Standards-based cylinders DSBC, ISO 15552





*

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At a glance

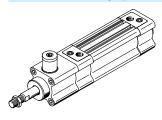






- Standards-based cylinders to ISO15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA24562, NFE49003.1 and UNI 10290)
- · Double-acting
- · For contactless position sensing
- Optionally with protection against rotation
- EX4: for use in potentially explosive areas
- Extensive range of accessories makes it possible to install the cylinder virtually anywhere
- Three types of cushioning available:
 - Elastic cushioning: elastic cushioning rings/plates 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 using a modular product system
- Wide range of variants provides high level of flexibility

DSBC-...-C - with clamping unit, standard hole pattern

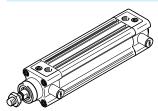


- Standard hole pattern
- Piston rod can be held or clamped in any position
- The piston rod can be held in position for long periods even with alternating loads, fluctuating operating pressure or leaks in the system

Additional measures are required for use in safety-related applications; in Europe, for example, the standards listed under the EC Machinery Directive must be observed.

Without additional measures in accordance with legally specified minimum requirements, the product is not suitable as a safety relevant component in control systems.

DSBC-...-E1/-E2/-E3 - with end-position locking, standard hole pattern

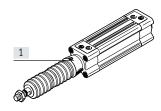


- · Standard hole pattern
- Positive locking in the end position as a drop guard. In the event of a pressure drop, the piston rod is locked in its end position.
- Optionally at one or both ends

Additional measures are required for use in safety-related applications; in Europe, for example, the standards listed under the EC Machinery Directive must be observed.

Without additional measures in accordance with legally specified minimum requirements, the product is not suitable as a safety relevant component in control systems.

DSBC-...-P2 - with bellows kit DADB, standard hole pattern



The bellows protects the piston rod, the seal and the bearing from the effects of a wide range of media, which has a positive impact on the service life of these components. The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air for the kit must be ducted via a pressure compensation hole in the connection part [1].

The kit protects the piston rod, seal and bearing against a wide variety of media, for example:

- Dust
- Chippings
- Oil
- Grease
- Fuel

Ordering the bellows kit

An extended piston rod is absolutely essential if a bellows kit is to be used. The bellows kit can be ordered via the modular product system or as an accessory. The following must be noted in this case:

Ordering via the modular product system:

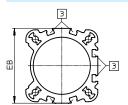
The bellows kit is supplied mounted on the bearing cap using feature P2. The required piston rod extension is automatically taken into consideration. This means that there is no need to specify a value for feature ...E.

Ordering as an accessory:

If the bellows kit is ordered as an accessory, the required value

→ page 52 must be entered for feature ...E in the modular product system.

DSBC-... D3 - Sensor slots on 3 sides



The piston position can be sensed on 3 sides of the drive if feature D3 is selected in the modular product system.

[3] Sensor slot for proximity switch

Position sensing/force control

With position transmitter SMAT-8M, SMAT-8E, SDAT → page 62



Analogue position feedback possible

- · Analogue output
 - 0 ... 10 V
 - 0 ... 20 mA

With proportional-pressure regulator VPPM



Infinite adjustment of the gripping force possible

- Setpoint value input
 - 0 ... 10 V
 - 4 ... 20 mA

For manufacturing lithium-ion batteries

DSBC-...-F1A

Recommended for production facilities for the manufacture of lithium-ion batteries.

Metals with copper, zinc or nickel as the main constituent are excluded from use. Exceptions are nickel in steels, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.

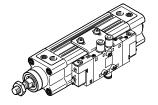
Accessories

Your Festo contact partner can provide information about which accessories are suitable for manufacturing lithium-ion batteries.

Optional accessories

Mounting kit DAVM



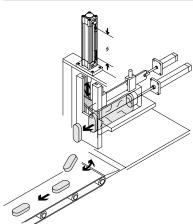


- For lateral valve mounting, directly on the drive
- Particularly suitable for decentralised use in large systems
- Mounting is only possible on the side on which the pneumatic connections are located

Application examples

Automatic screw machine

For process control



Variants from the modular p	roduct system		
Symbol	Characteris	stics	Description
-	Q	Square piston rod	Protection against rotation. For correctly oriented feeding
<u></u>	С	Clamping unit	Integrated clamping unit on the piston rod
1	E1/E2/E3	End-position locking	Positive locking in the end position as a drop guard. If there is a drop in pressure, the piston rod is secured in its end position to prevent it from dropping
\leftrightarrow	L	Low friction	Break-away pressure: low Dynamic response: Suitable for very fast movements, especially at low operating pressures Application example: Very dynamic movements with no standstill
\longleftrightarrow	U	Constant, slow movement	Break-away pressure: very low Dynamic response: Suitable for very slow, constant and stick-slip-free movements Application example: Slow, constant feed motion
\leftrightarrow	L1	Low friction for balancer applications	Break-away pressure: low Dynamic response: Suitable for slow movements with constant application of pressure at one end. System friction is independent of operating pressure Application example: Applications for load balancing (balancer, belt tensioner with constant feed motion)
	Т	Through piston rod	For working at both ends with the same force in the forward and return stroke, for attaching external stops
	F	Female piston rod thread	-

Variants from the modul Symbol	Characte		Description
1,11	R3	High corrosion protection	All external cylinder surfaces comply with corrosion resistance class 3 to Festo standard 940070. The piston rod is made from corrosion- and acid-resistant steel
	T1	Heat-resistant seals	Temperature range 0 +120°C
(IIIII)	T3	Low temperature	Temperature range -40 +80°C
	T4	Heat-resistant seals	Temperature range 0 +150°C
	A1	Scraper variant	Increased chemical resistance: For longer service life, e.g. when using cooling lubricants.
	A2	Wiper variant	Hard wiper: The cylinder is equipped with a hard-chrome plated piston rod and a hard scraper, which protects against dry, dusty and viscous media
1	A3	Wiper 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
	A6	Scraper variant	Metal wiper: The cylinder is fitted with a hard-chrome plated piston rod and metal scraper, which scrapes off hard particles (e.g. welding spatter) sticking to the piston rod. Application: Use in welding equipment
	F1A	Recommended for production facilities for manufacturing lithium-ion batteries	Cylinders free of copper, zinc and nickel (≤ 1%)
	Е	Extended piston rod	-
—	L	Extended piston rod thread	-

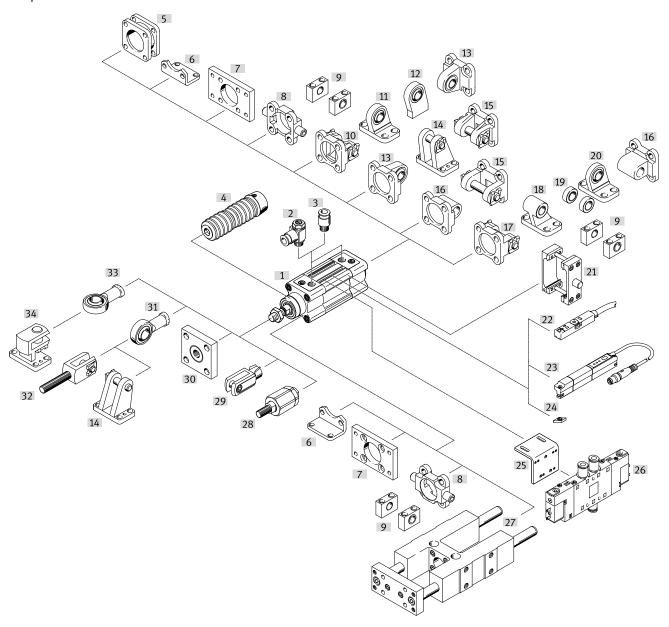
Product range overview

Function	Version	Туре	Piston diameter	Stroke [mm]	→ Through piston rod	Thread	Sensor slot on 3 sides	d Cushioning	PPS	PPV
Double-acting	DSBC									
bouste deting		DSBC	32, 40, 50, 63, 80, 100, 125	1 2800	•	•	•	•	•	•
	DSBCQ - with protect	tion against rotation							•	
		DSBCQ	32, 40, 50, 63, 80, 100	1 1500	•	•	•	•	•	•
	DSBCL/-U/-L1 - with									
		DSBCL	32, 40, 50, 63, 80, 100	1 2800	-	•	•	•	•	•
		DSBCU	32, 40, 50, 63, 80, 100, 125 32, 40, 50, 63, 80, 100,	1 2800	_	•	•	•	•	-
			125	10 1000	_		•	•	•	_
	DSBCC - with clamping						T	,		,
		DSBCC	32, 40, 50, 63, 80, 100, 125	10 2000	•	•	•	•	•	•
	DSBCE1/-E2/-E3 – wi	th end-position lockin	g. standard hole nattern							
		DSBCE1/ -E2/-E3	32, 40, 50, 63, 80, 100	10 2000	-	•	•	•	_	•
	DSBCP2 – with bellow	ve standard holo patte	orn			-				
	DSBCF2 - Will Bellow	DSBCP2	32, 40, 50, 63, 80, 100	10 500	•	•	•	•	•	•

Product range overview

Туре												
	Position sensing	High corrosion protection	Temperature range 0 +120°C	Temperature range –40 +80°C	Temperature range 0 +150°C	Scraper variant increased chemical resistance	Scraper variant hard scraper	Scraper variant for unlubricated operation	Scraper variant metal scraper	EU certification	Piston rod extension	Extended piston rod thread
		1	l			1	1	1		a		
	A	R3	T1	T3	T4	A1	A2	A3	A6	EX4	Е	L
DSBC			1		1	1				T		
DSBC		•	•	•	•	-	-	-	•			•
DSBCQ – with pr	otection agains	t rotation	l	l		J.				1		
DSBCQ	•	•	•	-	-	-	-	-	-	•	•	•
DSBCL/-U/-L1 -	with special run	ining characte	ristics					1		1		
DSBCL	-	-	-	_	-	-	_	_	_	_	•	•
DSBCU	-	-	-	-	_	_	_	_	_	_	•	•
DSBCL1	•	-	-	-	-	_	_	-	_	-	•	•
DSBCC – with cla	amping unit. sta	ndard hole pa	ttern									İ
DSBCC	•	_	-	_	-	_	_	_	_	_	•	•
DSBCE1/-E2/-E3	– with end-pos	ition locking,	standard hole	e pattern							-	
DSBCE1/ E2/-E3	•	_	_	_	_	_	_	_	_	_	•	•
DSBCP2 – with b	ellows, standar	d hole patteri	1									
DSBCP2	•	•	-	-	-	-	-	-	-	-	•	•

Peripherals overview



Mounti	ng components and accessories								
		Description	DSBC	DSBC					
				L/U/ L1	С	E1/E2/ E3	T	Internet	
[1]	Standards-based cylinder DSBC	Standards-based cylinder without accessories, basic design						11	
[2]	One-way flow control valve GRLA	For speed regulation	•	•	•	-	•	63	
[3]	Push-in fitting QS	For connecting compressed air tubing with standard O.D.	•	•	•	-	•	qs	
[4]	Bellows kit DADB	Protects the cylinder (piston rod, seal and bearings) against a wide range of media and thus prevents premature wear Can only be used in combination with an extended piston rod (E)	•	-	-	-	•	52	
[5]	Multi-position kit DPNC	For connecting two cylinders with identical piston diameters to form a multi-position cylinder	•	-	•	-	•	56	
[6]	Foot mounting HNC/CRHNC	For bearing or end caps	•	•	-	•	•	41	

Can only be mounted in combination with E1.
 Can only be mounted on the end cap in combination with E2.
 Can only be mounted on the bearing cap in combination with E3.

Peripherals overview

		Description	DSBC-					→ Page/	
				L/U/ L1	С	E1/E2/ E3	Т	Internet	
[7]	Flange mounting	For bearing or end caps				_		42	
	FNC/CRFNG	Cannot be used on the bearing cap in combination with the bellows kit DADB	-	•	-		•		
[8]	Trunnion flange	For bearing or end caps				1)		43	
	ZNCF/CRZNG	Cannot be used on the bearing cap in combination with the bellows kit DADB	_		_		_		
[9]	Trunnion support LNZG/CRLNZG	-	•	-	•	1)	•	44	
[10][15]	Swivel flange SNC	For end caps	•	-	•	•	-	45	
[11]	Clevis foot LSNG	With spherical bearing	•	•	•	•	-	50	
[12]	Clevis foot LSNSG	Weld-on, with spherical bearing	-	•	•	•	-	50	
[13]	Swivel flange SNCS/CRSNCS/SNCSR3	With spherical bearing for end caps	•	•	•	-	_	47	
[14]	Clevis foot LBG/LBGR3	-	•	•	•	-	-	50	
[16]	Swivel flange SNCL	For end caps	•	•	•	•	_	48	
[17]	Swivel flange SNCB/SNCBR3	For end caps	•	•	•	•	_	46	
[18]	Clevis foot LNG/CRLNG	-	•	•	-	•	_	50	
[19][20]	Clevis foot LSN	With spherical bearing	•	•	•		-	50	
[21]	Trunnion flange kit DAMT	For mounting anywhere along the cylinder profile barrel	•	•	-	•	-	49	
[22]	Proximity switch SME/SMT-8M/SDBT-MS	Can be integrated in the cylinder profile barrel	•	•	•	•	•	61	
[23]	Position transmitter SMAT, SDAT	Continuously senses the position of the piston Has an analogue output	-	•	-	•	•	62	
[24]	Slot nut ABAN	Inserted in slot from above	-	•	-	•	•	63	
[25]	Mounting kit DAVM	For mounting the valve	-	•	-	•	•	57	
[26]	Ssolenoid valve CPE/VUVG/VUVS	For standards-based cylinder	•	•	-	•	-	57	
[27]	Guide unit FENG	For protecting standards-based cylinders against rotation at high torque loads	•	•	•	-	•	60	
[28]	Self-aligning rod coupler FK, CRFK	For compensating radial and angular deviations	•	•	-	•	-	51	
[29]	Rod clevis SG/CRSG	Permits a swivelling movement of the cylinder in one plane	•	•	-	•	-	51	
[30]	Coupling piece KSG	For compensating radial deviations	-	•	-	-	-	51	
	Coupling piece KSZ	For cylinders with a non-rotating piston rod to compensate for radial deviations	•	•	-	•	-	51	
[31][33]	Rod eye SGS/CRSGS	With spherical bearing	•	•	-	•	-	51	
[32]	Rod clevis SGA	With male thread	•	•	•	-	•	51	
[34]	Right-angle clevis foot LQG	-	•	•	-	-	-	50	
-	Slot cover ABP-5-S	For protecting the sensor cable and the sensor slots from contamination	-	•	-	-	-	63	

Type codes

001	Series
DSBC	Standards-based cylinder, double-acting, based on ISO 15552
l 002	Drotestian against rotation
002	Protection against rotation
	None
Q	With protection against rotation
003	Running characteristics
	Standard
L	Low friction
U	Uniform, slow movement
L1	Low friction for balancer applications
004	Piston diameter [mm]
32	32
40	40
50	50
63	63
80	80
100	100
125	125
005	Stroke [mm]
20	20
25	25
30	30
40	40
50	50
60	60
70	70
80	80
100	100
125	125
150	150
160	160
200	200
250	250
300	300
320	320
400	400
500	500
•••	1 2800
006	Clamping unit
	None
С	Attached
·	
007	End-position locking
	None
E1	Both sides
E2	With advanced piston rod
E3	With retracted piston rod
008	Piston rod type
	At one end
T	Through piston rod
<u> </u>	20.1 k. 10.10.10.00

009	Piston rod thread type	
	Male thread	
F	Female thread	
010	Profile type	
D3	Sensor slots on 3 profile sides	
	Sensor slot on one profile side only	
1		
011	Cushioning	
P	Elastic cushioning rings/plates on both sides	
PPS	Pneumatic cushioning, self-adjusting at both ends	
PPV	Pneumatic cushioning, adjustable at both ends	
012	Position sensing	
Α	For proximity sensor	
013	Corrosion protection	
	Standard	
R3	High corrosion protection	
_	0 1 1 2 2	
014	Temperature range	
	Standard	
T1	Heat-resistant seals max. 120°C	
T3	-40 +80°C	
T4	0 +150°C	
015	Protection against particles	
	Standard	
P2	Bellows on bearing cap	
016	Scraper variant	
010		
A4	None	
A1	Increased chemical resistance	l
42	Hard caranar	
A2	Hard scraper	
А3	For unlubricated operation	
	· · · · · · · · · · · · · · · · · · ·	
А3	For unlubricated operation	
A3 A6	For unlubricated operation Metal scraper	
A3 A6	For unlubricated operation Metal scraper Special material properties	
A3 A6	For unlubricated operation Metal scraper Special material properties None	
A3 A6 017 F1A	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries	
A3 A6	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of	
A3 A6 017 F1A	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification	
A3 A6 017 F1A	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None	
A3 A6 017 F1A	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None	
A3 A6 017 F1A 018 EX4	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None II 2GD	
A3 A6 017 F1A 018 EX4	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None II 2GD Piston rod extension	
A3 A6 017 F1A 018 EX4 019E	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None II 2GD Piston rod extension None 1 500 mm	
A3 A6 017 F1A 018 EX4	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None II 2GD Piston rod extension None	
A3 A6 017 F1A 018 EX4 019E	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None II 2GD Piston rod extension None 1 500 mm	
A3 A6 017 F1A 018 EX4 019E	For unlubricated operation Metal scraper Special material properties None Recommended for production facilities for the manufacture of lithium-ion batteries EU certification None II 2GD Piston rod extension None 1 500 mm	

