

Flat Cylinders DZH - Inch Series

Overview

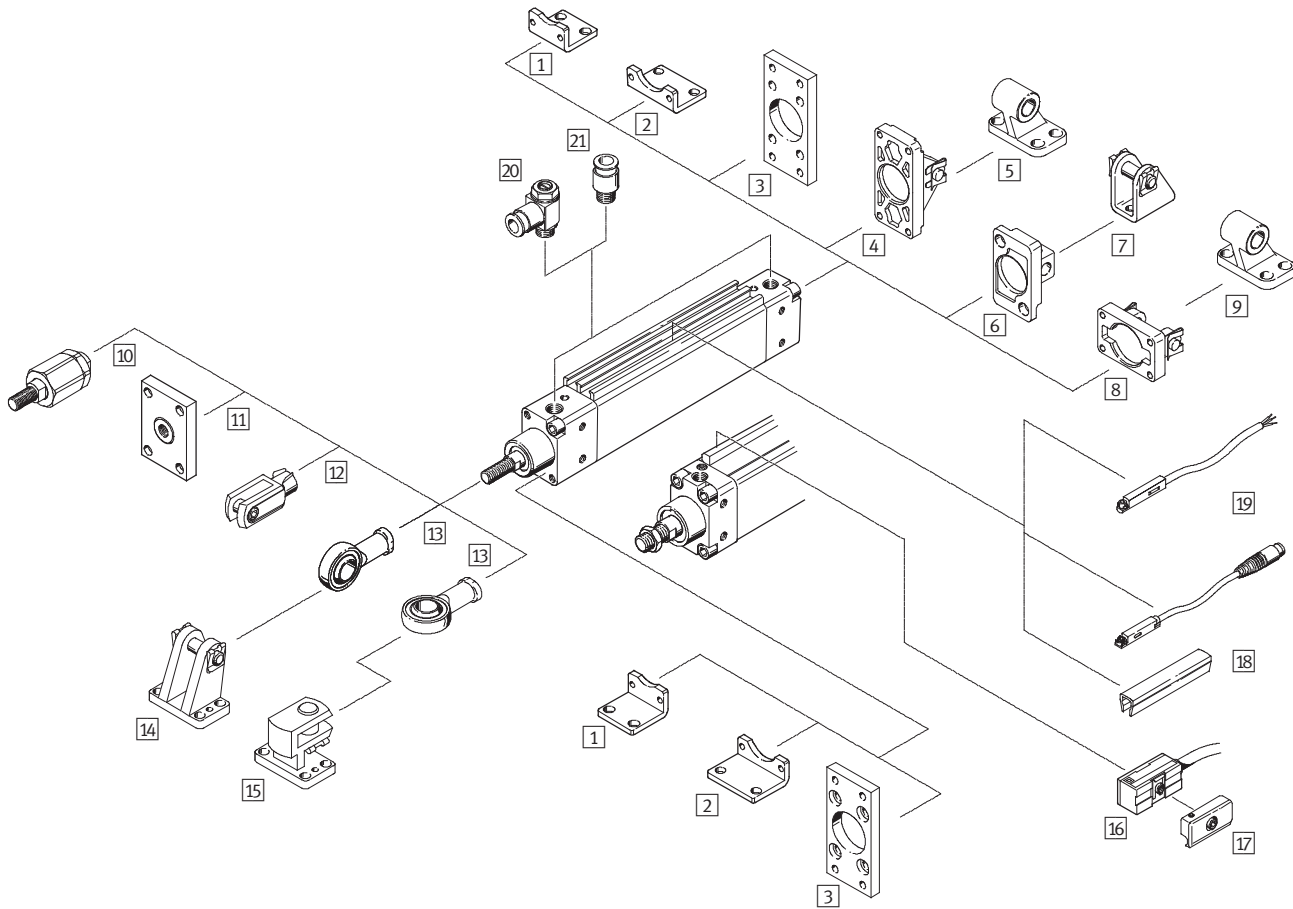


- Non-rotating oval piston
- Piston \varnothing 5/8" to 2-1/2"
- Strokes up to 40"
- Double-acting
- Moment capacity up to 2.2 lbf-in
- Extensive range of accessories
- Versatile mounting options

Product range overview								
Function	Design	Type	Piston \varnothing	Variable stroke	Standard stroke	Magnet for position sensing (A)	Piston rod	Heat resistant seals up to 302 °F (S6)
			[in]	[in]	[in]		male thread	
Double-acting flat cylinder		DZH Single-ended piston rod	5/8	0.04 ... 8	1, 2, 3, 4, 5, 6, 8	■	■	■
			3/4	0.04... 13	1, 2, 3, 4, 5, 6, 8, 10, 12			
			1, 1-1/4, 1-5/8, 2, 2-1/2	0.04... 40	1, 2, 3, 4, 5, 6, 8, 10, 12			
		DZH-...-S2 Through piston rod	5/8	0.04... 8	–	■	■	–
			3/4	0.04... 13	–			
			1, 1-1/4, 1-5/8, 2, 2-1/2	0.04... 40	–			

