

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO



Standard cylinders DSBF-C, to ISO 15552, Clean Design

Key features

FESTO

At a glance



DIN



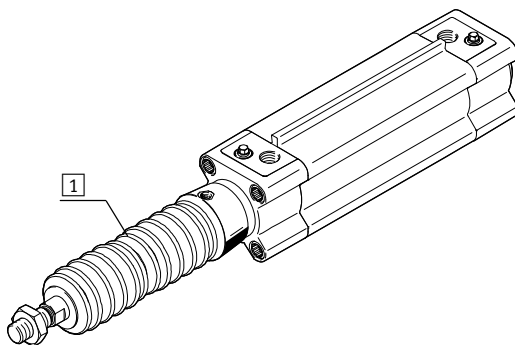
- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)
- Clean Design means smooth surfaces without slots and edges, which means fewer places where dirt can collect
- For hygiene reasons, the threads on the cylinder caps should be sealed with suitable blanking screws (available as accessories → 28)
- Resistant to conventional cleaning agents
- Increased corrosion protection
- Three types of cushioning available:
 - P cushioning: elastic cushioning rings/pads at both ends
 - PPS cushioning: pneumatic cushioning, self-adjusting at both ends
 - PPV cushioning: pneumatic cushioning, adjustable at both ends
- The variants can be configured according to individual needs thanks to the modular product system
- High flexibility thanks to the wide range of variants
- Comprehensive range of mounting accessories for just about every type of installation
- Contactless position sensing via proximity sensors

The technology in detail



- 1 Hygienic and self-adjusting PPS cushioning
- 2 Easy-to-clean cylinder profile without corners and indents
- 3 Corrosion-resistant cylinder surface
- 4 Standard dimensions and mounting accessories to ISO 15552
- 5 NSF-H1 lubricant and special wiper seal suitable for contact with foodstuffs

Longer service life with protective bellows kit DADB



The protective bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air must be ducted via a pressure compensation hole in the connection part **1**.

The kit protects the piston rod, seal

and bearings against a wide variety of media, for example:

- Dust
- Chippings
- Oil
- Grease
- Fuel

Standard cylinders DSBF-C, to ISO 15552, Clean Design

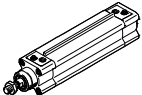
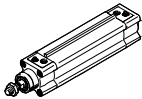
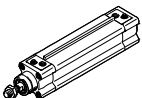
Key features

Variants from the modular product system		
Symbol	Features	Description
	A3 Wiper seal variant	Unlubricated operation: Cleaning processes degrease the piston rod. A special piston rod seal designed for unlubricated operation permits a longer service life compared to the standard seal.
	T Through piston rod	For working at both ends with the same force in the forward and return stroke, for attaching external stops.
	...L Piston rod thread extension	–
	F Female piston rod thread	–
	...E Piston rod extension	–
	T1 Heat-resistant seals	Temperature resistance up to max. 120 °C. The seals used and the grease mean that this variant is not suitable for direct contact with foodstuffs.
	T3 Low temperature	Temperature resistance down to max. –40 °C.

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Product range overview

Function	Version	Type	Piston Ø	Stroke	Easy-to-clean design	Through piston rod	Female piston rod thread
			[mm]	[mm]			
Double-acting	DSBF-...-P – With elastic cushioning rings/pads at both ends						
		DSBF-...-P	32, 40, 50, 63, 80, 100	1 ... 2,800	☐	☐	☐
	DSBF-...-PPS – Pneumatic cushioning, self-adjusting at both ends						
		DSBF-...-PPS	32, 40, 50, 63, 80, 100	1 ... 2,800	☐	☐	☐
	DSBF-...-PPV – Pneumatic cushioning, adjustable at both ends						
		DSBF-...-PPV	32, 40, 50, 63, 80, 100	1 ... 2,800	☐	☐	☐

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

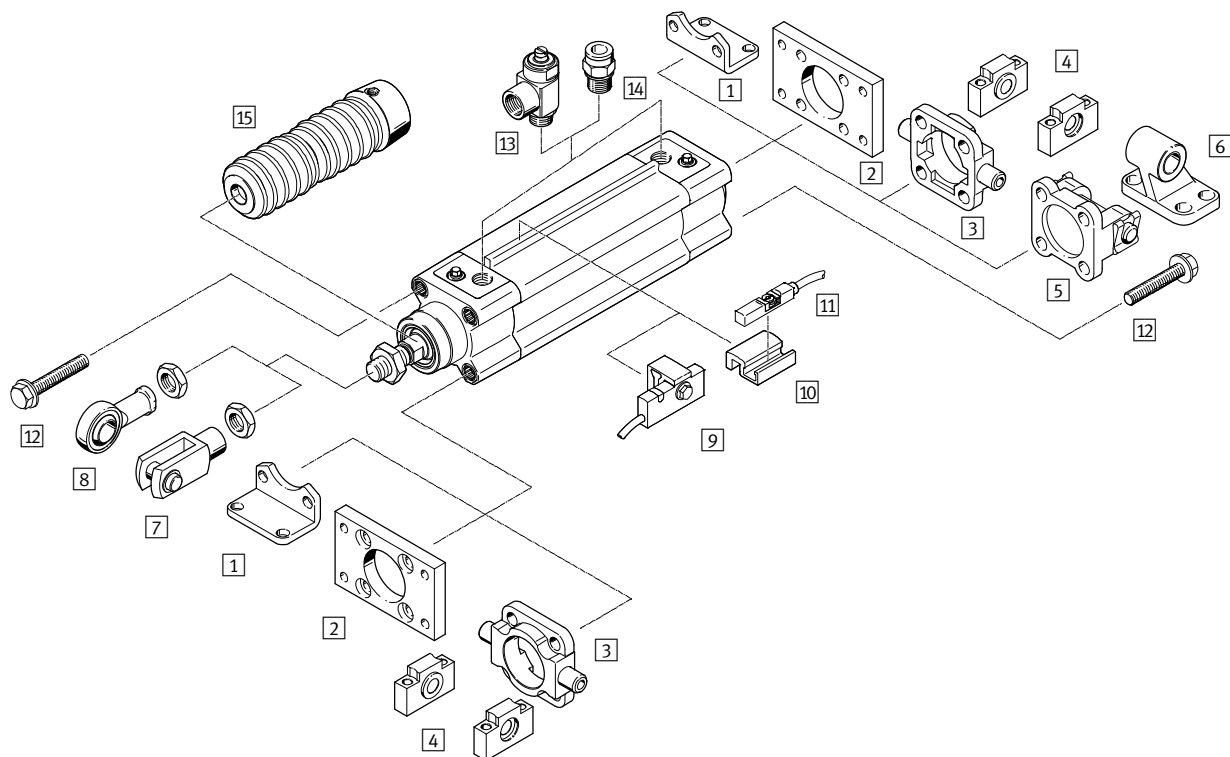
Product range overview

Type	Position sensing	Conforms to standard ISO 15552	Temperature range 0 ... +120 °C	Temperature range -40 ... +80 °C	Wiper seal variant	Piston rod extension	Piston rod thread extension	Sensor mounting
	A	N3	T1	T3	A3	...E	...L	R
DSBF-...-P – With elastic cushioning rings/pads at both ends								
DSBF-...-P	■	■	■	■	■	■	■	■
DSBF-...-PPS – Pneumatic cushioning, self-adjusting at both ends								
DSBF-...-PPS	■	■	–	–	■	■	■	■
DSBF-...-PPV – Pneumatic cushioning, adjustable at both ends								
DSBF-...-PPV	■	■	■	■	■	■	■	■

Standard cylinders DSBF-C, to ISO 15552, Clean Design

Peripherals overview

FESTO



Standard cylinders DSBF-C, to ISO 15552, Clean Design

Peripherals overview

Mounting components and accessories		
	Brief description	→ Page/Internet
1 Foot mounting CRHNC	For bearing and end caps	19
2 Flange mounting CRFNG	– For bearing or end caps – Cannot be used on the bearing cap in combination with protective bellows kit DADB	19
3 Trunnion flange CRZNG	– For bearing or end caps in combination with trunnion supports CRLNZG – Cannot be used on the bearing cap in combination with protective bellows kit DADB	20
4 Trunnion support CRLNZG	For swivel mounting CRZNG	20
5 Swivel flange SNCB- ... -R3	For end caps	21
6 Clevis foot CRLNG	For swivel flange SNCB- ... -R3	21
7 Rod clevis CRSG	Permits a swivelling movement of the cylinder in one plane	28
8 Rod eye CRSGS	With spherical bearing	28
9 Proximity sensor SMT-C1	For sensing the piston rod position	26
10 Mounting kit SMB-8-C	For mounting the proximity sensor CRSMT-8M	26
11 Proximity sensor CRSMT-8M	For sensing the piston rod position	26
12 Blanking screw DAMD	For covering unused mounting threads	28
13 One-way flow control valve CRGRLA	For regulating speed	28
14 Push-in fitting QS-F/QSL-F/CRQS/CRQSL	For connecting compressed air tubing with standard O.D.	26
15 Protective bellows kit DADB	– Protects the cylinder (piston rod, seal and bearings) against a wide range of media and thus prevents premature wear – The kit can only be used in combination with a piston rod extension (feature: ...E)	22

