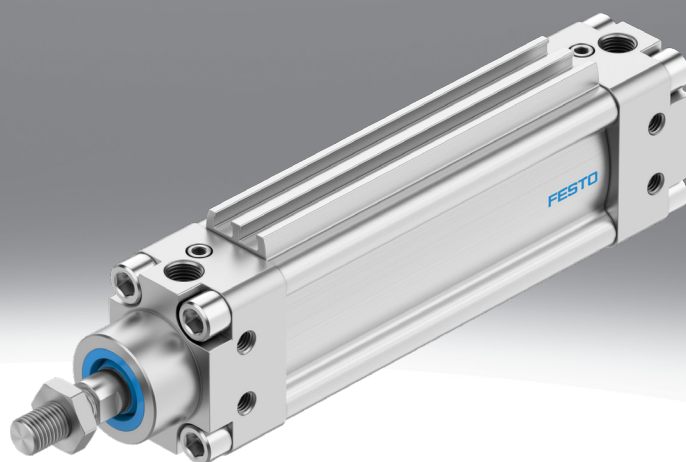


Flat cylinder, metric DZH

FESTO



Characteristics

At a glance Link [dzh](#)

For high packing density with block mounting: Double-acting cylinder with adjustable cushioning and protection against torsion with oval piston.

- Flat design
- Protected against rotation thanks to special piston shape
- Ideal for block mounting
- Wide variety of mounting and assembly options

Position sensing

[A] For proximity sensor

By using proximity switches, any position can be detected.

Piston rod type

[] At one end



- The piston rod can be used for connection at one end of the cylinder

[S2] Through piston rod



- The piston rod can be used for connection at both ends of the cylinder
- Identical forces in the forward and return stroke

[S20] Through, hollow piston rod



- The piston rod can be used for connection at both ends of the cylinder
- The piston rod is hollow inside, so that it can be used to carry vacuum or compressed air
- Identical forces in the forward and return stroke

Temperature resistance

[] Standard



Temperature range: -20 ... +80 °C

[S6] Heat-resistant seals max. 120 °C



Temperature range: 0 ... +120 °C

Type code

001	Series	
DZH	Flat cylinder, double-acting	

002	Piston diameter [mm]	
16	16	
20	20	
25	25	
32	32	
40	40	
50	50	
63	63	

003	Stroke [mm]	
25	25	
40	40	
50	50	
80	80	
100	100	
125	125	
160	160	
200	200	
250	250	
300	300	
320	320	
400	400	
500	500	
...	1 ... 1000	

004	Position sensing	
A	For proximity sensor	

005	Piston rod type	
	At one end	
S2	Through piston rod	
S20	Through, hollow piston rod	

006	Temperature resistance	
	Standard	
S6	Heat-resistant seals max. 120 °C	

Datasheet

General technical data

Piston diameter [mm]	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Stroke	1 ... 200 mm	1 ... 320 mm	1 ... 500 mm	1 ... 1,000 mm			
Pneumatic connection	M5	G1/8			G1/4		G3/8
Design	Piston Piston rod Profile barrel						
Protection against torque/ guide	Oval piston						
Mode of operation	Double-acting						
Cushioning	Pneumatic cushioning, adjustable at both ends						
Cushioning length	14 mm	17 mm		19 mm	21 mm	23 mm	
Position detection	Via proximity switch						
Type of mounting	Either: Via female thread With accessories						
Mounting position	optional						

Operating and environmental conditions

Piston diameter [mm]	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Stroke	1 ... 200 mm	1 ... 320 mm	1 ... 500 mm	1 ... 1,000 mm			
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)						
Operating pressure	0.1 ... 1 MPa			0.06 ... 1 MPa			
Operating pressure	1 ... 10 bar			0.6 ... 10 bar			
Operating pressure	13.8 ... 145 psi			8.3 ... 145 psi			
Corrosion resistance class CRC ²⁾	2 - Moderate corrosion stress						

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

Ambient temperature – DZH-16 ... 25

Piston diameter [mm]	16 mm		20 mm		25 mm		
Temperature resistance	Standard	Heat-resistant seals max. 120 °C	Standard	Heat-resistant seals max. 120 °C	Standard	Heat-resistant seals max. 120 °C	
Ambient temperature ¹⁾	-20 ... 80°C	0 ... 120°C	-20 ... 80°C	0 ... 120°C	-20 ... 80°C	0 ... 120°C	

1) Note the application range of the proximity switches

Ambient temperature – DZH-32 ... 63

Piston diameter [mm]	32 mm		40 mm		50 mm		63 mm	
Temperature resistance	Standard	Heat-resistant seals max. 120 °C	Standard	Heat-resistant seals max. 120 °C	Standard	Heat-resistant seals max. 120 °C	Standard	Heat-resistant seals max. 120 °C
Ambient temperature ¹⁾	-20 ... 80°C	0 ... 120°C	-20 ... 80°C	0 ... 120°C	-20 ... 80°C	0 ... 120°C	-20 ... 80°C	0 ... 120°C

1) Note the application range of the proximity switches

Forces and torques – DZH-16 ... 25

Piston diameter [mm]	16 mm			20 mm			25 mm		
Piston rod type	At one end	Through piston rod	Through, hol- low piston rod	At one end	Through piston rod	Through, hol- low piston rod	At one end	Through piston rod	Through, hol- low piston rod
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	121 N	104 N		188 N	158 N		295 N	247 N	
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	104 N			158 N			247 N		
Max. torque for protection against torsion ¹⁾	0.5 Nm			0.6 Nm			0.8 Nm		

1) The max. torque must not be exceeded even when attaching mounting components to the piston rod.

Datasheet

Forces and torques – DZH-32 ... 63

Piston diameter [mm]	32 mm		40 mm		50 mm		63 mm	
Piston rod type	At one end	Through piston rod	At one end	Through piston rod	At one end	Through piston rod	At one end	Through piston rod
Theoretical force at 0.6 MPa (6 bar, 87 psi), advance stroke	483 N	415 N	754 N	633 N	1,178 N	989 N	1,870 N	1,682 N
Theoretical force at 0.6 MPa (6 bar, 87 psi), return stroke	415 N		633 N		989 N		1,682 N	
Max. torque for protection against torsion ¹⁾	1 Nm		1.2 Nm		1.7 Nm		2 Nm	

1) The max. torque must not be exceeded even when attaching mounting components to the piston rod.

Angle of rotation

Piston diameter [mm]	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Torsional backlash at piston rod +/-	3.1 deg	2.6 deg	2.4 deg	1.7 deg	1.4 deg	0.75 deg	0.67 deg

Weight – DZH-16 ... 20

Piston diameter [mm]	16 mm				20 mm			
Piston rod type	At one end		Through piston rod	Through, hollow piston rod	At one end		Through piston rod	Through, hollow piston rod
Temperature resistance	Standard	Heat-resistant seals max. 120 °C	Standard			Heat-resistant seals max. 120 °C	Standard	
Basic weight for 0 mm stroke	148 g	160 g	163 g	178 g	234 g	264 g	262 g	251 g
Additional weight per 10 mm stroke	12 g		14.2 g	13.6 g	15.9 g		19.9 g	18.7 g

Weight – DZH-25 ... 32

Piston diameter [mm]	25 mm				32 mm			
Piston rod type	At one end		Through piston rod	Through, hollow piston rod	At one end		Through piston rod	
Temperature resistance	Standard	Heat-resistant seals max. 120 °C	Standard			Heat-resistant seals max. 120 °C	Standard	
Basic weight for 0 mm stroke	326 g	351 g	326 g	362 g	511 g	528 g	593 g	
Additional weight per 10 mm stroke	18.4 g			22.9 g	25 g		33.6 g	

