40,5
		■	45
	25	–	58,5
		■	63
FNC-32	5	–	40,5
		■	44
	10	–	45,5
		■	49
	25	–	63,5
		■	67
FNC-40	5	–	46
		■	49,5
	10	–	51
		■	54,5
	25	–	69
		■	72,5
FNC-50	10	–	58
		■	61
	25	–	75,5
		■	79
FNC-63	10	–	61
		■	64
	25	–	78,5
		■	81,5

1) Stroke

2) Position sensing

Ordering data

With female thread – I					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	6 mm	5 mm	2 - Moderate corrosion stress	4984929	AEN-S-6-5-I
		10 mm		4984930	AEN-S-6-10-I
	10 mm	5 mm		4891759	AEN-S-10-5-I
		10 mm		4891760	AEN-S-10-10-I

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

With female thread – I; with position sensing – A					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	6 mm	5 mm	1 - Low corrosion stress	5267300	AEN-S-6-5-I-A
		10 mm		5267301	AEN-S-6-10-I-A
	10 mm	5 mm		5269268	AEN-S-10-5-I-A
		10 mm		5269269	AEN-S-10-10-I-A

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

With male thread – A					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	6 mm	5 mm	2 - Moderate corrosion stress	8080593	AEN-S-6-5-A
		10 mm		8080594	AEN-S-6-10-A
	10 mm	5 mm		8080583	AEN-S-10-5-A
		10 mm		8080586	AEN-S-10-10-A

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

With male thread – A; with position sensing – A					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	6 mm	5 mm	2 - Moderate corrosion stress	8080591	AEN-S-6-5-A-A
		10 mm		8080592	AEN-S-6-10-A-A
	10 mm	5 mm		8080584	AEN-S-10-5-A-A
		10 mm		8080585	AEN-S-10-10-A-A

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

With cushioning – P; with female thread – I					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	12 mm	5 mm	1 - Low corrosion stress	8076479	AEN-S-12-5-I-P
		10 mm		8076476	AEN-S-12-10-I-P
	16 mm	5 mm		8076496	AEN-S-16-5-I-P
		10 mm		8076492	AEN-S-16-10-I-P
		25 mm		8076497	AEN-S-16-25-I-P
	20 mm	5 mm		8076501	AEN-S-20-5-I-P
		10 mm		8076499	AEN-S-20-10-I-P
		25 mm		8076503	AEN-S-20-25-I-P
	25 mm	5 mm		8076509	AEN-S-25-5-I-P
		10 mm		8076507	AEN-S-25-10-I-P
		25 mm		8076504	AEN-S-25-25-I-P

Ordering data

With cushioning – P; with female thread – I

	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	32 mm	5 mm	1 - Low corrosion stress	8076512	AEN-S-32-5-I-P
		10 mm		8076510	AEN-S-32-10-I-P
		25 mm		8076514	AEN-S-32-25-I-P
	40 mm	5 mm		5149287	AEN-S-40-5-I-P
		10 mm		5149288	AEN-S-40-10-I-P
		25 mm		5149289	AEN-S-40-25-I-P
	50 mm	10 mm		5137801	AEN-S-50-10-I-P
		25 mm		5137802	AEN-S-50-25-I-P
	63 mm	10 mm		5132649	AEN-S-63-10-I-P
		25 mm		5132650	AEN-S-63-25-I-P

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

With cushioning – P; with female thread – I; with position sensing – A

	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	12 mm	5 mm	1 - Low corrosion stress	8076475	AEN-S-12-5-I-P-A
		10 mm		8076477	AEN-S-12-10-I-P-A
	16 mm	5 mm		8076495	AEN-S-16-5-I-P-A
		10 mm		8076493	AEN-S-16-10-I-P-A
		25 mm		8076494	AEN-S-16-25-I-P-A
	20 mm	5 mm		8076502	AEN-S-20-5-I-P-A
		10 mm		8076498	AEN-S-20-10-I-P-A
		25 mm		8076500	AEN-S-20-25-I-P-A
	25 mm	5 mm		8076506	AEN-S-25-5-I-P-A
		10 mm		8076505	AEN-S-25-10-I-P-A
		25 mm		8076508	AEN-S-25-25-I-P-A
	32 mm	5 mm		8076511	AEN-S-32-5-I-P-A
		10 mm		8076515	AEN-S-32-10-I-P-A
		25 mm		8076513	AEN-S-32-25-I-P-A
	40 mm	5 mm		5149290	AEN-S-40-5-I-P-A
		10 mm		5149291	AEN-S-40-10-I-P-A
		25 mm		5149292	AEN-S-40-25-I-P-A
	50 mm	10 mm		5137803	AEN-S-50-10-I-P-A
		25 mm		5137804	AEN-S-50-25-I-P-A
	63 mm	10 mm		5132651	AEN-S-63-10-I-P-A
		25 mm		5132652	AEN-S-63-25-I-P-A