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Type codes

		DSBF	-	C	-	32	-	300	-		-		-	PPV		A	-	N3
Type																		
Standard cylinder, Clean Design																		
Version																		
C	Easy-to-clean design																	
Piston Ø [mm]																		
Stroke [mm]																		
Piston rod																		
-	At one end																	
T	At both ends																	
Piston rod thread type																		
-	Male thread																	
F	Female thread																	
Cushioning																		
P	Elastic cushioning rings/pads at both ends																	
PPS	Pneumatic cushioning, self-adjusting at both ends																	
PPV	Pneumatic cushioning, adjustable at both ends																	
Position sensing																		
A	Via proximity sensor																	
Standard																		
N3	Corresponds to ISO 15552																	

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Type codes

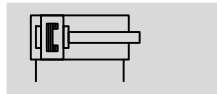
		T1	-		-	E	-		-	R
Temperature range										
-	Standard									
T1	Heat-resistant									
T3	Low temperature									
Wiper seal variant										
-	None									
A3	For unlubricated operation									
Piston rod extension										
... E	1 ... 500 mm									
Piston rod thread extension										
... L	1 ... 70 mm									
Sensor mounting										
R	Mounting rail for sensors									

Standard cylinders DSBF-C, to ISO 15552, Clean Design

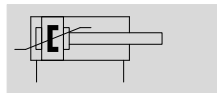
FESTO

Technical data

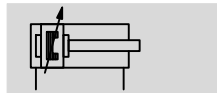
Function
P cushioning



PPS cushioning



PPV cushioning



DIN



-N- Diameter
32 ... 100 mm
-T- Stroke length
1 ... 2,800 mm

www.festo.com/en/
Spare_parts_service



General technical data							
Piston Ø	32	40	50	63	80	100	
Pneumatic connection	G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	
Piston rod thread	M10x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5	M20x1.5	
Design	Piston						
	Piston rod						
	Profile barrel						
Mode of operation	Double-acting						
Cushioning							
DSBF-...-P	Elastic cushioning rings/pads at both ends						
DSBF-...-PPS	Pneumatic cushioning, self-adjusting at both ends						
DSBF-...-PPV	Pneumatic cushioning, adjustable at both ends						
Cushioning length	[mm]	20	20	22	22	32	32
Stroke							
DSBF-...	[mm]	1 ... 2,800					
DSBF-...-...E	[mm]	1 ... 2,000					
DSBF-...-...L	[mm]	1 ... 2,000					
Min. stroke with position sensing	[mm]	18	17	13	10	10	10
Position sensing	Via proximity sensor						
Type of mounting	Via female thread						
	Via accessories						
Mounting position	Any						

Operating and environmental conditions						
Piston Ø	32	40	50	63	80	100
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]					
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)					
Operating pressure						
DSBF-... [bar]	0.6 ... 12					
DSBF-...-T3 [bar]	1 ... 12					
DSBF-...-A3 [bar]	1.5 ... 12		1 ... 12		0.6 ... 12	
Ambient temperature ¹⁾						
DSBF-... [°C]	-20 ... +80					
DSBF-...-T1 [°C]	0 ... +120					
DSBF-...-T3 [°C]	-40 ... +80					
Suitable for use in the food industry	As per manufacturer's declaration (➔ Support Portal)					
Corrosion resistance class CRC ²⁾	3					

1) Note operating range of proximity sensors

2) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Technical data

Forces [N] and impact energy [J]						
Piston Ø	32	40	50	63	80	100
Theoretical force at 6 bar, advancing	483	754	1,178	1,870	3,016	4,712
Theoretical force at 6 bar, retracting	415	633	990	1,682	2,721	4,418
Max. impact energy in the end positions						
DSBF-...	0.4	0.7	1.0	1.3	1.8	2.5
DSBF-...-T1	0.2	0.35	0.5	0.65	0.9	1.25
DSBF-...-T3	0.2	0.35	0.5	0.65	0.9	1.25

Permissible impact velocity:

$$v_{perm.} \leq \sqrt{\frac{2 \times E_{perm.}}{m_{dead} + m_{load}}}$$

$v_{perm.}$ Permissible impact velocity

$E_{perm.}$ Max. impact energy

$m_{intrinsic}$ Moving load (drive)

m_{Load} Moving effective load

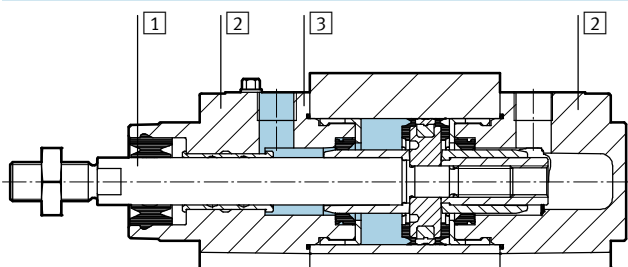
Maximum permissible load:

$$m_{load} \leq \frac{2 \times E_{perm.}}{v^2} - m_{dead}$$

Weight [g]						
Piston Ø	32	40	50	63	80	100
Product weight with 0 mm stroke	472	778	1,241	1,803	3,131	4,551
Additional weight per 10 mm stroke	28	40	58	65	95	106
Moving load with 0 mm stroke	108	204	363	460	800	1,045
Additional load per 10 mm stroke	9	16	25	25	39	39

Materials

Sectional view



Standard cylinder	Basic design, variants	T1	A3
1 Piston rod	High-alloy stainless steel		
2 Cap	Coated die-cast aluminium		
3 Profile barrel	Anodised wrought aluminium alloy		
– Seals	PUR, POM, NBR	FPM	PUR, NBR
Note on materials	RoHS-compliant		
	PWIS-free	Contains PWIS (paint-wetting impairment substances)	

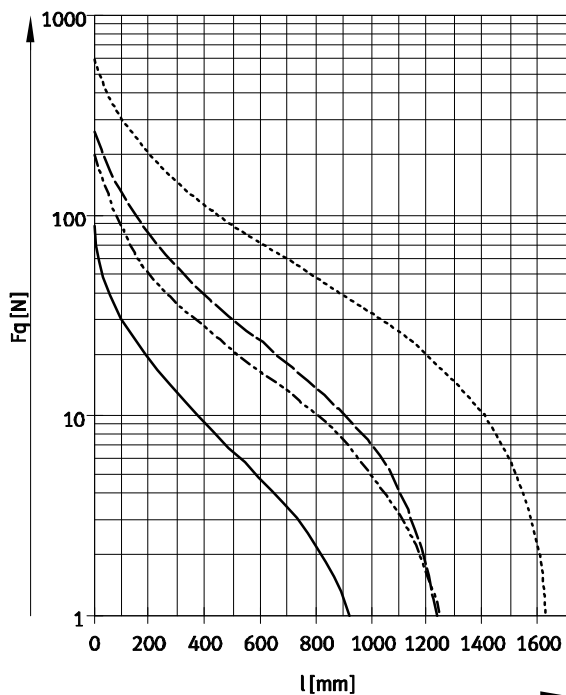
Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Technical data

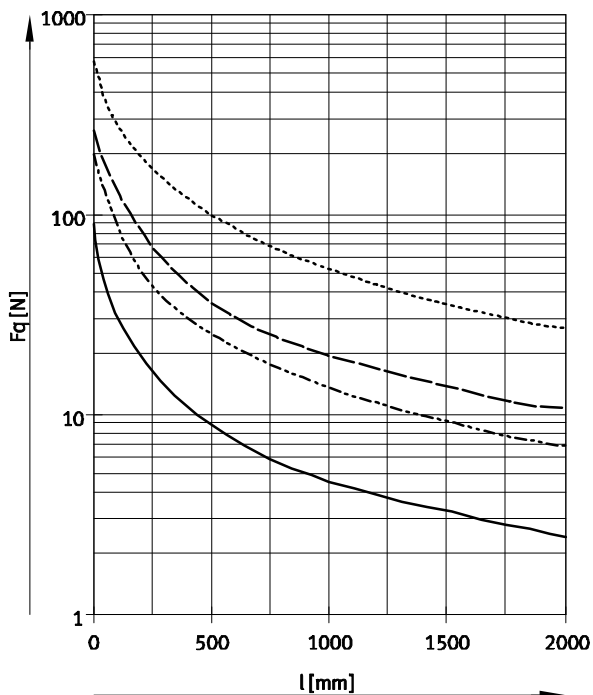
Max. lateral force F_q as a function of stroke length l

