

Standard cylinders DNCB, ISO 15552

FESTO

Reliable, economical,
good performers –
standard cylinders from
Festo



Info 118 →→







Standard cylinders DNCB – sturdy and reliable



The latest addition to the DNC standard cylinder range, namely the DNCB, is the preferred solution when simple tasks need to be executed with a standard cylinder. For example, the new, smooth running system piston is significantly more compact and features markedly increased energy absorption at the same time – and the space saved is used to increase bearing length. Naturally all existing accessories and mounting components can also be used with this latest addition to the DNC range.



* Representatively tested and certified based upon ADVU, DGPL and DNC products.

					
	With scaling!	Complete and economical!	Clean!	Systematic!	Optimised space requirements!
	New! Simple, precise adjustment of end-position cushioning via the new PPV adjusting screw with scaling	Thanks to the complete range of standard cylinder mounting attachments, and outstanding value for the money	New! Elegant, easy to clean profile design.	New! More compact, higher performance, smooth running system piston	Space-saving sensing thanks to proximity sensor in the profile slot

A clean solution is always achieved whenever economical and technical criteria are optimally fulfilled in equal measure. Why not check the arguments in favour of the DNCB for yourself:

	Advantages for Engineering	Advantages for Purchasing
1. Cylinder in accordance with ISO 15552 (ISO 6431 and VDMA 24562)	<ul style="list-style-type: none"> Standardised dimensions Time tested technology, compact, robust and reliable Can be used with all accessories and mounting attachments from the DNC range Simple design: 2 and 3D CAD support on the Internet free of charge 	<ul style="list-style-type: none"> Cost savings with full performance capabilities Highly economical thanks to emphasis on basic functions
2. Top product quality	<ul style="list-style-type: none"> Smooth running thanks to high performance system piston PPV end-position cushioning can be quickly and easily adjusted Ideal settings can be readily reproduced using the imprinted scale 	<ul style="list-style-type: none"> Outstanding value for money You only pay for the functions you need
3. Optimised installation space	<ul style="list-style-type: none"> Elegant, easy to clean profile design Space-saving sensing thanks to proximity sensor in the profile slot Service and support after you buy as well Repair and replacement part kits Help for laying out and sizing pneumatic systems 	<ul style="list-style-type: none"> A single supplier for all your pneumatic needs Worldwide service Shipped from stock within 48 hours

Standard cylinders DNCB, ISO 15552

Features

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At a glance



- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)

- The modern design and construction saves up to 11% on space compared to ordinary standard cylinders, thus permitting a considerably more compact system design



DIN



High quality product

- Proven technology, compact, solid and reliable
- Excellent running characteristics thanks to efficient piston system
- Simple and sensitive adjustable end-position cushioning thanks to new PPV adjusting screw
- When an ideal setting has been found, the imprinted scale ensures easy reproducibility

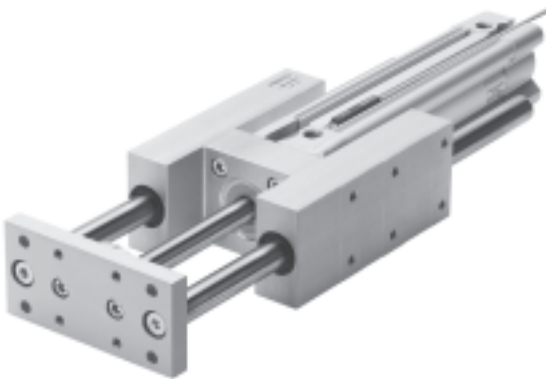
Contactless sensing

- The proximity sensors fit flush in the profile slot. On the one hand, this does away with the need for additional mounting kits and on the other, it protects the proximity sensor against mechanical damage

Easy to assemble

- Large selection of mounting options
- All accessories and mounting attachments from the DNC range can be used