Function

Elastic cushioning



PPV cushioning



PPS cushioning







32 ... 125 mm











General technical data										
Piston diameter		32	40	50	63	80	100	125		
Design		Piston/piston	rod/profile barrel							
Mode of operation		Double-acting								
Pneumatic connection		G1/8	G1/4	G1/4	G3/8	G3/8	G1/2	G1/2		
Piston rod thread		M10x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5	M20x1.5	M27x2		
Stroke										
DSBC	[mm]	1 2800		,				,		
DSBCQ	[mm]	1 1500						-		
DSBCL1	[mm]	10 1000								
DSBCC	[mm]	10 2000								
DSBCE1/-E2/-E3	[mm]	10 2000						-		
DSBCP2	[mm]	10 500						-		
DSBCE	[mm]	1 2000		,						
DSBCL	[mm]	1 2000		,				,		
Cushioning										
DSBCP		Elastic cushior	ning rings/plates a	t both ends						
DSBCPPV		Pneumatic cus	Pneumatic cushioning, adjustable at both ends							
DSBCPPS		Pneumatic cus	Pneumatic cushioning, self-adjusting at both ends							
Cushioning length										
DSBCPPV	[mm]	17	19	22	22	31	31	45		
DSBCE1/-E2/-E3	[mm]	17	19	15	15	15	15	_		
Position sensing		Via proximity s								
Type of mounting		With female th	read/accessories							
Mounting position		Any								

Piston diameter		32	40	50	63	80	100	125	
Dperating medium		Compressed air	r to ISO 8573-1:201	0 [7:4:4]	:		*		
Note on the operating/pilot medium					ated operation w	ill always be required	d)		
perating pressure		· ·	•		-	· · · · · ·			
DSBC	[MPa]	0.06 1.2		0.04 1.2	.04 1.2				
	[bar]	0.6 12		0.4 12				0.2 10	
DSBCQ	[MPa]	0.1 1.2						-	
	[bar]	1 12						-	
DSBCL ¹⁾	[MPa]	0.03 1.2	0.025 1.2			0.02 1.2	0.015 1.2	_	
	[bar]	0.3 12	0.25 12			0.2 12	0.15 12	_	
DSBCU ¹⁾	[MPa]	0.01 1.2				0.005 1.2		0.005 1.0	
	[bar]	0.1 12				0.05 12	,	0.05 10	
DSBCL1 ¹⁾	[MPa]	0.03 1.2	0.025 1.2			0.02 1.2	0.015 1.2	0.01 1.0	
	[bar]	0.3 12	0.25 12			0.2 12	0.15 12	0.1 10	
DSBCC ²⁾	[MPa]	0.15 1.0					'		
	[bar]	1.5 10							
DSBCE1/-E2/-E3	[MPa]	0.25 1.2		0.15 1.2				-	
	[bar]	2.5 12		1.5 12				-	
DSBCT3/-A2	[MPa]	0.1 1.2						0.1 1.0	
	[bar]	1 12						1 10	
DSBCA3	[MPa]	0.15 1.2		0.1 1.2	0.06 1.2			0.06 1.0	
	[bar]	1.5 12		1 12	0.6 12			0.6 10	
DSBCA6	[MPa]	0.2 1.2	0.15 1.2		'		,	0.15 1.0	
	[bar]	2 12	1.5 12					1.5 10	
mbient temperature ³⁾			'						
DSBC	[°C]	-20 +80							
DSBCL/-U	[°C]	+5 +80							
DSBCL1	[°C]	0 +60							
DSBCA1	[°C]	0 +80							
DSBCA6	[°C]	-20 +80							
DSBCT1-A6	[°C]	0 +120							
DSBCT3-A6	[°C]	-40 +80							
DSBCT4-A6	[°C]	0 +150							
DSBCC	[°C]	-10 +80							
DSBCT1	[°C]	0 +120							
DSBCT3	[°C]	-40 +80							
DSBCT4	[°C]	0 +150						1	
DSBCP2	[°C]	-10 +80						-	
DSBCEX4	[°C]	-20 +60							
orrosion resistance CRC		·						'	
DSBC		2 ⁴⁾							
DSBCR3		3 ⁵⁾							

¹⁾ Values apply only for strokes \leq 500 mm and after 10 double strokes.

In combination with cushioning PPV/PPS, the specifications only apply outside the cushioning range

²⁾ Note min. release pressure → page 19

Note operating range of proximity switches.

⁴⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

⁵⁾ Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

Weight [g]							
Piston diameter	32	40	50	63	80	100	125
DSBC							
Product weight with 0 mm stroke	465	740	1190	1740	2660	3665	6611
Additional weight per 10 mm stroke	27	37	56	62	92	101	151
Moving mass with 0 mm stroke	110	205	365	430	810	1000	2245
Moving mass per 10 mm stroke	9	16	25	25	39	39	63
		<u> </u>					
DSBCQ	1	1	Lieu	1	1		
Product weight with 0 mm stroke	503	755	1241	1821	2717	3827	-
Additional weight per 10 mm stroke	26	32	51	57	85	94	-
Moving mass with 0 mm stroke	103	170	332	391	757	890	-
Moving mass per 10 mm stroke	8	11	20	20	32	32	
DSBCL1				1	1	1	
Product weight with 0 mm stroke	465	741	1200	1759	2651	3693	6651
Additional weight per 10 mm stroke	27	37	56	62	92	101	151
Moving mass with 0 mm stroke	110	206	375	449	801	1028	2285
Moving mass per 10 mm stroke	9	16	25	25	39	39	63
DSBCC							
Product weight with 0 mm stroke	745	1175	1940	2920	5075	6965	12860
Additional weight per 10 mm stroke	25	35	56	62	95	103	151
Moving mass with 0 mm stroke	160	290	540	620	1200	1425	3035
Moving mass per 10 mm stroke	9	16	25	25	39	39	63
DSBCE1/-E2/-E3							
Product weight with 0 mm stroke	1505	1700	14242	14062	12040	1,022	
DSBCE1 DSBCE2	505	780	1312	1862	3018	4023	
	485	760	1251	1801	2839	3844	
DSBCE3	485 27	760	1251	1801	2839	3844	-
Additional weight per 10 mm stroke	110	37 205	56 365	62 430	92 810	101	-
Moving mass with 0 mm stroke Moving mass per 10 mm stroke	9	16	25	25	39	39	-
Moving mass per 10 mm stroke	9	10	25	23)))	39	
DSBCT							
Product weight with 0 mm stroke	581	924	1523	2103	3243	4353	7450
Additional weight per 10 mm stroke	34	53	81	87	131	140	214
Moving mass with 0 mm stroke	181	339	613	684	1292	1516	3084
Moving mass per 10 mm stroke	18	32	50	50	78	78	126
DSBCF					1	1	
Product weight with 0 mm stroke	453	721	1145	1695	2570	3575	6391
Additional weight per 10 mm stroke	27	37	56	62	92	101	151
Moving mass with 0 mm stroke	98	186	320	385	720	910	2023
Moving mass per 10 mm stroke	9	16	25	25	39	39	63
DSBCD3			•				
Product weight with 0 mm stroke	474	767	1221	1772	2714	3716	6705
Additional weight per 10 mm stroke	32	49	79	92	141	162	239
Moving mass with 0 mm stroke	110	205	365	430	810	1000	2245
Moving mass per 10 mm stroke	9	16	25	25	39	39	63
	1,				1	1	
DSBCE	10	146	25	125	120	120	162
Additional weight per piston rod extension of 10 mm	9	16	25	25	39	39	63
DSBCL							

ATEX ¹⁾	
ATEX category for gas	II 2G
Type of ignition protection for gas	Ex h IICT4 Gb
ATEX category for dust	II 2D
Type of ignition protection for dust	Ex h IIIC T120°C Db
Explosion-proof ambient temperature	-20°C ≤ Ta ≤ +60°C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)
UKCA marking (see declaration of conformity)	To UK EX instructions
Explosion protection certification outside the EU	EPL Gb (GB)
	EPL Db (GB)

 $1) \quad \hbox{ Note the ATEX certification of the accessories.} \\$

Forces [N] and impact energy [J]							
Piston diameter	32	40	50	63	80	100	125
Theoretical force at 6 bar, advancing	483	754	1178	1870	3016	4712	7363
Theoretical force at 6 bar, retracting	415	633	990	1682	2721	4418	6881
Max. impact energy in the end positions							
DSBC	0.41)	0.7	1.0	1.3	1.8	2.5	3.3
DSBCL/-U/-T1/-T3/-T4	0.21)	0.35	0.5	0.65	0.9	1.25	1.65
DSBCL1	0.1	0.2	0.3	0.4	0.9	1.25	1.65

1) The max. impact energy in combination with the trunnion flange kit DAMT is 0.1 J.

Permissible impact velocity:

$$V = \sqrt{\frac{2 \times E}{m_1 + m_2}}$$

Ε

m2

Permissible impact velocity

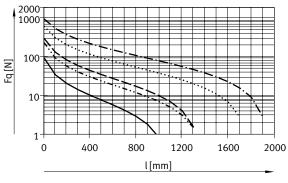
Max. impact energy Moving mass (drive) Moving payload

Maximum permissible mass:

$$m_2 \!=\! \frac{2 \!\times\! E}{v^2} \!-\! m_1$$

Max. transverse load Fq as a function of stroke length l

Horizontal installation



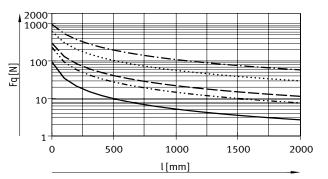




No transverse forces are permitted in

combination with feature DSBC-...-L1.

V	'ertical	instal	latior



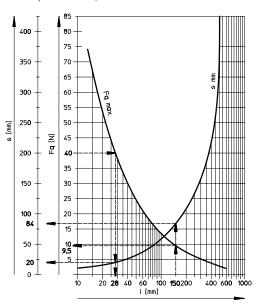
Permissible torsional backlash with variant Q – With protection against rotation							
Piston diameter		32	40	50	63	80	100
Torsional backlash	[º]	±0.65	±0.6	±0.45	±0.45	±0.45	±0.45

Max. transverse force Fq as a function of stroke length l and lever arm s

Q - With protection against rotation

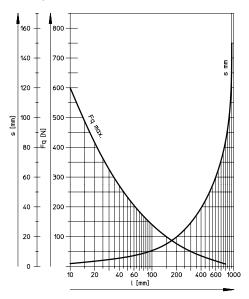
Ø 32

Max. torque = 800 Nmm/max. stroke = 300 mm



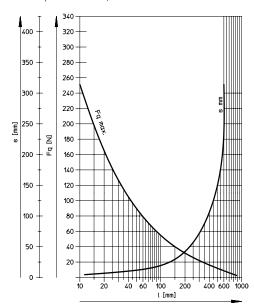
ø 50/63

Max. torque = 1500 Nmm/max. stroke = 500 mm



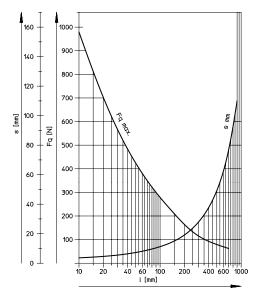
Ø 40

Max. torque = 1100 Nmm/max. stroke = 400 mm



Ø 80/100

Max. torque = 3000 Nmm/max. stroke = 600 mm



Examples for piston diameter 32 mm

Example 1: Stroke length l = 150 mm Result: Permissible

Transverse force Fq = 9.5 N

Lever arm s = 84 mm

Transverse force Fq = 40 N
Result: Permissible
Stroke length l = 28 mm
Lever arm s = 20 mm

Example 2:

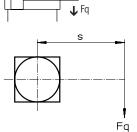
Example 3:
Stroke length l = 150 mm
Lever arm s = 100 mm

 $F_q = \frac{M}{s} = \frac{800 \ Nmm}{100 \ mm}$

M = Max. torque

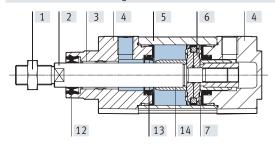
s = Lever arm

Result: Permissible Fq= $8 \text{ N} \cdot \text{Fq}_{\text{max}}$ = 9.5 N

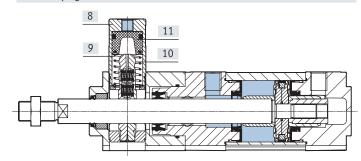


Materials

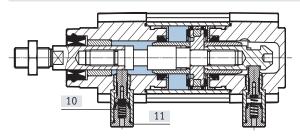
Sectional view – Basic design



With clamping unit



With end-position locking



Stan	dards-based cylinder	
[1]	Nut	
` '	DSBC	Galvanised steel
	DSBCR3	High-alloy stainless steel
	DSBCF1A	Steel, chemically nickel-plated
[2]	Piston rod	Steet, chemically mover plated
[2]		Ush allowed
	DSBC	High-alloy steel
	DSBCR3	High-alloy stainless steel
	DSBCA2/-A6	Hard-chrome plated tempered steel
[3]	Bearing	
	DSBC	POM
	DSBCE1/-E2/-E3/-SL/-EX4/-A2/-Q	Bronce
	DSBCL/-U/-T1/-T4	Metal polymer compound
[4]	Cover	Coated die-cast aluminium
[5]	Profile barrel	Anodised wrought aluminium alloy
[6]	Piston	Anodised wrought aluminium alloy
[7]	Piston seal	
'	DSBC	TPE-U(PU)
	DSBCL/-U/-T1/-T4	FPM
	DSBCT3	TPE-U(PU)
	DSBCL1	HNBR
[0]	Housing, clamping unit	Anodised wrought aluminium alloy
[8]		
[9]	Clamping jaws, clamping unit	Brass
[10]		
	DSBCC	Spring steel
	DSBCE1/E2/E3	High-alloy stainless steel
[11]	Piston, clamping unit/end-position locking	
	DSBCC	POM
	DSBCE1/E2/E3	Hardened steel
[12]	Piston rod wiper seal	
	DSBC	PUR
	DSBCL/-U	FPM
	DSBCL1	HNBR
	DSBCT1/-T4/-A1	FPM
	DSBCT3	PUR (suitable for low temperatures)
	DSBCA3	UHMW-PE
[1 2]	Buffer seal	UNIWW-FE
[13]		Laun
	DSBC	PUR
	DSBCU	FPM
	DSBCT1/-T4	FPM
	DSBCT3	PUR (suitable for low temperatures)
[14]	Buffer sleeve	
	DSBC	POM
	DSBCT1/-T3/-T4	Aluminium
-	Piston rod scraper	•
	DSBCA6	CuZn
	DSBCT3/-A2	PTFE reinforced
<u> </u>	Housing, end-position locking	High-alloy steel
-	Flange screw	1.10. 4.10) 5.55.
	DSBC	Galvanised steel
	DSBCF1A	Steel, chemically nickel-plated
-	Note on materials	Taua III.
	DSBC	RoHS-compliant
	DSBCL/U/-T3/-T4/-A3	Contains paint-wetting impairment substances
	DSBCF1A	Metals with copper, zinc or nickel as the main constituent are excluded from use.
		Exceptions are nickel in steels, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and
		coils.

Technical data DSBC-...-E1/-E2/-E3 - With end-position locking

- In order to ensure that the lock is completely released prior to starting the drive movement, end-position locking should only be used in conjunction with double-acting cylinders with exhaust-air flow control.
- The end-position locking may only be released if the forces at the piston have reached equilibrium. Otherwise, a sudden movement of the piston rod could cause accidents. Blocking off the air supply at both ends (e.g. with a 5/3-way valve) does not provide any safety.
- The piston rod can be locked in any stroke position once the drive is brought mechanically into its end position.
- An excessive end-position cushioning setting (more than 50% closed) can result in the locking bolt not engaging reliably, resulting in premature wear.
- The exhaust hole must not be closed.

Piston diameter		32	40	50	63	80	100	
Clamping type	Positive interlocking	Positive interlocking with stop cylinder						
	Release through cor	Release through compressed air						
Static holding force	[N]	500	500	2000	2000	5000	5000	
Max. axial backlash with end position locked	[mm]	1.3	1.3	1.3	1.5	1.5	1.5	
Min. unlocking pressure	[MPa]	≤ 0.25		≤ 0.15				
	[bar]	≤ 2.5		≤ 1.5				
Max. locking pressure [MPa]		≥ 0.05						
	[bar]	≥ 0.5						

Sizing example

When sizing pneumatic cylinders it is recommended as a basic principle that only 50% of the indicated theoretical forces (see above) be used.

Given:

Mounting position = vertical Workpiece load = 44 kg $F = m x g = 44 kg x 9.81 m/s^2$

= 431.6 N

To be calculated:

Suitable piston diameter

Example with 32 mm piston diameter:

Theoretical force at 6 bar, advancing = 483 N 50% of the theoretical force = 241.5 N

Static holding force with 32 mm piston diameter = 500 N

The static holding force of end-position locking is within the permissible range (max. 500 N) for a workpiece load of 44 kg (431.6 N); however the cylinder would be at 89% capacity.

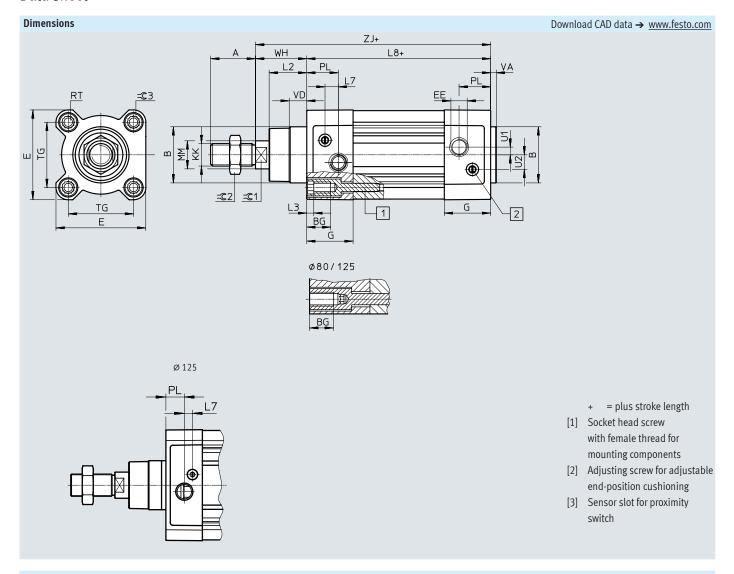
Result:

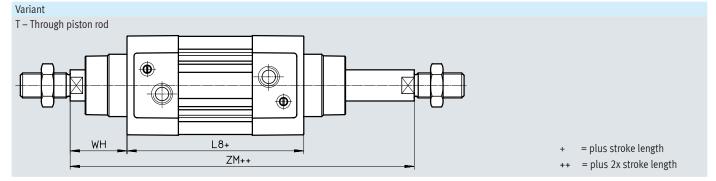
A cylinder with a piston diameter of 40 mm is therefore recommended for this application.