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

With cushioning – P; with male thread – A

	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	12 mm	5 mm	1 - Low corrosion stress	8092150	AEN-S-12-5-A-P
		10 mm		8092149	AEN-S-12-10-A-P
	16 mm	5 mm		8092144	AEN-S-16-5-A-P
		10 mm		8092143	AEN-S-16-10-A-P
		25 mm		8092140	AEN-S-16-25-A-P
	20 mm	5 mm		8092220	AEN-S-20-5-A-P
		10 mm		8092219	AEN-S-20-10-A-P
		25 mm		8092224	AEN-S-20-25-A-P
	25 mm	5 mm		8092182	AEN-S-25-5-A-P
		10 mm		8092179	AEN-S-25-10-A-P
		25 mm		8092180	AEN-S-25-25-A-P
	32 mm	5 mm		8092167	AEN-S-32-5-A-P

Ordering data

With cushioning – P; with male thread – A					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	32 mm	10 mm	1 - Low corrosion stress	8092164	AEN-S-32-10-A-P
		25 mm		8092163	AEN-S-32-25-A-P
	40 mm	5 mm		8092158	AEN-S-40-5-A-P
		10 mm		8092159	AEN-S-40-10-A-P
		25 mm		8092157	AEN-S-40-25-A-P
	50 mm	10 mm		8092155	AEN-S-50-10-A-P
		25 mm		8092156	AEN-S-50-25-A-P
	63 mm	10 mm		8092147	AEN-S-63-10-A-P
		25 mm		8092145	AEN-S-63-25-A-P

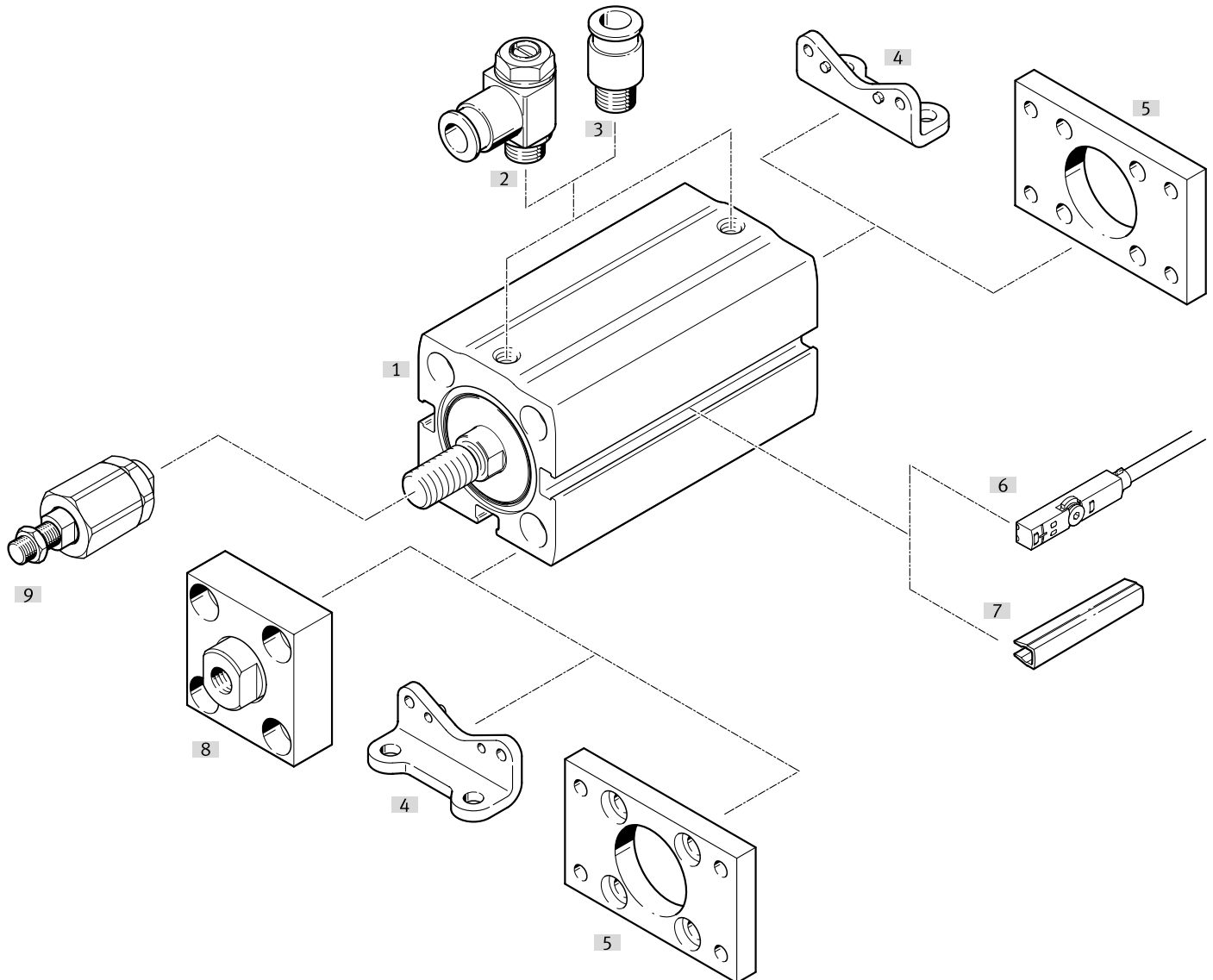
1) More information www.festo.com/x/topic/kbk