Horizontal mounting



— Ø 32 - - - - Ø 50, 63
- - - - Ø 40 ····· Ø 80, 100

Vertical mounting



Standard cylinders DSBF-C, to ISO 15552, Clean Design

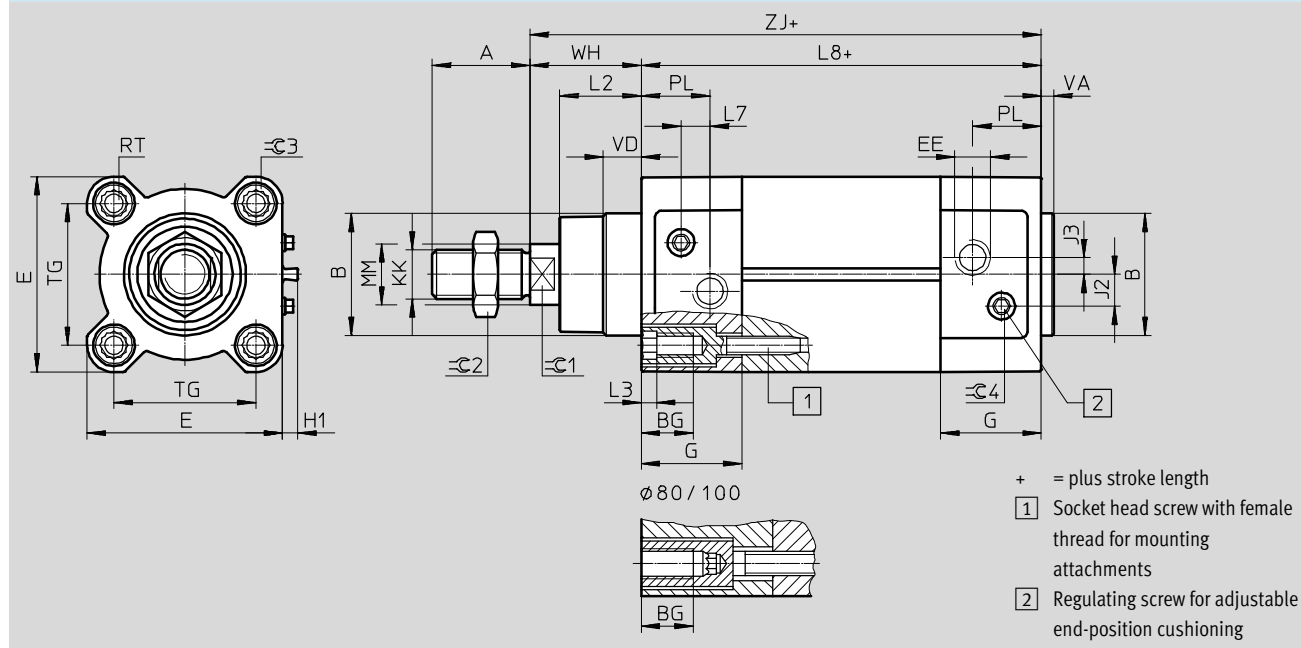
FESTO

Technical data

Dimensions

Download CAD Data → www.festo.com/us/cad

Basic design and A3 – Unlubricated operation



Ø	A	B Ø	BG	E	EE	G	H1	J2	J3
[mm]	-0.5	d11	min.	+0.5		-0.2	±0.2	±0.1	±0.1
32	22	30	16	45	G ¹ / ₈	28	5	5.7	5.3
40	24	35	16	54	G ¹ / ₄	33	5	8	4
50	32	40	16	64	G ¹ / ₄	33	5	10.4	5.5
63	32	45	16	75	G ³ / ₈	40.5	5	12.75	6.3
80	40	45	17	93	G ³ / ₈	43	5	12.5	8
100	40	55	17	110	G ¹ / ₂	48	5	13.5	10

Ø	KK	L2	L3	L7	L8	MM Ø	PM	RT	TG
[mm]		-0.2	max.		±0.4		±0.1		±0.3
32	M10x1.25	18	5	6.5	94	12	19.5	M6	32.5
40	M12x1.25	21.3	5	7.5	105	16	22.5	M6	38
50	M16x1.5	26.8	5	9.5	106	20	22.5	M8	46.5
63	M16x1.5	27	5	9	121	20	27.5	M8	56.5
80	M20x1.5	34.2	-	11	128	25	30	M10	72
100	M20x1.5	38	-	7.5	138	25	31.5	M10	89

Ø	VA	VD	WH	ZJ	⌀C1	⌀C2	⌀C3	⌀C4
[mm]	-0.2	+0.5	+2.2	+1.8				
32	4	10	25	119.1	10	16	6	4
40	4	10.5	28.7	133.9	13	18	6	4
50	4	11.5	35.6	141.8	17	24	8	4
63	4	15	35.9	157.1	17	24	8	4
80	4	15.7	45.4	173.6	22	30	6	4
100	4	19.2	49.3	187.5	22	30	6	5

Standard cylinders DSBF-C, to ISO 15552, Clean Design

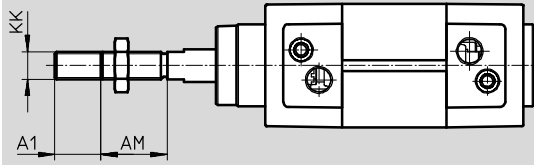
FESTO

Technical data

Dimensions – Variants

Download CAD Data → www.festo.com/us/cad

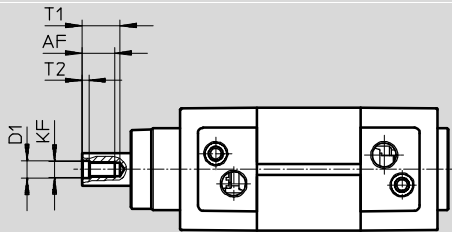
...L – Piston rod thread extension



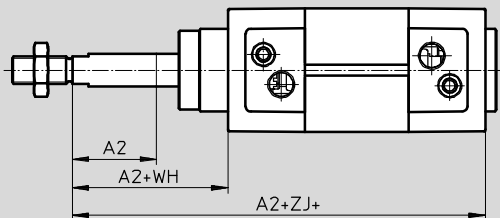
Note

In combination with variant T, the piston rod thread is extended at both ends.

F – Piston rod with female thread



...E – Piston rod extension

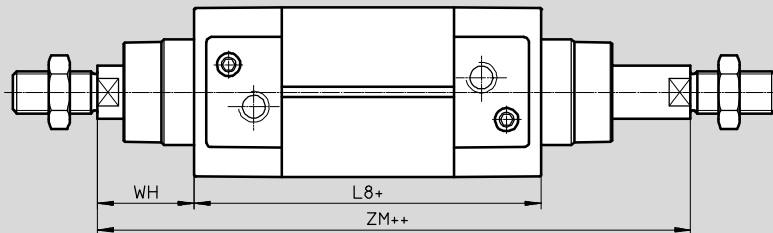


Note

In combination with variant T, the piston rod is extended at one end.

+ = plus stroke length

T – Through piston rod



+ = plus stroke length

++ = plus 2x stroke length

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Technical data

Ø [mm]	A1 max.	A2 max.	AM	AF	D1	KF
32	35	500	22	12	6.4	M6
40			24	12	8.4	M8
50	70		32	16	10.5	M10
63			32	16	10.5	M10
80			40	20	13	M12
100			40	20	13	M12

Ø [mm]	KK	L8 ±0.4	T1	T2	WH +2.2	ZJ +1.8	ZM +1
32	M10x1.25	94	16	2.6	26	119.1	146.1
40	M12x1.25	105	16	3.3	28.7	133.9	164.8
50	M16x1.5	106	21	4.7	35.6	141.8	179.8
63	M16x1.5	121	21	4.7	35.9	157.1	195.4
80	M20x1.5	128	26.5	6.1	45.4	173.6	221
100	M20x1.5	138	26.5	6.1	49.3	187.5	238.8