Technical data DSBC-...C - With clamping unit

- The specified holding force refers to a static load. If this value is exceeded, the
 piston rod may slip. Dynamic forces occurring during operation must not exceed the static holding force. The clamping unit is not backlash-free in the
 clamped condition if varying loads are applied to the piston rod.
- The clamping unit may only be released if the forces at the piston have reached
 equilibrium. Otherwise, a sudden movement of the piston rod could cause
 accidents. Blocking off the air supply at both ends (e.g. with a 5/3-way valve)
 does not provide any safety.

Piston diameter		32	40	50	63	80	100	125	
Type of clamping with active direction	At both ends	At both ends							
		Clamping throug	Clamping through spring force						
				Release through compressed air					
Static holding force	[N]	600	1000	1400	2000	5000	5000	7500	
Max. axial play under load	[mm]	0.5	0.5	0.8	0.8	0.8	0.8	1.8	
Min. release pressure	[MPa]	0.3	0.3						
	[bar]	3							

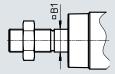




Ø	A	В	BG	Е	EE		G	U2	U1	KK
[mm]	-0.5	ø d11	min.	+0.5			-0.2	±0.1	±0.1	
32	22	30	16	45	G1/	/8	28	5.7	5.25	M10x1.25
40	24	35	16	54	G1/	4	33	8	4	M12x1.25
50	32	40	16	64	G1/	4	33	10.4	5.5	M16x1.5
63	32	45	16	75	G3/	8	40.5	12.75	6.25	M16x1.5
80	40	45	17	93	G3/	'8	43	12.5	8	M20x1.5
100	40	55	17	110	G1/	'2	48	13.5	10	M20x1.5
125	54	60	20	136	G1/	'2	44.7	13	8	M27x2
Ø	L2	L3	L7	L	8		MM Ø	PL	RT	TG
[mm]		max.		±O	1.4		Ø	±0.1		±0.3
32	18_0.2	5	6.5	9	4		12	19.5	M6	32.5
40	21.3_0.2	5	7.5	10)5		16	22.5	M6	38
50	26.8_0.2	5	9.5	10)6		20	22.5	M8	46.5
63	27_0.2	5	9	12	21		20	27.5	M8	56.5
80	34.2_0.2	-	11	12	28		25	30	M10	72
100	38_0.2	-	7.5	13	38		25	31.5	M10	89
125	45.5 _{-0.3}	_	10	16	50		32	22.5	M12	110
Ø	VA	VD	WH	Z	<u>"</u> J		ZM	= ©1	=©2	= ©3
[mm]		+0.5	+2.2	+1	.8		+1			
32	4_0.2	10	25	11	9.1	1	46.1	10	16	6
40	4_0.2	10.5	28.7	13	3.9	1	64.8	13	18	6
50	4_0.2	11.5	35.6	14	1.8	1	79.8	17	24	8
63	4_0.2	15	35.9	15	7.1	1	95.4	17	24	8
80	4_0.2	15.7	45.4	17	3.6		221	22	30	6
100	4_0.2	19.2	49.3	18	7.5	2	238.8	22	30	6
125	6_0.3	20.5	64.1	22	25		290	27	41	8

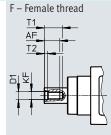
Dimensions - Variants

Q – With protection against rotation





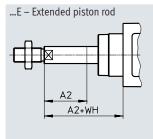
In combination with variant T, the piston rod is protected against rotation at one end.



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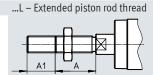


In combination with variant T, the piston rod has female threads at both ends.



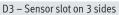
- 🖣 - Note

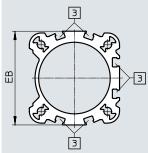
Piston rod thread is extended at one end in combination with the variant T.
Piston rod extension only at the square piston rod in combination with the variants T and Q



- Note

Piston rod thread is extended at both ends in combination with variant T.





[3] Sensor slot for proximity switch

4.7

4.7

6.1

6.1

8

35.6

35.9

45.4

49.3

64.1

Data sheet

50

63

80

100

125

16

16

20

20

10.5

10.5

13

13

17

Ø	А		A1		A	AF	
[mm]		min.	max		min.	max.	min.
32	22	1	35		1	500	12
40	24	1	35		1	500	12
50	32	1	70		1	500	16
63	32	1	70		1	500	16
80	40	1	70		1	500	20
100	40	1	70		1	500	20
125	54	1	70		1	500	32
ø	B1	D1	EB	KF	T1	T2	WH
[mm]					max.		+2.2
32	10	6.4	47_0.3	M6	16	2.6	25
40	12	8.4	54.8 ^{+0.3}	M8	16	3.3	28.7
				t			

65.5+0.3/-0.05

76₋₁

92_0.5

109_{-0.5} 132^{+0.8}

M10

M10

M12

M12

M16

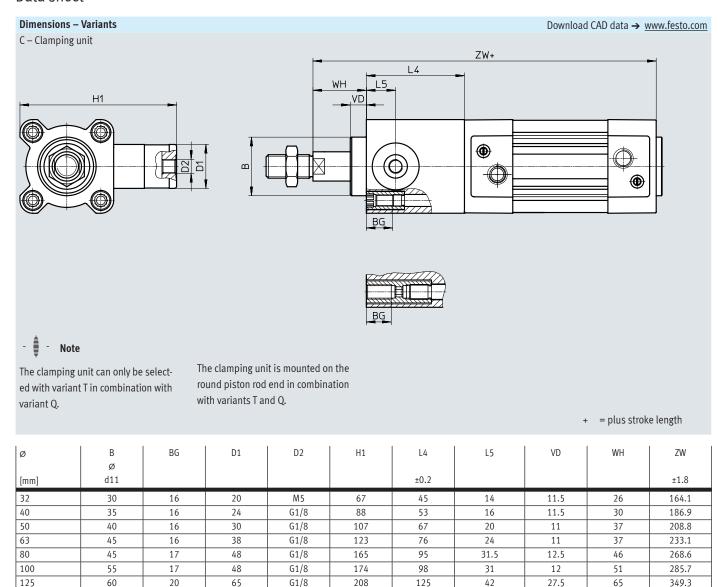
21

21

26.5

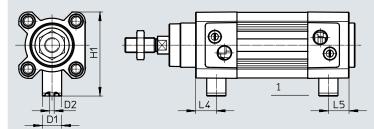
26.5

40



Dimensions – Variants

E1/E2/E3 – End-position locking



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Note

[1] The connection is used for the manual interlock and/or ducted exhaust air. It must not be sealed or pressurised.

E1 - End	-nosition	locking	at	hoth	ends
LI - LIIU	position	TUCKING	αı	DULII	ciius

	· ·				
Ø	D1 Ø	D2	H1	L4	L5
[mm]					
32	13	M3	57.5	14	14
40	13	M3	64	17	17
50	20	M5	78.5	18	18
63	20	M5	84.5	25	25
80	30	M5	105	22	22
100	30	M5	113.5	25.5	25.5

F2 F	'nd nociti	on lockin	a with a	dvanced	nicton ro	٦
F / - F	na-nosiri	on lockin	g with a	nvancen	nision ro	а

•	·			
Ø	D1 Ø	D2	H1	L4
[mm]				
32	13	M3	57.5	14
40	13	M3	64	17
50	20	M5	78.5	18
63	20	M5	84.5	25
80	30	M5	105	22
100	30	M5	113.5	25.5

E3 – End-position locking with retracted piston rod

Ø	D1 Ø	D2	H1	L5
[mm]				
32	13	M3	57.5	14
40	13	M3	64	17
50	20	M5	78.5	18
63	20	M5	84.5	25
80	30	M5	105	22
100	30	M5	113.5	25.5

176 ... 250

251 ... 300

301 ... 350

351 ... 375

376 ... 425

426 ... 475

476 ... 500

80

96

112

114

130

145

147

38

G1/8

12.9

Dimensions - Variants Download CAD data → www.festo.com P2 – Bellows on the bearing cap **(4)** WH+A2+ + = plus stroke length 32 40 Ø Stroke A21) D1 EE L1 WH+A2 A21) D1 D2 EE L1 WH+A2 [mm] max. max. 10 ... 50 29 55 28 56.7 51 ... 125 47 73 43 71.7 84.7 126 ... 175 61 56

106

122

138

140

156

171

173

72

86

100

101

115

130

131

14

G1/8

16.3

ø				50				63							
Stroke	A2 ¹⁾	D1	D2	EE	L1	L2	WH+A2	A2 ¹⁾	D1	D2	EE	L1	L2	WH+A2	
[mm]		max.							max.						
10 50	28						63.6	28						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	57	17	G1/4	22.35	7	121.6	86	57	17	G1/4	22.4	7	121.9	
301 350	97] 3/	17	01/4	22.55	'	132.6	97))/	17	01/4	22.4	'	132.9	
351 375	105	1					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	

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

100.7

114.7

128.7

129.7

143.7

158.7

159.7

Ø				80							100			
Stroke	A2 ¹⁾	D1	D2	EE	L1	L2	WH+A2	A2 ¹⁾	D1	D2	EE	L1	L2	WH+A2
[mm]		max.							max.					
10 50	25						70.4	25						74.3
51 125	37	1					82.4	37	1					86.3
126 175	49	1					94.4	49	1					98.3
176 250	62	1					107.4	62	1					111.3
251 300	74	93	17	G1/4	28	,	119.4	74	93	17	G1/4	28	4	123.3
301 350	86	7 93	17	01/4	20	4	131.4	86) 95	17	01/4	20	4	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 (piston rod extension) of the drive

Ordering da	ta Stroke	With PPV cushioning		With PPS cushio	ninσ
diameter	Stroke	With 11 V cashioning		Within S cusino	5
[mm]	[mm]	Part no. Type		Part no.	Туре
32	20	★ 2123069 DSBC-32-20-F	PVA-N3	★ 2123085	DSBC-32-20-PPSA-N3
	25	★ 1376422 DSBC-32-25-F	PVA-N3	± 1376467	DSBC-32-25-PPSA-N3
	30	★ 2123070 DSBC-32-30-F	PVA-N3	★ 2123086	DSBC-32-30-PPSA-N3
	40	★ 1376423 DSBC-32-40-F	PVA-N3	± 1376468	DSBC-32-40-PPSA-N3
	50	★ 1376424 DSBC-32-50-F	PVA-N3	★ 1376469	DSBC-32-50-PPSA-N3
	60	★ 2123071 DSBC-32-60-F	PVA-N3	* 2123087	DSBC-32-60-PPSA-N3
	70	★ 2123072 DSBC-32-70-F	PVA-N3	± 2123088	DSBC-32-70-PPSA-N3
	80	★ 1376425 DSBC-32-80-F	PVA-N3	★ 1376470	DSBC-32-80-PPSA-N3
	100	★ 1376426 DSBC-32-100	PPVA-N3	1376471	DSBC-32-100-PPSA-N3
	125	★ 1376427 DSBC-32-125	PPVA-N3	★ 1376472	DSBC-32-125-PPSA-N3
	150	★ 2123073 DSBC-32-150	PPVA-N3	± 2123089	DSBC-32-150-PPSA-N3
	160	★ 1376428 DSBC-32-160	PPVA-N3	1376473	DSBC-32-160-PPSA-N3
	200	★ 1376429 DSBC-32-200	PPVA-N3	1376474	DSBC-32-200-PPSA-N3
	250	★ 1376430 DSBC-32-250	PPVA-N3	1376475	DSBC-32-250-PPSA-N3
	300	★ 2123074 DSBC-32-300-	PPVA-N3	★ 2123090	DSBC-32-300-PPSA-N3
	320	★ 1376431 DSBC-32-320	PPVA-N3	± 1376476	DSBC-32-320-PPSA-N3
	400	★ 1376432 DSBC-32-400	PPVA-N3	★ 1376477	DSBC-32-400-PPSA-N3
	500	★ 1376433 DSBC-32-500	PPVA-N3	★ 1376478	DSBC-32-500-PPSA-N3
10	20	A 24224// DCDC / 0 20 F	DIVA NO	4 24 22 700	DCDC (A 20 DDCA NO
40	20	★ 2123166 DSBC-40-20-F	-	★ 2123780	DSBC-40-20-PPSA-N3
	25	★ 1376656 DSBC-40-25-F		★ 1376903	DSBC-40-25-PPSA-N3
	30	★ 2123167 DSBC-40-30-F		★ 2123781	DSBC-40-30-PPSA-N3
	40	★ 1376657 DSBC-40-40-F		★ 1376904	DSBC-40-40-PPSA-N3
	50	★ 1376658 DSBC-40-50-F		★ 1376905	DSBC-40-50-PPSA-N3
	60	★ 2123224 DSBC-40-60-F	-	★ 2123782 ★ 2123782	DSBC-40-60-PPSA-N3
	70	★ 2123225 DSBC-40-70-F		★ 2123783	DSBC-40-70-PPSA-N3
	80	★ 1376659 DSBC-40-80-F		★ 1376906	DSBC-40-80-PPSA-N3
	100	★ 1376660 DSBC-40-100-		★ 1376907 ★ 1376909	DSBC-40-100-PPSA-N3
	125 150	★ 1376661 DSBC-40-125		★ 1376908	DSBC-40-125-PPSA-N3 DSBC-40-150-PPSA-N3
	160	★ 2123226 DSBC-40-150- ★ 1376662 DSBC-40-160-		★ 2123784 ★ 1376909	DSBC-40-160-PPSA-N3
	200	★ 1376662 DSBC-40-160-		★ 1376909 ★ 1376910	DSBC-40-200-PPSA-N3
	250	★ 1376664 DSBC-40-200-		★ 1376910 ★ 1376911	DSBC-40-250-PPSA-N3
	300	★ 2123227 DSBC-40-250		★ 2123785	DSBC-40-300-PPSA-N3
	320	★ 1376665 DSBC-40-300-		★ 1376912	DSBC-40-320-PPSA-N3
	400			7.1	
	500	★ 1376666 DSBC-40-400- ★ 1376667 DSBC-40-500-		★ 1376913 ★ 1376914	DSBC-40-400-PPSA-N3 DSBC-40-500-PPSA-N3
	300	X 13/000/ DSBC-40-500	FFVA-NO	× 13/0914	D3DC-4U-3UU-PY3A-N3



Ordering data			
Piston	Stroke	With PPV cushioning	With PPS cushioning
diameter			
[mm]	[mm]	Part no. Type	Part no. Type
50	20	★ 2098969 DSBC-50-20-PPVA-N3	★ 2102628 DSBC-50-20-PPSA-N3
	25	★ 1366948 DSBC-50-25-PPVA-N3	★ 1376301 DSBC-50-25-PPSA-N3
	30	★ 2098970 DSBC-50-30-PPVA-N3	★ 2102629 DSBC-50-30-PPSA-N3
	40	★ 1366949 DSBC-50-40-PPVA-N3	★ 1376304 DSBC-50-40-PPSA-N3
	50	★ 1366950 DSBC-50-50-PPVA-N3	★ 1376305 DSBC-50-50-PPSA-N3
	60	★ 2098972 DSBC-50-60-PPVA-N3	★ 2102630 DSBC-50-60-PPSA-N3
	70	★ 2098973 DSBC-50-70-PPVA-N3	★ 2102631 DSBC-50-70-PPSA-N3
	80	★ 1366951 DSBC-50-80-PPVA-N3	★ 1376306 DSBC-50-80-PPSA-N3
	100	★ 1366952 DSBC-50-100-PPVA-N3	★ 1376307 DSBC-50-100-PPSA-N3
	125	★ 1366953 DSBC-50-125-PPVA-N3	★ 1376308 DSBC-50-125-PPSA-N3
	150	★ 2098974 DSBC-50-150-PPVA-N3	★ 2102632 DSBC-50-150-PPSA-N3
	160	★ 1366954 DSBC-50-160-PPVA-N3	★ 1376309 DSBC-50-160-PPSA-N3
	200	★ 1366955 DSBC-50-200-PPVA-N3	★ 1376310 DSBC-50-200-PPSA-N3
	250	★ 1366956 DSBC-50-250-PPVA-N3	★ 1376311 DSBC-50-250-PPSA-N3
	300	★ 2098975 DSBC-50-300-PPVA-N3	★ 2102633 DSBC-50-300-PPSA-N3
	320	★ 1366957 DSBC-50-320-PPVA-N3	★ 1376312 DSBC-50-320-PPSA-N3
	400	★ 1366958 DSBC-50-400-PPVA-N3	★ 1376313 DSBC-50-400-PPSA-N3
	500	★ 1366959 DSBC-50-500-PPVA-N3	★ 1376314 DSBC-50-500-PPSA-N3
63	20	★ 2125490 DSBC-63-20-PPVA-N3	★ 2126684 DSBC-63-20-PPSA-N3
	25	★ 1383578 DSBC-63-25-PPVA-N3	★ 1383632 DSBC-63-25-PPSA-N3
	30	★ 2125491 DSBC-63-30-PPVA-N3	★ 2126685 DSBC-63-30-PPSA-N3
	40	★ 1383579 DSBC-63-40-PPVA-N3	★ 1383633 DSBC-63-40-PPSA-N3
	50	★ 1383580 DSBC-63-50-PPVA-N3	★ 1383634 DSBC-63-50-PPSA-N3
	60	★ 2125492 DSBC-63-60-PPVA-N3	★ 2126686 DSBC-63-60-PPSA-N3
	70	★ 2125493 DSBC-63-70-PPVA-N3	★ 2126687 DSBC-63-70-PPSA-N3
	80	★ 1383581 DSBC-63-80-PPVA-N3	★ 1383635 DSBC-63-80-PPSA-N3
	100	★ 1383582 DSBC-63-100-PPVA-N3	★ 1383636 DSBC-63-100-PPSA-N3
	125	★ 1383583 DSBC-63-125-PPVA-N3	★ 1383637 DSBC-63-125-PPSA-N3
	150	★ 2125494 DSBC-63-150-PPVA-N3	★ 2126688 DSBC-63-150-PPSA-N3
	160	★ 1383584 DSBC-63-160-PPVA-N3	★ 1383638 DSBC-63-160-PPSA-N3
	200	★ 1383585 DSBC-63-200-PPVA-N3	★ 1383639 DSBC-63-200-PPSA-N3
	250	★ 1383586 DSBC-63-250-PPVA-N3	★ 1383640 DSBC-63-250-PPSA-N3
	300	★ 2125495 DSBC-63-300-PPVA-N3	★ 2126689 DSBC-63-300-PPSA-N3
	320	★ 1383587 DSBC-63-320-PPVA-N3	★ 1383641 DSBC-63-320-PPSA-N3
	400	★ 1383588 DSBC-63-400-PPVA-N3	★ 1383642 DSBC-63-400-PPSA-N3
	500	★ 1383589 DSBC-63-500-PPVA-N3	★ 1383643 DSBC-63-500-PPSA-N3

