

Round Cylinders ESNU, Single-acting – Inch Series



- Piston \varnothing 5/16" to 2-1/2"
- Stroke lengths up to 2"
- Single-acting, spring return
- Meets the highest requirements for running characteristics, service life and load carrying ability
- Extensive range of accessories

Product Range Overview							
Function	Type	Piston \varnothing	Standard Stroke	Variable Stroke ¹⁾	Force	Variants	
		[in]	[in]	[in]	[lbf]	P	A
Single-acting, spring return	ESNU	5/16, 3/8, 1/2, 5/8, 3/4, 1	3/8, 1, 2	0.04 $\bar{\text{I}}$ 2	0.6 $\bar{\text{I}}$ 60.7	■	■
		1-1/4, 1-5/8, 2, 2-1/2	1/2, 1, 2	0.125 $\bar{\text{I}}$ 2	12 $\bar{\text{I}}$ 402	■	■

1) Reliable position sensing requires a minimum stroke of 0.4 inch.

P Flexible cushioning at both ends A Magnet for position sensing

Round Cylinders ESNU – Inch Series (Sizes 5/16” to 1”)



Technical Data

Single-acting, spring return



∅ - Diameter
5/16 ... 1 in

— - Stroke length
0.04 ... 2 in



General Technical Data						
Piston ∅ [in]	5/16	3/8	1/2	5/8	3/4	1
Pneumatic connection	10-32 UNF	10-32 UNF	10-32 UNF	10-32 UNF	1/8" NPT	1/8" NPT
Piston rod thread	6-32 UNF	6-32 UNF	10-32 UNF	10-32 UNF	5/16-24 UNF	3/8-24 UNF
Constructional design	Piston					
	Piston rod					
	Cylinder barrel					
Cushioning	Flexible cushioning rings at both ends (P)					
Magnet for position sensing ¹⁾	Optional					

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

Operating Pressure [psi]						
Piston ∅ [in]	5/16	3/8	1/2	5/8	3/4	1
Operating medium	Filtered compressed air, lubricated or unlubricated					
Operating pressure [psi]	22.1 ... 147.0	17.7 ... 147.0				

Ambient Conditions	
Ambient temperature ¹⁾ [°F]	-4 ... +176
Corrosion resistance class CRC ²⁾	2

1) Note 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.

Round Cylinders ESNU – Inch Series (Sizes 5/16" to 1")

Technical Data

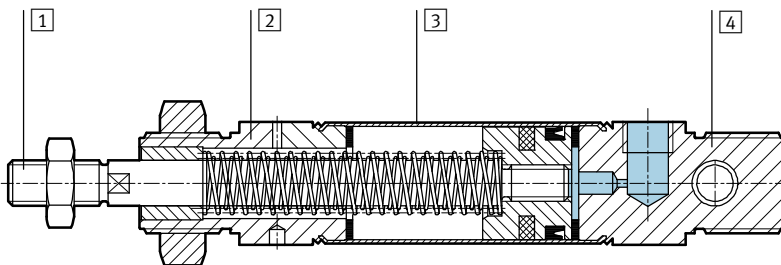
Forces [lbf] and Impact Energy [ft-lbf]						
Piston \varnothing [in]	5/16	3/8	1/2	5/8	3/4	1
Theoretical force at 90 psi, extending	5.4	9.2	13.7	24.1	38.0	60.7
Max. spring return force, 0.4 inch stroke	1.1	1.1	1.4	3.0	4.1	5.1
Max. spring return force, 1 inch stroke	0.9	0.9	1.2	2.7	3.7	4.8
Max. spring return force, 2 inch stroke	0.6	1.1	0.9	2.2	3.1	4.2
Max. impact energy at the end positions ¹⁾	0.02	0.04	0.05	0.11	0.15	0.22

1) The values are reduced by approx. 50% at 176 °F

Weights ESNU... [oz]						
Piston \varnothing [in]	5/16	3/8	1/2	5/8	3/4	1
Product weight with 0 inch stroke	1.2	1.3	2.6	3.2	6.6	8.4
Additional weight per 1 inch stroke	0.20	0.25	0.36	0.41	0.64	0.99

Materials

Sectional view

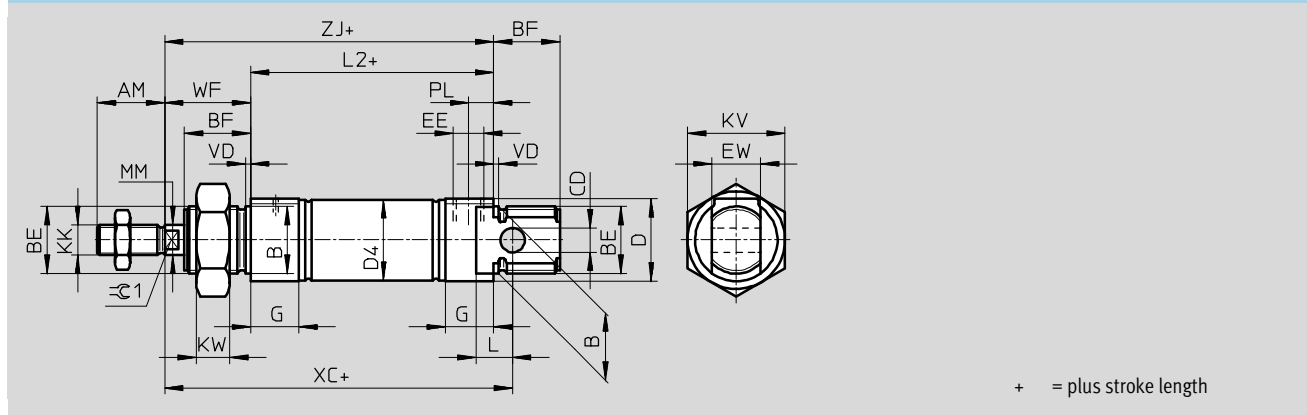


ESNU		
1	Piston rod	High-alloy stainless steel
2	Bearing cap	Wrought aluminum alloy
3	Cylinder barrel	High-alloy stainless steel
4	End cap	Wrought aluminum alloy
-	Seals	Polyurethane, nitrile rubber
-	Spring	Spring steel

Round Cylinders ESNU – Inch Series (Sizes 5/16" to 1")

Technical Data

Dimensions – Basic Version



Ø	AM	B	BE	BF	CD	D	D4	EE	EW	G	KK	KV
[in]		Ø			Ø	Ø	Ø					
5/16	0.5	0.5	M12x1.25	0.5	0.2	0.6	0.37	10-32 UNF	0.3	0.4	6-32 UNC	0.7
3/8							0.44					
1/2	0.6	0.6	M16x1.5	0.7	0.2	0.8	0.52		0.5	10-32 UNF	0.9	
5/8							0.68					
3/4	0.8	0.9	M22x1.5	0.8	0.3	1.1	0.84	1/8" NPT	0.6	0.6	5/16-24 UNF	1.3
1	0.9			0.9							0.8	

Ø	KW	L	L2	MM	PL	VD	WF	XC	ZJ	⊖C1
[in]				Ø						[mm]
5/16	0.2	0.2	1.8	0.2	0.2	0.1	0.6	2.5	2.4	-
3/8										
1/2	0.3	0.4	2.0	0.2			8.2	0.9	3.0	2.8
5/8			2.2		3.2	3.1				
3/4	0.4	0.5	2.7	0.3	8.2	0.9	3.7	3.6	7	
1			2.74	0.4			1.1	4.1	3.8	9

Dimensions are in inches, unless otherwise noted.