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Technical data

Ordering data					
Piston Ø	Stroke	PPS – Pneumatic cushioning, self-adjusting at both ends A – With position sensing		PPV – Pneumatic cushioning, adjustable at both ends A – With position sensing	
[mm]	[mm]	Part No.	Type	Part No.	Type
Basic design					
32	25	1778834	DSBF-C-32-25-PPSA-N3-R	1773752	DSBF-C-32-25-PPVA-N3-R
	40	1778835	DSBF-C-32-40-PPSA-N3-R	1773753	DSBF-C-32-40-PPVA-N3-R
	50	1778836	DSBF-C-32-50-PPSA-N3-R	1773754	DSBF-C-32-50-PPVA-N3-R
	80	1778837	DSBF-C-32-80-PPSA-N3-R	1773755	DSBF-C-32-80-PPVA-N3-R
	100	1778838	DSBF-C-32-100-PPSA-N3-R	1773756	DSBF-C-32-100-PPVA-N3-R
	125	1778839	DSBF-C-32-125-PPSA-N3-R	1773757	DSBF-C-32-125-PPVA-N3-R
	160	1778840	DSBF-C-32-160-PPSA-N3-R	1773758	DSBF-C-32-160-PPVA-N3-R
	200	1778841	DSBF-C-32-200-PPSA-N3-R	1773759	DSBF-C-32-200-PPVA-N3-R
	250	1778842	DSBF-C-32-250-PPSA-N3-R	1773760	DSBF-C-32-250-PPVA-N3-R
	320	1778843	DSBF-C-32-320-PPSA-N3-R	1773761	DSBF-C-32-320-PPVA-N3-R
	400	1778844	DSBF-C-32-400-PPSA-N3-R	1773762	DSBF-C-32-400-PPVA-N3-R
	500	1778845	DSBF-C-32-500-PPSA-N3-R	1773763	DSBF-C-32-500-PPVA-N3-R
40	25	1779431	DSBF-C-40-25-PPSA-N3-R	1774259	DSBF-C-40-25-PPVA-N3-R
	40	1779432	DSBF-C-40-40-PPSA-N3-R	1774260	DSBF-C-40-40-PPVA-N3-R
	50	1779433	DSBF-C-40-50-PPSA-N3-R	1774261	DSBF-C-40-50-PPVA-N3-R
	80	1779434	DSBF-C-40-80-PPSA-N3-R	1774262	DSBF-C-40-80-PPVA-N3-R
	100	1779435	DSBF-C-40-100-PPSA-N3-R	1774263	DSBF-C-40-100-PPVA-N3-R
	125	1779436	DSBF-C-40-125-PPSA-N3-R	1774264	DSBF-C-40-125-PPVA-N3-R
	160	1779437	DSBF-C-40-160-PPSA-N3-R	1774265	DSBF-C-40-160-PPVA-N3-R
	200	1779438	DSBF-C-40-200-PPSA-N3-R	1774266	DSBF-C-40-200-PPVA-N3-R
	250	1779439	DSBF-C-40-250-PPSA-N3-R	1774267	DSBF-C-40-250-PPVA-N3-R
	320	1779440	DSBF-C-40-320-PPSA-N3-R	1774268	DSBF-C-40-320-PPVA-N3-R
	400	1779441	DSBF-C-40-400-PPSA-N3-R	1774269	DSBF-C-40-400-PPVA-N3-R
	500	1779442	DSBF-C-40-500-PPSA-N3-R	1774270	DSBF-C-40-500-PPVA-N3-R
50	25	1780283	DSBF-C-50-25-PPSA-N3-R	1775258	DSBF-C-50-25-PPVA-N3-R
	40	1780284	DSBF-C-50-40-PPSA-N3-R	1775259	DSBF-C-50-40-PPVA-N3-R
	50	1780285	DSBF-C-50-50-PPSA-N3-R	1775260	DSBF-C-50-50-PPVA-N3-R
	80	1780286	DSBF-C-50-80-PPSA-N3-R	1775261	DSBF-C-50-80-PPVA-N3-R
	100	1780287	DSBF-C-50-100-PPSA-N3-R	1775262	DSBF-C-50-100-PPVA-N3-R
	125	1780288	DSBF-C-50-125-PPSA-N3-R	1775263	DSBF-C-50-125-PPVA-N3-R
	160	1780289	DSBF-C-50-160-PPSA-N3-R	1775264	DSBF-C-50-160-PPVA-N3-R
	200	1780290	DSBF-C-50-200-PPSA-N3-R	1775265	DSBF-C-50-200-PPVA-N3-R
	250	1780291	DSBF-C-50-250-PPSA-N3-R	1775266	DSBF-C-50-250-PPVA-N3-R
	320	1780292	DSBF-C-50-320-PPSA-N3-R	1775267	DSBF-C-50-320-PPVA-N3-R
	400	1780293	DSBF-C-50-400-PPSA-N3-R	1775268	DSBF-C-50-400-PPVA-N3-R
	500	1780294	DSBF-C-50-500-PPSA-N3-R	1775269	DSBF-C-50-500-PPVA-N3-R
63	25	1780905	DSBF-C-63-25-PPSA-N3-R	1776043	DSBF-C-63-25-PPVA-N3-R
	40	1780906	DSBF-C-63-40-PPSA-N3-R	1776044	DSBF-C-63-40-PPVA-N3-R
	50	1780907	DSBF-C-63-50-PPSA-N3-R	1776045	DSBF-C-63-50-PPVA-N3-R
	80	1780908	DSBF-C-63-80-PPSA-N3-R	1776046	DSBF-C-63-80-PPVA-N3-R
	100	1780909	DSBF-C-63-100-PPSA-N3-R	1776047	DSBF-C-63-100-PPVA-N3-R
	125	1780910	DSBF-C-63-125-PPSA-N3-R	1776048	DSBF-C-63-125-PPVA-N3-R
	160	1780911	DSBF-C-63-160-PPSA-N3-R	1776049	DSBF-C-63-160-PPVA-N3-R
	200	1780912	DSBF-C-63-200-PPSA-N3-R	1776050	DSBF-C-63-200-PPVA-N3-R
	250	1780913	DSBF-C-63-250-PPSA-N3-R	1776051	DSBF-C-63-250-PPVA-N3-R
	320	1780914	DSBF-C-63-320-PPSA-N3-R	1776052	DSBF-C-63-320-PPVA-N3-R
	400	1780915	DSBF-C-63-400-PPSA-N3-R	1776053	DSBF-C-63-400-PPVA-N3-R
	500	1780916	DSBF-C-63-500-PPSA-N3-R	1776054	DSBF-C-63-500-PPVA-N3-R

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Technical data

Ordering data					
Piston Ø	Stroke	PPS – Pneumatic cushioning, self-adjusting at both ends A – With position sensing		PPV – Pneumatic cushioning, adjustable at both ends A – With position sensing	
[mm]	[mm]	Part No.	Type	Part No.	Type
Basic design					
80	25	1781061	DSBF-C-80-25-PPSA-N3-R	1778429	DSBF-C-80-25-PPVA-N3-R
	40	1781062	DSBF-C-80-40-PPSA-N3-R	1778430	DSBF-C-80-40-PPVA-N3-R
	50	1781063	DSBF-C-80-50-PPSA-N3-R	1778431	DSBF-C-80-50-PPVA-N3-R
	80	1781064	DSBF-C-80-80-PPSA-N3-R	1778432	DSBF-C-80-80-PPVA-N3-R
	100	1781065	DSBF-C-80-100-PPSA-N3-R	1778433	DSBF-C-80-100-PPVA-N3-R
	125	1781066	DSBF-C-80-125-PPSA-N3-R	1778434	DSBF-C-80-125-PPVA-N3-R
	160	1781067	DSBF-C-80-160-PPSA-N3-R	1778435	DSBF-C-80-160-PPVA-N3-R
	200	1781068	DSBF-C-80-200-PPSA-N3-R	1778436	DSBF-C-80-200-PPVA-N3-R
	250	1781069	DSBF-C-80-250-PPSA-N3-R	1778437	DSBF-C-80-250-PPVA-N3-R
	320	1781070	DSBF-C-80-320-PPSA-N3-R	1778438	DSBF-C-80-320-PPVA-N3-R
	400	1781071	DSBF-C-80-400-PPSA-N3-R	1778439	DSBF-C-80-400-PPVA-N3-R
	500	1781072	DSBF-C-80-500-PPSA-N3-R	1778440	DSBF-C-80-500-PPVA-N3-R
100	25	1782823	DSBF-C-100-25-PPSA-N3-R	1782253	DSBF-C-100-25-PPVA-N3-R
	40	1782824	DSBF-C-100-40-PPSA-N3-R	1782254	DSBF-C-100-40-PPVA-N3-R
	50	1782825	DSBF-C-100-50-PPSA-N3-R	1782255	DSBF-C-100-50-PPVA-N3-R
	80	1782826	DSBF-C-100-80-PPSA-N3-R	1782256	DSBF-C-100-80-PPVA-N3-R
	100	1782827	DSBF-C-100-100-PPSA-N3-R	1782257	DSBF-C-100-100-PPVA-N3-R
	125	1782828	DSBF-C-100-125-PPSA-N3-R	1782258	DSBF-C-100-125-PPVA-N3-R
	160	1782829	DSBF-C-100-160-PPSA-N3-R	1782259	DSBF-C-100-160-PPVA-N3-R
	200	1782830	DSBF-C-100-200-PPSA-N3-R	1782260	DSBF-C-100-200-PPVA-N3-R
	250	1782831	DSBF-C-100-250-PPSA-N3-R	1782261	DSBF-C-100-250-PPVA-N3-R
	320	1782832	DSBF-C-100-320-PPSA-N3-R	1782262	DSBF-C-100-320-PPVA-N3-R
	400	1782833	DSBF-C-100-400-PPSA-N3-R	1782263	DSBF-C-100-400-PPVA-N3-R
	500	1782834	DSBF-C-100-500-PPSA-N3-R	1782264	DSBF-C-100-500-PPVA-N3-R

Ordering data					
Piston Ø	Stroke	PPS – Pneumatic cushioning, self-adjusting at both ends A – With position sensing		PPV – Pneumatic cushioning, adjustable at both ends A – With position sensing	
[mm]	[mm]	Part No.	Type	Part No.	Type
Variable stroke					
32	1 ... 2,800	1778516	DSBF-C-32-...-PPSA-N3-R	1772262	DSBF-C-32-...-PPVA-N3-R
40	1 ... 2,800	1779309	DSBF-C-40-...-PPSA-N3-R	1774182	DSBF-C-40-...-PPVA-N3-R
50	1 ... 2,800	1779742	DSBF-C-50-...-PPSA-N3-R	1774418	DSBF-C-50-...-PPVA-N3-R
63	1 ... 2,800	1780600	DSBF-C-63-...-PPSA-N3-R	1775324	DSBF-C-63-...-PPVA-N3-R
80	1 ... 2,800	1780945	DSBF-C-80-...-PPSA-N3-R	1778184	DSBF-C-80-...-PPVA-N3-R
100	1 ... 2,800	1781567	DSBF-C-100-...-PPSA-N3-R	1781598	DSBF-C-100-...-PPVA-N3-R

Note

Further variants can be configured and ordered using the modular product system DSBF → 18.