With cushioning – P; with male thread – A; with position sensing – A					
	Piston diameter	Stroke	Corrosion resistance class CRC ¹⁾	Part no.	Type
	12 mm	5 mm	1 - Low corrosion stress	8092152	AEN-S-12-5-A-P-A
		10 mm		8092151	AEN-S-12-10-A-P-A
	16 mm	5 mm		8092142	AEN-S-16-5-A-P-A
		10 mm		8092139	AEN-S-16-10-A-P-A
		25 mm		8092141	AEN-S-16-25-A-P-A
	20 mm	5 mm		8092222	AEN-S-20-5-A-P-A
		10 mm		8092221	AEN-S-20-10-A-P-A
		25 mm		8092223	AEN-S-20-25-A-P-A
	25 mm	5 mm		8092177	AEN-S-25-5-A-P-A
		10 mm		8092178	AEN-S-25-10-A-P-A
		25 mm		8092181	AEN-S-25-25-A-P-A
	32 mm	5 mm		8092165	AEN-S-32-5-A-P-A
		10 mm		8092166	AEN-S-32-10-A-P-A
		25 mm		8092168	AEN-S-32-25-A-P-A
	40 mm	5 mm		8092162	AEN-S-40-5-A-P-A
		10 mm		8092161	AEN-S-40-10-A-P-A
		25 mm		8092160	AEN-S-40-25-A-P-A
	50 mm	10 mm		8092153	AEN-S-50-10-A-P-A
		25 mm		8092154	AEN-S-50-25-A-P-A
	63 mm	10 mm		8092148	AEN-S-63-10-A-P-A
		25 mm		8092146	AEN-S-63-25-A-P-A

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

Peripherals

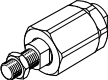
Peripherals overview



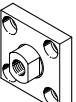
Accessories			→ Link
Type/order code	Description		
[1] Compact cylinder AEN-S	Single-acting		aen-s
[2] One-way flow control valve GRLZ	For piston Ø 12 ... 63: for regulating speed		25
[2] One-way flow control valve GRLA	For piston Ø 12 ... 63: for regulating speed		25
[3] Push-in fitting QS	For piston Ø 12 ... 63: for connecting tubing with standard O.D.		qs
[4] Foot mounting HNA	For piston Ø 12 ... 63: for bearing or end caps		24
[5] Flange mounting FNC	For piston Ø 12 ... 63: for bearing or end caps		24
[6] Proximity switch SMT-10	For piston Ø 6 ... 10: can be integrated in the cylinder profile barrel		25
[6] Proximity switches SMT-8	For piston Ø 12 ... 63: can be integrated in the cylinder profile barrel		25
[6] Position transmitter SDAS-MHS	For piston Ø 12 ... 63: can be integrated in the cylinder profile barrel		26
[6] Position transmitter SDAT-MHS	For piston Ø 12 ... 63: can be integrated in the cylinder profile barrel		26
[6] Position transmitter SMAT-8	For piston Ø 12 ... 63: can be integrated in the cylinder profile barrel		26
[7] Slot cover ABP	For piston Ø 12 ... 63: for protecting the sensor cables and the sensor slots from contamination		27
[8] Coupling piece KSG	For piston Ø 32 ... 63: to compensate for radial deviations		24
[8] Coupling piece KSZ	For piston Ø 32 ... 63: to compensate for radial deviations		24
[9] Self-aligning rod coupler FK	For piston Ø 12 ... 63: To compensate for radial and angular deviations		24