Round Cylinders ESNU – Inch Series (Sizes 5/16" to 1")



Ordering Data

M Mandatory Data				O Options
Function	Piston Ø	Stroke	Cushioning	Magnet for position sensing
ESNU	5/16 3/8 1/2 5/8 3/4 1	0.04 T 2	P	A
ESNU	- 1	- 1	- P	- A

Ordering Table										
Size	5/16	3/8	1/2	5/8	3/4	1	Conditions	Code		Enter code
M Function	Standard cylinder, single-acting pushing							ESNU		ESNU
Piston Ø [in]	5/16	3/8	1/2	5/8	3/4	1		-T		
Stroke [in]	0.04 T 2							-T		
Cushioning	Flexible cushioning rings at both ends							-P	-P	
O Magnet for position sensing	For use with magnetic proximity sensor						1	-A		

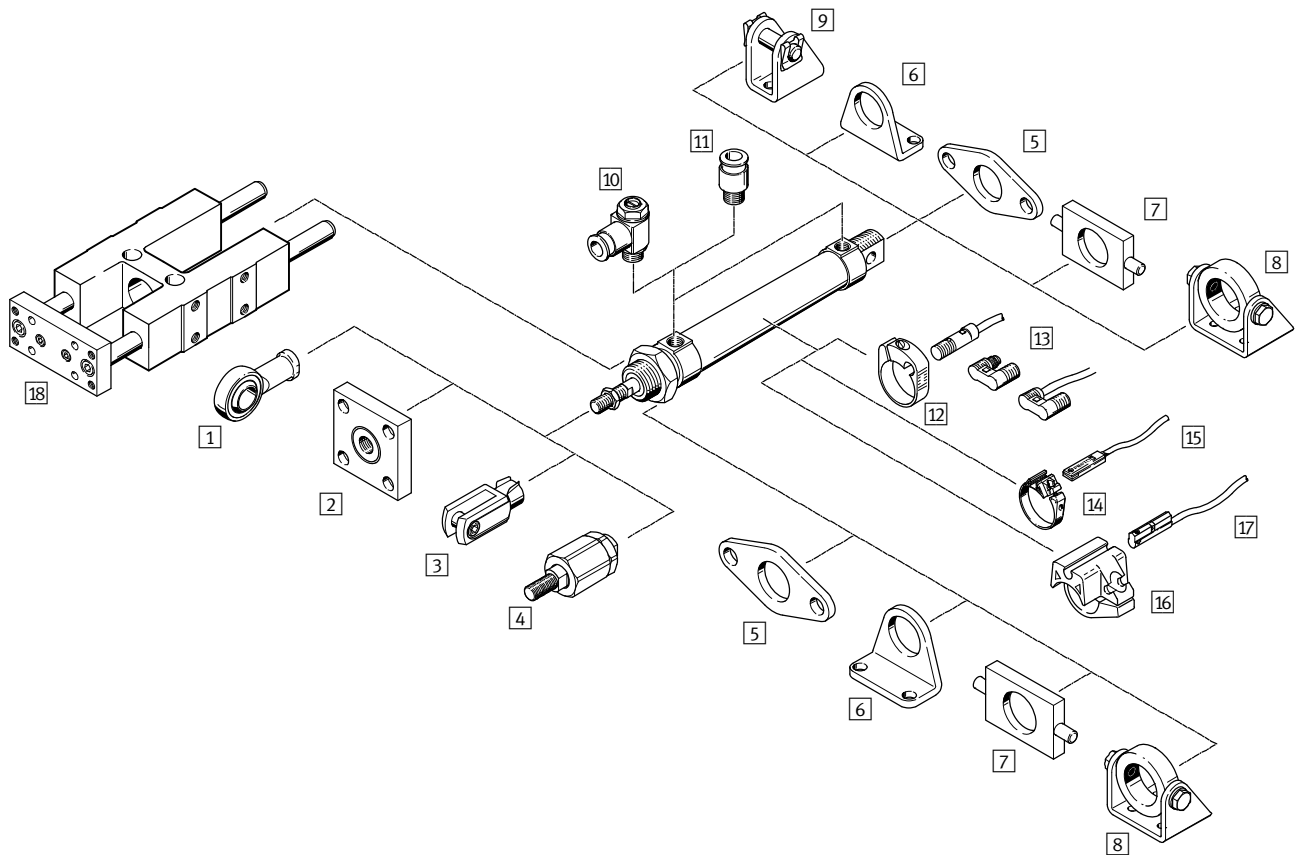
1 Reliable position sensing requires a minimum stroke of 0.4 inch

Transfer order code

ESNU - [] - [] - P - []

Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")

Accessories Overview



Mounting Attachments and Accessories		→ Page
1	Rod eye SGS	16
2	Coupling piece KSZ	16
3	Rod clevis SG	16
4	Self-aligning rod coupler FK	16
5	Flange mounting FBN	14
6	Foot mounting HBN	13
7	Swivel mounting WBN	15
8	Swivel mounting SBN	14
9	Clevis foot LBN	15
10	One-way flow control valve GRLA/GRLZ	17
11	Push-in fitting QS	17
12	Sensor mounting kit SMBR	18
13	Proximity switch SMEO/SMT0	18
14	Sensor mounting kit SMBR-8	19
15	Proximity switch SME/SMT-8	19
16	Sensor mounting kit SMBR-10	20
17	Proximity switch SME/SMT-10	20
18	Guide unit FEN	16

Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")

Accessories

Foot Mounting HBN

Scope of delivery:

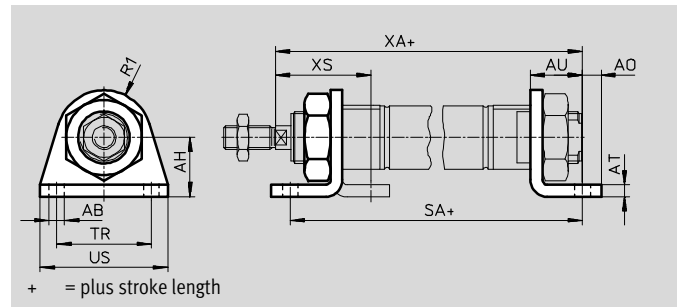
HBN-...x1: 1 foot

HBN-...x2: 2 feet and 1 nut

Material:

HBN: Galvanized steel

Free of copper, PTFE and silicone



Dimensions											
∅	AB	AH	AO	AT	AU	R1	SA	TR	US	XA	XS
[in]	∅										
5/16, 3/8	0.18	0.6	0.2	0.1	0.4	0.4	2.7	1.0	1.4	2.9	0.9
1/2	0.22	0.8	0.2	0.2	0.6	0.5	3.1	1.3	1.7	3.4	1.3
5/8	0.22	0.8	0.2	0.2	0.6	0.5	3.3	1.3	1.7	3.6	1.3
3/4	0.26	1.0	0.3	0.2	0.7	0.8	4.0	1.6	2.1	4.3	1.4
1	0.26	1.0	0.3	0.2	0.7	0.8	4.08	1.6	2.1	4.51	1.6

Ordering Data				
∅	Basic version			
	CRC ¹⁾	Weight [oz]	Part No.	Type
[in]				
5/16, 3/8	2	0.7	5123	HBN-8/10x1
	2	1.9	5124	HBN-8/10x2
1/2, 5/8	2	1.4	5125	HBN-12/16x1
	2	3.7	5126	HBN-12/16x2
3/4, 1	2	3.2	5127	HBN-20/25x1
	2	7.8	5128	HBN-20/25x2

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.