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Accessories overview

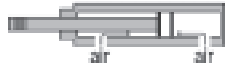


Mounting attachments and accessories		Description	Piston \varnothing 5/8" ... 1"	1-1/4" ... 2-1/2"
1	Foot mounting, narrow HZS	for bearing and end caps	■	■
2	Foot mounting, wide HZB	for bearing and end caps	■	■
3	Flange mounting FZS	for bearing and end caps	■	■
4	Swivel flange, narrow SZS	for end caps	-	■
5	Clevis foot LBZB/LBZS	-	-	■
6	Swivel flange, narrow SZSB	for end caps	■	-
7	Clevis foot LBN	-	■	-
8	Swivel flange, wide SZB	for end caps	-	■
9	Clevis foot LN	-	-	■
10	Self-aligning rod coupler FK	for compensating radial and angular deviations	■	■
11	Coupling piece KSZ	for cylinders with a non-rotating piston rod to compensate for radial deviations	■	■
12	Rod clevis SG	permits a swivelling movement of the cylinder in one plane	■	■
13	Rod eye SGS	with spherical bearing	■	■
14	Clevis foot LBG	-	■	■
15	Right-angle clevis foot LQG	-	■	■
16	Proximity sensors SMxO-1	-	-	■
17	Mounting kit SMB-1	-	-	■
18	Slot cover ABP-5-S	to protect the sensor cable and keep dirt out of the sensor slots	■	-
19	Proximity sensors SME/SMT-8	can be integrated in the cylinder profile barrel	■	-
20	One-way flow control valve GRLx	to regulate speed	■	■
21	Push-in fitting QS	for connecting compressed air tubing with standard external diameters	■	■

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Technical Data

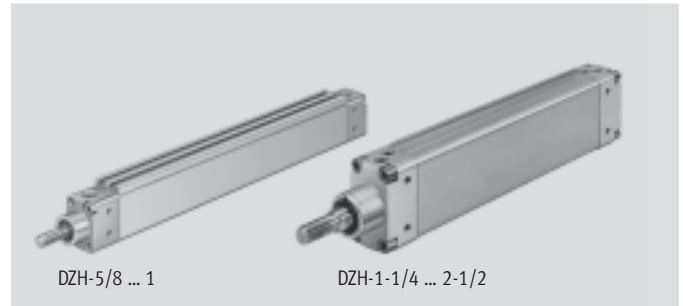
Double-acting



- N- Equivalent Piston Diameter
5/8 ... 2-1/2 inch
- T- Stroke length
0.4 ... 40 inch

Options:

- Non rotating
- Through piston rod (S2)
- Heat resistant variant (S6)



Design							
Piston Ø	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2
Pneumatic connection	10-32 UNF	1/8" NPT	1/8" NPT	1/8" NPT	1/4" NPT	1/4" NPT	3/8" NPT
End of piston rod Male thread	10-32 UNF	5/16-24 UNF	3/8-24 UNF	3/8-24 UNF	1/2-20 UNF	5/8-18 UNF	5/8-18 UNF
Operating medium	Filtered compressed air, lubricated or unlubricated						
Constructional design	Piston						
	Piston rod						
Protection against torsion	Oval piston						
Cushioning	Adjustable air cushioning at both ends						
Cushioning length [in]	0.55	0.67	0.67	0.75	0.83	0.91	0.23
Magnet for position sensing ¹⁾	Standard						

1) Position sensing via magnetic proximity sensor (ordered separately, see accessories).

Operating pressure [psi]							
Piston Ø	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2
	14.5 ... 145			9 ... 145			

Ambient conditions		
Variant	Basic version	S6
Ambient temperature ¹⁾ [°F]	-4 ... +176	32 ... +302
Corrosion resistance class CRC ²⁾	2	2

1) Observe operating range of proximity sensors.

2) Corrosion resistance class 2 according to Festo standard 940 070

Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

Forces [lbf] and torques [ft-lbf]							
Piston Ø	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2
Theoretical force at 90 psi, extending	27.2	42.3	66.3	108.6	169.5	264.8	420.4
	S2 23.4	35.5	55.5	93.3	142.3	222.3	378.1
Theoretical force at 90 psi, retracting	23.4	35.5	55.5	93.3	142.3	222.3	378.1
	S2 23.4	35.5	55.5	93.3	142.3	222.3	378.1
Max. torque at the piston rod ¹⁾	0.55	0.66	0.89	1.11	1.33	1.88	2.21

1) The max. torque must also be observed when fitting mounting attachments to the piston rod.