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Ordering data – Modular products

Ordering table										
Size	32	40	50	63	80	100	Condi- tions	Code	Enter code	
M	Module No.	570077	570078	570079	570080	570081	570082			
	Function	Clean Design standard cylinder							DSBF	DSBF
	Product version	Easy-to-clean design							-C	-C
	Piston diameter [mm]	32	40	50	63	80	100		-...	
	Stroke [mm]	1 ... 2,800							-...	
O	Piston rod	At one end								
		Through piston rod							-T	
	Piston rod thread type	Male thread								
		Female thread						1	F	
M	Cushioning	Elastic cushioning rings/pads at both ends							-P	
		Pneumatic cushioning, self-adjusting at both ends						2	-PPS	
		Pneumatic cushioning, adjustable at both ends							-PPV	
	Position sensing	Via proximity sensor							A	A
	Standard	Conforms to ISO 15552							-N3	-N3
O	Temperature range	Standard -20 ... +80 °C								
		Heat-resistant 0 ... +120 °C							T1	
		Low temperature -40 ... +80 °C							T3	
	Wiper seal variant	None								
		For unlubricated operation						2	A3	
	Piston rod extension [mm]	1 ... 500							-...E	
	Piston rod thread extension [mm]	1 ... 35		1 ... 70				3	-...L	
M	Sensor mounting	Mounting rail for sensors							-R	-R

- 1** **F** Not with piston rod thread extension ...L
2 **PPS, A3** Not with temperature range T1, T3
3 **...E, ...L** Only up to strokes of 2,000 mm

Note

In the case of cylinders with position sensing, a minimum stroke is required for reliable sensing.

➔ 10

Transfer order code

DSBF - **C** - - - - - **A** - **N3** - - - **-R**

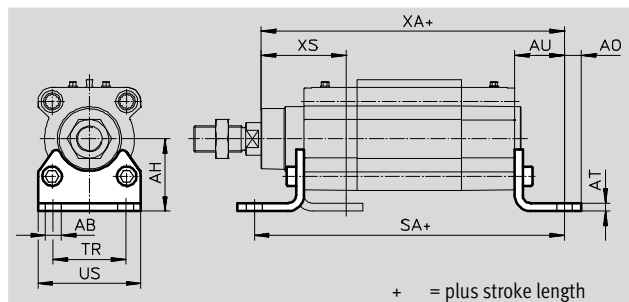
Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Foot mounting CRHNC

Material:
High-alloy steel
Free of copper, PTFE and silicone



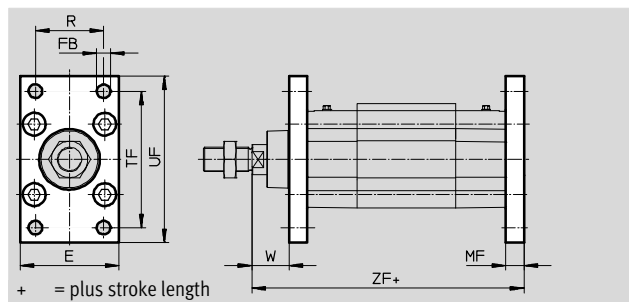
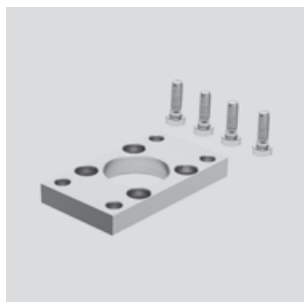
Dimensions and ordering data													
For Ø	AB Ø	AH	AO	AT	AU	SA	TR	US	XA	XS	CRC ¹⁾	Weight [g]	Part No. Type
[mm]													
32	7	32	6.5	4	24	142	32	45	143.1	46	4	135	176937 CRHNC-32
40	10	36	9	4	28	161	36	54	161.9	52.7	4	180	176938 CRHNC-40
50	10	45	9.5	5	32	170	45	64	173.8	62.6	4	325	176939 CRHNC-50
63	10	50	12.5	5	32	185	50	75	189.1	62.9	4	405	176940 CRHNC-63
80	12	63	15	6	41	210	63	93	214.6	80.4	4	820	176941 CRHNC-80
100	14.5	71	17.5	6	41	220	75	110	228.5	84.3	4	1,000	176942 CRHNC-100

- 1) Corrosion resistance class 4 to Festo standard 940 070
Components subject to high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Flange mounting CRFNG

Material:
High-alloy steel
Free of copper, PTFE and silicone

Cannot be used on the bearing cap in combination with protective bellows kit DADB.



Dimensions and ordering data												
For Ø	E	FB Ø	MF	R	TF	UF	W	ZF	CRC ¹⁾	Weight	Part No.	Type
[mm]										[g]		
32	45	7	10	32	64	80	16	129.1	4	225	161846	CRFNG-32
40	54	9	10	36	72	90	18.7	143.9	4	300	161847	CRFNG-40
50	64	9	12	45	90	110	23.6	153.8	4	540	161848	CRFNG-50
63	75	9	12	50	100	120	23.9	169.1	4	680	161849	CRFNG-63
80	93	12	16	63	126	150	29.4	189.6	4	1,500	161850	CRFNG-80
100	110	14	16	75	150	175	33.3	203.5	4	2,100	161851	CRFNG-100

- 1) Corrosion resistance class 4 to Festo standard 940 070
Components subject to high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

FESTO

Accessories

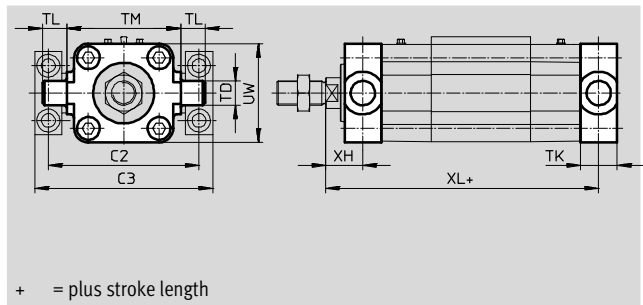
Trunnion flange CRZNG

Material:

High-alloy steel

Free of copper, PTFE and silicone

Cannot be used on the bearing cap in combination with protective bellows kit DADB.



Dimensions and ordering data													
For Ø	C2	C3	TD Ø e9	TK	TL	TM	UW	XH	XL	CRC ¹⁾	Weight	Part No.	Type
[mm]											[g]		
32	71	86	12	16	12	50	50	18	127.1	4	150	161852	CRZNG-32
40	87	105	16	20	16	63	55	18.7	143.9	4	285	161853	CRZNG-40
50	99	117	16	24	16	75	65	23.6	153.8	4	473	161854	CRZNG-50
63	116	136	20	24	20	90	75	23.9	169.1	4	687	161855	CRZNG-63
80	136	156	20	28	20	110	100	31.4	187.6	4	1,296	161856	CRZNG-80
100	164	189	25	38	25	132	120	30.3	206.5	4	2,254	161857	CRZNG-100

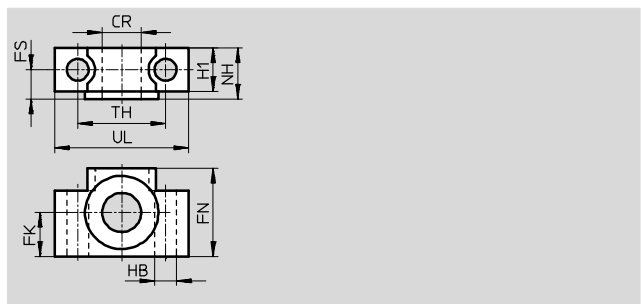
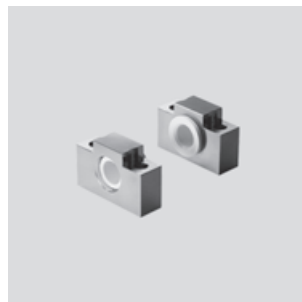
- 1) Corrosion resistance class 4 to Festo standard 940 070
Components subject to high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Trunnion support CRLNZG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	CR	FK	FN	FS	H1	HB	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø	Ø				Ø					[g]		
	D11	±0.1				H13		±0.2					
32	12	15	30	10.5	15	6.6	18	32	46	4	205	161874	CRNLZG-32
40, 50	16	18	36	12	18	9	21	36	55	4	323	161875	CRNLZG-40/50
63, 80	20	20	40	13	20	11	23	42	65	4	435	161876	CRNLZG-63/80
100	25	25	50	16	24.5	14	28.5	50	75	4	739	161877	CRNLZG-100/125