Weight – DZH-40 ... 50

Piston diameter [mm]	40 mm			50 mm		
Piston rod type	At one end		Through piston rod	At one end		Through piston rod
Temperature resistance	Standard	Heat-resistant seals max. 120 °C	Standard		Heat-resistant seals max. 120 °C	Standard
Basic weight for 0 mm stroke	836 g	868 g	990 g	1,263 g	1,289 g	1,474 g
Additional weight per 10 mm stroke	37 g	37.3 g	52.5 g	52.3 g		76.5 g

Weights - DZH-63

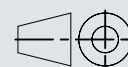
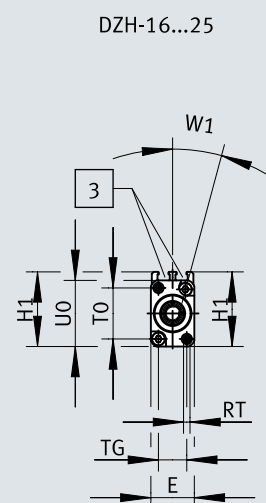
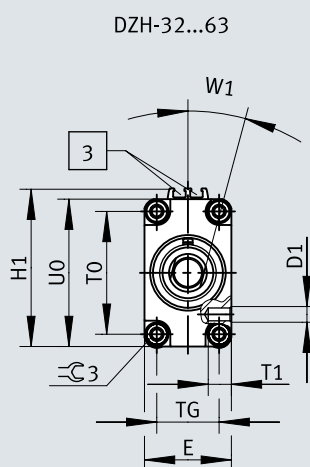
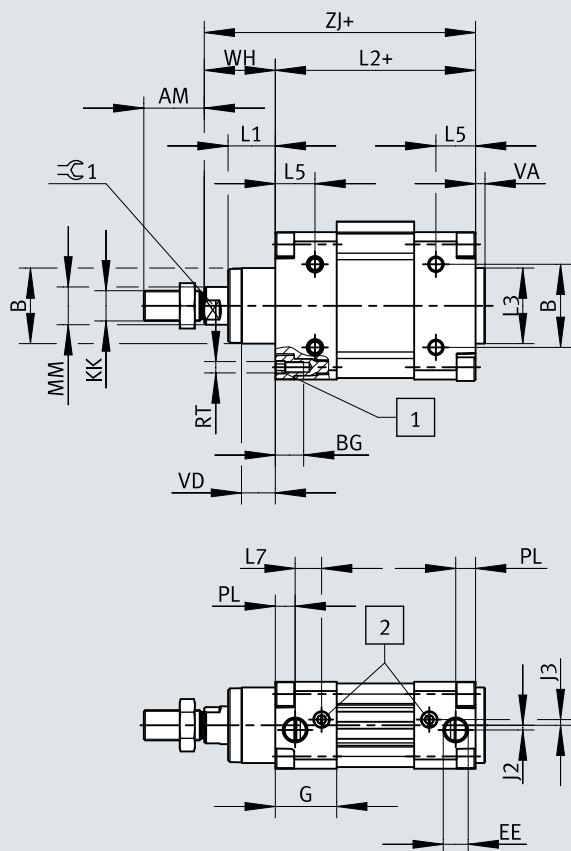
Piston diameter [mm]	63 mm		
Piston rod type	At one end		Through piston rod
Temperature resistance	Standard	Heat-resistant seals max. 120 °C	Standard
Basic weight for 0 mm stroke	1,820 g	1,847 g	3,055 g
Additional weight per 10 mm stroke	69.6 g		94 g

Datasheet

Materials							
Piston diameter [mm]	16 mm	20 mm	25 mm	32 mm	40 mm	50 mm	63 mm
Material housing	Aluminium						
Material cover	Aluminium						
Material piston rod	High-alloy steel						
Material seals	FPM, TPE-U(PU)						
Note on materials	RoHS-compliant						
LABS (PWIS) conformity	VDMA24364-B2-L						

Dimensions

Dimensions – Flat cylinder DZH

Download CAD data www.festo.com

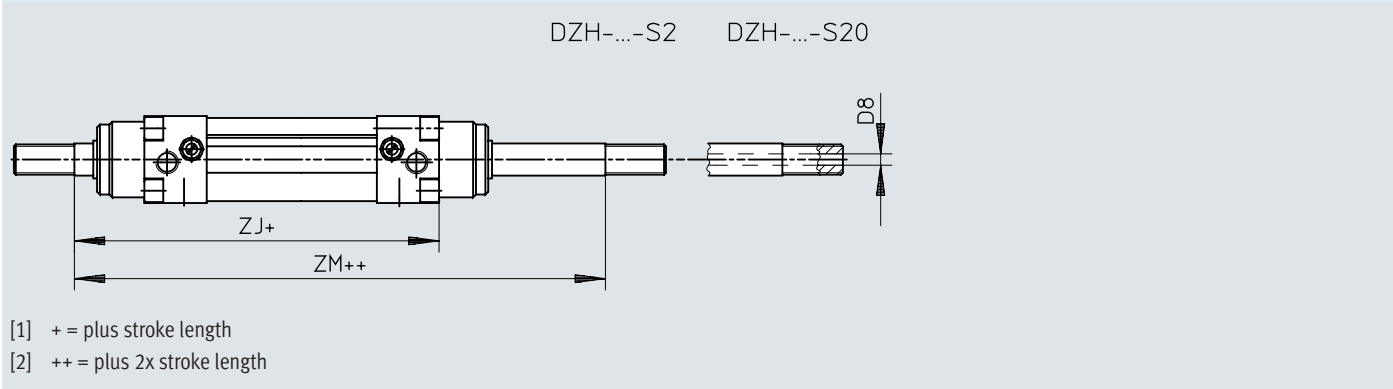
- [1] Socket head screw with female thread
 [2] Adjusting screw for adjustable end-position cushioning
 [3] Mounting slot for proximity switch
 [4] + = plus stroke length
 [5] Note: The maximum permissible torque must not be exceeded when additional components are screwed onto the piston rod. The spanner flat 1 needs to be held firmly.

	AM	B ø f10	BG	D1	D8 ø	E	EE	G	H1	J2	J3	KK	L1	L2	L3	L5
DZH-16	16	16	5,5	M4	2,3	20	M5	20,5	35,5	-0,7	2,8	M6	12	78,5 _{±0,5}	12	12
DZH-20	20	20	5,5	M4	3,2	23	G1/8	25	39,5	-0,7	5	M8	14	90,5 _{±0,5}	15	15
DZH-25	22	22	7	M5	3,8	26	G1/8	26	44,5	-0,3	4,2	M10x1,25	14	92,5 _{±0,5}	18	16
DZH-32	22	30	13	M6	-	36	G1/8	27	53,3	-	4	M10x1,25	16	94 _{±0,7}	18	13
DZH-40	24	35	13	M6	-	40	G1/4	33	66,3	-	6	M12x1,25	20	105 _{±0,7}	32	16,5
DZH-50	32	40	15	M8	-	46	G1/4	32,5	82,9	2,5	3	M16x1,5	25	106 _{±0,7}	44	21
DZH-63	32	42	15	M10	-	54	G3/8	36,5	108,3	4	5	M16x1,5	28	115 _{±0,7}	64	22,5

	L7	MM ø	PL	RT	TO	T1	TG	UO	VA	VD	W1	WH ±1	ZJ	≈G1	≈G3
DZH-16	8,5	6	7,5	M4	23	5,5	12	31	2,5	-	15°	17,5	96	5	4
DZH-20	10,5	8	9,3	M4	27	5,5	15	35	2,5	-	15°	18,5	109	7	4
DZH-25	10	10	10,5	M5	30,5	7	16,5	40	2,5	-	15°	20,5	113	9	5
DZH-32	9,2	12	9	M5	36,5	9	24,5	48	4	-	15°	26	120	10	6
DZH-40	13,2	16	11	M5	50	9	28	62	5,5	-	15°	30	135	13	6
DZH-50	14	20	10,5	M6	65	10	33	78	5	17	15°	37,5	143,5	17	6
DZH-63	14,5	20	12,5	M6	90	12	40	104	6	20	15°	40	155	17	6