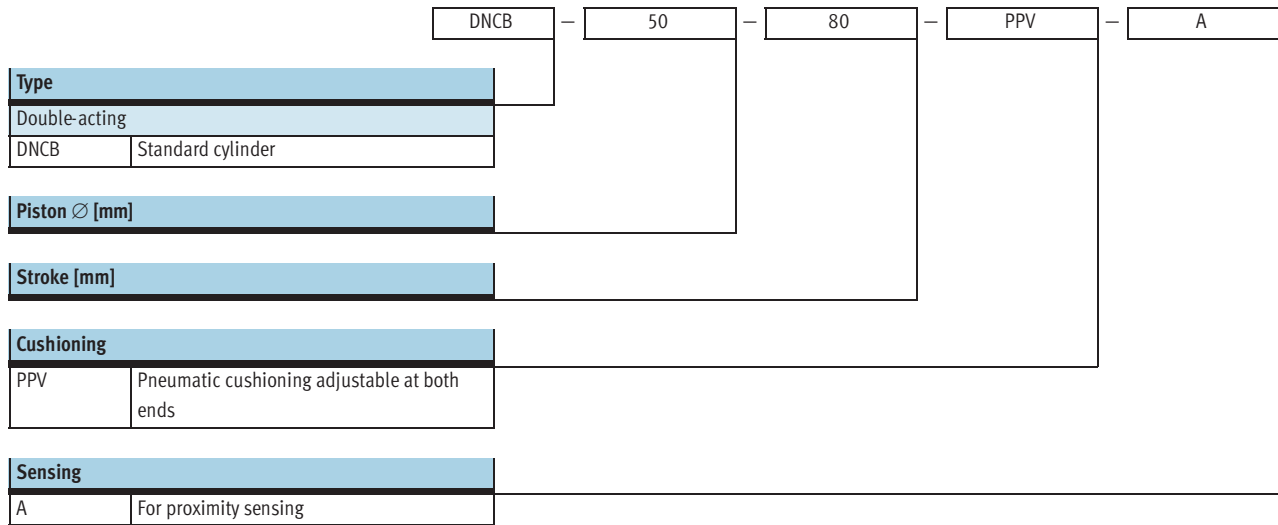
Accessories



Guide units protect ISO standard cylinders from torsion when these are subjected to high torque loads. They provide high precision guidance for workpiece handling and other handling applications.