Accessories

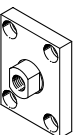
Self-aligning rod coupler FK

	Description	Material housing	Product weight	Part no.	Type
	For Ø 12	Galvanised steel	23 g	30984	FK-M5
	For Ø 16		24 g	2061	FK-M6
	For Ø 20, 25		56 g	2062	FK-M8
	For Ø 32, 40		236 g	6140	FK-M10X1,25
	For Ø 50, 63		245 g	6141	FK-M12X1,25

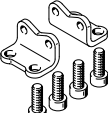
Coupling piece KSG

	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32, 40	Steel, Galvanised	229 g	32963	KSG-M10X1,25
	For Ø 50, 63		447 g	32964	KSG-M12X1,25

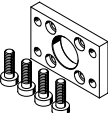
Coupling piece KSZ

	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32, 40	Steel, Galvanised	110 g	36125	KSZ-M10X1,25
	For Ø 50, 63		180 g	36126	KSZ-M12X1,25

Foot mounting HNA

	Description	Material bracket	Product weight	Part no.	Type
	For Ø 12	Steel, Galvanised	39 g	537237	HNA-12
	For Ø 16		42 g	537238	HNA-16
	For Ø 20		84 g	537239	HNA-20
	For Ø 25		90 g	537240	HNA-25
	For Ø 32		123 g	537241	HNA-32
	For Ø 40		157 g	537242	HNA-40
	For Ø 50		278 g	537243	HNA-50
	For Ø 63		328 g	537244	HNA-63

Flange mounting FNC

	Description	Material mounting	Product weight	Part no.	Type
	For Ø 12	Steel, Galvanised	79 g	537245	FNC-12
	For Ø 16		88 g	537246	FNC-16
	For Ø 20		141 g	537247	FNC-20
	For Ø 25		165 g	537248	FNC-25
	For Ø 32		221 g	174376	FNC-32
	For Ø 40		291 g	174377	FNC-40
	For Ø 50		536 g	174378	FNC-50
	For Ø 63		679 g	174379	FNC-63

Accessories

One-way flow control valves GRLA – for exhaust air

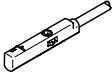
	Description	Pneumatic connection 1	Pneumatic connection, port 2	Part no.	Type
	For Ø 6, 10	Push-in connector 3 mm	M3	175041	GRLA-M3-QS-3
	For Ø 12, 16, 20, 25, 32, 40	Push-in connector 4 mm	M5	193137	GRLA-M5-QS-3-D
		Push-in connector 6 mm		193138	GRLA-M5-QS-4-D
		Push-in connector 6 mm		193139	GRLA-M5-QS-6-D
	For Ø 50, 63	Push-in connector 3 mm	G1/8	193142	GRLA-1/8-QS-3-D
		Push-in connector 4 mm		193143	GRLA-1/8-QS-4-D
		Push-in connector 6 mm		193144	GRLA-1/8-QS-6-D
		Push-in connector 8 mm		193145	GRLA-1/8-QS-8-D

One-way flow control valves GRLZ – for supply air

	Description	Pneumatic connection 1	Pneumatic connection, port 2	Part no.	Type
	For Ø 6, 10	Push-in connector 3 mm	M3	175043	GRLZ-M3-QS-3
	For Ø 12, 16, 20, 25, 32, 40	Push-in connector 4 mm	M5	193153	GRLZ-M5-QS-3-D
		Push-in connector 6 mm		193154	GRLZ-M5-QS-4-D
		Push-in connector 6 mm		193155	GRLZ-M5-QS-6-D
	For Ø 50, 63	Push-in connector 3 mm	G1/8	193156	GRLZ-1/8-QS-3-D
		Push-in connector 4 mm		193157	GRLZ-1/8-QS-4-D
		Push-in connector 6 mm		193158	GRLZ-1/8-QS-6-D
		Push-in connector 8 mm		193159	GRLZ-1/8-QS-8-D