· 🏺 - Note

Ordering data			
Piston	Stroke	With PPV cushioning	With PPS cushioning
diameter			
[mm]	[mm]	Part no. Type	Part no. Type
80	20	★ 2126594 DSBC-80-20-PPVA-N3	★ 2126636 DSBC-80-20-PPSA-N3
	25	★ 1383333 DSBC-80-25-PPVA-N3	★ 1383366 DSBC-80-25-PPSA-N3
	30	★ 2126595 DSBC-80-30-PPVA-N3	★ 2126637 DSBC-80-30-PPSA-N3
	40	★ 1383334 DSBC-80-40-PPVA-N3	★ 1383367 DSBC-80-40-PPSA-N3
	50	★ 1383335 DSBC-80-50-PPVA-N3	★ 1383368 DSBC-80-50-PPSA-N3
	60	★ 2126597 DSBC-80-60-PPVA-N3	★ 2126638 DSBC-80-60-PPSA-N3
	70	★ 2126598 DSBC-80-70-PPVA-N3	★ 2126639 DSBC-80-70-PPSA-N3
	80	★ 1383336 DSBC-80-PPVA-N3	★ 1383369 DSBC-80-PPSA-N3
	100	★ 1383337 DSBC-80-100-PPVA-N3	★ 1383370 DSBC-80-100-PPSA-N3
	125	★ 1383338 DSBC-80-125-PPVA-N3	★ 1383371 DSBC-80-125-PPSA-N3
	150	★ 2126599 DSBC-80-150-PPVA-N3	★ 2126640 DSBC-80-150-PPSA-N3
	160	★ 1383339 DSBC-80-160-PPVA-N3	★ 1383372 DSBC-80-160-PPSA-N3
	200	★ 1383340 DSBC-80-200-PPVA-N3	★ 1383373 DSBC-80-200-PPSA-N3
	250	★ 1383341 DSBC-80-250-PPVA-N3	★ 1383374 DSBC-80-250-PPSA-N3
	300	★ 2126600 DSBC-80-300-PPVA-N3	★ 2126641 DSBC-80-300-PPSA-N3
	320	★ 1383342 DSBC-80-320-PPVA-N3	★ 1383375 DSBC-80-320-PPSA-N3
	400	★ 1383343 DSBC-80-400-PPVA-N3	★ 1383376 DSBC-80-400-PPSA-N3
	500	★ 1383344 DSBC-80-500-PPVA-N3	★ 1383377 DSBC-80-500-PPSA-N3



Ordering data					
Piston	Stroke	With PPV cushio	ning	With PPS cushio	oning
diameter					
[mm]	[mm]	Part no.	Туре	Part no.	Туре
32	1 2800	1463254	DSBC-32PPVA-N3	1463252	DSBC-32PPSA-N3
40	1 2800	1462834	DSBC-40PPVA-N3	1462835	DSBC-40PPSA-N3
50	1 2800	1463766	DSBC-50PPVA-N3	1463768	DSBC-50PPSA-N3
63	1 2800	1463483	DSBC-63PPVA-N3	1463481	DSBC-63PPSA-N3
80	1 2800	1463504	DSBC-80PPVA-N3	1463500	DSBC-80PPSA-N3
100	25	1384804	DSBC-100-25-PPVA-N3	1384890	DSBC-100-25-PPSA-N3
	40	1384805	DSBC-100-40-PPVA-N3	1384891	DSBC-100-40-PPSA-N3
	50	1384806	DSBC-100-50-PPVA-N3	1384892	DSBC-100-50-PPSA-N3
	80	1384807	DSBC-100-80-PPVA-N3	1384893	DSBC-100-80-PPSA-N3
	100	1384808	DSBC-100-100-PPVA-N3	1384894	DSBC-100-100-PPSA-N3
	125	1384809	DSBC-100-125-PPVA-N3	1384895	DSBC-100-125-PPSA-N3
	160	1384810	DSBC-100-160-PPVA-N3	1384896	DSBC-100-160-PPSA-N3
	200	1384811	DSBC-100-200-PPVA-N3	1384897	DSBC-100-200-PPSA-N3
	250	1384812	DSBC-100-250-PPVA-N3	1384898	DSBC-100-250-PPSA-N3
	320	1384813	DSBC-100-320-PPVA-N3	1384899	DSBC-100-320-PPSA-N3
	400	1384814	DSBC-100-400-PPVA-N3	1384900	DSBC-100-400-PPSA-N3
	500	1384815	DSBC-100-500-PPVA-N3	1384901	DSBC-100-500-PPSA-N3
	1 2800	1463598	DSBC-100PPVA-N3	1463558	DSBC-100PPSA-N3
125	25	1804956	DSBC-125-25-PPVA-N3	1804661	DSBC -125-25-PPSA-N3
	40	1804957	DSBC-125-40-PPVA-N3	1804662	DSBC-125-40-PPSA-N3
	50	1804958	DSBC-125-50-PPVA-N3	1804663	DSBC-125-50-PPSA-N3
	80	1804959	DSBC-125-80-PPVA-N3	1804664	DSBC-125-80-PPSA-N3
	100	1804960	DSBC-125-100-PPVA-N3	1804665	DSBC-125-100-PPSA-N3
	125	1804961	DSBC-125-125-PPVA-N3	1804666	DSBC-125-125-PPSA-N3
	160	1804962	DSBC-125-160-PPVA-N3	1804667	DSBC-125-160-PPSA-N3
	200	1804963	DSBC-125-200-PPVA-N3	1804668	DSBC-125-200-PPSA-N3
	250	1804964	DSBC-125-250-PPVA-N3	1804669	DSBC-125-250-PPSA-N3
	320	1804965	DSBC-125-320-PPVA-N3	1804671	DSBC-125-320-PPSA-N3
	400	1804966	DSBC-125-400-PPVA-N3	1804672	DSBC-125-400-PPSA-N3
	500	1804967	DSBC-125-500-PPVA-N3	1804673	DSBC-125-500-PPSA-N3
	1 2800	1755348	DSBC-125PPVA-N3	1755619	DSBC-125PPSA-N3



Ordering data - Modular product system

Ordering table												
Size		32	40	50	63	80	100	125	Conditions	Code	Ente	er co
Module no.		1463250	1461995	1463770	1463475	1463495	1463520	1722457				
Function		Standards-l	oased cylinde	r, double-act	ing, based on	ISO 15552				DSBC	DSB	3C
Protection against rotatio	n	None								*		
		With protec	tion against r	otation				-	[1]	★ -Q		
Running characteristics		Standard								*		
		Low friction						-	[2]	L		
			low movemen			,			[2]	U		
:		Low friction	for balancer	applications					[3]	L1		,
Piston diameter	[mm]	32	40	50	63	80	100	125		★		
Stroke	[mm]	1 2800								*		
Piston rod type		At one end								*		
		Through pis	ton rod							★ -T		
Piston rod thread type		Male thread	l							*		
		Female thre	ad						[4]	★ F		
Profile type	·	Sensor slot	on 1 side							*		
		Sensor slot	on 3 sides							★ D3		
Cushioning	· ·	Elastic cush	ioning rings/	plates at both	n ends				[5]	-P		
		Pneumatic o	cushioning, s	elf-adjusting	at both ends				[6]	★ -PPS		
		Pneumatic o	cushioning, a	djustable at b	ooth ends					★ -PPV		
Position sensing		Via proximit	ty switch							★ A	Α	

- [1] **Q** Not with L, U, L1, N3, T3, T4, P2, A1, A2, A3, A6 Only up to a stroke of 1500 mm
- [2] **L, U** Not with T, R3, T1, T3, T4, P2, A1, A2, A3, A6, EX4 [3] **L1** Not with T, PPV, R3, T1, T3, T4, P2, A1, A2, A3, A6, EX4
- Not with ...L
- [4] **F** Not with A1
- [6] **PPS** Not with T1, T3, T4, A1



If feature L is used in combination with transverse loads or strokes of above 500 mm, suitable measures must be taken to support the piston rod. The operating pressure (→ page 12) is applicable for strokes up to 500 mm.



If feature L1 is used in combination with strokes of above 500 mm, suitable measures must be taken to support the piston rod. The operating pressure (→ page 12) is applicable for strokes up to 500 mm.

Ordering data – Modular product system

Ordering table											
Size		32	40	50	63	80	100	125	Conditions	Code	Enter code
Standard		Based on	ı ISO 1555	2						*	
		Correspo	nds to ISO	15552						★ -N3	
Corrosion protection		Standard	I							*	
		High corr	osion prote	ection					[7]	★ R3	
Temperature range		Standard	l							*	
	[°C]	Heat-resi	istant seals	up to max. 1	20		,		[8]	★ T1	
	[°C]	-40 +8	80						[8]	Т3	
	[°C]	0 +150	0						[8]	T4	
Protection against particles		Standard	I							*	
		Bellows	on bearing	сар				-	[9]	P2	
Scraper variant		None								*	
		Increased	d chemical	resistance						A1	
		Hard scra	aper							A2	
		For unlub	oricated op	eration						A3	
		Metal scr	raper							A6	
EU certification		None								*	
	[mm]	II 2GD							[10]	EX4	
Piston rod extension		None]
	[mm]	1 500							[11]	★ E	
Piston rod thread extension		None]
	[mm]	1 35		1 70					[11]	L	

[7] **R3** Not with A2, A6

[8] **T1, T3, T4** Not with P2, A1, A2, A3, EX4

[9] **P2** Not with N3, A1, A2, A3, A6, EX4 Only for strokes of 10 ... 500 mm

[10] **EX4** Not with T1, T3, T4, P2, A1, A3, A6 [11] **E, ...L** Only up to a stroke of 2000 mm



The piston rod extension for the bellows is automatically taken into consideration when feature P2 is selected. This means that there is no need to specify a value for feature ...E.



When selecting feature ... E in combination with feature P2, the extended part of the piston rod ... E is not covered by the bellows.

- 🖣 - Note

When feature P2 is selected in combination with feature T (through piston rod), the bellows is mounted at one end only.

Standards-based cylinders DSBC, standard hole pattern, with clamping unit

Ordering data – Modular product system

Ordering table Size		32	40	50	63	80	100	125	Conditions	Code	Enter code
Module no.		1463250	1461995	1463770	1463475	1463495	1463520	1722457			
Function		Standards-b	ased cylinde		DSBC	DSBC					
Protection against rotation		None With protect	ion against r	otation				-	[1]	★ ★ -Q	
Piston diameter	[mm]	32	40	50	63	80	100	125		*	
Stroke	[mm]	10 2000								★	
Clamping unit		Attached							★ -C	С	
Piston rod type		At one end	one end ough piston rod						★		
Piston rod thread type		Male thread	rough piston rod ale thread					*			
Profile type		Sensor slot	ale thread male thread nsor slot on 1 side nsor slot on 3 sides					[2]	★ F ★ D3		
Cushioning		Pneumatic o	ushioning, s	plates at both elf-adjusting a djustable at b	at both ends					-P ★ -PPS ★ -PPV	
Position sensing		Via proximit		-						★ A	А
Piston rod extension [mm] None					★ E						
Piston rod thread extension	[mm]	None 1 35		1 70						L	

Only available with T.
Only up to a stroke of 1500 mm

[2] **F** Not with ...L

Ordering data – Modular product system

Ordering table										
Size		32	40	50	63	80	100	Conditions	Code	Enter code
Module no.		1463250	1461995	1463770	1463475	1463495	1463520			
Function		Standards-ba	sed cylinder, do	ouble-acting, b	ased on ISO 15	552			DSBC	DSBC
Piston diameter	[mm]	32	40	50	63	80	100			
Stroke	[mm]	10 2000								
End-position locking		At both ends							E1	
		With advance	d piston rod						E2	
		With retracted	l piston rod						E3	
Piston rod thread type		Male thread								
		Female thread	d					[1]	F	
Profile type		Sensor slot or	n 1 side							
		Sensor slot or	3 sides						D3	
Cushioning		Elastic cushio	ning rings/plat	es at both ends	5	_	_		-P	
		Pneumatic cu	shioning, adjus	table at both e	nds				-PPV	
Position sensing		Via proximity	switch						Α	А
Piston rod extension	[mm]	None			,					
		1 500							E	
Piston rod thread extension	[mm]	None			,					
		1 35		1 70					L	

1] **F** Not with ...L

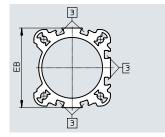
Standards-based cylinders DSBC, ISO 15552, for manufacturing lithium-ion batteries

Ordering data – Modular product system

Ordering table Size		32	40	50	63	80	100	125	Conditions	Code		Enter code
Module no.	· ·	8150687	8150688	8150689	8150690	8150691	8150692	8150693				
Function		Standards-l	oased cylinde	r, double-act	ing, based on	ISO 15552				DSBC		DSBC
Piston diameter	[mm]	32	40	50	63	80	100	125				
Stroke	[mm]	1 2800										
Piston rod type		At one end										
		Through pis	ton rod							T		
Piston rod thread type		Male thread] [
		Female thre							[1]	F]]	
Profile type		Sensor slot										
		Sensor slot	on 3 sides							D3		
Cushioning		Elastic cush	ioning rings/	plates at both	n ends	-				-P		
		Pneumatic o	cushioning, s	elf-adjusting	at both ends					-PPS		
		Pneumatic o	cushioning, a	djustable at b	ooth ends					-PPV		
Position sensing		Via proximit	y switch							Α		Α
Standard		Based on IS	0 15552									
		Correspond	s to ISO 1555	52						-N3	İ	
Special material properties		Recommend	ded for produ	ction facilities	s for the man	ufacture of lit	hium-ion batt	eries		F1A	ĺĺ	F1A
Piston rod extension		None										
	[mm]	1 500							[1]	Е		
Piston rod thread extension		None										
	[mm]	1 70							[1] [2]	L		

^[1] **F, ...E, ...L** Not with N3 [2] **...L** Not with F

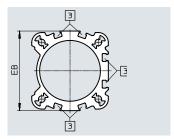
Ordering data – Versions for DSBC-...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