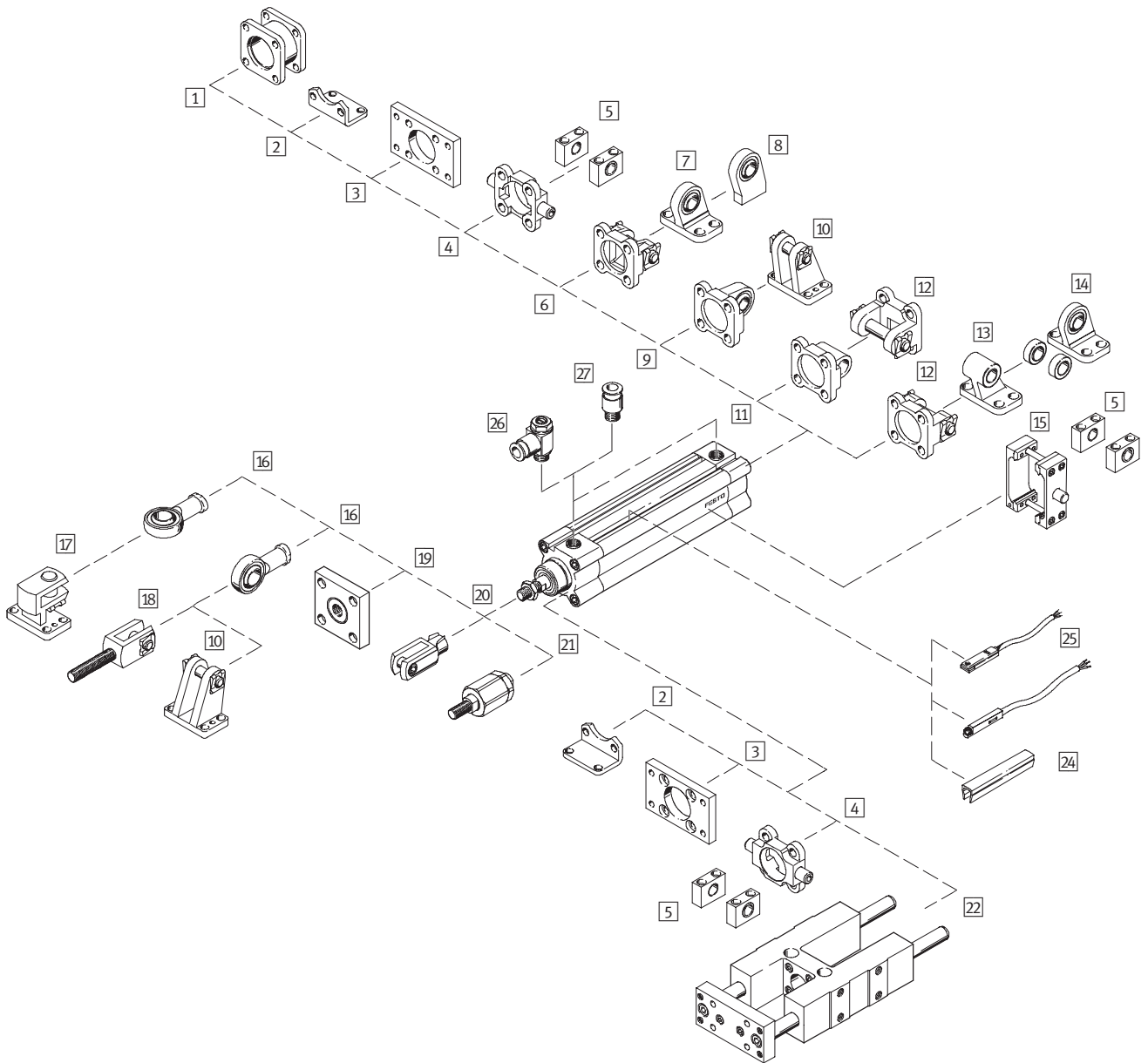
Standard cylinders DNCB, ISO 15552

Type codes



Standard cylinders DNCB, ISO 15552

Peripherals overview



Standard cylinders DNCB, ISO 15552

Peripherals overview

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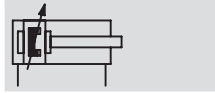
Mounting attachments and accessories			
	Brief description	→ Page	
1	Multi-position kit DPNC	for connecting two DNCB cylinders with identical piston \varnothing to form a multi-position cylinder	12
2	Foot mounting HNC	for bearing and end caps corresponds to MS1 to ISO 15552	13
3	Flange mounting FNC	for bearing or end caps corresponds to MF1/MF2 to ISO 15552	13
4	Trunnion flange ZNCF	for bearing or end caps	14
5	Trunnion support LNZG	corresponds to MT4 to ISO 15552	16
6	Swivel flange SNC	for end caps	16
7	Clevis foot LSNG	with spherical bearing	18
8	Clevis foot LSNSG	weld-on with spherical bearing	18
9	Swivel flange SNCS	with spherical bearing for end caps	17
10	Clevis foot LBG	with non-rotating pivot pin	18
11	Swivel flange SNCL	for end caps corresponds to MP4 to ISO 15552	18
12	Swivel flange SNCB	for end caps corresponds to MP2 to ISO 15552	17
13	Clevis foot LNG	for swivel flange SNCB	18
14	Clevis foot LSN	with spherical bearing	18
15	Trunnion mounting kit ZNCM	for mounting anywhere on the cylinder barrel corresponds to MT4 to ISO 15552	15
16	Rod eye SGS	with spherical bearing	19
17	Right-angle clevis foot LQG	with non-rotating pivot pin for rod eye SGS	18
18	Rod clevis SGA	suitable for spherical mounting of cylinders in conjunction with rod eye SGS	19
19	Coupling piece KSG	for compensating radial deviations	19
20	Rod clevis SG	permits a swivelling movement of the cylinder in one plane	19
21	Self-aligning rod coupler FK	for compensating radial and angular deviations	19
22	Guide unit FENG	to protect against torsion at high torque loads	20
24	Slot cover ABP-5-S	to protect the sensor cable and keep dirt out of the sensor slots	21
25	Proximity sensors SME/SMT-8	can be integrated in the cylinder profile barrel	21
26	One-way flow control valve GRLA	for speed regulation	19
27	Push-in fitting QS	for connecting compressed air tubing with standard O.D.	www.festo.com