- 1) Corrosion resistance class 4 to Festo standard 940 070
Components subject to high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

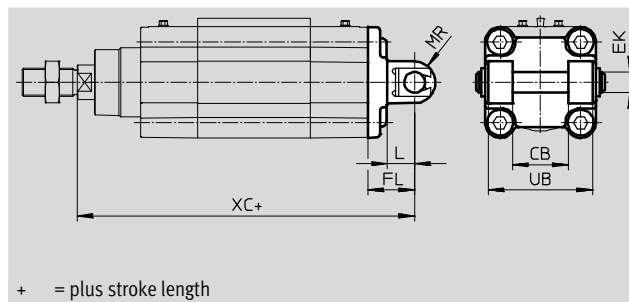
Accessories

Swivel flange SNCB- ... R3

Material:

Die-cast aluminium with protective coating

Free of copper, PTFE and silicone



Dimensions and ordering data											
For Ø	CB	EK	FL	L	MR	UB	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H14	Ø e8	±0.2			h14			[g]		
32	26	10	22	13	8.5	45	141.1	3	100	176944	SNCB-32-R3
40	28	12	25	16	12	52	158.9	3	151	176945	SNCB-40-R3
50	32	12	27	16	12	60	168.8	3	228	176946	SNCB-50-R3
63	40	16	32	21	16	70	189.1	3	371	176947	SNCB-63-R3
80	50	16	36	22	16	90	209.6	3	632	176948	SNCB-80-R3
100	60	20	41	27	20	110	228.5	3	986	176949	SNCB-100-R3

1) Corrosion resistance class 3 according to Festo standard 940 070

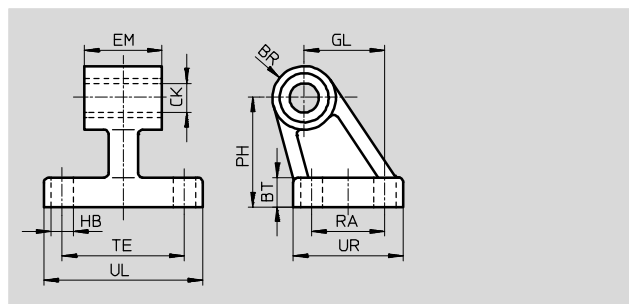
Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

Clevis foot CRLNG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	BR	BT	CK	EM	GL	HB	PH	RA	TE	UL	UR	CRC ¹⁾	Weight
[mm]			Ø D11	-Q4		Ø H13							[g]
32	10	8	10	25.8	21	6.6	32	18	38	51	31	4	120
40	11	10	12	27.8	24	6.6	36	22	41	54	35	4	160
50	12	12	12	31.8	33	9	45	30	50	65	45	4	280
63	15	12	16	39.8	37	9	50	35	52	67	50	4	375
80	15	14	16	49.8	47	11	63	40	66	86	60	4	580
100	19	15	20	59.8	55	11	71	50	76	96	70	4	935

1) Corrosion resistance class 4 to Festo standard 940 070

Components subject to high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Protective bellows kit DADB



General technical data							
Type DADB-V6-		32	40	50	63	80	100
Max. stroke range of cylinder ¹⁾	[mm]	10 ... 500	10 ... 500	10 ... 500	10 ... 500	10 ... 500	10 ... 500
Type of mounting		Via threaded pin					
Mounting position		Any					
Resistance to media		Dust, chippings, oil, grease, fuel (→ Internet: Resistance to media)					
Ambient temperature ²⁾	[°C]	-10 ... +80					
Protection class		IP54					
Corrosion resistance class CRC ³⁾		3					

1) In combination with protective bellows kit DADB

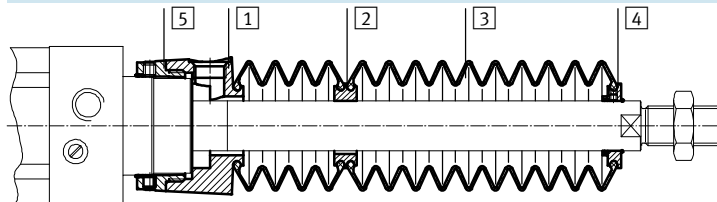
2) Note operating range of proximity sensors and cylinder

3) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

Materials

Sectional view



Bellows

1	Connection	Polyamide
2	Adapter	Polyamide
3	Bellows	Nitrile rubber
4	End piece	Polyamide
5	Connector	Polyamide
-	O-ring	Nitrile rubber
Note on materials		Free of copper and PTFE
		RoHS-compliant

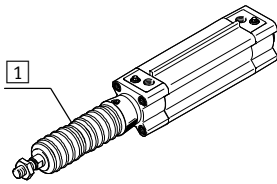
Weight [g]							
Type DADB-V6-		32	40	50	63	80	100
Stroke [mm]							
10 ... 50		29	42	71	69	99	124
51 ... 125		41	56	91	89	127	152
126 ... 175		52	68	105	103	140	165
176 ... 250		66	85	129	127	193	218
251 ... 300		79	100	147	145	231	255
301 ... 350		92	115	166	164	268	293
351 ... 375		92	115	167	165	259	284
376 ... 425		104	129	185	183	296	321
426 ... 475		117	144	204	202	334	359
476 ... 500		117	144	205	203	324	349

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Travel speed v as a function of tubing length l

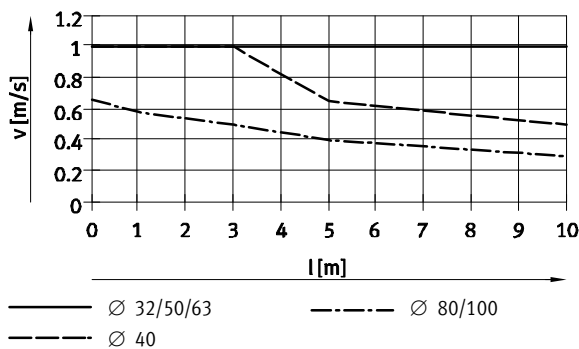


The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air must be ducted via a pressure compensation hole in the connection part **1**.

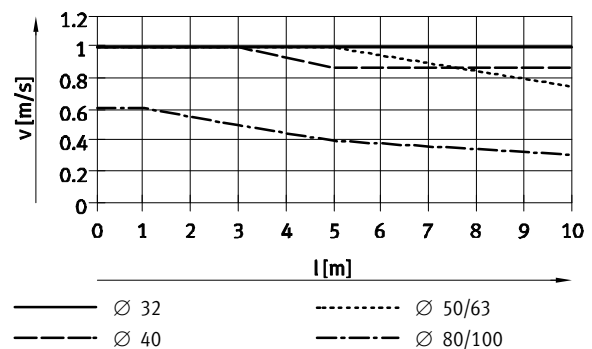
The pressure generated in the protective bellows kit by the positioning motion is primarily defined by the travel speed and tubing

length. The recommended tubing length based on the travel speed of the drive can be read from the graph.

Advance



Return



Note

The push-in fittings opposite must be used for the pressure compensation hole. Silencers can be used as an alternative. This reduces the travel speed slightly.

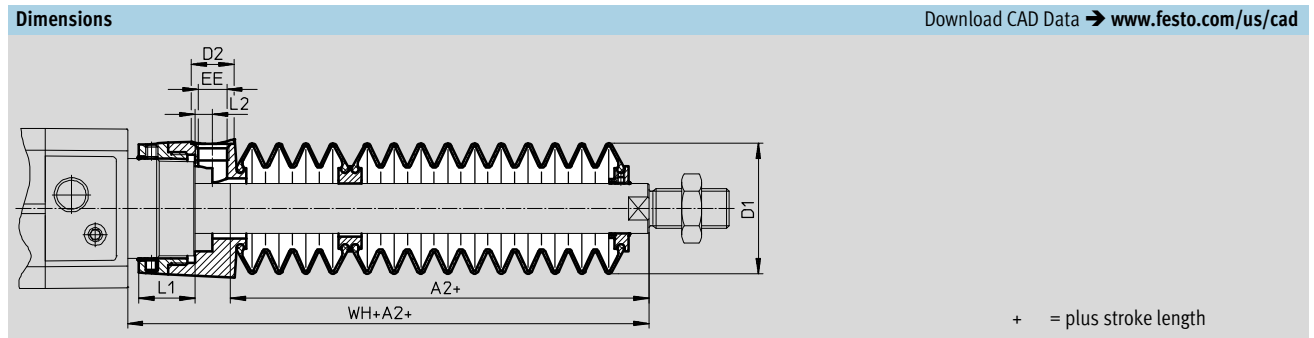
Tubing length and push-in fitting for pressure compensation hole

Ø [mm]	Tubing O.D. [mm]	Push-in fitting	
		Part No.	Type
32, 40	8	186109	QS-G $\frac{1}{8}$ -8-I
		533929	QS-F-G $\frac{1}{8}$ -8-I
		533880	QS-F-G $\frac{1}{8}$ -8H
50, 63, 80, 100	12	186350	QS-G $\frac{1}{4}$ -12
		533848	QS-F-G $\frac{1}{4}$ -12
		533884	QS-F-G $\frac{1}{4}$ -12H