Piston diameter	Stroke	With PPV cushio	ning	With PPS cush	nioning
[mm]	[mm]	Part no.	Туре	Part no.	Туре
32	20	3656511	DSBC-32-20-D3-PPVA-N3	3659374	DSBC-32-20-D3-PPSA-N3
	25	3656512	DSBC-32-25-D3-PPVA-N3	3659375	DSBC-32-25-D3-PPSA-N3
	30	3656513	DSBC-32-30-D3-PPVA-N3	3659376	DSBC-32-30-D3-PPSA-N3
	40	3656514	DSBC-32-40-D3-PPVA-N3	3659377	DSBC-32-40-D3-PPSA-N3
	50	3656515	DSBC-32-50-D3-PPVA-N3	3659378	DSBC-32-50-D3-PPSA-N3
	60	3656516	DSBC-32-60-D3-PPVA-N3	3659379	DSBC-32-60-D3-PPSA-N3
	70	3656517	DSBC-32-70-D3-PPVA-N3	3659380	DSBC-32-70-D3-PPSA-N3
	80	3656518	DSBC-32-80-D3-PPVA-N3	3659381	DSBC-32-80-D3-PPSA-N3
	100	3656519	DSBC-32-100-D3-PPVA-N3	3659382	DSBC-32-100-D3-PPSA-N3
	125	3656520	DSBC-32-125-D3-PPVA-N3	3659383	DSBC-32-125-D3-PPSA-N3
	150	3656521	DSBC-32-150-D3-PPVA-N3	3659384	DSBC-32-150-D3-PPSA-N3
	160	3656522	DSBC-32-160-D3-PPVA-N3	3659385	DSBC-32-160-D3-PPSA-N3
	200	3656523	DSBC-32-200-D3-PPVA-N3	3659386	DSBC-32-200-D3-PPSA-N3
	250	3656524	DSBC-32-250-D3-PPVA-N3	3659387	DSBC-32-250-D3-PPSA-N3
	300	3656525	DSBC-32-300-D3-PPVA-N3	3659388	DSBC-32-300-D3-PPSA-N3
	320	3656526	DSBC-32-320-D3-PPVA-N3	3659389	DSBC-32-320-D3-PPSA-N3
	400	8165440	DSBC-32-400-D3-PPVA-N3	8165446	DSBC-32-400-D3-PPSA-N3
	500	8165460	DSBC-32-500-D3-PPVA-N3	8165461	DSBC-32-500-D3-PPSA-N3
40	20	3660615	DSBC-40-20-D3-PPVA-N3	3660759	DSBC-40-20-D3-PPSA-N3
	25	3660616	DSBC-40-25-D3-PPVA-N3	3660760	DSBC-40-25-D3-PPSA-N3
	30	3660617	DSBC-40-30-D3-PPVA-N3	3660761	DSBC-40-30-D3-PPSA-N3
	40	3660618	DSBC-40-40-D3-PPVA-N3	3660762	DSBC-40-40-D3-PPSA-N3
	50	3660619	DSBC-40-50-D3-PPVA-N3	3660763	DSBC-40-50-D3-PPSA-N3
	60	3660620	DSBC-40-60-D3-PPVA-N3	3660764	DSBC-40-60-D3-PPSA-N3
	70	3660621	DSBC-40-70-D3-PPVA-N3	3660765	DSBC-40-70-D3-PPSA-N3
	80	3660622	DSBC-40-80-D3-PPVA-N3	3660766	DSBC-40-80-D3-PPSA-N3
	100	3660623	DSBC-40-100-D3-PPVA-N3	3660767	DSBC-40-100-D3-PPSA-N3
	125	3660624	DSBC-40-125-D3-PPVA-N3	3660768	DSBC-40-125-D3-PPSA-N3
	150	3660625	DSBC-40-150-D3-PPVA-N3	3660769	DSBC-40-150-D3-PPSA-N3
	160	3660626	DSBC-40-160-D3-PPVA-N3	3660770	DSBC-40-160-D3-PPSA-N3
	200	3660627	DSBC-40-200-D3-PPVA-N3	3660771	DSBC-40-200-D3-PPSA-N3
	250	3660628	DSBC-40-250-D3-PPVA-N3	3660772	DSBC-40-250-D3-PPSA-N3
	300	3660629	DSBC-40-300-D3-PPVA-N3	3660773	DSBC-40-300-D3-PPSA-N3
	320	3660630	DSBC-40-320-D3-PPVA-N3	3660774	DSBC-40-320-D3-PPSA-N3
	400	8165582	DSBC-40-400-D3-PPVA-N3	8165583	DSBC-40-400-D3-PPSA-N3
	500	8165584	DSBC-40-500-D3-PPVA-N3	8165586	DSBC-40-500-D3-PPSA-N3

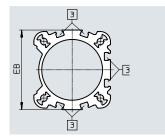
Ordering data – Versions for DSBC-...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

Piston	Stroke	With PPV cushic	ning		With PPS cushio	ning
diameter			_			_
[mm]	[mm]	Part no.	Туре		Part no.	Туре
50	20	3659467	DSBC-50-20-D3-PPVA-N3		3659491	DSBC-50-20-D3-PPSA-N3
	25	3659468	DSBC-50-25-D3-PPVA-N3		3659492	DSBC-50-25-D3-PPSA-N3
	30	3659469	DSBC-50-30-D3-PPVA-N3		3659493	DSBC-50-30-D3-PPSA-N3
	40	3659470	DSBC-50-40-D3-PPVA-N3		3659494	DSBC-50-40-D3-PPSA-N3
	50	3659471	DSBC-50-50-D3-PPVA-N3		3659495	DSBC-50-50-D3-PPSA-N3
	60	3659472	DSBC-50-60-D3-PPVA-N3		3659496	DSBC-50-60-D3-PPSA-N3
	70	3659473	DSBC-50-70-D3-PPVA-N3		3659497	DSBC-50-70-D3-PPSA-N3
	80	3659474	DSBC-50-80-D3-PPVA-N3		3659498	DSBC-50-80-D3-PPSA-N3
	100	3659475	DSBC-50-100-D3-PPVA-N3		3659499	DSBC-50-100-D3-PPSA-N3
	125	3659476	DSBC-50-125-D3-PPVA-N3		3659500	DSBC-50-125-D3-PPSA-N3
	150	3659477	DSBC-50-150-D3-PPVA-N3		3659501	DSBC-50-150-D3-PPSA-N3
	160	3659478	DSBC-50-160-D3-PPVA-N3	1 [3659502	DSBC-50-160-D3-PPSA-N3
	200	3659479	DSBC-50-200-D3-PPVA-N3		3659503	DSBC-50-200-D3-PPSA-N3
	250	3659480	DSBC-50-250-D3-PPVA-N3		3659504	DSBC-50-250-D3-PPSA-N3
	300	3659481	DSBC-50-300-D3-PPVA-N3		3659505	DSBC-50-300-D3-PPSA-N3
	320	3659482	DSBC-50-320-D3-PPVA-N3	1 [3659506	DSBC-50-320-D3-PPSA-N3
	400	8165587	DSBC-50-400-D3-PPVA-N3	1	8165588	DSBC-50-400-D3-PPSA-N3
	500	8165589	DSBC-50-500-D3-PPVA-N3		8165590	DSBC-50-500-D3-PPSA-N3
63	20	3657859	DSBC-63-20-D3-PPVA-N3		3657811	DSBC-63-20-D3-PPSA-N3
	25	3657860	DSBC-63-25-D3-PPVA-N3		3657812	DSBC-63-25-D3-PPSA-N3
	30	3657861	DSBC-63-30-D3-PPVA-N3		3657813	DSBC-63-30-D3-PPSA-N3
	40	3657862	DSBC-63-40-D3-PPVA-N3		3657814	DSBC-63-40-D3-PPSA-N3
	50	3657863	DSBC-63-50-D3-PPVA-N3	1 [3657815	DSBC-63-50-D3-PPSA-N3
	60	3657864	DSBC-63-60-D3-PPVA-N3		3657816	DSBC-63-60-D3-PPSA-N3
	70	3657865	DSBC-63-70-D3-PPVA-N3] [3657817	DSBC-63-70-D3-PPSA-N3
	80	3657866	DSBC-63-80-D3-PPVA-N3		3657818	DSBC-63-80-D3-PPSA-N3
	100	3657867	DSBC-63-100-D3-PPVA-N3		3657819	DSBC-63-100-D3-PPSA-N3
	125	3657868	DSBC-63-125-D3-PPVA-N3		3657820	DSBC-63-125-D3-PPSA-N3
	150	3657869	DSBC-63-150-D3-PPVA-N3		3657821	DSBC-63-150-D3-PPSA-N3
	160	3657870	DSBC-63-160-D3-PPVA-N3		3657822	DSBC-63-160-D3-PPSA-N3
	200	3657871	DSBC-63-200-D3-PPVA-N3	1	3657823	DSBC-63-200-D3-PPSA-N3
	250	3657872	DSBC-63-250-D3-PPVA-N3	1	3657824	DSBC-63-250-D3-PPSA-N3
	300	3657873	DSBC-63-300-D3-PPVA-N3	1	3657825	DSBC-63-300-D3-PPSA-N3
	320	3657874	DSBC-63-320-D3-PPVA-N3		3657826	DSBC-63-320-D3-PPSA-N3
	400	8165591	DSBC-63-400-D3-PPVA-N3		8165592	DSBC-63-400-D3-PPSA-N3
	500	8165593	DSBC-63-500-D3-PPVA-N3	i i	8165594	DSBC-63-500-D3-PPSA-N3

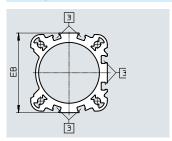
Ordering data – Versions for DSBC-...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

Piston diameter	Stroke	With PPV cushioning	With PPS cushioning
[mm]	[mm]	Part no. Type	Part no. Type
80	20	3656631 DSBC-80-20-D3-PPVA-N3	3656854 DSBC-80-20-D3-PPSA-N3
	25	3656632 DSBC-80-25-D3-PPVA-N3	3656855 DSBC-80-25-D3-PPSA-N3
	30	3656633 DSBC-80-30-D3-PPVA-N3	3656856 DSBC-80-30-D3-PPSA-N3
	40	3656634 DSBC-80-40-D3-PPVA-N3	3656857 DSBC-80-40-D3-PPSA-N3
	50	3656635 DSBC-80-50-D3-PPVA-N3	3656858 DSBC-80-50-D3-PPSA-N3
	60	3656636 DSBC-80-60-D3-PPVA-N3	3656859 DSBC-80-60-D3-PPSA-N3
	70	3656637 DSBC-80-70-D3-PPVA-N3	3656860 DSBC-80-70-D3-PPSA-N3
	80	3656638 DSBC-80-80-D3-PPVA-N3	3656861 DSBC-80-B0-D3-PPSA-N3
	100	3656639 DSBC-80-100-D3-PPVA-N3	3656862 DSBC-80-100-D3-PPSA-N3
	125	3656640 DSBC-80-125-D3-PPVA-N3	3656863 DSBC-80-125-D3-PPSA-N3
	150	3656641 DSBC-80-150-D3-PPVA-N3	3656864 DSBC-80-150-D3-PPSA-N3
	160	3656642 DSBC-80-160-D3-PPVA-N3	3656865 DSBC-80-160-D3-PPSA-N3
	200	3656643 DSBC-80-200-D3-PPVA-N3	3656866 DSBC-80-200-D3-PPSA-N3
	250	3656644 DSBC-80-250-D3-PPVA-N3	3656867 DSBC-80-250-D3-PPSA-N3
	300	3656645 DSBC-80-300-D3-PPVA-N3	3656868 DSBC-80-300-D3-PPSA-N3
	320	3656646 DSBC-80-320-D3-PPVA-N3	3656869 DSBC-80-320-D3-PPSA-N3
	400	8165595 DSBC-80-400-D3-PPVA-N3	8165596 DSBC-80-400-D3-PPSA-N3
	500	8165597 DSBC-80-500-D3-PPVA-N3	8165598 DSBC-80-500-D3-PPSA-N3
100	25	8165653 DSBC-100-25-D3-PPVA-N3	8165693 DSBC-100-25-D3-PPSA-N3
	40	8165656 DSBC-100-40-D3-PPVA-N3	8165690 DSBC-100-40-D3-PPSA-N3
	50	8165658 DSBC-100-50-D3-PPVA-N3	8165695 DSBC-100-50-D3-PPSA-N3
	80	8165660 DSBC-100-80-D3-PPVA-N3	8165697 DSBC-100-80-D3-PPSA-N3
	100	8165649 DSBC-100-100-D3-PPVA-N3	8165689 DSBC-100-100-D3-PPSA-N3
	125	8165650 DSBC-100-125-D3-PPVA-N3	8165694 DSBC-100-125-D3-PPSA-N3
	160	8165651 DSBC-100-160-D3-PPVA-N3	8165686 DSBC-100-160-D3-PPSA-N3
	200	8165652 DSBC-100-200-D3-PPVA-N3	8165688 DSBC-100-200-D3-PPSA-N3
	250	8165654 DSBC-100-250-D3-PPVA-N3	8165691 DSBC-100-250-D3-PPSA-N3
	320	8165655 DSBC-100-320-D3-PPVA-N3	8165696 DSBC-100-320-D3-PPSA-N3
	400	8165657 DSBC-100-400-D3-PPVA-N3	8165692 DSBC-100-400-D3-PPSA-N3
	500	8165659 DSBC-100-500-D3-PPVA-N3	8165687 DSBC-100-500-D3-PPSA-N3

Ordering data – Versions for DSBC-...D3 (sensor slots on 3 sides)



In this version, the piston position can be sensed on 3 sides of the drive.

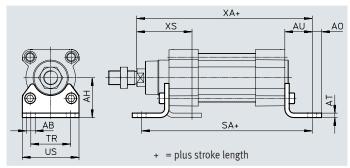
Piston diameter	Stroke	With PPV cushioning
[mm]	[mm]	Part no. Type
125	25	8165670 DSBC-125-25-D3-PPVA-N3
	40	8165676 DSBC-125-40-D3-PPVA-N3
	50	8165680 DSBC-125-50-D3-PPVA-N3
	80	8165684 DSBC-125-80-D3-PPVA-N3
	100	8165662 DSBC-125-100-D3-PPVA-N3
	125	8165664 DSBC-125-125-D3-PPVA-N3
	160	8165666 DSBC-125-160-D3-PPVA-N3
	200	8165668 DSBC-125-200-D3-PPVA-N3
	250	8165672 DSBC-125-250-D3-PPVA-N3
	320	8165674 DSBC-125-320-D3-PPVA-N3
	400	8165678 DSBC-125-400-D3-PPVA-N3
	500	8165682 DSBC-125-500-D3-PPVA-N3

With PPS cushio	ning
Part no.	Туре
8165669	DSBC-125-25-D3-PPSA-N3
8165675	DSBC-125-40-D3-PPSA-N3
8165679	DSBC-125-50-D3-PPSA-N3
8165683	DSBC-125-80-D3-PPSA-N3
8165661	DSBC-125-100-D3-PPSA-N3
8165663	DSBC-125-125-D3-PPSA-N3
8165665	DSBC-125-160-D3-PPSA-N3
8165667	DSBC-125-200-D3-PPSA-N3
8165671	DSBC-125-250-D3-PPSA-N3
8165673	DSBC-125-320-D3-PPSA-N3
8165677	DSBC-125-400-D3-PPSA-N3
8165681	DSBC-125-500-D3-PPSA-N3

Foot mounting HNC/CRHNC

Material: HNC: Galvanised steel CRHNC: High-alloy steel Free of copper and PTFE





Dimensions and	l ordering dat	a										
For diam.	AB	AH	AO	AT	AU	9	SA	TR	US	x	A	XS
	Ø											
[mm]						DSBC	DSBCC			DSBC	DSBCC	
32	7	32	6.5	4	24	142	187	32	45	143.1	188.1	46
40	10	36	9	4	28	161	214	36	54	161.9	214.9	52.7
50	10	45	9.5	5	32	170	237	45	64	173.8	240.8	62.6
63	10	50	12.5	5	32	185	261	50	75	189.1	265.1	62.9
80	12	63	15	6	41	210	305	63	93	214.6	309.6	80.4
100	14.5	71	17.5	6	41	220	318	75	110	228.5	326.7	84.3
125	16.5	90	22	8	45	250	375	90	131	270	394.3	102

For diam.	Basic type				Corrosion-	resistant		
	CRC ¹⁾	Weight	Part no.	Type ²⁾	CRC ¹⁾	Weight	Part no.	Type ²⁾
[mm]		[g]				[g]		
32	2	144	174369	HNC-32	4	139	176937	CRHNC-32
40	2	193	* 174370	HNC-40	4	188	176938	CRHNC-40
50	2	353	* 174371	HNC-50	4	341	176939	CRHNC-50
63	2	436	★ 174372	HNC-63	4	424	176940	CRHNC-63
80	2	829	174373	HNC-80	4	809	176941	CRHNC-80
100	2	1009	174374	HNC-100	4	990	176942	CRHNC-100
125	2	1902	174375	HNC-125	4	1920	176943	CRHNC-125

¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment. Corrosion resistance class CRC 4 to Festo standard FN 940070

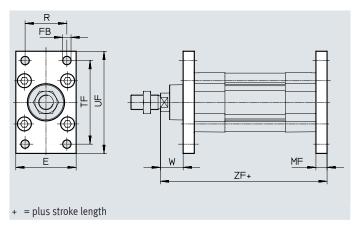
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests (>> also FN 940082), using appropriate media.

²⁾ Suitable for ATEX

Flange mounting FNC/CRFNG

Material: FNC: Galvanised steel CRFNG: High-alloy steel Free of copper and PTFE ROHS-compliant





Dimensions an	d ordering data								
For diam.	E	FB	MF	R	TF	UF	W	Z	ľF
		Ø							
[mm]		H13						DSBC	DSBCC
32	45	7	10	32	64	80	16	129.1	174.1
40	54	9	10	36	72	90	18.7	143.9	196.9
50	65	9	12	45	90	110	23.6	153.8	220.8
63	75	9	12	50	100	120	23.9	169.1	245.1
80	93	12	16	63	126	150	29.4	189.6	284.6
100	110	14	16	75	150	175	33.3	203.5	301.7
125	132	16	20	90	180	210	45	245	369.3

For diam.	Basic type				Corrosion-re	esistant		
	CRC ¹⁾	Weight	Part no.	Type ²⁾	CRC ¹⁾	Weight	Part no.	Type ²⁾
[mm]		[g]				[g]		
32	1	221	★ 174376	FNC-32	4	220	161846	CRFNG-32
40	1	291	★ 174377	FNC-40	4	291	161847	CRFNG-40
50	1	536	* 174378	FNC-50	4	526	161848	CRFNG-50
63	1	679	★ 174379	FNC-63	4	680	161849	CRFNG-63
80	1	1495	★ 174380	FNC-80	4	1508	161850	CRFNG-80
100	1	2041	174381	FNC-100	4	2054	161851	CRFNG-100
125	1	3775	174382	FNC-125	4	3787	185363	CRFNG-125

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions). Corrosion resistance class CRC 4 to Festo standard FN 940070

Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests (

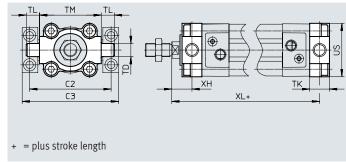
also FN 940082), using appropriate media.