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Technical data

Function



DIN



⊘ - Diameter
32 ... 100 mm

- | - Stroke length
2 ... 2,000 mm

www.festo.com/en/Spare_parts_service

Wearing parts kits

➔ 11

General technical data						
Piston Ø	32	40	50	63	80	100
Pneumatic connection	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{1}{2}$
Piston rod thread	M10x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5	M20x1.5
Constructional design	Piston					
	Piston rod					
	Profile barrel					
Cushioning	Pneumatic cushioning adjustable at both ends					
Cushioning length [mm]	20	20	22	22	32	32
Position sensing	For proximity sensing					
Type of mounting	Using internal threads					
	With accessories					
Mounting position	Any					

Operating and environmental conditions	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure [bar]	0.6 ... 12
Ambient temperature ¹⁾ [°C]	-20 ... +80
Corrosion resistance class CRC ²⁾	2

1) Note operating range of proximity sensors

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

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

Forces [N] and impact energy [J]						
Piston Ø	32	40	50	63	80	100
Theoretical force at 6 bar, advancing	483	754	1,178	1,870	3,016	4,712
Theoretical force at 6 bar, retracting	415	633	990	1,682	2,721	4,418
Max. impact energy at end positions	0.4	0.7	1	1.3	2	3

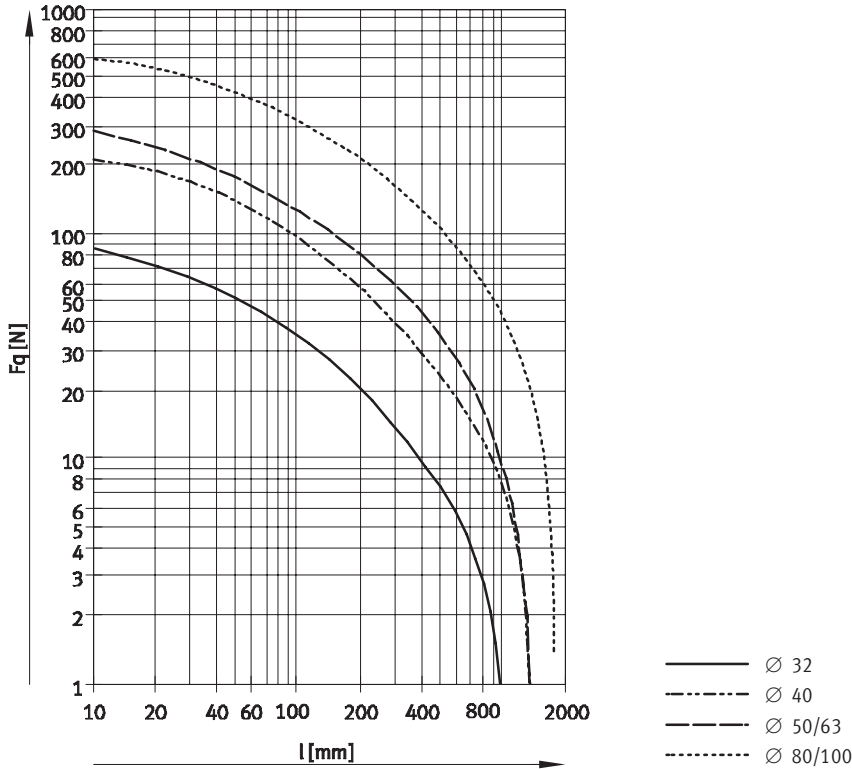


Pneumatic sizing using Pro Pneu
www.festo.com/en/engineering

Standard cylinders DNCB, ISO 15552

Technical data

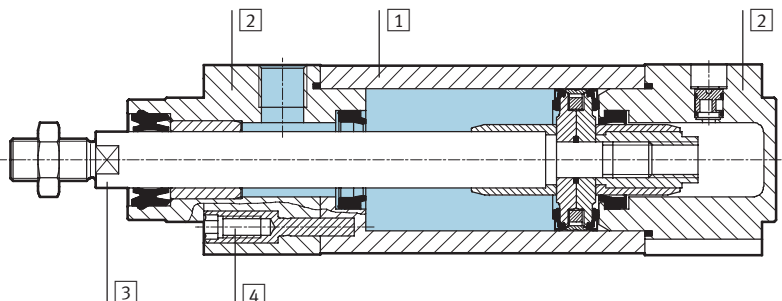
Lateral force F_q as a function of stroke length l