Dimensions

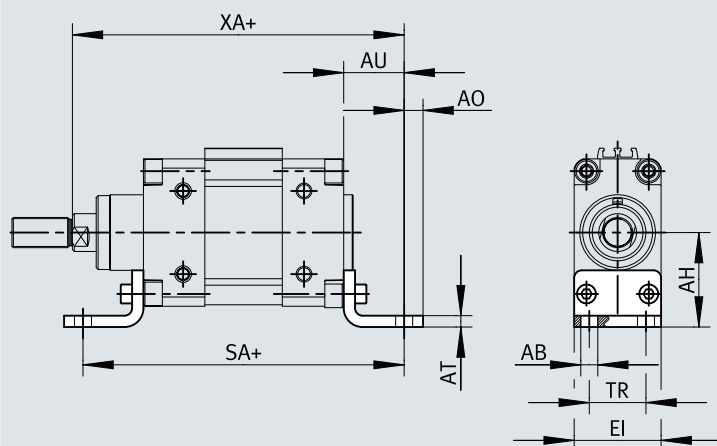
Dimensions – Flat cylinder DZH-...-S2 – through piston rod / DZH-...-S20 – hollow through piston rod Download CAD data www.festo.com



	D8 ø	ZJ	ZM
DZH-16	2,3	96	114,4 _{±0,4}
DZH-20	3,2	109	128 _{±0,4}
DZH-25	3,8	113	134 _{±0,4}
DZH-32	–	120	147,1 _{±0,5}
DZH-40	–	135	165,3 _{±0,5}
DZH-50	–	143,5	181,5 _{±0,5}
DZH-63	–	155	195,3 _{±0,5}

Dimensions

Dimensions – Foot mounting HZS

Download CAD data www.festo.com

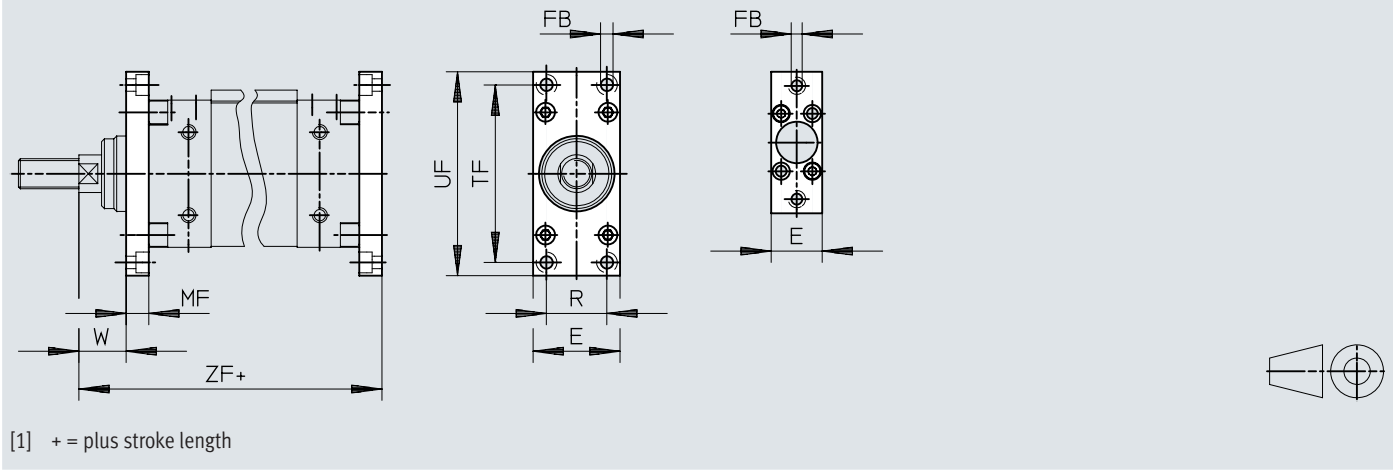
[1] + = plus stroke length

	AB Ø	AH	AO	AT	AU	E1	SA	TR	XA
HZS-16	4,5	24,5	4	4	21	20	120,5	12	117
HZS-20	4,5	27,5	4	4	21	23	132,5	15	130
HZS-25	5,5	30	5	4	25	26	142,5	16,5	138
HZS-32	7	32	8	4	24	36	142	24	144
HZS-40	9	40	10	5	28	40	161	25	163
HZS-50	9	50	10	6	32	46	170	30	175,5
HZS-63	9	62	15	6	35	54	185	38	190

Dimensions

Dimensions – Flange mounting FZS Download CAD data www.festo.com

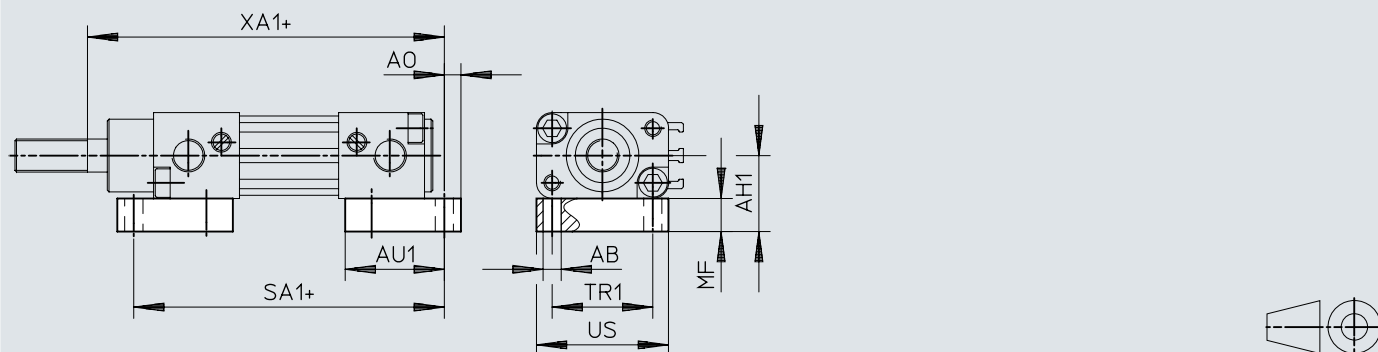
FZS-32 – FZS-63 FZS-16 – FZS-25



	E	FB ø	MF	R	TF	UF	W	ZF
FZS-16	21	4,8	10	–	48	60	7,5	106
FZS-20	24	4,8	10	–	54	70	8,5	119
FZS-25	27	5,8	10	–	60	75	10,5	123
FZS-32	36	5,8	10	24	62	75	16	130
FZS-40	40	5,8	10	28	78	90	20	145
FZS-50	46	6,8	12	32	94	108	25,5	155,5
FZS-63	54	6,8	15	40	120	134	25	170