Weights [oz]							
Piston Ø	5/8	3/4	1	1-1/4	1-5/8	2	2-1/2
Product weight at 0 inch stroke	4.9	8.1	11.6	17.6	29.0	42.3	59.6
Additional weight per 1 inch stroke	1.0	1.3	1.9	2.7	3.6	5.4	7.1

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Data sheet

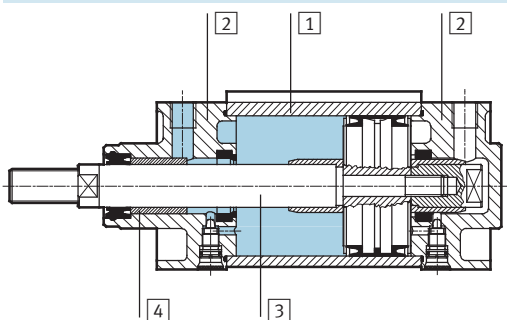


Minimum stroke length [inch] for magnetic position sensing with one proximity sensor				
Piston \varnothing	1-1/4	1-5/8	2	2-1/2
SMEO-1/SMT0-1				
Plug	0.4			
Cable				

Minimum stroke length [inch] for magnetic position sensing with two proximity sensors					
Piston \varnothing	1-1/4	1-5/8	2	2-1/2	
SMEO-1					
Plug	outlet towards caps	3.4	3.4	3.5	3.6
	outlet towards center	1.8	1.9	1.9	2.0
Cable	outlet towards caps	2.5	2.5	2.6	2.7
	outlet towards center	1.9	2.0	2.0	2.1
SMT0-1					
Plug	outlet towards caps	4.1	4.2	4.2	4.2
	outlet towards center	not possible as the plug would cover the pneumatic port			
Cable	outlet towards caps	3.2	3.3	3.3	3.4
	outlet towards center	0.7	0.8	0.8	0.9

Materials

Sectional view



Cylinder	Basic version	S6
1 Cylinder barrel	Anodized aluminum	Anodized aluminum
2 Bearing end cap	Aluminum	Aluminum
3 Piston rod	\varnothing 5/8 ... 1	Stainless steel
	\varnothing 1-1/4 ... 2-1/2	High-alloy steel
4 Dynamic seals	Polyurethane	Fluorocarbon rubber

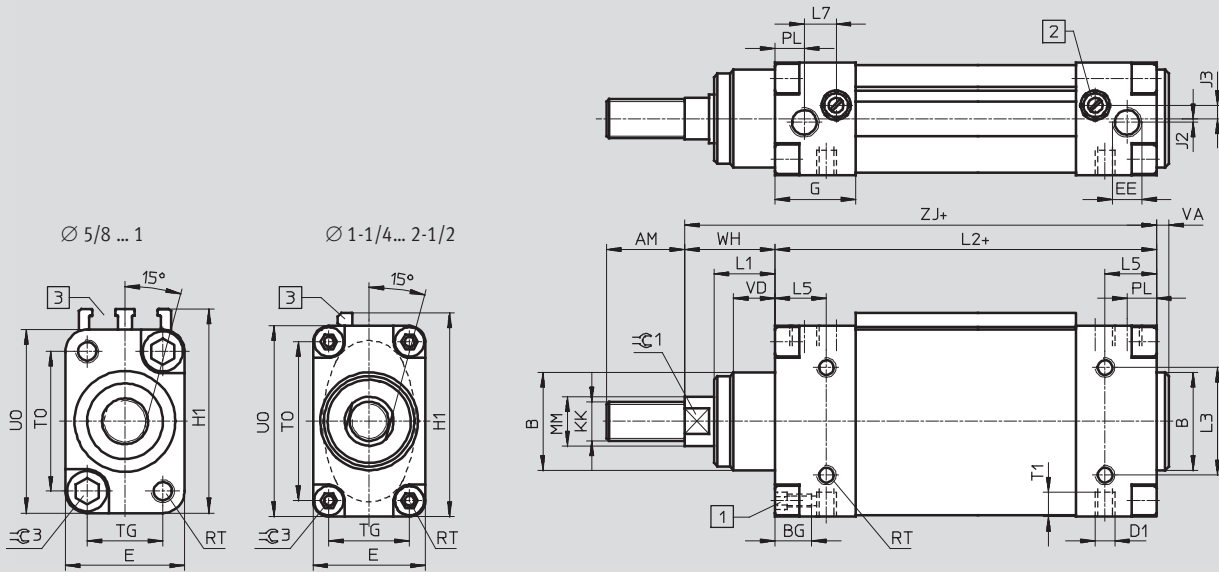
Flat cylinders DZH - Inch Series

Data sheet



Dimensions

Basic version



- 1 Socket head screw with female thread
- 2 Regulating screw for adjustable end-position cushioning
- 3 \varnothing 5/8 ... 1: Mounting slot for proximity sensors
 \varnothing 1-1/4 ... 2-1/2: Mounting rail for proximity sensor