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories



Ø Stroke [mm]	32							40						
	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2
10 ... 50	29	38	14	G ¹ / ₈	12.9	5.4	55	28	46	14	G ¹ / ₈	16.3	5.4	56.7
51 ... 125	47						73	43						71.7
126 ... 175	61						87	56						84.7
176 ... 250	80						106	72						100.7
251 ... 300	96						122	86						114.7
301 ... 350	112						138	100						128.7
351 ... 375	114						140	101						129.7
376 ... 425	130						156	115						143.7
426 ... 475	145						171	130						158.7
476 ... 500	147						173	131						159.7

Ø Stroke [mm]	50							63						
	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2
10 ... 50	28	57	17	G ¹ / ₄	22.35	7	63.6	28	57	17	G ¹ / ₄	22.4	7	63.9
51 ... 125	46						81.6	46						81.9
126 ... 175	56						91.6	56						91.9
176 ... 250	73						108.6	73						108.9
251 ... 300	86						121.6	86						121.9
301 ... 350	97						132.6	97						132.9
351 ... 375	105						140.6	105						140.9
376 ... 425	116						151.6	116						151.9
426 ... 475	126						161.6	126						161.9
476 ... 500	134						169.6	134						169.9

Ø Stroke [mm]	80							100						
	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2	A2 ¹⁾	D1 max.	D2	EE	L1	L2	WH+A2
10 ... 50	25	93	17	G ¹ / ₄	28	4	70.4	25	93	17	G ¹ / ₄	28	4	74.3
51 ... 125	37						82.4	37						86.3
126 ... 175	49						94.4	49						98.3
176 ... 250	62						107.4	62						111.3
251 ... 300	74						119.4	74						123.3
301 ... 350	86						131.4	86						135.3
351 ... 375	87						132.4	87						136.3
376 ... 425	98						143.4	98						147.3
426 ... 475	110						155.4	110						159.3
476 ... 500	111						156.4	111						160.3

1) The dimension corresponds to the E value (extended piston rod) of the drive

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Ordering data – Protective bellows kit

An extended piston rod (order code ...E) → 18 is absolutely essential if a protective bellows kit is to be used.

The following table specifies the required dimension for E as a function of piston diameter and stroke of the cylinder as well as the associated bellows kit:

Order example:

Selected standard cylinder:

DSBF-C-32-320-PPV-A-N3-...E-R

The dimension for the corresponding E value (see table):

112 mm

Complete type code for standard cylinder:

DSBF-C-32-320-PPV-A-N3-112E-R

The corresponding protective bellows kit:

DADB-V6-32-S301-350

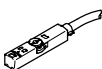
Cylinder data			Protective bellows kit	
Ø	Stroke	Dimension for E	Part No.	Type
[mm]	[mm]	[mm]		
32	10 ... 50	29	553271	DADB-V6-32-S10-50
	51 ... 125	47	553273	DADB-V6-32-S51-125
	126 ... 175	61	553275	DADB-V6-32-S126-175
	176 ... 250	80	553277	DADB-V6-32-S176-250
	251 ... 300	96	553279	DADB-V6-32-S251-300
	301 ... 350	112	553281	DADB-V6-32-S301-350
	351 ... 375	114	553283	DADB-V6-32-S351-375
	376 ... 425	130	553285	DADB-V6-32-S376-425
	426 ... 475	145	553287	DADB-V6-32-S426-475
	476 ... 500	147	553289	DADB-V6-32-S476-500
50	10 ... 50	28	553311	DADB-V6-50-S10-50
	51 ... 125	46	553313	DADB-V6-50-S51-125
	126 ... 175	56	553315	DADB-V6-50-S126-175
	176 ... 250	73	553317	DADB-V6-50-S176-250
	251 ... 300	86	553319	DADB-V6-50-S251-300
	301 ... 350	97	553321	DADB-V6-50-S301-350
	351 ... 375	105	553323	DADB-V6-50-S351-375
	376 ... 425	116	553325	DADB-V6-50-S376-425
	426 ... 475	126	553327	DADB-V6-50-S426-475
	476 ... 500	134	553329	DADB-V6-50-S476-500
63	10 ... 50	28	553331	DADB-V6-63-S10-50
	51 ... 125	46	553333	DADB-V6-63-S51-125
	126 ... 175	56	553335	DADB-V6-63-S126-175
	176 ... 250	73	553337	DADB-V6-63-S176-250
	251 ... 300	86	553339	DADB-V6-63-S251-300
	301 ... 350	97	553341	DADB-V6-63-S301-350
	351 ... 375	105	553343	DADB-V6-63-S351-375
	376 ... 425	116	553345	DADB-V6-63-S376-425
	426 ... 475	126	553347	DADB-V6-63-S426-475
	476 ... 500	134	553349	DADB-V6-63-S476-500
80	10 ... 50	25	553351	DADB-V6-80-S10-50
	51 ... 125	37	553353	DADB-V6-80-S51-125
	126 ... 175	49	553355	DADB-V6-80-S126-175
	176 ... 250	62	553357	DADB-V6-80-S176-250
	251 ... 300	74	553359	DADB-V6-80-S251-300
	301 ... 350	86	553361	DADB-V6-80-S301-350
	351 ... 375	87	553363	DADB-V6-80-S351-375
	376 ... 425	98	553365	DADB-V6-80-S376-425
	426 ... 475	110	553367	DADB-V6-80-S426-475
	476 ... 500	111	553369	DADB-V6-80-S476-500
100	10 ... 50	25	553371	DADB-V6-100-S10-50
	51 ... 125	37	553373	DADB-V6-100-S51-125
	126 ... 175	49	553375	DADB-V6-100-S126-175
	176 ... 250	62	553377	DADB-V6-100-S176-250
	251 ... 300	74	553379	DADB-V6-100-S251-300
	301 ... 350	86	553381	DADB-V6-100-S301-350
	351 ... 375	87	553383	DADB-V6-100-S351-375
	376 ... 425	98	553385	DADB-V6-100-S376-425
	426 ... 475	110	553387	DADB-V6-100-S426-475
	476 ... 500	111	553389	DADB-V6-100-S476-500

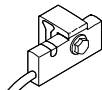
Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Ordering data – Mounting kit			
	Description	Part No.	Type
	For mounting the proximity sensor CRSMT-8M on the mounting rail	1806790	SMB-8-C

Ordering data – Proximity sensor for T-slot, magneto-resistive					Technical data → Internet: smt	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with the mounting kit	PNP	Cable, 3-wire	5.0	574380	CRSMT-8M-PS-24V-K-5,0-OE
			Cable, 3-wire	10.0	574381	CRSMT-8M-PS-24V-K-10,0-OE
			Plug M8x1, 3-pin	0.3	574383	CRSMT-8M-PS-24V-K-0,3-M8D
			Plug M12x1, 3-pin	0.3	574382	CRSMT-8M-PS-24V-K-0,3-M12

Ordering data – Proximity sensor for T-slot, magneto-resistive					Technical data → Internet: smt	
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Is mounted on the mounting rail	PNP	Cable, 3-wire	5.0	571339	SMT-C1-PS-24V-K-5,0-OE
			Plug M8x1, 3-pin	0.3	571342	SMT-C1-PS-24V-K-0,3-M8D
			Plug M12x1, 3-pin	0.3	571341	SMT-C1-PS-24V-K-0,3-M12

Ordering data – Connecting cables				Technical data → Internet: nebu	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541333	NEBU-M8G3-K-2.5-LE3
			5	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	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	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	541370	NEBU-M12W5-K-5-LE3

Ordering data – Push-in fittings					Technical data → Internet: quick star		
	Connection		Material	Weight [g]	Part No.	Type	PU ³⁾
	Thread	Tubing O.D.					
With external hexagon							
	G1/8	4	Nickel and chrome-plated brass	8	193408	QS-F-G1/8-4 ¹⁾	10
		6		12	193409	QS-F-G1/8-6 ¹⁾	
		8		14	193410	QS-F-G1/8-8 ¹⁾	
	G1/4	6		16	193411	QS-F-G1/4-6 ¹⁾	
		8		16	193412	QS-F-G1/4-8 ¹⁾	
		10		22	193413	QS-F-G1/4-10 ¹⁾	
	G3/8	8		20	193414	QS-F-G3/8-8 ¹⁾	
		10		30	193415	QS-F-G3/8-10 ¹⁾	
		12		38	193487	QS-F-G3/8-12 ¹⁾	
	G1/2	10		42	193416	QS-F-G1/2-10 ¹⁾	
		12		46	193417	QS-F-G1/2-12 ¹⁾	