¹⁾ Suitable for ATEX

Trunnion flange ZNCF/CRZNG

Material: ZNCF: Stainless steel casting CRZNG: Electropolished stainless steel casting Free of copper and PTFE RoHS-compliant





Dimensions	and ordering dat	ta								
For diam.	C2	C3	TD	TK	TL	TM	US	XH	Х	(L
			ø							
[mm]			e9						DSBC	DSBCC
32	71	86	12	16	12	50	45	18	127.1	172.1
40	87	105	16	20	16	63	54	18.7	143.9	196.9
50	99	117	16	24	16	75	64	23.6	153.8	220.8
63	116	136	20	24	20	90	75	23.9	169.1	245.1
80	136	156	20	28	20	110	93	31.4	187.6	282.6
100	164	189	25	38	25	132	110	30.3	206.5	304.7
125	192	217	25	50	25	160	131	40	250	374.3

For diam.	Basic type				Corrosion-re	sistant		
[mm]	CRC ¹⁾	Weight [g]	Part no.	Type ²⁾	CRC ¹⁾	Weight [g]	Part no.	Type ²⁾
32	2	150	174411	ZNCF-32	4	150	161852	CRZNG-32
40	2	285	174412	ZNCF-40	4	285	161853	CRZNG-40
50	2	473	174413	ZNCF-50	4	473	161854	CRZNG-50
63	2	687	174414	ZNCF-63	4	687	161855	CRZNG-63
80	2	1296	174415	ZNCF-80	4	1296	161856	CRZNG-80
100	2	2254	174416	ZNCF-100	4	2254	161857	CRZNG-100
125	2	3484	174417	ZNCF-125	4	3484	185362	CRZNG-125

¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment. Corrosion resistance class CRC 4 to Festo standard FN 940070

Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests

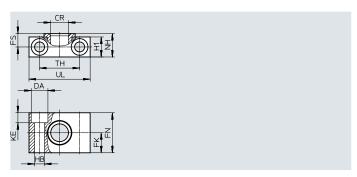
^{(→} also FN 940082), using appropriate media.

Suitable for ATEX

Trunnion support LNZG

Material: Trunnion support: Anodised aluminium Plain bearing: Plastic Free of copper and PTFE ROHS-compliant





Dimensions an	d orderin	ıg data													
For diam.	CR	DA	FK	FN	FS	H1	НВ	KE	NH	TH	UL	CRC ¹⁾	Weight	Part no.	Туре
	Ø	Ø	Ø				Ø								
[mm]	D11	H13	±0.1				H13			±0.2			[g]		
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	90	32959	LNZG-32
32 40, 50	12 16	11 15	15 18	30 36	10.5 12	15 18	6.6	6.8	18 21	32 36	46 55	2	90	32959 32960	LNZG-32 LNZG-4 0/50
						_		6.8 9 11	21	-		2 2 2	1		

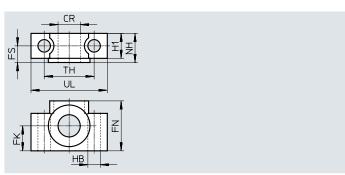
¹⁾ Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Trunnion support CRLNZG

Material: High-alloy steel Free of copper and PTFE RoHS-compliant





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

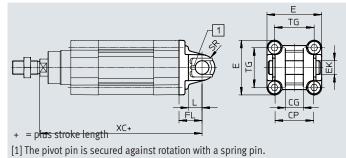
¹⁾ Corrosion resistance class CRC 4 to Festo standard FN 940070

Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests (>> also FN 940082), using appropriate media.

Swivel flange SNC

Material: Die-cast aluminium Free of copper and PTFE ROHS-compliant





Dimensions and	Dimensions and ordering data												
For diam.	CG	СР	E	EK Ø	FL	L	SR						
[mm]	H14	h14		H9	±0.2								
32	14	34	45+0.2/-0.5	10	22	13	10						
40	16	40	54-0.5	12	25	16	12						
50	21	45	64-0.6	16	27	16	12						
63	21	51	75 _{-0.6}	16	32	21	16						
80	25	65	93_0.8	20	36	22	16						
100	25	75	110+0.3/-0.8	20	41	27	20						
125	37	97	131-0.8	30	50	30	25						

For diam.	TG	XC		CRC ¹⁾	Weight	Part no.	Type ²⁾
[mm]		DSBC	DSBCC		[g]		
32	32.5	141.1	186.1	1	93	★ 174383	SNC-32
40	38	158.9	211.9	1	140	* 174384	SNC-40
50	46.5	168.8	235.8	1	234	* 174385	SNC-50
63	56.5	189.1	265.1	1	331	★ 174386	SNC-63
80	72	209.6	304.6	1	618	★ 174387	SNC-80
100	89	228.5	326.7	1	865	174388	SNC-100
125	110	275	399.3	1	1728	174389	SNC-125

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070

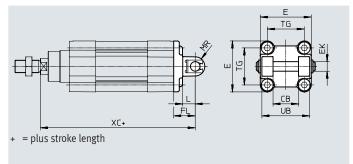
Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

²⁾ Suitable for ATEX

Swivel flange SNCB/SNCB-...-R3

Material: SNCB: Die-cast aluminium SNCB-...-R3: die-cast aluminium with protective coating Free of copper and PTFE ROHS-compliant





Dimensions an	d ordering data									
For diam.	СВ	Е	EK Ø	FL	L	MR	TG	UB)	(C
[mm]	H14		H9/e8	±0.2		-0.5		h14	DSBC	DSBCC
32	26	45+0.2/-0.5	10	22	13	8.5	32.5	45	141.1	186.1
40	28	54-0.5	12	25	16	12	38	52	158.9	211.9
50	32	64-0.6	12	27	16	12	46.5	60	168.8	235.8
63	40	75-0.6	16	32	21	16	56.5	70	189.1	265.1
80	50	93_0.8	16	36	22	16	72	90	209.6	304.6
100	60	110+0.3/-0.8	20	41	27	20	89	110	228.5	326.7
125	70	131-0.8	25	50	30	25	110	130	275	399.3

For diam.	Basic type				R3 – High corrosion protection				
	CRC ¹⁾	Weight	Part no.	Туре	CRC ¹⁾	Weight	Part no.	Type	
[mm]		[g]				[g]			
32	1	103	★ 174390	SNCB-32	3	100	176944	SNCB-32-R3	
40	1	155	174391	SNCB-40	3	151	176945	SNCB-40-R3	
50	1	232	174392	SNCB-50	3	228	176946	SNCB-50-R3	
63	1	375	* 174393	SNCB-63	3	371	176947	SNCB-63-R3	
80	1	636	★ 174394	SNCB-80	3	632	176948	SNCB-80-R3	
100	1	1035	174395	SNCB-100	3	986	176949	SNCB-100-R3	
125	1	1860	174396	SNCB-125	3	1776	176950	SNCB-125-R3	

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070

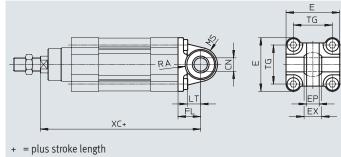
Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions). Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

Swivel flange SNCS/CRSNCS/SNCS-...-R3

Material:
SNCS 32 ... 50: Die-cast aluminium
SNCS 63 ... 125:
Wrought aluminium alloy
CRSNCS 32 ... 80:
High-alloy stainless steel
SNCS-...-R3 100 ... 125:
Wrought aluminium alloy with
protective coating
ROHS-compliant





Dimensions an	d ordering data							
For diam.		CN	E		EP	EX	FL	LT
		Ø						
[mm]	DSBC	DSBCR3	DSBC	DSBCR3	±0.2		±0.2	
32	10+0.013	10+0.015/-0.04	45+0.2/-0.5	45-0.5	10.5	14	22	13
40	12+0.015	12+0.018/-0.04	54-0.5	54-0.5	12	16	25	16
50	16+0.015	16+0.018/-0.04	64-0.6	64-0.6	15	21	27	16
63	16+0.015	16+0.018/-0.04	74.5±0.5	75-0.6	15	21	32	21
80	20+0.018	20+0.021/-0.04	92.2±0.8	93_0.8	18	25	36	22
100	20+0.018	20+0.021/-0.04	109+1/-0.7	109+1/-0.7	18	25	41	27
125	30+0.018	30+0.021/-0.04	132+1/-0.7	132+1/-0.7	25	37	50	30

For diam.		MS	F	RA	TG	×	C
	DSBC	DSBCR3	DSBC	DSBCR3	1	DSBC	DSBCC
[mm]			+1	+1			
32	15+0.5	15+0.5	14.5	14.5	32.5	141.1	186.1
40	17+0.5	17+0.5	17.5	17.5	38	158.9	211.9
50	20+0.5	20+0.5	18.5	19	46.5	168.8	235.8
63	23-0.5	22+0.5	23	23	56.5	189.1	265.1
80	28-0.5	27+0.5	25	25	72	209.6	304.6
100	30±0.5	30±0.5	95	100	89	228.5	326.7
125	39±0.5	39±0.5	100	100	110	275	326.7

For diam.	Basic type	<u> </u>			High corros	High corrosion protection			
	CRC ¹⁾	Weight	Part no.	Туре	CRC ¹⁾	Weight	Part no.	Type	
[mm]		[g]				[g]			
32	1	86	★ 174397	SNCS-32	4	161	2895920	CRSNCS-32	
40	1	122	174398	SNCS-40	4	239	2895921	CRSNCS-40	
50	1	216	* 174399	SNCS-50	4	403	2895922	CRSNCS-50	
63	2	281	* 174400	SNCS-63	4	576	2895923	CRSNCS-63	
80	2	557	* 174401	SNCS-80	4	1173	2895924	CRSNCS-80	
100	2	683	174402	SNCS-100	3	684	2895925	SNCS-100-R3	
125	2	1369	174403	SNCS-125	3	1369	2895926	SNCS-125-R3	

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions). Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment. Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment. Corrosion resistance class CRC 4 to Festo standard FN 940070

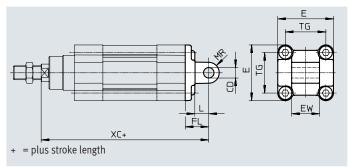
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests (

also FN 940082), using appropriate media.

Swivel flange SNCL

Material: Die-cast aluminium Free of copper and PTFE ROHS-compliant





Dimensions ar	nd ordering data					
For diam.	CD	E	EW	FL	L	MR
	Ø					
[mm]	H9		h12	±0.2		
32	10	45+0.2/-0.5	26	22	13	10
40	12	54 _{-0.5}	28	25	16	12
50	12	64_0.6	32	27	16	12
63	16	75 _{-0.6}	40	32	21	16
80	16	93 _{-0.8}	50	36	22	16
100	20	110+0.3/-0.8	60	41	27	20
125	25	131-0.8	70	50	30	25

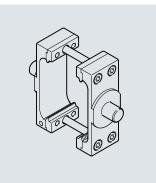
For diam.	TG			CRC ¹⁾	Weight	Part no.	Туре
		DSBC	DSBCC				
[mm]					[g]		
32	32.5	141.1	186.1	1	71	* 174404	SNCL-32
40	38	158.9	211.9	1	95	★ 174405	SNCL-40
50	46.5	168.8	235.8	1	158	★ 174406	SNCL-50
63	56.5	189.1	265.1	1	225	★ 174407	SNCL-63
80	72	209.6	304.6	1	436	★ 174408	SNCL-80
100	89	228.5	326.7	1	606	174409	SNCL-100
125	110	275	399.3	1	1135	174410	SNCL-125

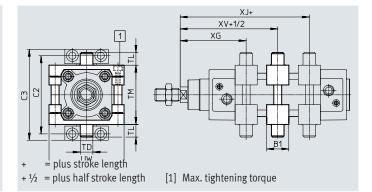
¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Trunnion flange kit DAMT

The kit can be attached at any position along the profile barrel of the cylinder.

Material: Galvanised steel RoHS-compliant





Dimensions	and ordering data						
For diam.	B1	C2	C3	TD	TL	TM	UW
				Ø			
[mm]				e9			
32	30	71	86	12	12	50	65
40	32	87	105	16	16	63	75
50	34	99	117	16	16	75	95
63	41	116	136	20	20	90	105
80	44	136	156	20	20	110	130
100	48	164	189	25	25	132	145
125	50	192	217	25	25	160	177

For diam.	XG	XJ	XV	Max. tightening torque	CRC ¹⁾	Weight	Part no.	Type ²⁾
[mm]	min.	max.		[Nm]		[g]		
32	69±1.4	76±1.4	73±1.4	4+1	1	213	* 2213233	DAMT-V1-32-A
40	77.7±1.4	84.9±1.4	81.2±1.4	8+1	1	388	* 2214899	DAMT-V1-40-A
50	85.6±1.4	91.8±1.4	88.6±1.4	8+2	1	608	* 2214909	DAMT-V1-50-A
63	96.9±1.8	96.1±1.8	96.4±1.8	18+2	1	911	* 2214971	DAMT-V1-63-A
80	110.4±1.8	108.6±1.8	109.4±1.8	28+2	1	1494	★ 163529	DAMT-V1-80-A
100	121.3±1.8	115.5±1.8	118.3±1.8	28+2	1	2095	163530	DAMT-V1-100-A
125	134.7±1.8	155.3±1.8	145±1.8	40+2	1	3548	1812524	DAMT-V8-125-A

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Suitable for ATEX

Ordering data -	Mounting compone	ents					Data sheets → Internet: clevis foot
Designation	For diam.	Part no.	Туре	Designation	For diam.	Part no.	Туре
Clevis foot LNG				Clevis foot LSN		_	
	32	★ 33890	LNG-32		32	5561	LSN-32
120	40	* 33891	LNG-40		40	5562	LSN-40
	50	★ 33892	LNG-50		50	5563	LSN-50
\smile	63	* 33893	LNG-63	_	63	5564	LSN-63
	80	★ 33894	LNG-80		80	5565	LSN-80
	100	33895	LNG-100		100	5566	LSN-100
	125	33896	LNG-125		125	6987	LSN-125
Clevis foot LSNG				Clevis foot LSNS	 G		
	32	31740	LSNG-32		32	31747	LSNSG-32
	40	31741	LSNG-40		40	31748	LSNSG-40
	50	31742	LSNG-50		50	31749	LSNSG-50
	63	31743	LSNG-63		63	31750	LSNSG-63
	80	31744	LSNG-80		80	31751	LSNSG-80
	100	31745	LSNG-100		100	31752	LSNSG-100
	125	31746	LSNG-125		125	31753	LSNSG-125
Clevis foot LBG ¹)			Right-angle clevi	s foot LQG 1)		
(A)	32	31761	LBG-32		32	31768	LQG-32
	40	31762	LBG-40		40	31769	LQG-40
	50	31763	LBG-50		50	31770	LQG-50
	63	31764	LBG-63		63	31771	LQG-63
	80	31765	LBG-80		80	31772	LQG-80
	100	31766	LBG-100		100	31773	LQG-100
	125	31767	LBG-125		125	31774	LQG-125

¹⁾ Suitable for ATEX

Ordering data –	Mounting components, corrosion-resistant		Data sheets → Internet: crlng
Designation	For diam.	Part no.	Туре
Clevis foot CRLNG			
	32	161840	CRLNG-32
15.0	40	161841	CRLNG-40
1000	50	161842	CRLNG-50
	63	161843	CRLNG-63
	80	161844	CRLNG-80
	100	161845	CRLNG-100
	125	176951	CRLNG-125

Ordering data	- Mounting components, high corrosion protection		Data sheets → Internet: clevis foot
Designation	For diam.	Part no.	Туре
Clevis foot LBG	R3		
(Ca)	32	2078790	LBG-32-R3
	40	2078792	LBG-40-R3
	50	2078794	LBG-50-R3
Ce O	63	2078795	LBG-63-R3
	80	2078797	LBG-80-R3
	100	2078799	LBG-100-R3
	125	2078837	LBG-125-R3

Ordering data -	- Piston rod attach	ments				Data sheets	→ Internet: piston rod attachment
Designation	For diam.	Part no.	Туре	Designation	For diam.	Part no.	Туре
Rod eye SGS				Rod clevis SGA 1)		
~ (32	★ 9261	SGS-M10x1.25		32	32954	SGA-M10x1.25
	40	★ 9262	SGS-M12x1.25		40	10767	SGA-M12x1.25
	50	★ 9263	SGS-M16x1.5		50	10768	SGA-M16x1.5
	63				63		
	80	★ 9264	SGS-M20x1.5		80	10769	SGA-M20x1.5
	100				100		
	125	10774	SGS-M27x2		125	10770	SGA-M27x2
Rod clevis SG 1)				Self-aligning roo	l coupler FK 1)		
	32	★ 6144	SG-M10x1.25		32	★ 6140	FK-M10x1.25
	40	★ 6145	SG-M12x1.25		40	★ 6141	FK-M12x1.25
(96)	50	★ 6146	SG-M16x1.5		50	★ 6142	FK-M16x1.5
	63				63		
~~ 🔊	80	★ 6147	SG-M20x1.5		80	★ 6143	FK-M20x1.5
	100				100		
60	125	14987	SG-M27x2-B		125	10485	FK-M27x2
Coupling piece I	(SG 1)			Coupling piece h	(SZ 1)	<u>'</u>	
	32	32963	KSG-M10x1.25		32	36125	KSZ-M10x1.25
0	40	32964	KSG-M12x1.25		40	36126	KSZ-M12x1.25
	50	32965	KSG-M16x1.5		50	36127	KSZ-M16x1.5
@	63				63		
	80	32966	KSG-M20x1.5		80	36128	KSZ-M20x1.5
	100				100		
	125	32967	KSG-M27x2		125	-	-