+ = plus stroke length

\varnothing [in]	AM	B \varnothing	BG	D1	D8 \varnothing	E	EE	G	H1	J2	J3	KK	L1	L2	L3
5/8	0.6	0.6	0.2	8-32 UNC	0.1	0.8	10-32 UNF	0.8	1.4	-0.03	0.1	10-32 UNF	0.5	3.1	0.5
3/4	0.8	0.8	0.2	8-32 UNC	0.1	0.9	1/8" NPT	1.0	1.6	-0.03	0.2	5/16-24 UNF	0.6	3.6	0.6
1	0.9	0.9	0.3	10-24 UNC	0.1	1.0	1/8" NPT	1.0	1.8	-0.01	0.2	3/8-24 UNF	0.6	3.6	0.7
1-1/4	0.9	1.2	0.5	1/4-20 UNC	-	1.4	1/8" NPT	1.1	2.1	-	0.1	3/8-24 UNF	0.6	3.7	0.7
1-5/8	0.9	1.4	0.5	1/4-20 UNC	-	1.6	1/4" NPT	1.3	2.6	-	0.2	1/2-20 UNF	0.8	4.1	1.3
2	1.3	1.6	0.6	5/16-18 UNC	-	1.8	1/4" NPT	1.3	3.2	0.10	0.1	5/8-18 UNF	1.0	4.2	1.7
2-1/2	1.3	1.7	0.6	3/8-16 UNC	-	2.1	3/8" NPT	1.4	4.3	0.16	0.2	5/8-18 UNF	1.1	4.5	2.5

\varnothing [in]	L5	L7	MM \varnothing	PL	RT	T1	TG	TO	UO	VA	VD	WH	ZJ	ZM	\approx C1 [mm]	\approx C3 [mm]
5/8	0.47	0.33	0.2	0.30	M4	0.2	0.5	0.9	1.2	0.1	0.5	0.7	3.8	4.5	5	4
3/4	0.59	0.41	0.3	0.37	M4	0.2	0.6	1.1	1.4	0.1	0.6	0.7	4.3	5.0	7	4
1	0.63	0.39	0.4	0.41	M5	0.3	0.6	1.2	1.6	0.1	0.6	0.8	4.4	5.3	9	5
1-1/4	0.51	0.40	0.5	0.35	M5	0.4	1.0	1.4	1.9	0.2	0.6	1.0	4.7	5.8	10	6
1-5/8	0.65	0.52	0.6	0.43	M5	0.4	1.1	2.0	2.4	0.2	0.8	1.2	5.3	6.5	13	6
2	0.83	0.55	0.8	0.41	M6	0.4	1.3	2.6	3.1	0.2	0.7	1.5	5.6	7.1	17	6
2-1/2	0.89	0.57	0.8	0.49	M6	0.5	1.6	3.5	4.1	0.2	0.8	1.6	6.1	7.7	17	6

Note

The maximum permissible torque must not be exceeded when attaching components onto the piston rod. Counterhold by means of the wrench flats \approx C1.

Dimensions are in inches, unless otherwise noted.

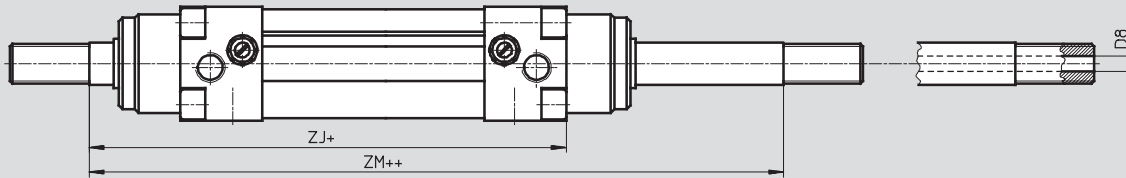
Flat cylinders DZH - Inch Series

Data sheet



Dimensions

Variant S2 – Through piston rod



+ = plus stroke length ++ = plus 2x stroke length

Ø [in]	D8 Ø	ZJ	ZM
5/8	0.09	3.8	4.5
3/4	0.13	4.3	5.0
1	0.15	4.4	5.3
1-1/4	-	4.7	5.8
1-5/8	-	5.3	6.5
2	-	5.6	7.1
2-1/2	-	6.1	7.7

Dimensions are in inches, unless otherwise noted.

Flat cylinders DZH - Inch Series

Ordering Data



M Mandatory data					O Options	
Function	Piston Ø	Stroke	Cushioning	Magnet for position sensing	Type of piston rod	Temperature Resistant
DZH	5/8 3/4 1 1 1/4 1 5/8 2 2 1/2	0.04 ... 40	PPV	A	S2	S6
DZH	- 1 5/8	- 10	- PPV	- A	- S6	

Ordering table										
Size	5/8	3/4	1	1 1/4	1 5/8	2	2 1/2	Conditions	Code	Enter code
M Function	Flat, double-acting cylinder								DZH	DZH
Piston Ø [in]	5/8	3/4	1	1 1/4	1 5/8	2	2 1/2		-...	
Stroke [in]	0.04 ... 40								-...	
Cushioning	Adjustable air cushioning at both ends								-PPV	-PPV
Magnet for position sensing	For use with magnetic proximity sensor								-A	-A
O Type of piston rod	Through piston rod								-S2	
Temperature resistant	Heat-resistant seals up to max. 302 °F							1	-S6	

1 Not in combination with S2

Transfer order code

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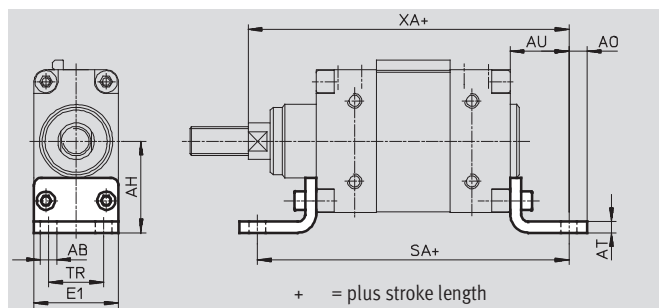
Flat cylinders DZH - Inch Series