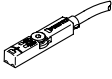
Proximity switch SMT-10 for round slot, magneto-resistive – for AEN-S-6 ... 10

Link [smt](#)

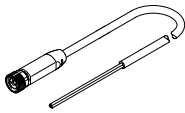
	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Screw-clamped, Insertable in the slot from above	3-wire NPN N/O contact	Open end	2.5 m	551377	SMT-10M-NS-24V-E-2,5-L-OE
			Plug M8, A-coded	0.3 m	551379	SMT-10M-NS-24V-E-0,3-L-M8D
		3-wire PNP N/O contact	Open end	2.5 m	551373	SMT-10M-PS-24V-E-2,5-L-OE
			Plug M8, A-coded	0.3 m	551375	SMT-10M-PS-24V-E-0,3-L-M8D

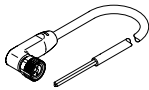
Proximity switch SMT-8 for T-slot, magneto-resistive – for AEN-S-12 ... 63

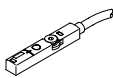
Link [smt](#)

	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type
	Screw-clamped, Insertable in the slot from above	3-wire NPN N/O contact	Open end	2.5 m	574338	SMT-8M-A-NS-24V-E-2,5-OE
			Plug M8, A-coded	0.3 m	574339	SMT-8M-A-NS-24V-E-0,3-M8D
		3-wire PNP N/C contact	Open end	7.5 m	574340	SMT-8M-A-PO-24V-E-7,5-OE
			Plug M8, A-coded	0.3 m	574335	SMT-8M-A-PS-24V-E-2,5-OE
		3-wire PNP N/O contact	Plug M8, A-coded	0.3 m	574334	SMT-8M-A-PS-24V-E-0,3-M8D

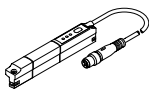
Accessories

Connecting cables NEBA, straight						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
				5 m	8078224	NEBA-M8G3-U-5-N-LE3

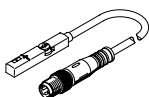
Connecting cables NEBA, angled						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
				5 m	8078231	NEBA-M8W3-U-5-N-LE3

Position transmitter SDAS for T-slot, plug M8, A-coded – for size AEN-S-12 ... 63						
	Description	Sensing range	Electrical connection 1, number of connections/cores	Cable length	Part no.	Type
	Operating modes: two adjustable switching outputs; IO-Link®	52 mm	4	0.3 m	8063974	SDAS-MHS-M40-1L-PNLK-PN-E-0.3-M8
				2.5 m	8063975	SDAS-MHS-M40-1L-PNLK-PN-E-2.5-LE

Link [sdas](#)

Position transmitter SDAT for T-slot, plug M8, A-coded – for AEN-S-12 ... 63						
	Sensing range	Analogue output	Electrical connection 1, number of connections/cores	Cable length	Part no.	Type
	0 ... 50.000 mm	4 - 20 mA	4	0.3 m	1531265	SDAT-MHS-M50-1L-SA-E-0.3-M8

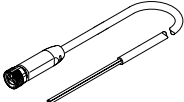
Link [sdatt](#)

Position transmitter SMAT for T-slot, M8 plug, A-coded – for size AEN-S-12 ... 63						
	Sensing range	Analogue output	Electrical connection 1, number of connections/cores	Cable length	Part no.	Type
	52 mm	0 - 10 V	4	0.3 m	553744	SMAT-8M-U-E-0,3-M8D

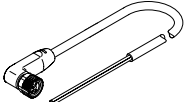
Link [smat](#)

Accessories

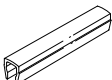
Connecting cables NEBA, straight

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	4	2.5 m	8078227	NEBA-M8G4-U-2.5-N-LE4
				5 m	8078228	NEBA-M8G4-U-5-N-LE4

Connecting cables NEBA, angled

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	4	2.5 m	8078233	NEBA-M8W4-U-2.5-N-LE4
				5 m	8078234	NEBA-M8W4-U-5-N-LE4

Slot cover ABP for T-slot – for AEN-S-12 ... 63

	Description	Material housing	Packaging quantity [pieces]	Part no.	Type
	Length 0.5 m, Inserted from above	ABS	2	151680	ABP-5-S