Weights [g]						
Piston Ø	32	40	50	63	80	100
Product weight with 0 mm stroke	460	760	1,225	1,800	3,135	4,575
Additional weight per 10 mm stroke	27	37	56	62	92	101
Moving load with 0 mm stroke	108	204	363	460	800	1,045
Additional load per 10 mm stroke	9	16	25	25	39	39

Materials

Sectional view



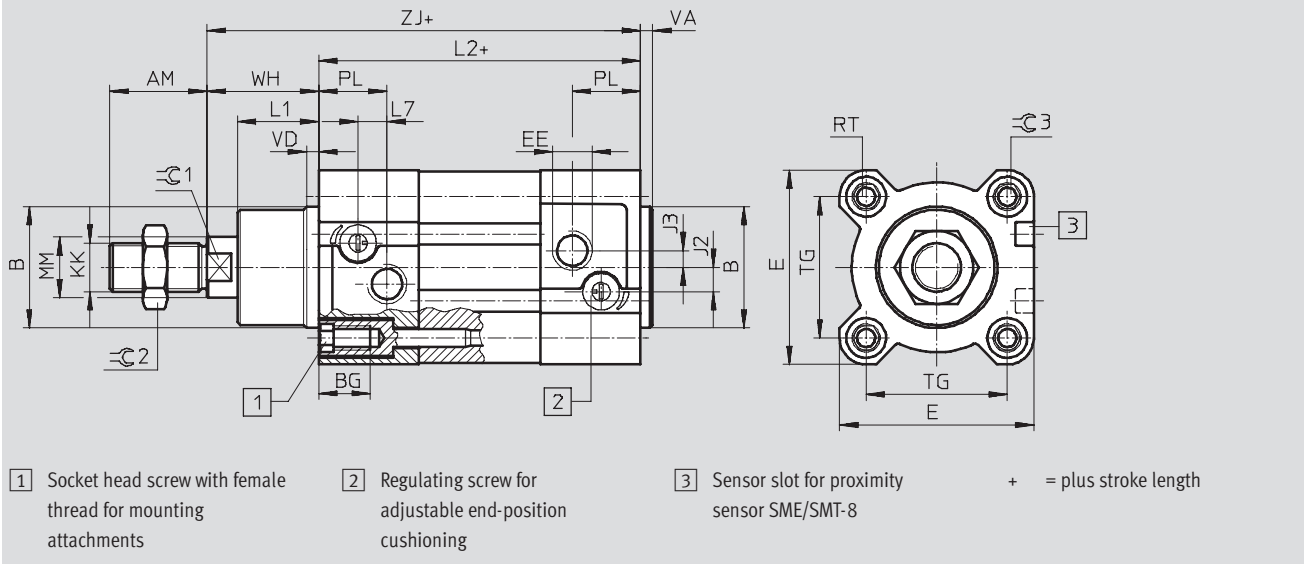
Standard cylinder	
1	Cylinder barrel Anodised aluminium
2	Bearing/end caps Die-cast aluminium
3	Piston rod High-alloy steel
4	Flange screws Galvanised steel
-	Seals Polyurethane, nitrile rubber
Note on material Free of copper, PTFE and silicone	

Standard cylinders DNCB, ISO 15552

Technical data



Dimensions Download CAD data → www.festo.com/en/engineering



∅	AM	B	BG	E	EE	J2	J3	KK	L1	L2	L7
[mm]		∅ d11									
32	22	30	16	45	G1/8	5.25	5.7	M10x1.25	18	94	6.5
40	24	35	16	54	G1/4	8	4	M12x1.25	21.3	105	7.5
50	32	40	17	64	G1/4	8	5.5	M16x1.5	26.8	106	9.5
63	32	45	17	75	G3/8	12.75	6.25	M16x1.5	27	121	9
80	40	45	17	93	G3/8	12.5	8	M20x1.5	34.2	128	11
100	40	55	17	110	G1/2	13.5	10	M20x1.5	38	138	7.5