Accessories



Foot mounting HZS, narrow

Material:
Steel
Free of copper, PTFE and silicone

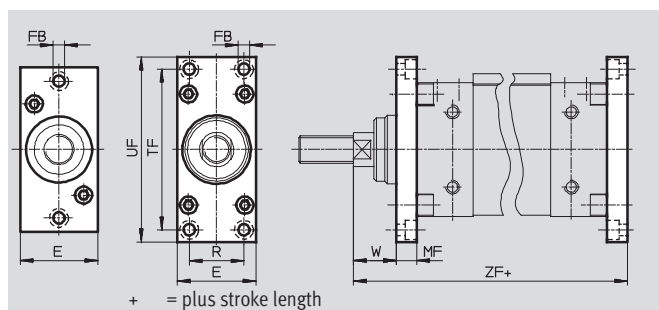


Dimensions and ordering data													
For \varnothing [in]	AB \varnothing	AH	AO	AT	AU	E1	SA	TR	XA	CRC ¹⁾	Weight [oz]	Part No.	Type
5/8	0.2	1.0	0.2	0.2	0.8	0.8	4.7	0.5	4.6	2	2.1	151933	HZS-16
3/4	0.2	1.1	0.2	0.2	0.8	0.9	5.2	0.6	5.1	2	2.5	151932	HZS-20
1	0.2	1.2	0.2	0.2	1.0	1.0	5.6	0.6	5.4	2	3.2	151931	HZS-25
1-1/4	0.3	1.3	0.3	0.2	0.9	1.4	5.6	0.9	5.7	2	3.7	14879	HZS-32
1-5/8	0.4	1.6	0.4	0.2	1.1	1.6	6.3	1.0	6.4	2	5.8	14880	HZS-40
2	0.4	2.0	0.4	0.2	1.3	1.8	6.7	1.2	6.9	2	9.5	14881	HZS-50
2-1/2	0.4	2.4	0.6	0.2	1.4	2.1	7.3	1.5	7.5	2	12.9	14882	HZS-63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

Flange mounting FZS

Material:
Wrought aluminum alloy



Dimensions and ordering data												
For \varnothing [in]	E	FB \varnothing	MF	R	TF	UF	W	ZF	CRC ¹⁾	Weight [oz]	Part No.	Type
5/8	0.8	0.19	0.4	-	1.9	2.4	0.3	4.2	2	1.1	151930	FZS-16
3/4	0.9	0.19	0.4	-	2.1	2.8	0.3	4.7	2	1.4	151929	FZS-20
1	1.1	0.23	0.4	-	2.4	3.0	0.4	4.8	2	1.8	151928	FZS-25
1-1/4	1.4	0.23	0.4	0.9	2.4	3.0	0.6	5.1	2	2.1	14887	FZS-32
1-5/8	1.6	0.23	0.4	1.1	3.1	3.5	0.8	5.7	2	2.8	14888	FZS-40
2	1.8	0.27	0.5	1.3	3.7	4.3	1.0	6.1	2	4.8	14889	FZS-50
2-1/2	2.1	0.27	0.6	1.6	4.7	5.3	1.0	6.7	2	9.2	14890	FZS-63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

All dimensions are in inches, unless otherwise noted.

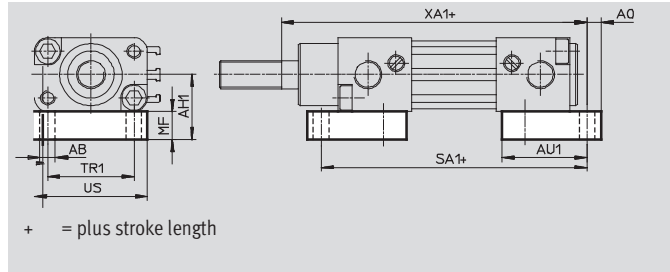
Flat cylinders DZH - Inch Series

Accessories



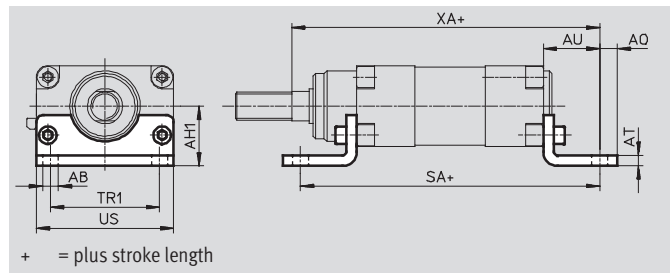
Foot mounting HZB, wide for piston \varnothing 5/8 ... 1 inch