Dimensions are in inches, unless otherwise noted.

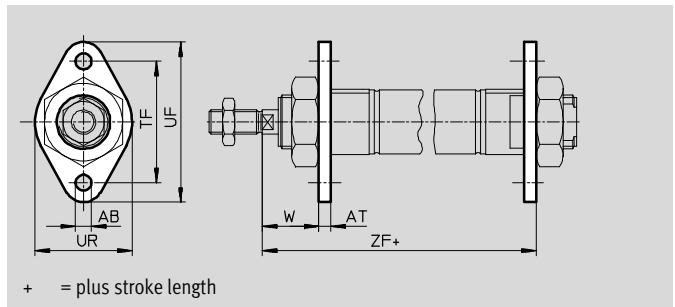
Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")



Accessories

Flange Mounting FBN

Material:
FBN: Galvanized steel
Free of copper, PTFE and silicone



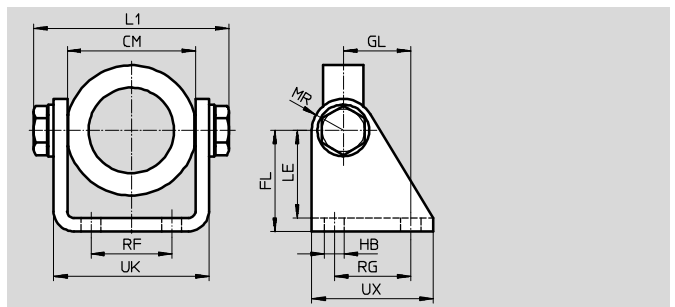
Dimensions							
∅	AB ∅	AT	TF	UF	UR	W	ZF
[in]							
5/16, 3/8	0.2	0.1	1.2	2.6	1.0	0.5	2.6
1/2	0.2	0.2	1.6	2.1	1.2	0.7	3.0
5/8	0.2	0.2	1.6	2.1	1.2	0.7	3.2
3/4	0.3	0.2	2.0	2.6	1.6	0.7	3.8
1	0.3	0.2	2.0	2.6	1.6	0.9	4.0

Ordering Data					
∅ [in]	Basic version		Weight [g]	Part No.	Type
	CRC ¹⁾				
5/16, 3/8	2		0.4	5129	FBN-8/10
1/2, 5/8	2		0.9	5130	FBN-12/16
3/4, 1	2		1.6	5131	FBN-20/25

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 Mounting SBN

Material:
Mounting ring: Wrought aluminum alloy, anodized
Bearings: Bronze
Screws: Galvanized steel
Bracket: Steel



Dimensions and Ordering Data															
∅	CM	FL	GL	HB	L1	LE	MR	RF	RG	UK	UX	CRC ¹⁾	Weight	Part No.	Type
[in]					max.								[oz]		
3/4, 1	1.5	1.4	0.8	0.3	2.4	1.2	0.5	0.8	0.9	1.81	1.6	2	7.1	539927	SBN-20/25

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.

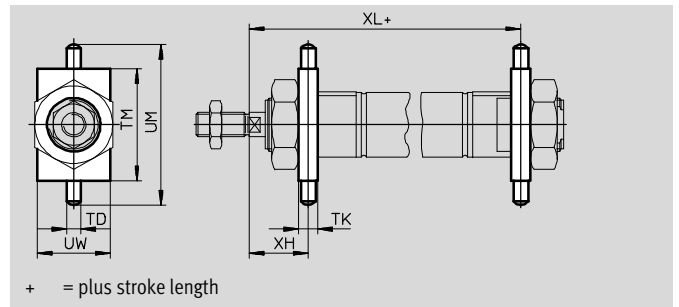
Dimensions are in inches, unless otherwise noted.

Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")

Accessories

Swivel Mounting WBN

Material:
Galvanized steel
Free of copper, PTFE and silicone

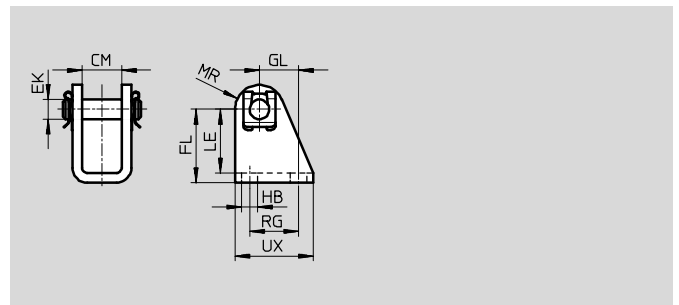


Dimensions and Ordering Data											
Ø	TD	TK	TM	UM	UW	XH	XL	CRC ¹⁾	Weight	Part No.	Type
[in]	Ø								[oz]		
5/16, 3/8	0.2	0.2	1.0	1.5	0.8	0.5	2.6	2	0.7	8608	WBN-8/10
1/2	0.2	0.3	1.5	2.3	1.0	0.7	3.0	2	1.8	8609	WBN-12/16
5/8	0.2	0.3	1.5	2.3	1.0	0.7	3.2	2	1.8	8609	WBN-12/16
3/4	0.2	0.3	1.8	2.6	1.2	0.8	3.8	2	2.5	8610	WBN-20/25
1	0.2	0.3	1.8	2.6	1.2	0.9	4.0	2	2.5	8610	WBN-20/25

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.

Clevis Foot LBN

Material:
LBN: Galvanized steel
Free of copper, PTFE and silicone



Dimensions									
For Ø	CM	EK	FL	GL	HB	LE	MR	RG	UX
[in]		Ø							
5/16, 3/8	0.32	0.2	0.9	0.54	0.17	0.85	0.2	0.49	0.8
1/2, 5/8	0.48	0.2	1.1	0.5	0.22	0.9	0.3	0.6	1.0
3/4, 1	0.63	0.3	1.2	0.6	0.26	1.0	0.4	0.8	1.3

Ordering Data				
Ø	Basic version			
	CRC ¹⁾	Weight [oz]	Part No.	Type
[in]				
5/16, 3/8	2	0.8	6057	LBN-8/10
1/2, 5/8	2	1.4	6058	LBN-12/16
3/4, 1	2	2.9	6059	LBN-20/25




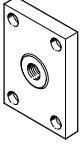
1) Corrosion resistance class 2 according to Festo standard 940 070
Components with moderate corrosion resistance for use in normal industrial environments subjected to contact with coolants or lubricating agents.

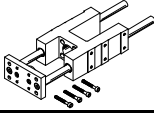
Dimensions are in inches, unless otherwise noted.

Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")



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				Rod clevis SG			
	5/16	532693	SGS-6-32		5/16	11127	SG-6-32
	3/8				3/8		
	1/2	532694	SGS-10-32		1/2	546552	SG-10-32-B
	5/8	532695	SGS-5/16-24		5/8	546574	SG-5/16"-24-B
	3/4				3/4		
1	532696	SGS-3/8-24	1	546540	SG-3/8"-24-B		
Self-aligning rod coupler FK				Coupling piece KSZ			
	5/16	532702	FK-6-32		5/16, 3/8	-	
	3/8				1/2, 5/8		
	1/2	532703	FK-10-32		3/4		
	5/8	532704	FK-5/16-24		1	36129	KSZ-3/8-24-UNF
	3/4				1		
1	532705	FK-3/8-24					



Ordering Data – Guide Units						
	For Ø [in]	Stroke [in]	With recirculating ball bearing guide		With plain bearing guide	
			Part No.	Type	Part No.	Type
	5/16, 3/8	up to 8	151730	FEN-5/16"-3/8"-...-KF	151720	FEN-5/16"-3/8"-...
	1/2, 5/8	up to 8	151731	FEN-1/2"-5/8"-...-KF	151721	FEN-1/2"-5/8"-...
	3/4	up to 10	151732	FEN-3/4"-...-KF	151722	FEN-3/4"-...
	1	up to 10	151733	FEN-1"-...-KF	151723	FEN-1"-...

Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")

FESTO


Accessories


Ordering Data – One-way Flow Control Valves				
	Connection		Part No.	Type
	Thread	For tubing O.D.		
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
		1/4"	165010	GRLA-1/8-NPT-QS-1/4-U
		3/16"	190941	GRLA-1/8-NPT-QS-3/16-U
		5/16"	165013	GRLA-1/8-NPT-QS-5/16-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
		3/8"	151563	GRLZ-1/8-NPT-3/8-B


Ordering Data – Push-in Fittings QS				Technical Data → www.festo.com/catalog/QS	
	For tubing O.D. [in]	10/32 UNF		R ³ / ₈	
		Part No.	Type	Part No.	Type
With external hex					
	3/16	164851	QS-10-32-UNF-3/16-U	–	–
	1/4	164850	QS-10-32-UNF-1/4-U	183741	QS-1/8-1/4-I-U-M
	5/16	–	–	183742	QS-1/8-5/16-I-U-M
With internal hex					
	1/8	–	–	533213	QS-H-1/8-1/8-U-M
	5/32	–	–	533214	QS-H-1/8-5/32-U-M
	3/16	–	–	533215	QS-H-1/8-3/16-U-M
	1/4	190687	QS-10-32-UNF-1/4-I-U	533216	QS-H-1/8-1/4-U-M
	5/16	–	–	533217	QS-H-1/8-5/16-U-M


Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16” to 1”)

Accessories

Ordering data – Proximity Switches for T-slot, Magneto-resistive							Technical data → www.festo.com/catalogue/sm	
	Mounting	Switch output	Electrical connection		Cable length [ft]	Connection direction	Part No.	Type
			Cable	M8 plug				
NO contact								
	Via mounting kit	PNP	3-wire	–	8.2	In-line	152836	SMT0-4U-PS-K-LED-24
			–	3-pin	–	In-line	152742	SMT0-4U-PS-S-LED-24
		NPN	3-wire	–	8.2	In-line	152837	SMT0-4U-NS-K-LED-24
			–	3-pin	–	In-line	152743	SMT0-4U-NS-S-LED-24

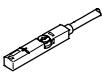

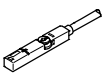
Ordering data – Proximity Switches for T-slot, Magnetic Reed							Technical data → www.festo.com/catalogue/sm	
	Mounting	Electrical connection		Cable length [ft]	Connection direction	Part No.	Type	
		Cable	M8 plug					
NO contact								
	Via mounting kit	3-wire	–	8.2	In-line	36198	SME0-4U-K-LED-24	
			–	16.4	In-line	175401	SME0-4U-K5-LED-24	
		–	3-pin	–	In-line	151526	SME0-4U-S-LED-24-B	

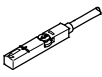


Ordering data – Proximity Switches for T-slot, Magnetic Reed, Corrosion Resistant							Technical data → www.festo.com/catalogue/sm	
	Mounting	Electrical connection		Cable length [ft]	Connection direction	Part No.	Type	
		Cable	M8 plug					
NO contact								
	Via mounting kit	3-wire	–	8.2	In-line	161775	CRSMEO-4-K-LED-24	


Ordering Data – Mounting Kit for Proximity Sensors SME0/SMTO/CRSMEO			
Designation	For Ø [in]	Part No.	Type
Mounting kit SMBR			
	5/16	19272	SMBR-8
	3/8	19273	SMBR-10
	1/2	19274	SMBR-12
	5/8	19275	SMBR-16
	3/4	19276	SMBR-20
	1	19277	SMBR-25

Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")

Accessories

Ordering data – Proximity switches for T-slot, magneto-resistive					Technical data → www.festo.com/catalogue/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/catalogue/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	Cable, 3-wire	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-O-K-LED-24	



Ordering Data – Mounting Kit for Proximity Sensors SME/SMT-8			
Designation	For Ø [in]	Part No.	Type
Mounting kit SMBR-8			
	5/16	175091	SMBR-8-8
	3/8	175092	SMBR-8-10
	1/2	175093	SMBR-8-12
	5/8	175094	SMBR-8-16
	3/4	175095	SMBR-8-20
	1	175096	SMBR-8-25

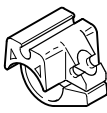
Round Cylinders DSNU/ESNU – Inch Series (Sizes 5/16" to 1")



FESTO

Accessories

Ordering data – Proximity switches for C-slot, magneto-resistive					Technical data → www.festo.com/catalogue/sm	
	Type of mounting	Switch output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire, in-line	2.5	525915	SMT-10F-PS-24V-K2,5L-OE
			Plug M8x1, 3-pin, in-line	0.3	525916	SMT-10F-PS-24V-K0,3L-M8D
			Plug M8x1, 3-pin, lateral	0.3	526675	SMT-10F-PS-24V-K0,3Q-M8D
	Insertable in the slot length-wise	PNP	Plug M8x1, 3-pin, in-line	0.3	173220	SMT-10-PS-SL-LED-24
			Cable, 3-wire, in-line	2.5	173218	SMT-10-PS-KL-LED-24

Ordering data – Proximity switches for C-slot, magnetic reed					Technical data → www.festo.com/catalogue/sm	
	Type of mounting	Switch output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	Contacting	Plug M8x1, 3-pin, in-line	0.3	525914	SME-10F-DS-24V-K0,3L-M8D
			Cable, 3-wire, in-line	2.5	525913	SME-10F-DS-24V-K2,5L-OE
			Cable, 2-wire, in-line	2.5	526672	SME-10F-ZS-24V-K2,5L-OE
	Insertable in the slot length-wise	Contacting	Plug M8x1, 3-pin, in-line	0.3	173212	SME-10-SL-LED-24
			Cable, 3-wire, in-line	2.5	173210	SME-10-KL-LED-24

Ordering Data – Mounting Kit for Proximity Sensors SME/SMT-10			
Designation	For Ø [in]	Part No.	Type
Mounting kit SMBR-10			
	5/16	175101	SMBR-10-8
	3/8	173227	SMBR-10-10
	1/2	175102	SMBR-10-12
	5/8	173228	SMBR-10-16
	3/4	175103	SMBR-10-20
	1	175104	SMBR-10-25

Ordering data – Connecting cables				Technical data → www.festo.com/catalogue/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

Round cylinders ESNU – Inch Series (Sizes 1-1/4” to 2-1/2”)