¹⁾ Suitable for ATEX

Ordering data –	Piston rod attachment	ts, corrosion-resis	stant			Data sheets •	→ Internet: piston rod attachment
Designation	For diam.	Part no.	Туре	Designation	For diam.	Part no.	Туре
Rod eye CRSGS				Rod clevis CRSG	1)		
	32	195582	CRSGS-M10x1.25		32	13569	CRSG-M10x1.25
I ~ \1	40	195583	CRSGS-M12x1.25		40	13570	CRSG-M12x1.25
	50	195584	CRSGS-M16x1.5		50	13571	CRSG-M16x1.5
	63				63		
	80	195585	CRSGS-M20x1.5		80	13572	CRSG-M20x1.5
	100				100		
	125	195586	CRSGS-M27x2		125	185361	CRSG-M27x2
Self-aligning rod	coupler CRFK 1)						
~~~	32	2305778	CRFK-M10x1.25				
	40	2305779	CRFK-M12x1.25				
	50	2490673	CRFK-M16x1.5				
•	63						
	80	2545677	CRFK-M20x1.5				
	100						

¹⁾ Suitable for ATEX

#### Bellows kit DADB



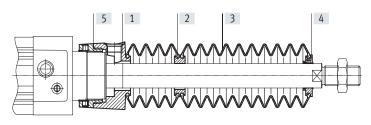
General technical data							
Type DADB-V6-		32	40	50	63	80	100
Max. stroke range of the cylinder ¹⁾	[mm]	10 500	10 500	10 500	10 500	10 500	10 500
Type of mounting		Via threaded pin					
Mounting position		Any					
Media resistance		Dust, chippings,	oil, grease, fuel (→	Internet: media resist	ance)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

- Note operating range of proximity switches and cylinder
- In combination with the bellows kit DADB
   Note operating range of proximity switches
   Corrosion resistance class CRC 3 to Festo st Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

## Materials

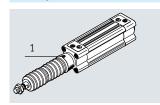
Sectional view



Bello	Bellows					
[1]	Connection	Polyamide				
[2]	Adapter	Polyamide				
[3]	Bellows	NBR				
[4]	End piece	Polyamide				
[5]	Connector	Polyamide				
-	0-ring	NBR				
	Note on materials	Free of copper and PTFE				
		RoHS-compliant				

Weight [g] Type DADB-V6- Stroke [mm]	32	40	50	63	80	100
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

#### Travel speed v as a function of tubing length l



The bellows kit is a leak-free system.

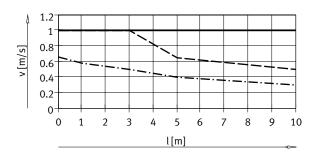
To prevent unwanted media from being drawn in, the supply and exhaust air must be ducted via a pressure

compensation hole in the connection part [1].

The pressure generated in the bellows kit by the positioning motion is primarily defined by the travel speed and the tubing length. The recommended tubing length based on the travel speed of the drive can be read from the graph.

Advancing

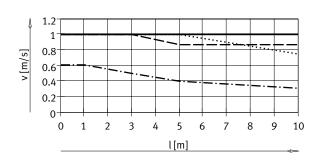
DADB-32 ... 100



Ø 32/50/63Ø 40Ø 80/100

Retracting

DADB-32 ... 100



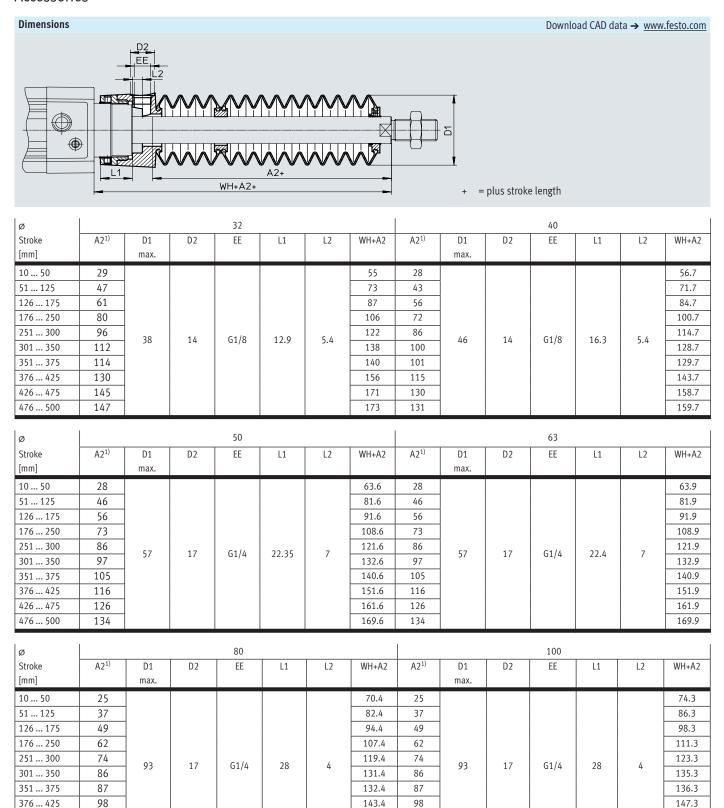
______ Ø 32 _____ Ø 40 _____ Ø 50/63 ..... Ø 80/100



The push-in fittings in the adjacent table must be used for the pressure compensation hole.

Silencers can be used as an alternative. This reduces the travel speed slightly.

Tube size and push-in fitting	Tube size and push-in fitting for pressure compensation hole						
Ø	Tubing O.D.	Push-in fitting					
[mm]	[mm]	Part no.	Туре				
32, 40	8	<b>★</b> 186109	QS-G1/8-8-I				
		578376	NPQH-DK-G18-Q8-P10				
		578362	NPQH-D-G18-S8-P10				
50, 63, 80, 100	12	<b>★</b> 186350	QS-G1/4-12				
		578344	NPQH-D-G14-Q12-P10				
		578366	NPQH-D-G14-S12-P10				



155.4

156.4

110

111

110

111

426 ... 475

476 ... 500

159.3

160.3

¹⁾ The dimension corresponds to the Evalue (piston rod extension) of the drive

### Ordering data - Bellows kit

An extended piston rod (order code E) is absolutely essential when using a bellows kit → Ordering data – Modular product system.

The necessary dimension for order code E as a function of piston diameter and cylinder stroke as well as the corresponding bellows kit is indicated in the table below:

#### Order example:

Selected standards-based cylinder:

DSBC-32-320-PPV-A-...

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

12 mm

Complete order reference for standards-based cylinder:

DSBC-32-320-PPV-A-...-112E

The corresponding bellows kit:

DADB-V6-32-S301-350

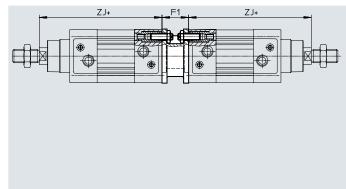
Cylinder	Cylinder data		Bellows kit		Cylinder	data		Bellows kit	
Ø	Stroke	Dimen- sion for E	Part no.	Туре	Ø	Stroke	Dimen- sion for E	Part no.	Туре
[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
32	10 50	29	553271	DADB-V6-32-S10-50	40	10 50	28	553291	DADB-V6-40-S10-50
	51 125	47	553273	DADB-V6-32-S51-125		51 125	43	553293	DADB-V6-40-S51-125
	126 175	61	553275	DADB-V6-32-S126-175		126 175	56	553295	DADB-V6-40-S126-175
	176 250	80	553277	DADB-V6-32-S176-250		176 250	72	553297	DADB-V6-40-S176-250
	251 300	96	553279	DADB-V6-32-S251-300		251 300	86	553399	DADB-V6-40-S251-300
	301 350	112	553281	DADB-V6-32-S301-350		301 350	100	553301	DADB-V6-40-S301-350
	351 375	114	553283	DADB-V6-32-S351-375		351 375	101	553303	DADB-V6-40-S351-375
	376 425	130	553285	DADB-V6-32-S376-425		376 425	115	553305	DADB-V6-40-S376-425
	426 475	145	553287	DADB-V6-32-S426-475		426 475	130	553307	DADB-V6-40-S426-475
	476 500	147	553289	DADB-V6-32-S476-500		476 500	131	553309	DADB-V6-40-S476-500
50	10 50	28	553311	DADB-V6-50-S10-50	63	10 50	28	553331	DADB-V6-63-S10-50
	51 125	46	553313	DADB-V6-50-S51-125		51 125	46	553333	DADB-V6-63-S51-125
	126 175	56	553315	DADB-V6-50-S126-175		126 175	56	553335	DADB-V6-63-S126-175
	176 250	73	553317	DADB-V6-50-S176-250		176 250	73	553337	DADB-V6-63-S176-250
	251 300	86	553319	DADB-V6-50-S251-300		251 300	86	553339	DADB-V6-63-S251-300
	301 350	97	553321	DADB-V6-50-S301-350		301 350	97	553341	DADB-V6-63-S301-350
	351 375	105	553323	DADB-V6-50-S351-375		351 375	105	553343	DADB-V6-63-S351-375
	376 425	116	553325	DADB-V6-50-S376-425		376 425	116	553345	DADB-V6-63-S376-425
	426 475	126	553327	DADB-V6-50-S426-475		426 475	126	553347	DADB-V6-63-S426-475
	476 500	134	553329	DADB-V6-50-S476-500		476 500	134	553349	DADB-V6-63-S476-500
80	10 50	25	553351	DADB-V6-80-S10-50	100	10 50	25	553371	DADB-V6-100-S10-50
	51 125	37	553353	DADB-V6-80-S51-125		51 125	37	553373	DADB-V6-100-S51-125
	126 175	49	553355	DADB-V6-80-S126-175		126 175	49	553375	DADB-V6-100-S126-175
	176 250	62	553357	DADB-V6-80-S176-250		176 250	62	553377	DADB-V6-100-S176-250
	251 300	74	553359	DADB-V6-80-S251-300		251 300	74	553377	DADB-V6-100-S251-300
	301 350	86	553361	DADB-V6-80-S301-350		301 350	86	553381	DADB-V6-100-S301-350
	351 375	87	553363	DADB-V6-80-S351-375		351 375	87	553383	DADB-V6-100-S351-375
	376 425	98	553365	DADB-V6-80-S376-425		376 425	98	553385	DADB-V6-100-S376-425
	426 475	110	553367	DADB-V6-80-S426-475		426 475	110	553387	DADB-V6-100-S426-475
	476 500	111	553369	DADB-V6-80-S476-500		476 500	111	553389	DADB-V6-100-S476-500

#### Multi-position kit DPNC

Material:

Flange: Wrought aluminium alloy Threaded pins, hex nuts: Galvanised







The maximum overall stroke length must not be exceeded when combining cylinders and multi-position kits.

Dimension	Dimensions and ordering data							
For diam.	F1	7	-	Max.	Weight	Part no.	Type ¹⁾	
		DSBC	DSBCC	complete stroke				
[mm]		+1.8		[mm]	[g]			
32	27	119.1	164.1	500	292	174418	DPNC-32	
40	27	133.9	186.9	800	410	174419	DPNC-40	
50	32	141.8	208.8	800	335	174420	DPNC-50	
63	28	157.1	233.1	700	390	174421	DPNC-63	
80	38	173.6	268.6	1000	847	174422	DPNC-80	
100	38	187.5	285.7	900	1200	174423	DPNC-100	
125	48	225	349.3	1000	2102	174424	DPNC-125	

¹⁾ Suitable for ATEX

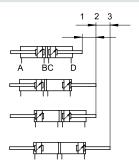
### Connecting two cylinders with identical piston diameters to form a 3 or 4-position cylinder

A 3 or 4-position cylinder consists of two separate cylinders whose piston rods advance in opposing directions. This means that, depending on the control and the stroke pattern, this type of cylinder can assume up to four positions, each of which

moves exactly to the stop. Note that when one end of the piston rod is fixed, the cylinder barrel executes the movement. The line connections to the cylinder must therefore be flexible.

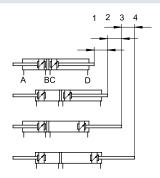
#### To achieve 3 positions

Two cylinders with identical stroke length must be connected together.



#### To achieve 4 positions

Two cylinders with different stroke lengths must be connected together.



#### Mounting kit DAVM

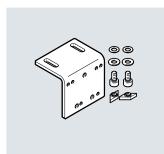
For lateral valve mounting, directly on the drive

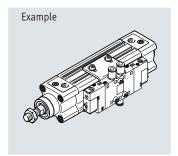
Material:

Mounting bracket, screws: Galvanised steel

Slot nut: High-alloy stainless steel

The hole pattern on the angle bracket enables solenoid valves to be attached on the right according to the assignment. The following table shows a few solenoid valves that are available.





Allocation table, mounting kit for solenoid valves							
Mounting kit	iolenoid valve						
DAVM-MW-V1-32-V	CPE14	VUVG-L14	VUVS-L20				
DAVM-MW-V1-50-V	CPE18, CPE24	VUVG-L18	VUVS-L25, VUVS-L30				

Recommended solenoid valv	res CPE					Data sheets → Internet: cpe
	For diam. [mm]	Mounting screw	Pneumatic connection	Function	Part no.	Туре
	Single solenoid					
	32, 40	M4x20	G1/8	5/2-way valve	196941	CPE14-M1BH-5L-1/8
	50, 63	M4x25	G1/4		163142	CPE18-M1H-5L-1/4
	80, 100, 125	M5x30	G3/8		163166	CPE24-M1H-5L-3/8
	Double solenoid		-		1	
	32, 40	M4x20	G1/8	5/2-way valve	196939	CPE14-M1BH-5J-1/8
	50, 63	M4x25	G1/4		163143	CPE18-M1H-5J-1/4
	80, 100, 125	M5x30	G3/8		163167	CPE24-M1H-5J-3/8

Accessories for soleno	d valves CPE			
	For valve	Cable length [m]	Part no.	Туре
Connecting cable NEBV	/KMEB			Data sheets → Internet: nebv
	CPE14	2.5	8047679	NEBV-Z4WA2L-R-E-2.5-N-LE2-S1
		5	8047680	NEBV-Z4WA2L-R-E-5-N-LE2-S1
		·	·	
	CPE18	2.5	<b>*</b> 151688	KMEB-1-24-2.5-LED
	CPE24	5	151689	KMEB-1-24-5-LED
		10	193457	KMEB-1-24-10-LED
*				

Recommended solenoid valves	Recommended solenoid valves VUVG  Data sheets → Into											
	For diam. [mm]	Mounting screw	Pneumatic connection	Function	Part no.	Туре						
	Single solenoid											
	32, 40	M3x20	G1/8	5/2-way valve	<b>★</b> 8031508	VUVG-L14-M52-MT-G18-1R8L						
	50, 63	M4x25	G1/4		<b>★</b> 8031532	VUVG-L18-M52-MT-G14-1R8L						
	Double solenoid											
	32, 40	M3x20	G1/8	5/2-way valve	<b>★</b> 574230	VUVG-L14-B52-T-G18-1R8L						
	50,63	M4x25	G1/4		<b>★</b> 8031533	VUVG-L18-B52-T-G14-1R8L						

Accessories for solenoid valve	s VUVG				
	For valve	Electrical connection	Cable length	Part no.	Type
Connecting cable NEBU					Data sheets → Internet: nebu
	VUVG-L14	Straight socket,	2.5 m	<b>★</b> 541333	NEBU-M8G3-K-2.5-LE3
<b>3</b>	VUVG-L18	M8x1, 3-pin	5 m	<b>★</b> 541334	NEBU-M8G3-K-5-LE3
		Angled socket,	2.5 m	<b>★</b> 541338	NEBU-M8W3-K-2.5-LE3
		M8x1, 3-pin	5 m	<b>★</b> 541341	NEBU-M8W3-K-5-LE3

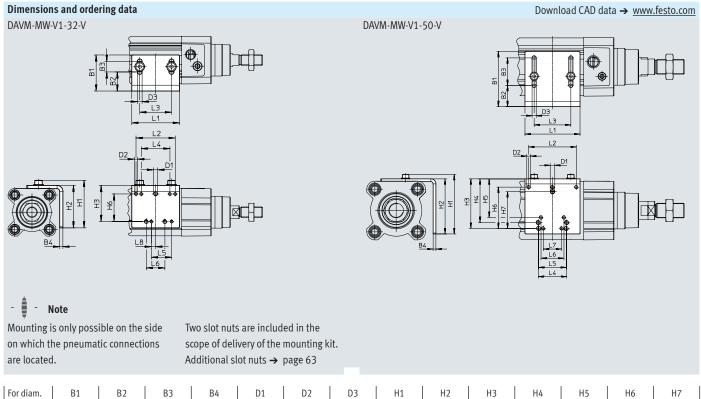
Recommended solenoid valve	s VUVS					Data sheets → Internet: vuvs
	For diam.	Mounting screw	Pneumatic	Function	Part no.	Туре
	[mm]		connection			
	Single solenoid, ty	/pe C				
	32, 40	M3x20	G1/8	5/2-way valve	<b>★</b> 575263	VUVS-L20-M52-AD-G18-F7-1C1
					<b>★</b> 575264	VUVS-L20-M52-MD-G18-F7-1C1
	50,63	M4x20	G1/4		<b>★</b> 575503	VUVS-L25-M52-AD-G14-F8-1C1
1 20 1					<b>★</b> 575511	VUVS-L25-M52-MD-G14-F8-1C1
	80, 100, 125	M5x30	G3/8		<b>★</b> 575596	VUVS-L30-M52-AD-G38-F8-1C1
					<b>★</b> 575604	VUVS-L30-M52-MD-G38-F8-1C1
	Double solenoid, ty	ype C	•			
	32, 40	M3x20	G1/8	5/2-way valve	<b>★</b> 575265	VUVS-L20-B52-D-G18-F7-1C1
	50, 63	M4x20	G1/4		<b>★</b> 575518	VUVS-L25-B52-D-G14-F8-1C1
	80, 100, 125	M5x30	G3/8		<b>★</b> 575611	VUVS-L30-B52-D-G38-F8-1C1
		-	·	·		

Accessories for solenoid	valves VUVS						
	Description				Part no.	Type	
Plug socket MSSD							
	Plug pattern	type C, to DIN EN 175301	-803				
	3-pin, screw	Cable connector Pg7	0 250 V AC/DC	IP65	<b>★</b> 151687	MSSDEB	
	terminal						
			•	•	•	•	

- 🏺 - Note

Dimensions and ordering data

→ Page 1



For diam. [mm]	B1	B2	В3	B4	D1	D2	D3 Ø	H1	H2	H3	H4	H5	H6	H7
32 40	34	18	10	3	M4	M3	4.5	44.8	40	34	-	-	26	-
50 63 80 100 125	60	23	30	3	M5	M4	4.5	64.8	60	54	47.5	42	45	40

For diam. [mm]	L1	L2	L3	L4	L5	L6	L7	L8	CRC1)	Weight [g]	Part no.	Туре
32	45	37	30	27	19.2	17.5	_	4	1	76	2568514	DAVM-MW-V1-32-V
40	47	),	)0	21	17.2	17.5		4				
50									1	160	2612128	DAVM-MW-V1-50-V
63												
80	60	52	40	31	30	25	20	-				
100												
125												

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind coverings, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Ordering data – Guide u	ınits for fixed strokes (	recirculating bal	l bearing guide only)			Data sheets → Internet: feng
	Stroke	Part no.	Type ¹⁾	Stroke	Part no.	Type ¹⁾
	[mm]			[mm]		
	For diam. 32 mm			For diam. 40 mm		
	10 50	34493	FENG-32-50-KF	10 50	34499	FENG-40-50-KF
	10 100	34494	FENG-32-100-KF	10 100	34500	FENG-40-100-KF
	10 160	34495	FENG-32-160-KF	10 160	34501	FENG-40-160-KF
1 2.	10 200	34496	FENG-32-200-KF	10 200	34502	FENG-40-200-KF
	10 250	150289	FENG-32-250-KF	10 250	34503	FENG-40-250-KF
	10 320	34497	FENG-32-320-KF	10 320	34504	FENG-40-320-KF
	10 400	150290	FENG-32-400-KF	10 400	150291	FENG-40-400-KF
	10 500	34498	FENG-32-500-KF	10 500	34505	FENG-40-500-KF
	For diam. 50 mm			For diam. 63 mm		
	10 50	34506	FENG-50-50-KF	10 50	34513	FENG-63-50-KF
	10 100	34507	FENG-50-100-KF	10 100	34514	FENG-63-100-KF
	10 160	34508	FENG-50-160-KF	10 160	34515	FENG-63-160-KF
	10 200	34509	FENG-50-200-KF	10 200	34516	FENG-63-200-KF
	10 250	34510	FENG-50-250-KF	10 250	34517	FENG-63-250-KF
	10 320	34511	FENG-50-320-KF	10 320	34518	FENG-63-320-KF