Material:
Wrought aluminum alloy



for piston \varnothing 1-1/4 ... 2-1/2 inch

Material:
Steel

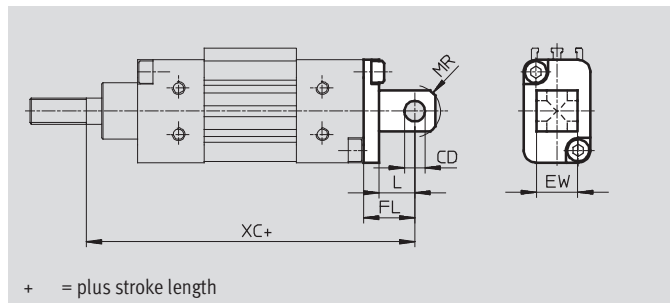


Dimensions and ordering data																	
For \varnothing [in]	AB \varnothing	AH1	AO	AT	AU	AU1	MF	SA	SA1	TR1	US	XA	XA1	CRC ¹⁾	Weight [oz]	Part No.	Type
5/8	0.2	0.8	0.2	-	-	0.9	0.4	-	3.5	0.9	1.2	-	4.0	2	1.8	151936	HZB-16
3/4	0.2	0.8	0.2	-	-	1.0	0.4	-	4.0	1.1	1.4	-	4.5	2	2.1	151935	HZB-20
1	0.2	0.9	0.2	-	-	1.2	0.4	-	4.1	1.2	1.6	-	4.7	2	2.8	151934	HZB-25
1-1/4	0.3	1.0	0.3	0.2	0.9	-	-	5.6	-	1.3	1.9	5.7	-	2	4.6	14875	HZB-32
1-5/8	0.4	1.1	0.4	0.2	1.1	-	-	6.3	-	1.8	2.4	6.4	-	2	8.3	14876	HZB-40
2	0.4	1.3	0.4	0.2	1.3	-	-	6.7	-	2.4	3.1	6.9	-	2	14.5	14877	HZB-50
2-1/2	0.4	1.5	0.6	0.2	1.4	-	-	7.3	-	3.5	4.1	7.5	-	2	22.6	14878	HZB-63

1) Corrosion resistance class 2 according to Festo standard 940 070
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

Swivel flange SZSB, narrow/wide for piston \varnothing 5/8 ... 1 inch

Material:
High-alloy stainless steel



Dimensions and ordering data								
For \varnothing [in]	CD \varnothing	EW	FL	L	XC	Weight [oz]	Part No.	Type
5/8	0.16	0.3	0.6	0.3	4.3	0.35	151927	SZSB-16
3/4	0.24	0.5	0.6	0.4	4.9	0.71	151926	SZSB-20
1	0.31	0.6	0.8	0.6	5.2	1.41	151925	SZSB-25

All dimensions are in inches, unless otherwise noted.

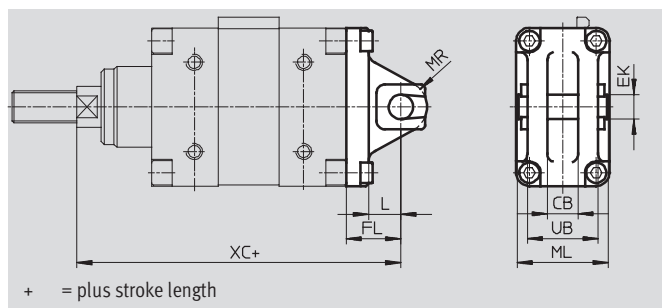
Flat cylinders DZH - Inch Series

Accessories



Swivel flange SZS, narrow for piston \varnothing 1-1/4 ... 2-1/2 inch

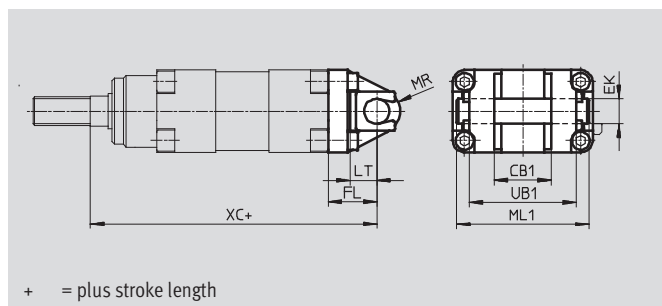
Material:
Die-cast aluminum



Dimensions and ordering data											
For \varnothing [in]	CB	EK \varnothing	FL	L	ML	MR	UB	XC	Weight [oz]	Part No.	Type
1-1/4	0.37	0.4	0.9	0.53	1.40	0.4	1.02	5.6	2.8	14883	SZS-32
1-5/8	0.49	0.5	1.0	0.61	1.56	0.5	1.13	6.3	4.2	14884	SZS-40
1	0.57	0.5	1.1	0.61	1.80	0.5	1.37	6.7	6.0	14885	SZS-50
2-1/2	0.65	0.6	1.4	0.88	2.11	0.7	1.61	7.5	11.3	14886	SZS-63