Dimensions

Dimensions – Foot mounting HZB-16 ... 25

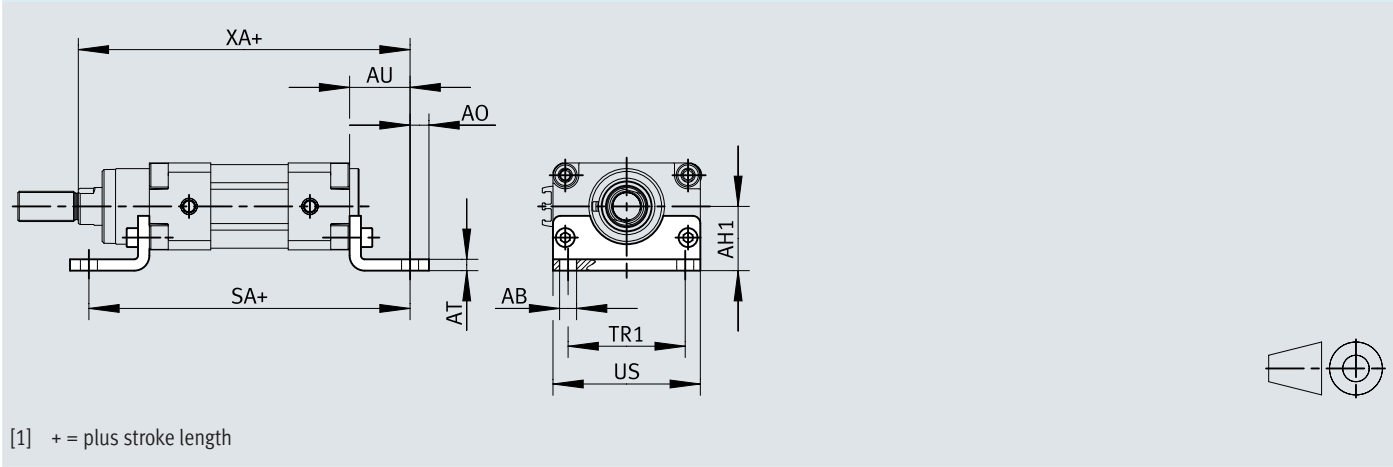
 Download CAD data www.festo.com


[1] + = plus stroke length

	AB ø	AH1	A0	AU1	MF	SA1	TR1	US	XA1
HZB-16	4,5	20	4	23	10	88,5	23	30	101
HZB-20	4,5	21,5	4	26	10	100,5	27	35	114
HZB-25	5,5	23	5	30	10	104,5	30,5	40	119

Dimensions

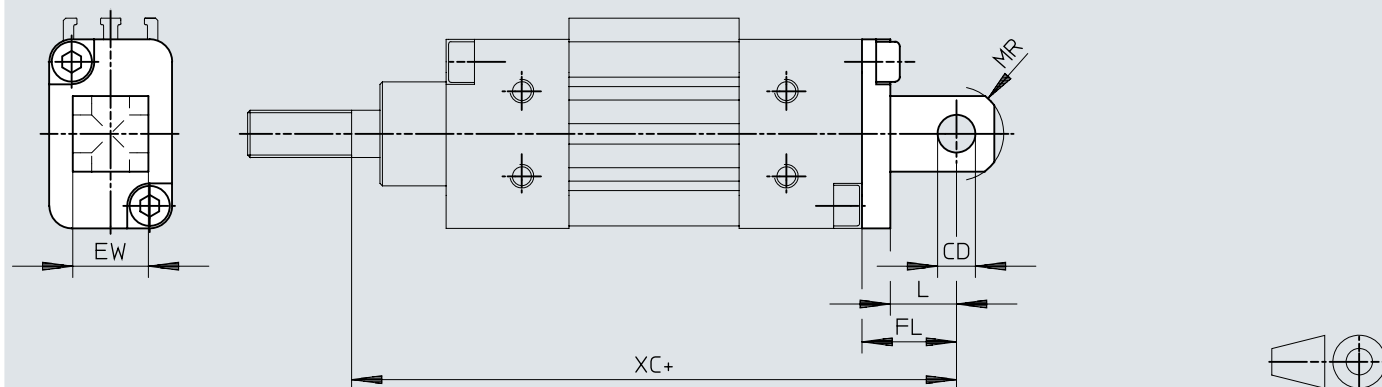
Dimensions – Foot mounting HZB-32 ... 63 Download CAD data www.festo.com



	AB ø	AH1	AO	AT	AU	SA	TR1	US	XA
HZB-32	7	26	8	4	24	142	32	48	144
HZB-40	9	29	10	5	28	161	46	62	163
HZB-50	9	34	10	6	32	170	62	78	175,5
HZB-63	9	38	15	6	35	185	88	104	190

Dimensions

Dimensions – Swivel flange SZSB, narrow/wide

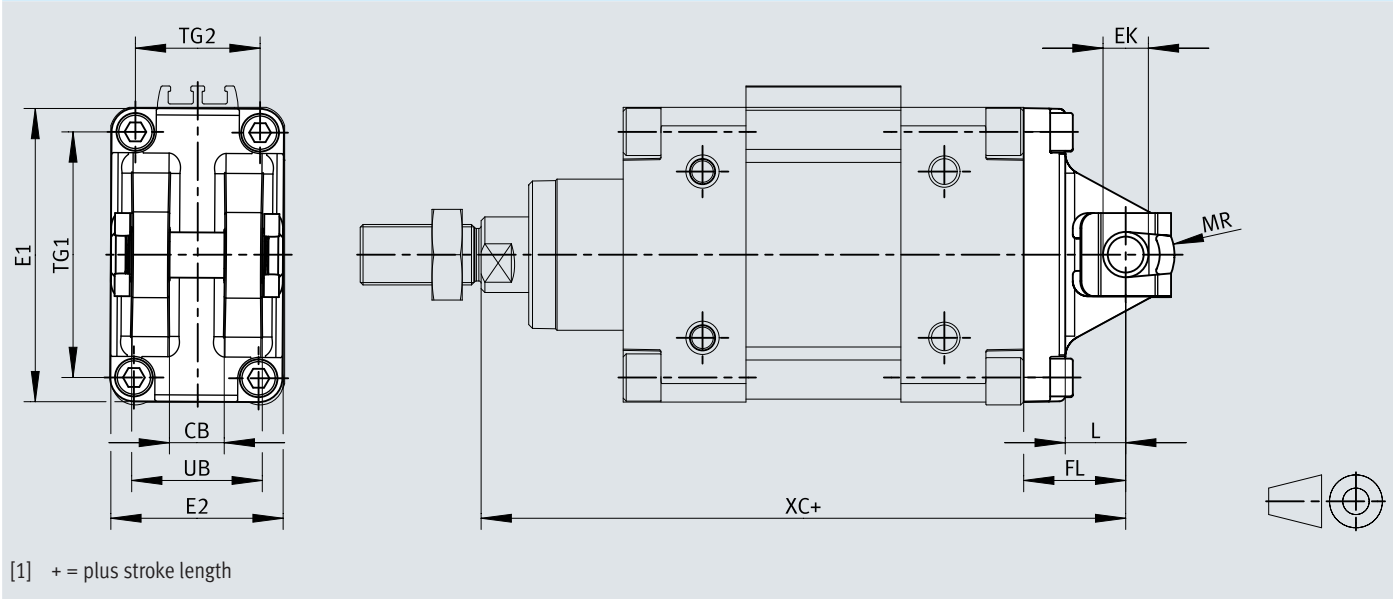
[Download CAD data](http://www.festo.com)


[1] + = plus stroke length

	CD Ø H8	EW	FL	L	XC
SZSB-16	4	8	14	8	110
SZSB-20	6	12	16	10	125
SZSB-25	8	16	20	14	133

Dimensions

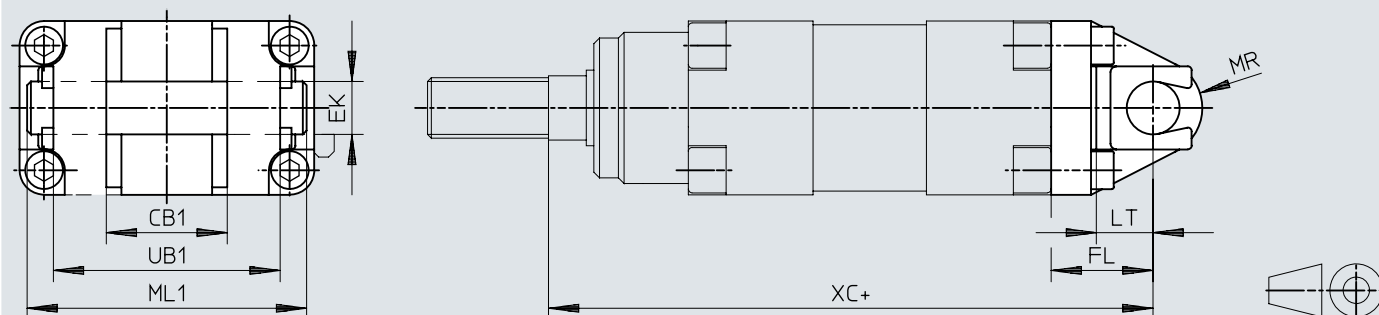
Dimensions – Swivel flange SZS, narrow Download CAD data www.festo.com