Technical Data

Single-acting, Spring Return



∅ - Diameter
 1-1/4 ... 2-1/2 inch

| - Stroke length
 1/8 ... 2 inch



General Technical Data				
Piston ∅ [in]	1-1/4	1-5/8	2	2-1/2
Pneumatic connection	1/8" NPT	1/4" NPT	1/4" NPT	3/8" NPT
Piston rod thread	3/8-24	1/2-20	5/8-18	5/8-18
Constructional design	Piston			
	Piston rod			
	Cylinder barrel			
Cushioning	Flexible cushioning rings at both ends (P)			
Magnet for position sensing ¹⁾	Optional			

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

Operating Pressure [psi]				
Piston ∅	1-1/4	1-5/8	2	2-1/2
Operating medium	Filtered compressed air, lubricated or unlubricated			
Operating pressure [psi]	17.6 ... 150			

Ambient Conditions				
Ambient temperature ²⁾	[°F]	-4 ... +176		
Corrosion resistance class CRC ³⁾	2			

2) Note operating range of proximity sensors

3) 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.

Round cylinders ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")

Technical Data

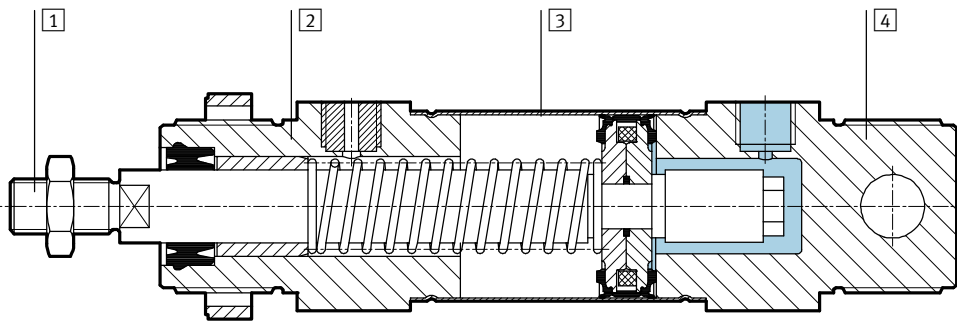
Forces [lbf] and Impact Energy [ft-lbf]				
Piston \varnothing [in]	1-1/4	1-5/8	2	2-1/2
Theoretical force at 90 psi, extending	94	150	247	402
Max. spring return force 3/8 inch stroke	12	17.7	16.7	16.7
Max. spring return force 1 inch stroke	12	17.7	16.7	16.7
Max. spring return force 2 inch stroke	12	17.7	16.7	16.7
Max. impact energy at the end positions ¹⁾	0.30	0.52	0.74	0.96

1) The values are reduced by approx. 50% at 176 °F

Weights ESNU-... [oz]				
Piston \varnothing [in]	1-1/4	1-5/8	2	2-1/2
Product weight with 0 inch stroke	13.1	23.3	38.3	51.0
Additional weight per 1 inch stroke	1.4	2.2	3.6	3.9

Materials

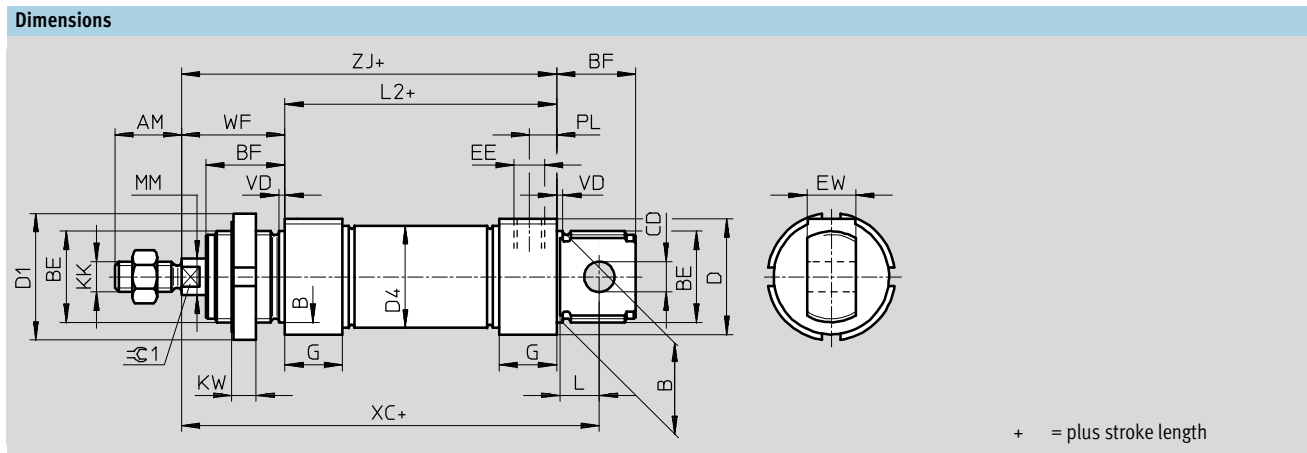
Sectional view



ESNU	
1	Piston rod High-alloy steel
2	Bearing cap Wrought aluminum alloy
3	Cylinder barrel High-alloy stainless steel
4	End cap Wrought aluminum alloy
-	Seals Polyurethane, nitrile rubber
-	Spring Spring steel

Round cylinders ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")

Technical Data



∅	AM	B ∅	BE	BF	CD ∅	D ∅	D1 ∅	D4 ∅	EE	EW	G	KK
1-1/4	0.9	1.2	M30x1.5	1.0	0.4	1.5	1.7	1.3	1/8" NPT	0.6	0.7	3/8-24
1-5/8	0.9	1.5	M38x1.5	1.2	0.5	1.8	2.0	1.6	1/4" NPT	0.7	1.0	1/2-20
2	1.3	1.8	M45x1.5	1.3	0.6	2.2	2.4	2.1	3/8" NPT	0.8	1.1	5/8-18
2-1/2						2.8		2.6				

∅	KW	L	L2	PL	MM ∅	VD	WF	XC	ZJ	⊖C1 [mm]
1-1/4	0.3	0.5	2.7	0.4	0.5	0.1	1.3	4.6	4.1	10
1-5/8	0.4	0.6	3.3	0.5	0.6	0.1	1.5	5.5	4.9	13
2		0.6	3.4		0.8		1.7	5.8	5.1	17
2-1/2			3.7	0.5	1.8		6.1	5.5		

Dimensions are in inches, unless otherwise noted.