Swivel flange SZB, wide for piston \varnothing 1-1/4 ... 2-1/2 inch

Material:
High-alloy stainless steel



Dimensions and ordering data											
For \varnothing [in]	CB1	EK \varnothing	FL	LT	ML1	MR	UB1	XC	Weight [oz]	Part No.	Type
1-1/4	0.6	0.4	0.9	0.6	1.9	0.4	1.4	5.6	6.0	30798	SZB-32
1-5/8	1.1	0.5	1.0	0.6	2.4	0.5	2.0	6.3	9.9	30799	SZB-40
2	1.3	0.5	1.1	0.6	3.0	0.5	2.4	6.7	14.5	30629	SZB-50
2-1/2	1.6	0.6	1.4	0.9	4.1	0.7	2.8	7.5	23.3	30630	SZB-63

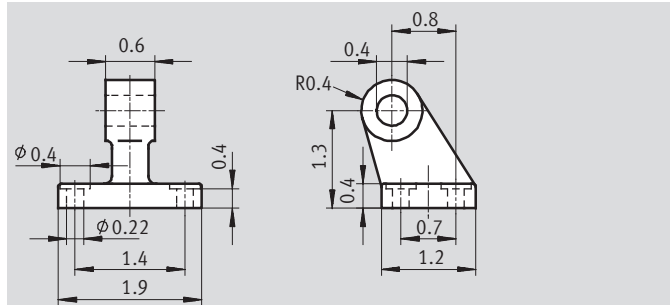
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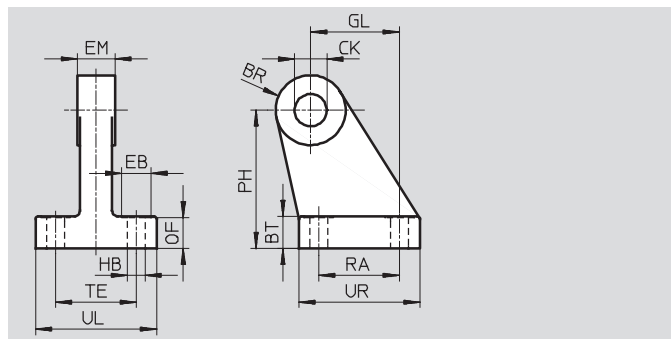
Clevis foot LBZB for piston \varnothing 1-1/4 inch

Material:
High-alloy stainless steel



Clevis foot LBZS for piston \varnothing 1-1/4 ... 2-1/2 inch

Material:
High-alloy stainless steel



Dimensions and ordering data															Weight	Part No.	Type
For \varnothing [in]	BR	BT	CK	EB	EM	GL	HB	OF	PH	RA	TE	UL	UR	[oz]			
LBZB																	
1-1/4	Dimensions → shown above															33842	LBZB-32
LBZS																	
1-1/4	0.4	0.3	0.4	0.4	0.4	0.8	0.22	0.29	1.3	0.7	0.9	1.4	1.2	3.2	33843	LBZS-32	
1-5/8	0.4	0.4	0.5	0.4	0.4	0.9	0.22	0.37	1.6	0.9	1.1	1.5	1.4	4.8	33844	LBZS-40	
2	0.5	0.5	0.5	0.4	0.5	1.3	0.26	0.45	2.0	1.2	1.2	1.8	1.8	8.3	33845	LBZS-50	
2-1/2	0.6	0.5	0.6	0.4	0.6	1.5	0.26	0.44	2.4	1.4	1.5	2.1	2.0	10.8	33846	LBZS-63	


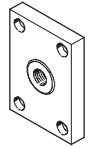


All dimensions are in inches, unless otherwise noted.


Ordering data – Mounting attachments				Ordering data – Mounting attachments			
Designation	For \varnothing [in]	Part No.	Type	Designation	For \varnothing [in]	Part No.	Type
Clevis foot LBN				Clevis foot LN			
	5/8	6058	LBN-12/16		1-1/4	5147	LN-32
	3/4	6059	LBN-20/25		1-5/8	5148	LN-40
	1				2	5149	LN-50
			2-1/2		5150	LN-63	
Clevis foot LBG				Right-angle clevis foot LQG			
	1-1/4	31761	LBG-32		1-1/4	31768	LQG-32
	1-5/8	31762	LBG-40		1-5/8	31769	LQG-40
	2	31763	LBG-50		2	31770	LQG-50
	2-1/2	31764	LBG-63		2-1/2	31771	LQG-63


Flat cylinders DZH - Inch Series


Accessories




Ordering data – Piston rod attachments				Ordering data – Piston rod attachments			
Designation	For Ø [in]	Part No.	Type	Designation	For Ø [in]	Part No.	Type
Rod eye SGS				Coupling piece KSZ			
	5/8	532694	SGS-10-32		5/8	–	
	3/4	13002871	SGS-5/16-24		3/4		
	1	532696	SGS-3/8-24		1	36129	KSZ-3/8-24-UNF
	1-1/4				1-1/4		
	1-5/8	532697	SGS-1/2-20		1-5/8	36130	KSZ-1/2-20-UNF
	2	532698	SGS-5/8-18		2	36131	KSZ-5/8-18-UNF
	2-1/2			2-1/2			
Rod clevis SG				Self-aligning rod coupler FK			
	5/8	13005667	SG-10-32		5/8	532703	FK-10-32
	3/4	11129	SG-5/16"-24		3/4	532704	FK-5/16-24
	1	546540	SG-3/8"-24-B		1	532705	FK-3/8-24
	1-1/4				1-1/4		
	1-5/8	546545	SG-1/2-20-B		1-5/8	532706	FK-1/2-20
	2	546575	SG-5/8-18-B		2	532707	FK-5/8-18
	2-1/2			2-1/2			