	CB	E1	E2	EK Ø e8/H9	FL	L min.	MR max.	TG1	TG2	UB -0,2	XC
SZS-32	9,4	47,6	35,6	10	22 ±0,15	13,5	11	36,5	24,5	25,8	142
SZS-40	12,4	61,6	39,6	12	25 ±0,15	15,5	13	50,2	28,2	28,8	160
SZS-50	14,4	77,6	45,6	12	27 ±0,15	15,5	13	65	33	34,8	170,5
SZS-63	16,4	103,6	53,6	16	35 ±0,3	22,4	17	90	40	40,8	190

Dimensions

Dimensions – Swivel flange SZB, wide

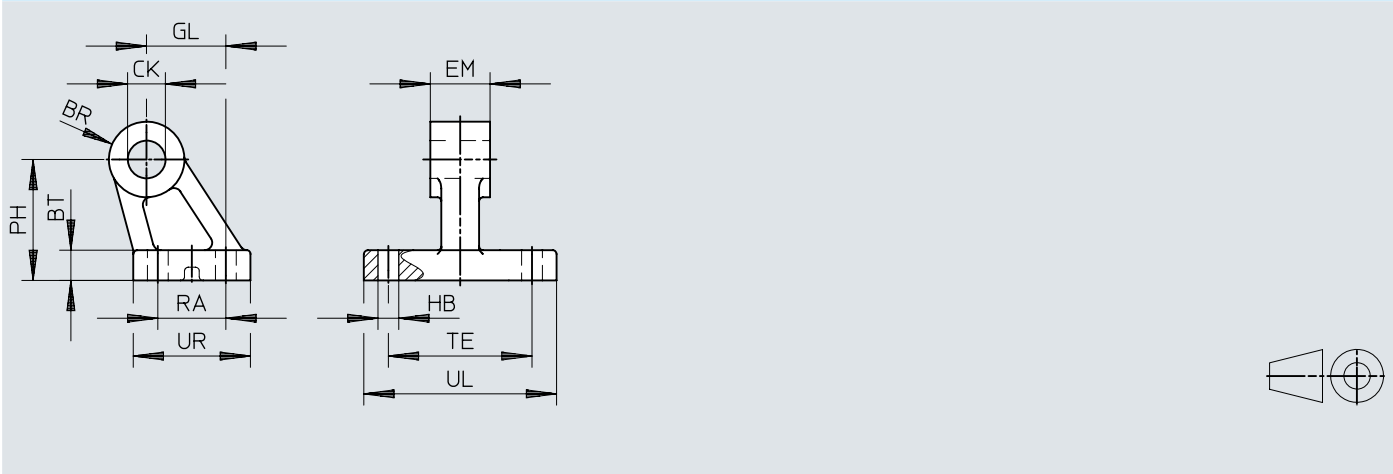
Download CAD data www.festo.com

[1] + = plus stroke length

	CB1	EK Ø e8	FL	LT	ML1	MR	UB1	XC
	H14							
SZB-32	16	10	22	14	47	11	36 _{-0,7}	142
SZB-40	28	12	25	15,5	61	13	52 ₋₁	160
SZB-50	32	12	27	16	77	13	60 ₋₁	170,5
SZB-63	40	16	35	23	103	17	70 ₋₁	190

Dimensions

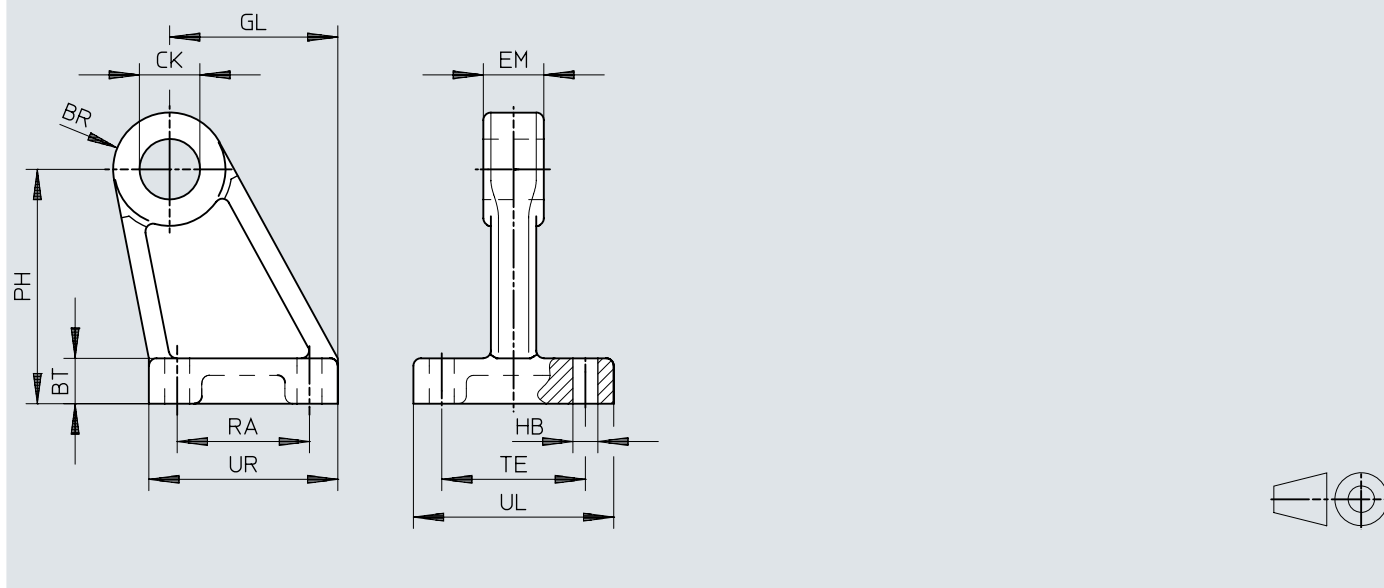
Dimensions – Clevis foot LBZB Download CAD data www.festo.com



	BR	BT	CK Ø	EM -0,3	GL	HB Ø	PH	RA	TE	UL	UR
LBZB-32	10	8	10 ^{H9}	15,8	21	5,5	32	18	38	41	31

Dimensions

Dimensions – Clevis foot LBZS

Download CAD data www.festo.com

	BR	BT	CK Ø	EM -0,3	GL	HB Ø	PH	RA	TE	UL	UR
LBZS-32	10	8	10 ^{H8}	9	21	5,5	33,5	18	24	35	31
LBZS-40	11	10	12 ^{H8}	12	24	5,5	40	22	28	39	35
LBZS-50	13	12	12 ^{H8}	14	33	6,6	51,5	30	30	45	45
LBZS-63	15	12	16 ^{H8}	16	37	6,6	62	35	38	53	51