Round cylinders ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")



Ordering Data

M Mandatory Data				O Options
Function	Piston Ø	Stroke	Cushioning	Magnet for position sensing
ESNU	1 1/4 1 5/8 2 2 1/2	1/8 2	P	A
ESNU	- 1 1/4	- 2	- P	- A

Ordering Table							
Size	1 1/4	1 5/8	2	2 1/2	Conditions	Code	Enter code
M Function	Single-acting round cylinder					ESNU	ESNU
Piston Ø [in]	1 1/4	1 5/8	2	2 1/2		-I	
Stroke [in]	1/8 2					-I	
Cushioning	Flexible cushioning rings at both ends					-P	-P
O Magnet for position sensing	For use with magnetic proximity sensor				1	-A	

1 Reliable position sensing requires a minimum stroke length of 0.4 inch.

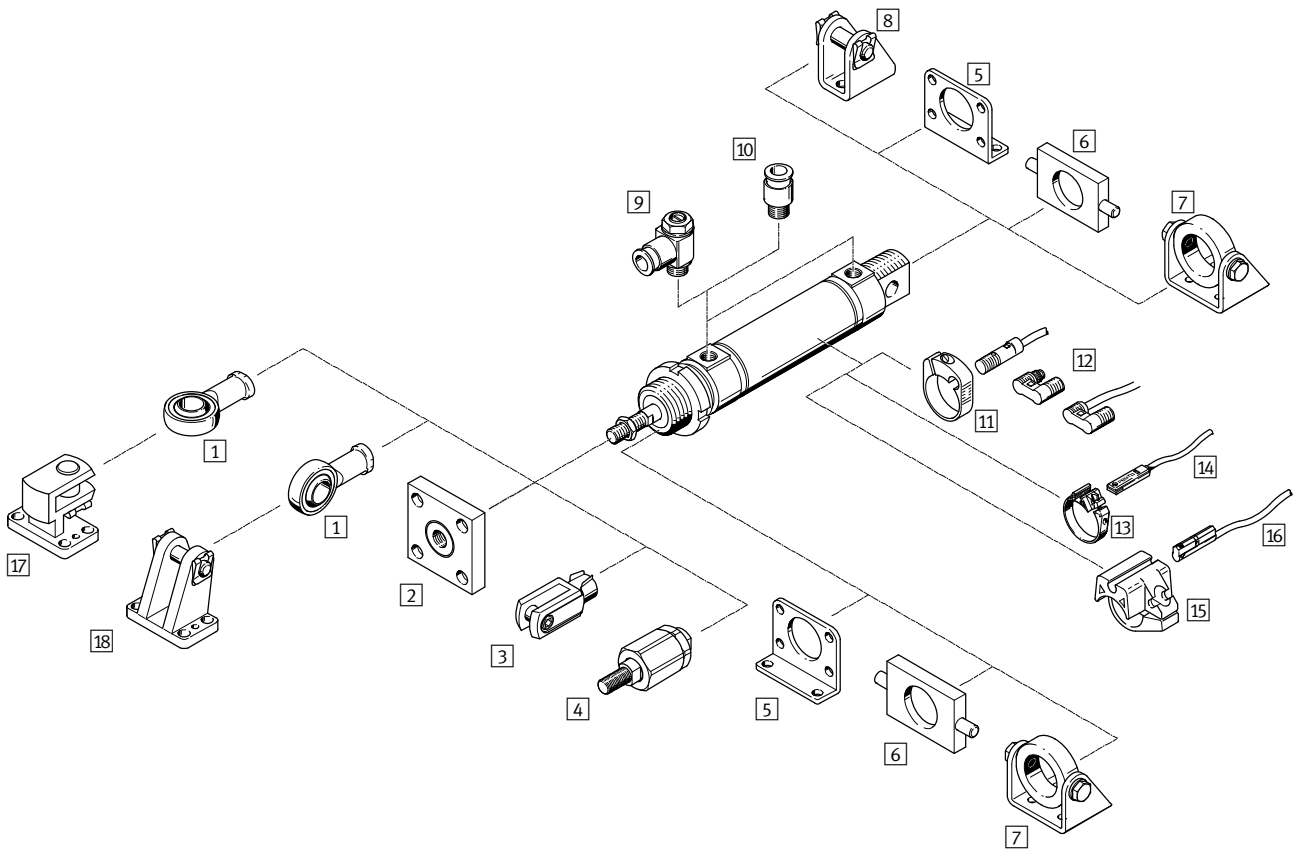
Transfer order code

ESNU - [] - [] - P - []

Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")

Accessories Overview

FESTO



Mounting Attachments and Accessories		→ Page
1	Rod eye SGS/CRSGS	28
2	Coupling piece KSG/KSZ	28
3	Rod clevis SG/CRSG	28
4	Self-aligning rod coupler FK	28
5	Flange mounting FBN/CRFV	26
6	Swivel mounting WBN	27
7	Swivel mounting SBN	27
8	Clevis foot LBN/CRLBN	28
9	One-way flow control valve GRLA/GRLZ/CRGRLA	29
10	Push-in fitting QS	29
11	Sensor mounting kit CRSMBR	30
12	Proximity sensor SMEO/SMTO/CRSMEO-4	30
13	Sensor mounting kit SMBR-8	31
14	Proximity sensor SME/SMT-8	31
15	Sensor mounting kit SMBR-10	32
16	Proximity sensor SME/SMT-10	32
17	Clevis foot, lateral LQG	27
18	Clevis foot LBG	27

Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")



Accessories

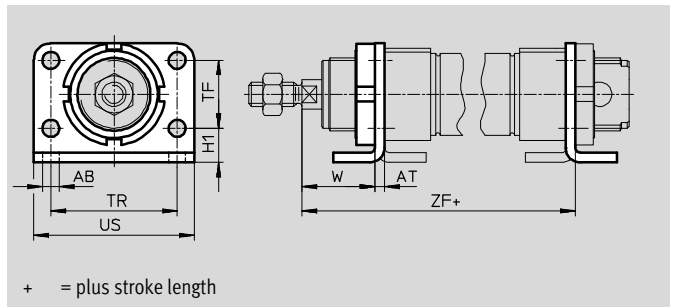
Flange Mounting FBN/CRFV

Material:

FBN: Galvanized steel

CRFV: High-alloy stainless steel

Free of copper, PTFE and silicone



Dimensions								
∅	AB	AT	H1	TF	TR	US	W	ZF
[in]	∅							
1-1/4	0.3	0.2	0.6	1.1	2.0	2.6	1.2	4.2
1-5/8	0.4	0.2	0.7	1.2	2.4	3.1	1.1	4.9
2	0.4	0.2	0.8	1.6	2.8	3.5	1.5	5.4
2-1/2	0.4	0.2	0.8	2.0	3.0	3.8	1.5	5.7

Ordering Data								
∅	Basic version				High corrosion protection			
	CRC ¹⁾	Weight [oz]	Part No.	Type	CRC ¹⁾	Weight [oz]	Part No.	Type
1-1/4	2	3.6	195855	FBN-32	4	3.6	161858	CRFV-32
1-5/8	2	6.7	195856	FBN-40	4	6.7	161859	CRFV-40
2	2	10.2	195857	FBN-50	4	10.2	161860	CRFV-50
2-1/2	2	12.9	195858	FBN-63	4	12.9	161861	CRFV-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.
 Corrosion resistance class 4 according to Festo standard 940 070
 Components requiring higher corrosion resistance. Parts subjected to aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Dimensions are in inches, unless otherwise noted.