	10 400	150292	FENG-50-400-KF	10 400	34519	FENG-63-400-KF
	10 500	34512	FENG-50-500-KF	10 500	34520	FENG-63-500-KF
	For diam. 80 mm			For diam. 100 mm		
	10 50	34521	FENG-80-50-KF	10 50	34529	FENG-100-50-KF
	10 100	34522	FENG-80-100-KF	10 100	34530	FENG-100-100-KF
	10 160	34523	FENG-80-160-KF	10 160	34531	FENG-100-160-KF
	10 200	34524	FENG-80-200-KF	10 200	34532	FENG-100-200-KF
	10 250	34525	FENG-80-250-KF	10 250	34533	FENG-100-250-KF
	10 320	34526	FENG-80-320-KF	10 320	34534	FENG-100-320-KF
	10 400	34527	FENG-80-400-KF	10 400	34535	FENG-100-400-KF
	10 500	34528	FENG-80-500-KF	10 500	34536	FENG-100-500-KF

Ordering data – Guide u	nits for variable stro	kes				Data sheets → Internet: feng
	For diam.	Stroke	With recirculating	ng ball bearing guide	With plain-bear	ring guide
	[mm]	[mm]	Part no.	Type ¹⁾	Part no.	Type ¹⁾
	32	10 500	34487	FENG-32KF	34481	FENG-32GF
	40	10 500	34488	FENG-40KF	34482	FENG-40GF
	50	10 500	34489	FENG-50KF	34483	FENG-50GF
	63	10 500	34490	FENG-63KF	34484	FENG-63GF
A	80	10 500	34491	FENG-80KF	34485	FENG-80GF
	100	10 500	34492	FENG-100KF	34486	FENG-100GF

¹⁾ Suitable for ATEX

Ordering data -	<ul> <li>Proximity switches for T-slot, magne</li> </ul>					
	Type of mounting	Switching	Electrical connection	Cable length	Part no.	Туре
		output		[m]		
/O contact						
~/	Insertable in the slot from above,	PNP	Cable, 3-wire	2.5	<b>★</b> 574335	SMT-8M-A-PS-24V-E-2,5-0E
	flush with the cylinder profile,		Plug M8x1, 3-pin	0.3	<b>★</b> 574334	SMT-8M-A-PS-24V-E-0.3-M8D
	short design		Plug M12x1, 3-pin	0.3	<b>★</b> 574337	SMT-8M-A-PS-24V-E-0,3-M12
		NPN	Cable, 3-wire	2.5	<b>★</b> 574338	SMT-8M-A-NS-24V-E-2,5-OE
			Plug M8x1, 3-pin	0.3	<b>★</b> 574339	SMT-8M-A-NS-24V-E-0.3-M8D
I/C contact						
/ C COIITACT	Insertable in the slot from above,	PNP	Cable, 3-wire	7.5	<b>★</b> 574340	SMT-8M-A-PO-24V-E-7.5-OE
3	flush with the cylinder profile,		custe, 5 wife	7.5	X 374340	3M1 0M1 A 1 0 244 E 7.5 0E
	short design					
rdering data -	- Proximity switches for T-slot, magne	etic reed				Data sheets → Internet: s
	Type of mounting	Switching	Electrical connection	Cable length	Part no.	Туре
		output		[m]		
I/O contact					:	
<u> </u>	Insertable in the slot from above,	Contacting	Cable, 3-wire	2.5	<b>★</b> 543862	SME-8M-DS-24V-K-2,5-OE
<b>9</b>	flush with the cylinder profile		,-	5.0	<b>★</b> 543863	SME-8M-DS-24V-K-5,0-OE
			Cable, 2-wire	2.5	<b>★</b> 543872	SME-8M-ZS-24V-K-2,5-0E
			Plug M8x1, 3-pin	0.3	<b>★</b> 543861	SME-8M-DS-24V-K-0,3-M8D
		1		I		·
I/C contact	T	10:	1011 0 :		A = 4.4=00	CHE OH DO ACCUSE TO
N/C contact	Insertable in the slot from above,	Contacting	Cable, 3-wire	7.5	<b>★</b> 546799	SME-8M-DO-24V-K-7.5-OE
	Insertable in the slot from above, flush with the cylinder profile  Proximity sensor for T-slot, NAMUR	Contacting	Cable, 3-wire	7.5	★ 546799	SME-8M-DO-24V-K-7.5-OE  Data sheets → Internet: so
	flush with the cylinder profile	Contacting  Switching output	Cable, 3-wire  Electrical connection	Cable length	★ 546799  Part no.	
Ordering data -	flush with the cylinder profile  - Proximity sensor for T-slot, NAMUR	Switching		Cable length		Data sheets → Internet: so
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Data sheets → Internet: so Type
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above,	Switching		Cable length [m]	Part no. 579071	Data sheets → Internet: so Type SDBT-MS-20NL-ZN-E-5-LE-EX6
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Data sheets → Internet: so Type
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile	Switching output	Electrical connection	Cable length [m]	Part no. 579071	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone	Switching output	Electrical connection	Cable length [m]	Part no.  579071  579072	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6
Ordering data -	flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description	Switching output NAMUR	Electrical connection  Cable, 2-wire	Cable length [m]  5 10	Part no.  579071 579072  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type
Ordering data -	flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in	Switching output  NAMUR	Electrical connection  Cable, 2-wire  against simple disconnection,	Cable length [m]	Part no.  579071  579072	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6
Ordering data -	flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi	Switching output  NAMUR  Atrinsically safe"	Electrical connection  Cable, 2-wire  against simple disconnection,	Cable length [m]  5 10	Part no.  579071 579072  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type
ordering data -	flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in	Switching output  NAMUR  Atrinsically safe"	Electrical connection  Cable, 2-wire  against simple disconnection,	Cable length [m]  5 10	Part no.  579071 579072  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type
Ordering data -	flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi	Switching output  NAMUR  Atrinsically safe"	Electrical connection  Cable, 2-wire  against simple disconnection,	Cable length [m]  5 10	Part no.  579071 579072  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type
Ordering data -	flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi	Switching output  NAMUR  Atrinsically safe"	Electrical connection  Cable, 2-wire  against simple disconnection,	Cable length [m]  5 10	Part no.  579071 579072  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type NEAU-M8-GD
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II	Switching output  NAMUR   Electrical connection  Cable, 2-wire  against simple disconnection, mecting cable NEBU	Cable length [m]  5 10  For size Plug M8x1	Part no.  579071 579072  Part no. 548067	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type NEAU-M8-GD  Data sheets → Internet: no	
ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II	Switching output  NAMUR   Electrical connection  Cable, 2-wire  against simple disconnection,	Cable length [m]  5 10  For size Plug M8x1  Cable length	Part no.  579071 579072  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type NEAU-M8-GD	
ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left	Switching output  NAMUR  Atrinsically safe" tch SMT and con 3D	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU	Cable length [m]  5 10  For size Plug M8x1  Cable length [m]	Part no.  579071 579072  Part no. 548067	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: ne Type
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II	Switching output  NAMUR  Atrinsically safe" tch SMT and con 3D	Electrical connection  Cable, 2-wire  against simple disconnection, mecting cable NEBU	Cable length [m]  5 10  For size Plug M8x1  Cable length [m] 2.5	Part no.  579071 579072  Part no.  548067  Part no.	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: no Type  NEBU-M8G3-K-2.5-LE3
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left  Straight socket, M8x1, 3-pin	Switching output  NAMUR  Atrinsically safe" tch SMT and con 3D  Electrica	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU	Cable length [m]  5 10  For size Plug M8x1  Cable length [m] 2.5 5	Part no.  579071 579072  Part no.  548067  Part no.  ★ 541333  ★ 541334	Data sheets → Internet: so  Type  SDBT-MS-20NL-ZN-E-5-LE-EX6  SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: no  Type  NEBU-M8G3-K-2.5-LE3  NEBU-M8G3-K-5-LE3
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left	Switching output  NAMUR  Atrinsically safe" tch SMT and con 3D  Electrica	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU	Cable length [m]  5 10  For size Plug M8x1  Cable length [m] 2.5 5 2.5	Part no.  579071  579072  Part no.  548067  Part no.  ★ 541333  ★ 541334  ★ 541363	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: no Type  NEBU-M8G3-K-2.5-LE3 NEBU-M12G5-K-2.5-LE3 NEBU-M12G5-K-2.5-LE3
Ordering data -	Froximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left  Straight socket, M8x1, 3-pin  Straight socket, M12x1, 5-pin	Switching output  NAMUR  NAMUR  Atrinsically safe" tch SMT and con 3D  Electrica  Cable, o	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU  connection, right  pen end, 3-wire  pen end, 3-wire	Cable length [m]  5 10  For size Plug M8x1  Cable length [m] 2.5 5 2.5 5	Part no.  579071  579072  Part no.  548067  Part no.  ★ 541333  ★ 541363  ★ 541364	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: no Type  NEBU-M863-K-2.5-LE3 NEBU-M12G5-K-2.5-LE3 NEBU-M12G5-K-5-LE3 NEBU-M12G5-K-5-LE3
Ordering data -	Flush with the cylinder profile  Proximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left  Straight socket, M8x1, 3-pin	Switching output  NAMUR  NAMUR  Atrinsically safe" tch SMT and con 3D  Electrica  Cable, o	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU	Cable length [m]  5 10  For size Plug M8x1  Cable length [m] 2.5 5 2.5 5 2.5	Part no.  579071  579072  Part no.  548067  Part no.  ★ 541333  ★ 541363  ★ 541364  ★ 541338	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: ne Type  NEBU-M8G3-K-2.5-LE3 NEBU-M12G5-K-2.5-LE3 NEBU-M12G5-K-5-LE3 NEBU-M8W3-K-2.5-LE3 NEBU-M8W3-K-2.5-LE3
Ordering data -	Froximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left  Straight socket, M8x1, 3-pin  Straight socket, M12x1, 5-pin  Angled socket, M8x1, 3-pin	Switching output  NAMUR  Itrinsically safe" tch SMT and con 3D  Electrica  Cable, o  Cable, o	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU  connection, right pen end, 3-wire pen end, 3-wire pen end, 3-wire	Cable length   [m]	Part no.  579071  579072  Part no.  548067  Part no.  ★ 541333  ★ 541364  ★ 541338  ★ 541341	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: ne Type  NEBU-M8G3-K-2.5-LE3 NEBU-M12G5-K-2.5-LE3 NEBU-M12G5-K-5-LE3 NEBU-M8W3-K-2.5-LE3 NEBU-M8W3-K-5-LE3 NEBU-M8W3-K-5-LE3 NEBU-M8W3-K-5-LE3
N/O contact Ordering data	Froximity sensor for T-slot, NAMUR Type of mounting  Insertable in the slot from above, flush with the cylinder profile  Safety clip for ATEX zone Description  Protects "equipment that is not in here the plug of the proximity swi ATEX category: gas: II 3G / dust: II  Connecting cables Electrical connection, left  Straight socket, M8x1, 3-pin  Straight socket, M12x1, 5-pin	Switching output  NAMUR  Itrinsically safe" tch SMT and con 3D  Electrica  Cable, o  Cable, o	Electrical connection  Cable, 2-wire  against simple disconnection, inecting cable NEBU  connection, right  pen end, 3-wire  pen end, 3-wire	Cable length [m]  5 10  For size Plug M8x1  Cable length [m] 2.5 5 2.5 5 2.5	Part no.  579071  579072  Part no.  548067  Part no.  ★ 541333  ★ 541363  ★ 541364  ★ 541338	Data sheets → Internet: so Type  SDBT-MS-20NL-ZN-E-5-LE-EX6 SDBT-MS-20NL-ZN-E-10-LE-EX6  Type  NEAU-M8-GD  Data sheets → Internet: ne Type  NEBU-M8G3-K-2.5-LE3 NEBU-M12G5-K-2.5-LE3 NEBU-M12G5-K-5-LE3 NEBU-M8W3-K-2.5-LE3 NEBU-M8W3-K-2.5-LE3

### Position transmitter

The position transmitter continuously senses the position of the piston.

It has an analogue output with an output signal in proportion to the piston position.

Ordering data –	Position trans	Position	l <b>ot</b> Analogue	output	Type of mounting	Electrical	Cable	Part no.	Data sheets → Internet: position transmitter Type
		measuring range	[V]	[mA]	_	connection	length [m]		
	32 125	0 40	0 10	_	Inserted in slot from above	Plug M8x1, 4-pin, in-line	0.3	553744	SMAT-8M-U-E-0,3-M8D
	32 125	0 50	010	4 20	Inserted into the slot lengthwise ¹⁾	Plug M8x1, 4-pin, lateral	-	540191	SMAT-8E-S50-IU-M8
is						Plug M8x1, 4-pin, in-line	0.3	570134	SMAT-8E-S50-IU-E-0,3-M8D
	32 125	0 50	-	4 20	Inserted in slot	Plug M8x1, 4-pin,	0.3	1531265	SDAT-MHS-M50-1L-SA-E-0.3-M8
S FOTO		0 80	]		from above	in-line		1531266	SDAT-MHS-M80-1L-SA-E-0.3-M8
		0 100						1531267	SDAT-MHS-M100-1L-SA-E-0.3-M8
		0 125						1531268	SDAT-MHS-M125-1L-SA-E-0.3-M8
		0 160						1531269	SDAT-MHS-M160-1L-SA-E-0.3-M8

¹⁾ Can only be used in combination with DSBC-...-D3.

Ordering data -	Data sheets → Internet: nebu				
	Electrical connection, left	Electrical connection, right	Cable length	Part no.	Туре
			[m]		
	Straight socket, M8x1, 4-pin	Cable, open end, 4-wire	2.5	541342	NEBU-M8G4-K-2.5-LE4
			5	541343	NEBU-M8G4-K-5-LE4
	Angled socket, M8x1, 4-pin	Cable, open end, 4-wire	2.5	541344	NEBU-M8W4-K-2.5-LE4
			5	541345	NEBU-M8W4-K-5-LE4

	Connection		Material	Part no.	Type
	Thread	For tubing O.D.			
or exhaust a	air				
	G1/8	4	Metal version	<b>★</b> 193143	GRLA-1/8-QS-4-D
		6		<b>193144</b>	GRLA-1/8-QS-6-D
		8		<b>*</b> 193145	GRLA-1/8-QS-8-D
	G1/4	6		<b>*</b> 193146	GRLA-1/4-QS-6-D
		8		<b>★</b> 193147	GRLA-1/4-QS-8-D
		10		<b>†</b> 193148	GRLA-1/4QS-10-D
	G3/8	6		<b>*</b> 193149	GRLA-3/8-QS-6-D
		8		<b>★</b> 193150	GRLA-3/8-QS-8-D
		10		<b>*</b> 193151	GRLA-3/8-QS-10-D
	G1/2	12		<b>±</b> 193152	GRLA-1/2-QS-12-D

Ordering data							
	Description	Part no.	Туре	PU ¹⁾			
Slot cover for T-slot							
	Insertable, length 0.5 m	151680	ABP-5-S	2			
Slot nut for T-slot							
	Inserted in the slot from above, thread M4	8028500	ABAN-8-1M4-5-P2	2			
		8028501	ABAN-8-1M4-5-P100	100			

¹⁾ Packaging unit

## **Festo - Your Partner in Automation**





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