Ordering data

Flat cylinder DZH-...				
	Piston diameter [mm] ¹⁾	Stroke	Part no.	Type
	16 mm	1 ... 200 mm	150295	DZH-16- -PPV-A
		25 mm	151145	DZH-16-25-PPV-A
		40 mm	151146	DZH-16-40-PPV-A
		50 mm	151147	DZH-16-50-PPV-A
		80 mm	151148	DZH-16-80-PPV-A
		100 mm	151149	DZH-16-100-PPV-A
		125 mm	151150	DZH-16-125-PPV-A
		160 mm	151151	DZH-16-160-PPV-A
		200 mm	151152	DZH-16-200-PPV-A
	20 mm	1 ... 320 mm	150294	DZH-20- -PPV-A
		25 mm	151134	DZH-20-25-PPV-A
		40 mm	151135	DZH-20-40-PPV-A
		50 mm	151136	DZH-20-50-PPV-A
		80 mm	151137	DZH-20-80-PPV-A
		100 mm	151138	DZH-20-100-PPV-A
		125 mm	151139	DZH-20-125-PPV-A
		160 mm	151140	DZH-20-160-PPV-A
		200 mm	151141	DZH-20-200-PPV-A
		250 mm	151142	DZH-20-250-PPV-A
		320 mm	151143	DZH-20-320-PPV-A
	25 mm	1 ... 500 mm	150293	DZH-25- -PPV-A
		25 mm	151121	DZH-25-25-PPV-A
		40 mm	151122	DZH-25-40-PPV-A
		50 mm	151123	DZH-25-50-PPV-A
		80 mm	151124	DZH-25-80-PPV-A
		100 mm	151125	DZH-25-100-PPV-A
		125 mm	151126	DZH-25-125-PPV-A
		160 mm	151127	DZH-25-160-PPV-A
		200 mm	151128	DZH-25-200-PPV-A
		250 mm	151129	DZH-25-250-PPV-A
		320 mm	151130	DZH-25-320-PPV-A
		400 mm	151131	DZH-25-400-PPV-A
		500 mm	151132	DZH-25-500-PPV-A
	32 mm	1 ... 1000 mm	14040	DZH-32- -PPV-A
		25 mm	14041	DZH-32-25-PPV-A
		40 mm	14042	DZH-32-40-PPV-A
		50 mm	14043	DZH-32-50-PPV-A
		80 mm	14044	DZH-32-80-PPV-A
		100 mm	14045	DZH-32-100-PPV-A
		125 mm	14046	DZH-32-125-PPV-A
		160 mm	14047	DZH-32-160-PPV-A
		200 mm	14048	DZH-32-200-PPV-A
		250 mm	14049	DZH-32-250-PPV-A
		300 mm	14050	DZH-32-300-PPV-A
	40 mm	1 ... 1000 mm	14051	DZH-40- -PPV-A
		25 mm	14052	DZH-40-25-PPV-A
		40 mm	14053	DZH-40-40-PPV-A
		50 mm	14054	DZH-40-50-PPV-A
		80 mm	14055	DZH-40-80-PPV-A
		100 mm	14056	DZH-40-100-PPV-A
		125 mm	14057	DZH-40-125-PPV-A
		160 mm	14058	DZH-40-160-PPV-A
		200 mm	14059	DZH-40-200-PPV-A
		250 mm	14060	DZH-40-250-PPV-A
		300 mm	14061	DZH-40-300-PPV-A
	50 mm	1 ... 1000 mm	14062	DZH-50- -PPV-A

Ordering data

Flat cylinder DZH-...				
	Piston diameter [mm] ¹⁾	Stroke	Part no.	Type
	50 mm	25 mm	14063	DZH-50-25-PPV-A
		40 mm	14064	DZH-50-40-PPV-A
		50 mm	14065	DZH-50-50-PPV-A
		80 mm	14066	DZH-50-80-PPV-A
		100 mm	14067	DZH-50-100-PPV-A
		125 mm	14068	DZH-50-125-PPV-A
		160 mm	14069	DZH-50-160-PPV-A
		200 mm	14070	DZH-50-200-PPV-A
		250 mm	14071	DZH-50-250-PPV-A
		300 mm	14072	DZH-50-300-PPV-A
	63 mm	1 ... 1000 mm	14073	DZH-63- -PPV-A
		25 mm	14074	DZH-63-25-PPV-A
		40 mm	14075	DZH-63-40-PPV-A
		50 mm	14076	DZH-63-50-PPV-A
		80 mm	14077	DZH-63-80-PPV-A
		100 mm	14078	DZH-63-100-PPV-A
		125 mm	14079	DZH-63-125-PPV-A
		160 mm	14080	DZH-63-160-PPV-A
		200 mm	14081	DZH-63-200-PPV-A
		250 mm	14082	DZH-63-250-PPV-A
		300 mm	14083	DZH-63-300-PPV-A

1) DZF-25 ... 63: A hex nut for the piston rod thread is included in the scope of delivery.

Flat cylinder DZH-...-S6 – heat-resistant seals max. 120 °C				
	Piston diameter [mm] ¹⁾	Stroke	Part no.	Type
	16 mm	1 ... 200 mm	151156	DZH-16- -PPV-A-S6
	20 mm	1 ... 320 mm	151157	DZH-20- -PPV-A-S6
	25 mm	1 ... 500 mm	151158	DZH-25- -PPV-A-S6
	32 mm	1 ... 1000 mm	16531	DZH-32- -PPV-A-S6
	40 mm		16532	DZH-40- -PPV-A-S6
	50 mm		16533	DZH-50- -PPV-A-S6
	63 mm		16534	DZH-63- -PPV-A-S6

1) DZF-25 ... 63: A hex nut for the piston rod thread is included in the scope of delivery.

Flat cylinder DZH-...-S2 – through piston rod				
	Piston diameter [mm] ¹⁾	Stroke	Part no.	Type
	16 mm	1 ... 200 mm	151155	DZH-16- -PPV-A-S2
	20 mm	1 ... 320 mm	151154	DZH-20- -PPV-A-S2
	25 mm	1 ... 500 mm	151153	DZH-25- -PPV-A-S2
	32 mm	1 ... 1000 mm	151772	DZH-32- -PPV-A-S2
	40 mm		151773	DZH-40- -PPV-A-S2
	50 mm		151774	DZH-50- -PPV-A-S2
	63 mm		151775	DZH-63- -PPV-A-S2

1) DZF-25 ... 63: A hex nut for the piston rod thread is included in the scope of delivery.

Flat cylinder DZH-...-S20 – hollow through piston rod				
	Piston diameter [mm] ¹⁾	Stroke	Part no.	Type
	16 mm	1 ... 200 mm	158379	DZH-16- -PPV-A-S20