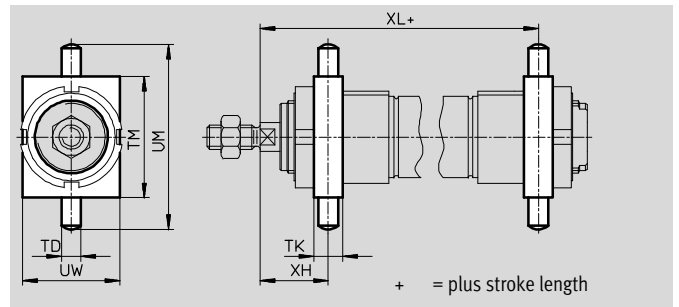
Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")



Accessories

Swivel Mounting WBN

Material:
Galvanized steel
Free of copper, PTFE and silicone

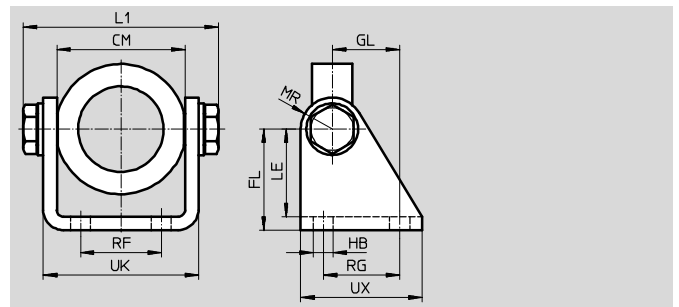


Dimensions and Ordering Data												
∅	TD	TK	TM	UM	UW	XH	XL	CRC ¹⁾	Weight	Part No.	Type	
[in]	∅								[oz]			
1-1/4	0.3	0.5	2.0	3.0	1.6	1.1	4.3	2	4.6	195863	WBN-32	
1-5/8	0.4	0.6	2.4	3.6	2.0	1.2	5.0	2	8.5	195864	WBN-40	
2	0.5	0.8	3.1	4.6	2.6	1.3	5.5	2	21.5	195865	WBN-50/63	
2-1/2	0.5	0.8	3.1	4.6	2.6	1.4	5.9	2	21.5	195865	WBN-50/63	

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 Mounting SBN

Material:
Mounting ring: Wrought aluminum alloy, anodized
Bearings: Bronze
Screws: Galvanized steel
Bracket: Steel



Dimensions and Ordering Data															
∅	CM	FL	GL	HB	L1	LE	MR	RF	RG	UK	UX	CRC ¹⁾	Weight	Part No.	Type
[in]					max.								[oz]		
1-1/4	1.8	1.6	1.1	0.4	2.8	1.4	0.5	1.1	1.2	2.2	2.0	2	10.4	539924	SBN-32
1-5/8	2.2	1.8	1.2	0.4	3.5	1.5	0.6	1.4	1.3	2.7	2.1	2	16.4	539925	SBN-40
2, 2-1/2	2.8	2.0	1.3	0.4	4.0	1.7	0.6	1.7	1.4	3.2	2.6	2	23.6	539926	SBN-50/63

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..

Ordering Data – Mounting Attachments												
Designation	For ∅ [in]	Part No.	Type	Designation	For ∅ [in]	Part No.	Type					
Clevis Foot mounting LBG				Clevis Foot, right-angled 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					

Dimensions are in inches, unless otherwise noted.

Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")

Accessories

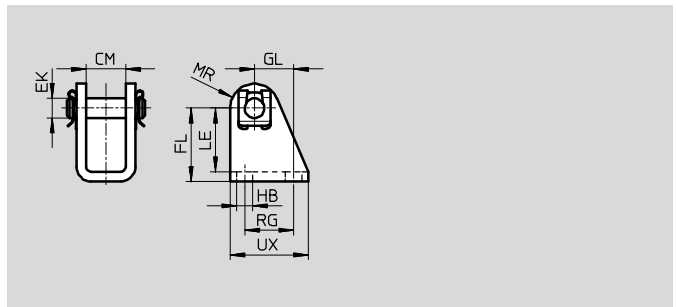
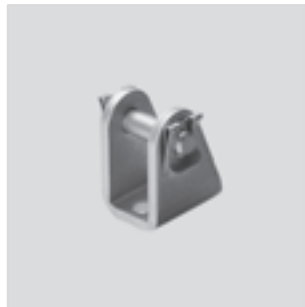
Clevis Foot LBN/CRLBN

Material:

LBN: Galvanized steel

CRLBN: High-alloy stainless steel

Free of copper, PTFE and silicone



Dimensions									
For Ø	CM	EK	FL	GL	HB	LE	MR	RG	UX
[in]		Ø							
1-1/4	0.6	0.4	1.4	0.7	0.3	1.2	0.4	0.9	1.4
1-5/8	0.7	0.5	1.6	1.0	0.4	1.4	0.5	1.2	1.8
2, 2-1/2	0.8	0.6	1.8	1.1	0.4	1.5	0.6	1.3	2.0

Ordering Data									
Ø [in]	Basic version				High corrosion protection				
	CRC ¹⁾	Weight [oz]	Part No.	Type	CRC ¹⁾	Weight [g]	Part No.	Type	
1-1/4	2	3.8	195860	LBN-32	4	3.8	195866	CRLBN-32	
1-5/8	2	6.8	195861	LBN-40	4	6.5	195867	CRLBN-40	
2, 2-1/2	2	10.7	195862	LBN-50/63	4	10.2	195868	CRLBN-50/63	

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.

Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts subjected to aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.



Ordering Data – Piston Rod Attachments											
Designation	For Ø [in]	Part No.	Type	Designation	For Ø [in]	Part No.	Type	Designation	For Ø [in]	Part No.	Type
Rod Eye SGS				Self-aligning rod coupler FK							
	1-1/4	532696	SGS-3/8-24		1-1/4	532705	FK-3/8-24		1-1/4	36129	KSZ-3/8-24-UNF
	1-5/8	532697	SGS-1/2-20		1-5/8	532706	FK-1/2-20		1-5/8	36130	KSZ-1/2-20-UNF
	2	532698	SGS-5/8-18		2	532707	FK-5/8-18		2	36131	KSZ-5/8-18-UNF
	2-1/2				2-1/2				2-1/2		
Rod clevis SG				Coupling piece KSZ							
	1-1/4	13000030	SG-3/8"-24-B								
	1-5/8	13000469	SG-1/2-20-B								
	2	13000712	SG5/8-18								
	2-1/2										



Dimensions are in inches, unless otherwise noted.

Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")

FESTO

Accessories


Ordering Data – One-way Flow Control Valves				Technical Data → www.festo.com/catalog/GRLA	
Connection	Thread	For tubing O.D.	Part No.	Type	
				For exhaust air	
	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	
	1/4" NPT	3/16"	190944	GRLA-1/4-NPT-QS-3/16-U	
		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	
	3/8" NPT	1/4"	165012	GRLA-3/8-NPT-QS-1/4-U	
		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	
1/2" NPT	3/8"	190952	GRLA-1/2-NPT-QS-3/8-U		
	1/2"	190953	GRLA-1/2-NPT-QS-1/2-U		
For supply air				Technical Data → www.festo.com/catalog/GRLZ	
	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	