Ordering data – Block-shaped proximity sensor, magneto-resistive							
	Mounting	Switch output	Electrical connection		Cable length [ft]	Part No.	Type
			Cables	M8 plug			
NO contact							
	With mounting kit	PNP	3 wires	–	8.2	151 683	SMT0-1-PS-K-LED-24-C
			–	3-pin	–	151 685	SMT0-1-PS-S-LED-24-C
		NPN	3 wires	–	8.2	151 684	SMT0-1-NS-K-LED-24-C
			–	3-pin	–	151 686	SMT0-1-NS-S-LED-24-C

Ordering data – Block-shaped proximity sensor, magnetic reed						
	Mounting	Electrical connection		Cable length [ft]	Part No.	Type
		Cables	M8 plug			
NO contact						
	With mounting kit	3 wires	–	8.2	30459	SME0-1-LED-24-B
		3 wires	–	16.4	151672	SME0-1-LED-24-K5-B
		–	3-pin	–	150848	SME0-1-S-LED-24-B




Ordering data – Block-shaped proximity sensor, pneumatic						
	Mounting	Pneumatic connection			Part No.	Type
3/2-way valve, normally closed						
	With mounting kit	Barbed fitting for tubing ID of 0.1 inch			31008	SMPO-1-H-B




Ordering data – Mounting kit						
	Mounting				Part No.	Type
	for cylinder with tie rod Ø 0.2 inch or DUO rail mounting profile				11886	SMB-1



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Ordering data – Proximity switches for T-slot, magneto-resistive					Technical data → www.festo.com/catalog/sm	
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	2.5	543867	SMT-8M-PS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543866	SMT-8M-PS-24V-K-0,3-M8D
			Plug M12x1, 3-pin	0.3	543869	SMT-8M-PS-24V-K-0,3-M12
		NPN	Cable, 3-wire	2.5	543870	SMT-8M-NS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543871	SMT-8M-NS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	PNP	Cable, 3-wire	2.5	175436	SMT-8-PS-K-LED-24-B
			Plug M8x1, 3-pin	0.3	175484	SMT-8-PS-S-LED-24-B
N/C contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	7.5	543873	SMT-8M-PO-24V-K7,5-OE

Ordering data – Proximity switches for T-slot, magnetic reed					Technical data → www.festo.com/catalog/sm	
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with 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
			Plug M8x1, 3-pin	2.5	543872	SME-8M-ZS-24V-K-2,5-OE
				0.3	543861	SME-8M-DS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	150855	SME-8-K-LED-24
			Plug M8x1, 3-pin	0.3	150857	SME-8-S-LED-24
N/C contact						
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	160251	SME-8-0-K-LED-24



Ordering data – Connecting cables				Technical data → www.festo.com/catalog/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 [ft]	Part No.	Type
	inserted from above	2x 0.5	151680	ABP-5-S

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Ordering data – One-way flow control valves				
	Connection		Part No.	Type
	Thread	For tubing OD		
For exhaust air				
	10-32 UNF	5/32	165008	GRLA-10-32-UNF-QS-5/32-U
		1/4	192753	GRLA-10-32-UNF-QS-1/4-U
	1/8" NPT	5/32	165009	GRLA-1/8-NPT-QS-5/32-U
		3/16	190941	GRLA-1/8-NPT-QS-3/16-U
		1/4	165010	GRLA-1/8-NPT-QS-1/4-U
		5/16	165013	GRLA-1/8-NPT-QS-5/16-U
		3/16	190944	GRLA-1/4-NPT-QS-3/16-U
	1/4" NPT	1/4	165011	GRLA-1/4-NPT-QS-1/4-U
		5/16	165014	GRLA-1/4-NPT-QS-5/16-U
		3/8	190947	GRLA-1/4-NPT-QS-3/8-U
		1/4	165012	GRLA-3/8-NPT-QS-1/4-U
	3/8" NPT	5/16	165015	GRLA-3/8-NPT-QS-5/16-U
		3/8	190950	GRLA-3/8-NPT-QS-3/8-U
		1/2	190951	GRLA-3/8-NPT-QS-1/2-U
For supply air				
	10-32 UNF	-	151576	GRLZ-10-UNF-B
			151579	GRLZ-10-UNF-RS-B
		3/16	151577	GRLZ-10-UNF-3/16-B
		1/4	151578	GRLZ-10-UNF-1/4-B
	1/8" NPT	-	151561	GRLZ-1/8-NPT-B
			151564	GRLZ-1/8-NPT-RS-B
		1/4	151562	GRLZ-1/8-NPT-1/4-B

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