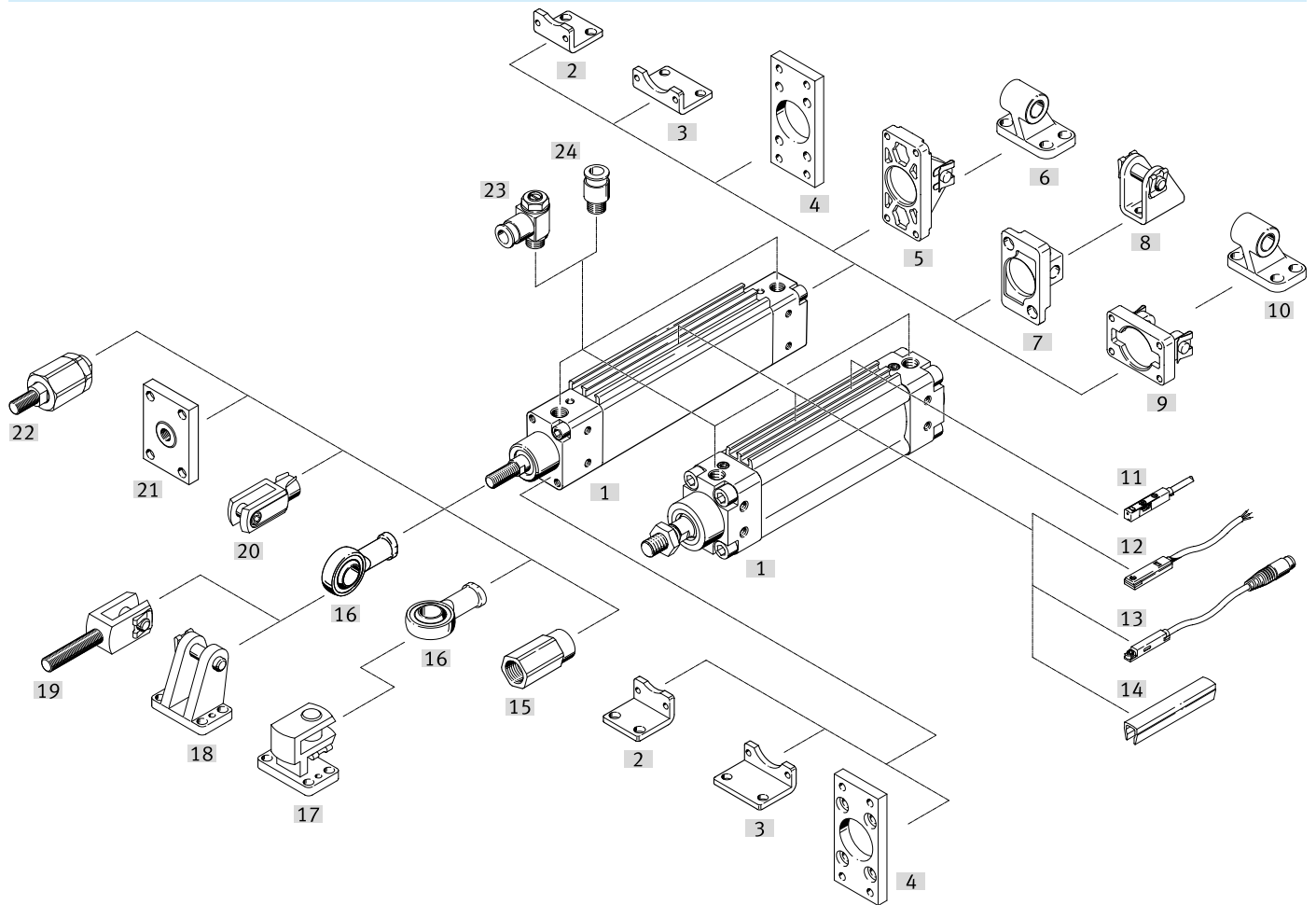
Ordering data

Flat cylinder DZH-...-S20 – hollow through piston rod				
	Piston diameter [mm] ¹⁾	Stroke	Part no.	Type
	20 mm	1 ... 320 mm	158380	DZH-20- -PPV-A-S20
	25 mm	1 ... 500 mm	158381	DZH-25- -PPV-A-S20

1) DZH-25: A hex nut for the piston rod thread is included in the scope of delivery.

Peripherals

Flat cylinder DZH

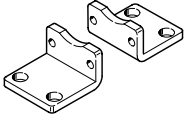


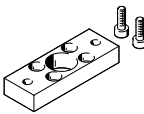
Accessories			→ Link
Type/order code	Description		
[1] Flat cylinder DZH	Double-acting		dzh
[2] Foot mounting HSZ, narrow	Bearing and end caps		23
[3] Foot mounting HZB, wide	Bearing and end caps		23
[4] Flange mounting FZS	For bearing and end caps		23
[5] Swivel flange SZS, narrow	For end caps		23
[6] Clevis foot LBZB	–		24
[6] Clevis foot LBZS	–		24
[7] Swivel flange SZSB, narrow	For end caps		23
[8] Clevis foot LBN	–		24
[9] Swivel flange SZB, wide	For end caps		23
[10] Clevis foot LN	–		24
[11] Proximity switch SDBT-MSX	Can be integrated into the cylinder profile barrel		26
[12] Proximity switch SME-8-...-S6	• For cylinder with heat-resistant seals • Can be integrated into the cylinder profile barrel		26
[13] Proximity switch SMT-8	Can be integrated in the cylinder profile barrel		26
[14] Slot cover ABP-5-S	For protecting the sensor cables and the sensor slots from contamination		27
[15] Adapter AD	For suction cup with connector		26
[16] Rod eye SGS	With spherical bearing		25
[17] Right-angle clevis foot LQG	–		24
[18] Clevis foot LBG	–		24
[19] Rod clevis SGA	With male thread		25
[20] Rod clevis SG	Permits a swivelling movement of the cylinder in one plane		25
[21] Coupling piece KSZ	For cylinders with non-rotating piston rod to compensate for radial deviations		25
[22] Self-aligning rod coupler FK	To compensate for radial and angular deviations		25
[23] One-way flow control valve GRLA	For regulating speed		27

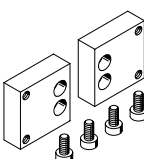
Peripherals

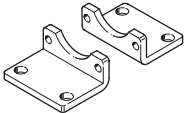
Accessories		→ Link
Type/order code	Description	
[23] One-way flow control valve GRLZ	For regulating speed	28
[24] Push-in fitting QS	For connecting compressed air tubing with standard O.D.	qs

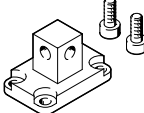
Accessories

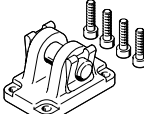
Foot mounting HZS					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 16	Steel	61 g	151933	HZS-16
	For Ø 20		72 g	151932	HZS-20
	For Ø 25		99 g	151931	HZS-25
	For Ø 32		114 g	14879	HZS-32
	For Ø 40		175 g	14880	HZS-40
	For Ø 50		283 g	14881	HZS-50
	For Ø 63		381 g	14882	HZS-63

Flange mounting FZS					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 16	Wrought aluminium alloy	27 g	151930	FZS-16
	For Ø 20		35 g	151929	FZS-20
	For Ø 25		43 g	151928	FZS-25
	For Ø 32		59 g	14887	FZS-32
	For Ø 40		76 g	14888	FZS-40
	For Ø 50		132 g	14889	FZS-50
	For Ø 63		248 g	14890	FZS-63

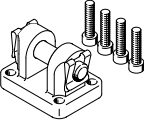
Foot mounting HZB-16 ... 25					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 16	Wrought aluminium alloy	48 g	151936	HZB-16
	For Ø 20		62 g	151935	HZB-20
	For Ø 25		85 g	151934	HZB-25

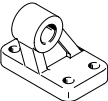
Foot mounting HZB-32 ... 63					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Steel, Galvanised	139 g	14875	HZB-32
	For Ø 40		243 g	14876	HZB-40
	For Ø 50		426 g	14877	HZB-50
	For Ø 63		673 g	14878	HZB-63

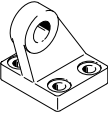
Swivel flange SZSB, narrow					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 16	Stainless steel casting	27 g	151927	SZSB-16
	For Ø 20		39 g	151926	SZSB-20
	For Ø 25		66 g	151925	SZSB-25

Swivel flange SZS, narrow					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Die-cast aluminium	79 g	14883	SZS-32
	For Ø 40		117 g	14884	SZS-40
	For Ø 50		167 g	14885	SZS-50
	For Ø 63		333 g	14886	SZS-63

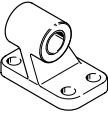
Accessories

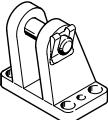
Swivel flange SZB, wide					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	High-alloy stainless steel	172 g	30798	SZB-32
	For Ø 40		288 g	30799	SZB-40
	For Ø 50		430 g	30629	SZB-50
	For Ø 63		679 g	30630	SZB-63

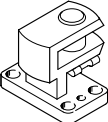
Clevis foot LBZB					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Tempered steel	131 g	33842	LBZB-32

Clevis foot LBZS					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Stainless steel casting	92 g	33843	LBZS-32
	For Ø 40		138 g	33844	LBZS-40
	For Ø 50		244 g	33845	LBZS-50
	For Ø 63		321 g	33846	LBZS-63