Ordering Data – Push-in Fittings QS							Technical Data → www.festo.com/catalog/QS		
For tubing O.D. [in]	R3/8	R1/4		R3/8		R1/2		Part No.	Type
		Part No.	Type	Part No.	Type	Part No.	Type		
With external hex									
	1/4	183741	QS-1/8-1/4-I-U-M	192809	QS-1/4-1/4-I-U-M	–	–	–	–
	5/16	183742	QS-1/8-5/16-I-U-M	183743	QS-1/4-5/16-I-U-M	183745	QS-3/8-5/16-I-U-M	–	–
	3/8	–	–	183744	QS-1/4-3/8-I-U-M	183746	QS-3/8-3/8-I-U-M	183747	QS-1/2-3/8-I-U-M
	1/2	–	–	–	–	–	–	183748	QS-1/2-1/2-I-U-M
–	–	–	–	–	–	–	–	–	
With internal hex									
	1/8	533213	QS-H-1/8-1/8-U-M	–	–	–	–	–	–
	5/32	533214	QS-H-1/8-5/32-U-M	–	–	–	–	–	–
	3/16	533215	QS-H-1/8-3/16-U-M	533218	QS-H-1/4-3/16-U-M	–	–	–	–
	1/4	533216	QS-H-1/8-1/4-U-M	533219	QS-H-1/4-1/4-U-M	533222	QS-H-3/8-1/4-U-M	–	–
	5/16	533217	QS-H-1/8-5/16-U-M	533220	QS-H-1/4-5/16-U-M	533223	QS-H-3/8-5/16-U-M	–	–
	3/8	–	–	533221	QS-H-1/4-3/8-U-M	533224	QS-H-3/8-3/8-U-M	533226	QS-H-1/2-3/8-U-M
	1/2	–	–	–	–	533225	QS-H-3/8-1/2-U-M	533227	QS-H-1/2-1/2-U-M


Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")


FESTO

Accessories

Ordering data – Proximity Switches for T-slot, Magneto-resistive							Technical data → www.festo.com/catalogue/sm	
	Mounting	Switch output	Electrical connection		Cable length [ft]	Connection direction	Part No.	Type
			Cable	M8 plug				
NO contact								
	Via mounting kit	PNP	3-wire	–	8.2	In-line	152836	SMT0-4U-PS-K-LED-24
			–	3-pin	–	In-line	152742	SMT0-4U-PS-S-LED-24
		NPN	3-wire	–	8.2	In-line	152837	SMT0-4U-NS-K-LED-24
			–	3-pin	–	In-line	152743	SMT0-4U-NS-S-LED-24

Ordering data – Proximity Switches for T-slot, Magnetic Reed							Technical data → www.festo.com/catalogue/sm	
	Mounting	Electrical connection		Cable length [ft]	Connection direction	Part No.	Type	
		Cable	M8 plug					
NO contact								
	Via mounting kit	3-wire	–	8.2	In-line	36198	SME0-4U-K-LED-24	
			–	16.4	In-line	175401	SME0-4U-K5-LED-24	
		–	3-pin	–	In-line	151526	SME0-4U-S-LED-24-B	

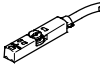
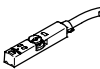
Ordering data – Proximity Switches for T-slot, Magnetic Reed, Corrosion Resistant							Technical data → www.festo.com/catalogue/sm	
	Mounting	Electrical connection		Cable length [ft]	Connection direction	Part No.	Type	
		Cable	M8 plug					
NO contact								
	Via mounting kit	3-wire	–	8.2	In-line	161775	CRSMEO-4-K-LED-24	

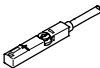


Ordering Data – Mounting Kit for Proximity Sensors SME0/SMT0/CRSMEO				Part No.	Type
Designation	For Ø [in]				
Mounting kit CRSMBR, corrosion resistant					
	1-1/4			163888	CRSMBR-32
	1-5/8			163889	CRSMBR-40
	2			163890	CRSMBR-50
	2-1/2			163891	CRSMBR-63


Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")



FESTO

Accessories

Ordering data – Proximity switches for T-slot, magneto-resistive					Technical data → www.festo.com/catalogue/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, 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						
	Insertable in the slot from above, flush with cylinder profile, short design	PNP	Cable, 3-wire	7.5	574340	SMT-8M-A-PO-24V-E-7,5-OE

Ordering data – Proximity switches for T-slot, magnetic reed					Technical data → www.festo.com/catalogue/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	Cable, 3-wire	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 – Mounting Kit for Proximity Sensors SME/SMT-8				Part No.	Type
Designation	For Ø [in]				
Mounting kit SMBR-8					
	1-1/4			175097	SMBR-8-32
	1-5/8			175098	SMBR-8-40
	2			175099	SMBR-8-50
	2-1/2			175100	SMBR-8-63



Ordering data – Connecting cables				Technical data → www.festo.com/catalogue/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

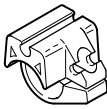
Round cylinders DSNU/ESNU – Inch Series (Sizes 1-1/4" to 2-1/2")

FESTO

Accessories

Ordering data – Proximity sensors for C-slot, magneto-resistive						Technical data → Internet: smt
	Type of mounting	Switching output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above	PNP	Cable, 3-wire, in-line	2.5	551 373	SMT-10M-PS-24V-E-2,5-L-OE
			Plug M8x1, 3-pin, in-line	0.3	551 375	SMT-10M-PS-24V-E-0,3-L-M8D
			Plug M8x1, 3-pin, angled	0.3	551 376	SMT-10M-PS-24V-E-0,3-Q-M8D

Ordering data – Proximity sensors for C-slot, magnetic reed						Technical data → Internet: sme
	Type of mounting	Switching output	Electrical connection, connection direction	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above	Contacting	Plug M8x1, 3-pin, in-line	0.3	551 367	SME-10M-DS-24V-E-0,3-L-M8D
			Cable, 3-wire, in-line	2.5	551 365	SME-10M-DS-24V-E-2,5-L-OE
			Cable, 2-wire, in-line	2.5	551 369	SME-10M-ZS-24V-E-2,5-L-OE
	Insertable in slot length-wise	Contacting	Plug M8x1, 3-pin, in-line	0.3	173 212	SME-10-SL-LED-24
			Cable, 3-wire, in-line	2.5	173 210	SME-10-KL-LED-24

Ordering Data – Mounting Kit for Proximity Sensors SME/SMT-10			
Designation	For Ø [in]	Part No.	Type
Mounting kit SMBR-10			
	1-1/4	175105	SMBR-10-32
	1-5/8	175106	SMBR-10-40
	2	175107	SMBR-10-50
	2-1/2	175108	SMBR-10-63

Product Range and Company Overview

A Complete Suite and Company Overview

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical
Electromechanical actuators, motors, controllers & drivers



Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 16,000 employees in 60 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



© Copyright 2013, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmental friendly printing plant.

Festo North America



**1 Festo Canada
Headquarters
Festo Inc.**
5300 Explorer Drive
Mississauga, ON
L4W 5G4

2 Montréal
5600, Trans-Canada
Pointe-Claire, QC
H9R 1B6

3 Québec City
2930, rue Watt#117
Québec, QC
G1X 4G3



**4 Festo United States
Headquarters
Festo Corporation**
395 Moreland Road
Hauppauge, NY
11788

5 Appleton
North 922 Tower View Drive, Suite N
Greenville, WI
54942

7 Detroit
1441 West Long Lake Road
Troy, MI
48098

6 Chicago
85 W Algonquin - Suite 340
Arlington Heights, IL
60005

8 Silicon Valley
4935 Southfront Road, Suite F
Livermore, CA
94550

Festo Regional Contact Center

Canadian Customers

Commercial Support:
Tel: 1 877 GO FESTO (1 877 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: festo.canada@ca.festo.com

Technical Support:
Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: technical.support@ca.festo.com

USA Customers

Commercial Support:
Tel: 1 800 99 FESTO (1 800 993 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: customer.service@us.festo.com

Technical Support:
Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: product.support@us.festo.com