- 1) With sealing ring
 2) With PTFE coating
 3) Packaging unit

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Ordering data – Push-in L-fittings					Technical data → Internet: quick star		
	Connection		Material	Weight [g]	Part No.	Type	PU ³⁾
	Thread	Tubing O.D.					
With external hexagon							
	R1/8	6	Stainless steel	9.9	162862	CRQS-1/8-6 ²⁾	1
		8		13	162863	CRQS-1/8-8 ²⁾	
	R1/4	8		18	162864	CRQS-1/4-8 ²⁾	
		10		22	162865	CRQS-1/4-10 ²⁾	
	R3/8	10		29	162866	CRQS-3/8-10 ²⁾	
		12		38	162867	CRQS-3/8-12 ²⁾	
	R1/2	12		55	162868	CRQS-1/2-12 ²⁾	
		16		59	162869	CRQS-1/2-16 ²⁾	
	With internal hexagon						
	G1/8	4	Nickel and chrome-plated brass	8.6	533927	QS-F-G1/8-4-I ¹⁾	10
		6		13.4	533928	QS-F-G1/8-6-I ¹⁾	
		8		13.1	533929	QS-F-G1/8-8-I ¹⁾	
	G1/4	8		14.6	533930	QS-F-G1/4-8-I ¹⁾	
		10		21	533931	QS-F-G1/4-10-I ¹⁾	
	G3/8	12		34.3	8002796	QS-F-G3/8-12-I-B ¹⁾	
	With external hexagon						
	G1/8	4	Nickel and chrome-plated brass	17.6	193418	QSL-F-G1/8-4 ¹⁾	10
		6		16	193419	QSL-F-G1/8-6 ¹⁾	
		8		20	193420	QSL-F-G1/8-8 ¹⁾	
	G1/4	6		24.5	193421	QSL-F-G1/4-6 ¹⁾	
		8		24	193422	QSL-F-G1/4-8 ¹⁾	
	10	34.6		193423	QSL-F-G1/4-10 ¹⁾		
	G3/8	8		34.2	193424	QSL-F-G3/8-8 ¹⁾	
		10		36.6	193425	QSL-F-G3/8-10 ¹⁾	
	G1/2	10		66	193426	QSL-F-G1/2-10 ¹⁾	
		12		70	193427	QSL-F-G1/2-12 ¹⁾	
		R1/8		6	Stainless steel	20	
8			27	162873		CRQSL-1/8-8 ²⁾	
R1/4		8	31	162874		CRQSL-1/4-8 ²⁾	
		10	46	162875		CRQSL-1/4-10 ²⁾	
R3/8		10	52	162876		CRQSL-3/8-10 ²⁾	
		12	69	162877		CRQSL-3/8-12 ²⁾	
R1/2		12	89	162878		CRQSL-1/2-12 ²⁾	
		16	105	162879		CRQSL-1/2-16 ²⁾	

- 1) With sealing ring
- 2) With PTFE coating
- 3) Packaging unit

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Ordering data – Plastic tubing, standard O.D.			Technical data → Internet: tubing
		Type	
	Good resistance to chemicals and hydrolysis	PLN	
	Pneumatic tubing with resistance to high temperatures and chemicals	PFAN	
	Approved for use in the food industry and resistant to hydrolysis	PUN-H	

Ordering data – One-way flow control valves					Technical data → Internet: crgla	
	Connection		Material	Weight [g]	Part No.	Type
	Thread	For push-in fitting				
	G1/8	CRQS/CRQSL/CRQST, Quick Star	Electrolytically polished stainless steel casting	44	161404	CRGRLA-1/8-B
	G1/4			83	161405	CRGRLA-1/4-B
	G3/8			150	161406	CRGRLA-3/8-B
	G1/2			315	161407	CRGRLA-1/2-B

Ordering data – Blanking screws, corrosion-resistant							
	For Ø	Material	CRC ¹⁾	Weight [g]	Part No.	Type	PU ²⁾
	32, 40	High-alloy steel	3	7	1355016	DAMD-PS-M6-12-R1	4
	50, 63		3	14	650121	DAMD-PS-M8-16-R1	
	80, 100		3	23	1355026	DAMD-PS-M10-16-R1	

1) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

2) Packaging unit

Ordering data – Piston rod attachments, corrosion and acid-resistant				Technical data → Internet: crsg			
	For Ø	Part No.	Type		For Ø	Part No.	Type
Rod eye CRSGS				Rod clevis CRSG			
	32	195582	CRSGS-M10x1,25		32	13569	CRSG-M10x1,25
	40	195583	CRSGS-M12x1,25		40	13570	CRSG-M12x1,25
	50, 63	195584	CRSGS-M16x1,5		50, 63	13571	CRSG-M16x1,5
	80, 100	195585	CRSGS-M20x1,5		80, 100	13572	CRSG-M20x1,5

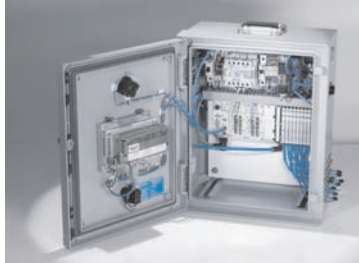
Product Range and Company Overview

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

Subject to change

Internet: www.festo.com/us

Standard cylinders DSBF-C, to ISO 15552, Clean Design

FESTO

Accessories

Ordering data – Plastic tubing, standard O.D.			Technical data → Internet: tubing
		Type	
	Good resistance to chemicals and hydrolysis	PLN	
	Pneumatic tubing with resistance to high temperatures and chemicals	PFAN	
	Approved for use in the food industry and resistant to hydrolysis	PUN-H	

Ordering data – One-way flow control valves					Technical data ➔ Internet: crgla	
	Connection		Material	Weight [g]	Part No.	Type
	Thread	For push-in fitting				
	G1/8	CRQS/CRQSL/CRQST,	Electrolytically polished stainless steel casting	44	161404	CRGRLA-1/8-B
	G1/4	Quick Star		83	161405	CRGRLA-1/4-B
	G3/8			150	161406	CRGRLA-3/8-B
	G1/2			315	161407	CRGRLA-1/2-B

Ordering data – Blanking screws, corrosion-resistant						
	For Ø	Material	CRC ¹⁾	Weight [g]	Part No.	Type ³⁾
	32, 40	High-alloy steel	3	7	1355016	DAMD-PS-M6-12-R1
	50, 63		3	14	650121	DAMD-PS-M8-16-R1
	80, 100		3	23	1355026	DAMD-PS-M10-16-R1

1) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment or media such as solvents and cleaning agents.

2) Packaging unit

3) ATEX-compliant

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.

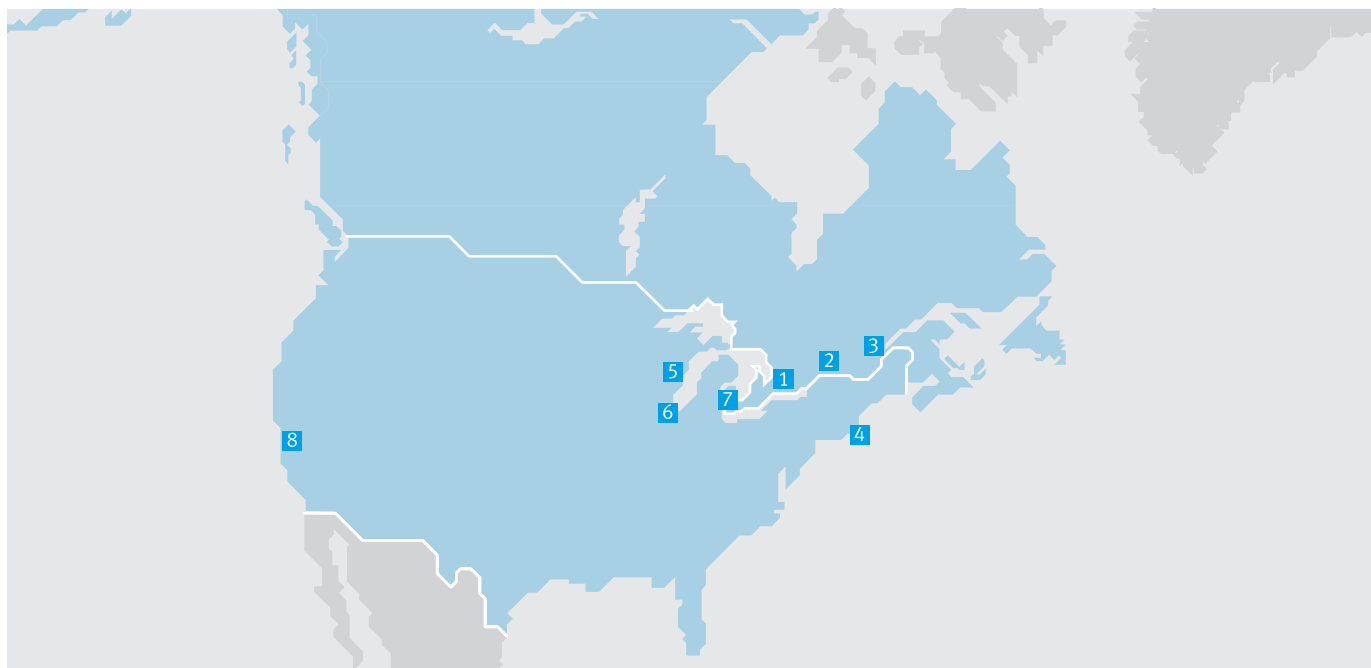


© Copyright 2013, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. 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

Subject to change

Internet: www.festo.com/us