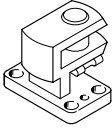
Clevis foot LBN					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 16	Steel, Galvanised	40 g	6058	LBN-12/16
	For Ø 20/25		84 g	6059	LBN-20/25

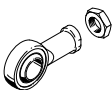
Clevis foot LN					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Tempered steel	149 g	5147	LN-32
	For Ø 40		192 g	5148	LN-40
	For Ø 50		323 g	5149	LN-50
	For Ø 63	Spheroidal graphite cast iron	545 g	5150	LN-63

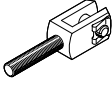
Clevis foot LBG					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Stainless steel casting	220 g	31761	LBG-32
	For Ø 40		300 g	31762	LBG-40
	For Ø 50		540 g	31763	LBG-50
	For Ø 63		580 g	31764	LBG-63

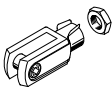
Clevis foot LQG, transverse					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 32	Stainless steel casting	301 g	31768	LQG-32

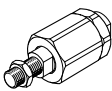
Accessories

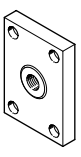
Clevis foot LQG, transverse					
	Description	Material mounting	Product weight	Part no.	Type
	For Ø 40	Stainless steel casting	369 g	31769	LQG-40
	For Ø 50		706 g	31770	LQG-50
	For Ø 63	Spheroidal graphite cast iron	784 g	31771	LQG-63

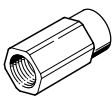
Rod eye SGS					
	Description	Material housing	Product weight	Part no.	Type
	for Ø 16	Galvanised steel	30 g	9254	SGS-M6
	For Ø 20		54 g	9255	SGS-M8
	For Ø 25/32		88 g	9261	SGS-M10X1,25
	for Ø 40		130 g	9262	SGS-M12X1,25
	for Ø 50/63		261 g	9263	SGS-M16X1,5

Rod clevis SGA					
	Description	Material rod eye	Product weight	Part no.	Type
	For Ø 25/32	Steel, Galvanised	129 g	32954	SGA-M10X1,25
	for Ø 40		222 g	10767	SGA-M12X1,25
	for Ø 50/63		512 g	10768	SGA-M16X1,5

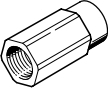
Rod clevis SG					
	Description	Material clevis	Product weight	Part no.	Type
	for Ø 16	Steel, Galvanised	22 g	3110	SG-M6
	For Ø 20		53 g	3111	SG-M8
	For Ø 25/32		103 g	6144	SG-M10X1,25
	for Ø 40		166 g	6145	SG-M12X1,25
	for Ø 50/63		375 g	6146	SG-M16X1,5

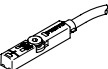
Self-aligning rod coupler FK					
	Description	Material housing	Product weight	Part no.	Type
	for Ø 16	Galvanised steel	24 g	2061	FK-M6
	For Ø 20		56 g	2062	FK-M8
	For Ø 25/32		236 g	6140	FK-M10X1,25
	for Ø 40		245 g	6141	FK-M12X1,25
	for Ø 50/63		709 g	6142	FK-M16X1,5

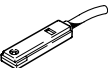
Coupling piece KSZ					
	Description	Material mounting	Product weight	Part no.	Type
	for Ø 16	Steel, Galvanised	45 g	36123	KSZ-M6
	For Ø 20		70 g	36124	KSZ-M8
	For Ø 25/32		110 g	36125	KSZ-M10X1,25
	for Ø 40		180 g	36126	KSZ-M12X1,25
	for Ø 50/63		246 g	36127	KSZ-M16X1,5

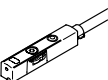
Adapter AD				Part no.	Type
	Description				
	for Ø 16			157329	AD-M6-1/8

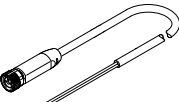
Accessories

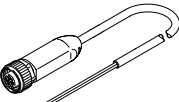
Adapter AD						
	Description	Part no.	Type			
	for Ø 16	157330	AD-M6-1/4			
		157328	AD-M6-M5			
	For Ø 20	157332	AD-M8-1/4			
		157331	AD-M8-1/8			
	For Ø 25	157334	AD-M10X1,25-1/4			
		157333	AD-M10X1,25-1/8			

Proximity switch SMT-8M for T-slot, magneto-resistive							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	
		3-wire PNP N/O contact		2.5 m	574335	SMT-8M-A-PS-24V-E-2,5-OE	
			Plug M8, A-coded	0.3 m	574334	SMT-8M-A-PS-24V-E-0,3-M8D	
			Plug M12, A-coded		574337	SMT-8M-A-PS-24V-E-0,3-M12	

Proximity switch SME-8-...-S6 for T-slot, solenoid reed - for DZH with heat-resistant seals							Link sme
	Type of mounting	Switching output	Electrical connection	Cable length	Part no.	Type	
	Clamped in T-slot, Insertable in the slot lengthwise	Contacting, bipolar	Open end	2.5 m	161756	SME-8-K-24-S6	

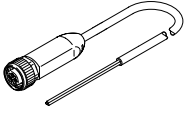
Proximity switch SDBT-MSX for T-slot, magnetic reed – for DZH-32 ... 63							Link sdbt
	Switching output	Switching element function	Electrical connection	Cable length	Part no.	Type	
	PNP/NPN, switchable	N/C or N/O contact, switchable	Open end	2.5 m	8059121	SDBT-MSX-1L-PU-E-2.5-N-LE	
					8059124	SDBT-MSX-1L-NU-E-2.5-N-LE	
			Plug M8, A-coded	0.3 m	8059123	SDBT-MSX-1L-NU-E-0.3-N-M8	
					8059120	SDBT-MSX-1L-PU-E-0.3-N-M8	

Connecting cables NEBA, straight, M8 connection						
	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

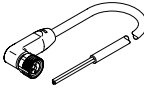
Connecting cables NEBA, straight, M12 connection						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5 m	8078236	NEBA-M12G5-U-2.5-N-LE3

Accessories

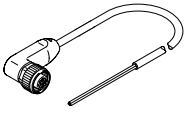
Connecting cables NEBA, straight, M12 connection

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	5 m	8078237	NEBA-M12G5-U-5-N-LE3

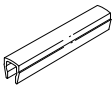
Connecting cables NEBA, angled, M8 connection

	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

Connecting cables NEBA, angled, M12 connection

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

Slot cover ABP for T-slot – for Ø 12 ... 63

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

One-way flow control valves GRLA – for exhaust air

	Pneumatic connection, port 2	Pneumatic connection 1	Part no.	Type
	M5	Push-in connector 3 mm	193137	GRLA-M5-QS-3-D
		Push-in connector 4 mm	193138	GRLA-M5-QS-4-D
		Push-in connector 6 mm	193139	GRLA-M5-QS-6-D
	G1/8	Push-in connector 3 mm	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
	G1/4	Push-in connector 6 mm	193146	GRLA-1/4-QS-6-D
		Push-in connector 8 mm	193147	GRLA-1/4-QS-8-D
		Push-in connector 10 mm	193148	GRLA-1/4-QS-10-D
	G3/8	Push-in connector 6 mm	193149	GRLA-3/8-QS-6-D
		Push-in connector 8 mm	193150	GRLA-3/8-QS-8-D
		Push-in connector 10 mm	193151	GRLA-3/8-QS-10-D

Accessories

One-way flow control valves GRLZ – for supply air				
	Pneumatic connection, port 2	Pneumatic connection 1	Part no.	Type
	M5	Push-in connector 3 mm	193153	GRLZ-M5-QS-3-D
		Push-in connector 4 mm	193154	GRLZ-M5-QS-4-D
		Push-in connector 6 mm	193155	GRLZ-M5-QS-6-D
	G1/8	Push-in connector 3 mm	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