∅	MM	PL	RT	TG	VA	VD	WH	ZJ	∅ 1	∅ 2	∅ 3
[mm]	∅										
32	12	19.5	M6	32.5	4	4	26	120	10	16	6
40	16	22.5	M6	38	4	4	30	135	13	18	6
50	20	22.5	M8	46.5	4	4	37	143	17	24	8
63	20	27.5	M8	56.5	4	4	37	158	17	24	8
80	25	30	M10	72	4	4	46	174	22	30	6
100	25	31.5	M10	89	4	4	51	189	22	30	6

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Technical data

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Ordering data															
Part No. Type			Part No. Type			Part No. Type									
Stroke [mm]	Piston Ø 32 mm					Piston Ø 40 mm					Piston Ø 50 mm				
25	532 724	DNCB-32-25-PPV-A	532 737	DNCB-40-25-PPV-A	532 750	DNCB-50-25-PPV-A	532 724	DNCB-32-25-PPV-A	532 737	DNCB-40-25-PPV-A	532 750	DNCB-50-25-PPV-A			
40	532 725	DNCB-32-40-PPV-A	532 738	DNCB-40-40-PPV-A	532 751	DNCB-50-40-PPV-A	532 725	DNCB-32-40-PPV-A	532 738	DNCB-40-40-PPV-A	532 751	DNCB-50-40-PPV-A			
50	532 726	DNCB-32-50-PPV-A	532 739	DNCB-40-50-PPV-A	532 752	DNCB-50-50-PPV-A	532 726	DNCB-32-50-PPV-A	532 739	DNCB-40-50-PPV-A	532 752	DNCB-50-50-PPV-A			
80	532 727	DNCB-32-80-PPV-A	532 740	DNCB-40-80-PPV-A	532 753	DNCB-50-80-PPV-A	532 727	DNCB-32-80-PPV-A	532 740	DNCB-40-80-PPV-A	532 753	DNCB-50-80-PPV-A			
100	532 728	DNCB-32-100-PPV-A	532 741	DNCB-40-100-PPV-A	532 754	DNCB-50-100-PPV-A	532 728	DNCB-32-100-PPV-A	532 741	DNCB-40-100-PPV-A	532 754	DNCB-50-100-PPV-A			
125	532 729	DNCB-32-125-PPV-A	532 742	DNCB-40-125-PPV-A	532 755	DNCB-50-125-PPV-A	532 729	DNCB-32-125-PPV-A	532 742	DNCB-40-125-PPV-A	532 755	DNCB-50-125-PPV-A			
160	532 730	DNCB-32-160-PPV-A	532 743	DNCB-40-160-PPV-A	532 756	DNCB-50-160-PPV-A	532 730	DNCB-32-160-PPV-A	532 743	DNCB-40-160-PPV-A	532 756	DNCB-50-160-PPV-A			
200	532 731	DNCB-32-200-PPV-A	532 744	DNCB-40-200-PPV-A	532 757	DNCB-50-200-PPV-A	532 731	DNCB-32-200-PPV-A	532 744	DNCB-40-200-PPV-A	532 757	DNCB-50-200-PPV-A			
250	532 732	DNCB-32-250-PPV-A	532 745	DNCB-40-250-PPV-A	532 758	DNCB-50-250-PPV-A	532 732	DNCB-32-250-PPV-A	532 745	DNCB-40-250-PPV-A	532 758	DNCB-50-250-PPV-A			
320	532 733	DNCB-32-320-PPV-A	532 746	DNCB-40-320-PPV-A	532 759	DNCB-50-320-PPV-A	532 733	DNCB-32-320-PPV-A	532 746	DNCB-40-320-PPV-A	532 759	DNCB-50-320-PPV-A			
400	532 734	DNCB-32-400-PPV-A	532 747	DNCB-40-400-PPV-A	532 760	DNCB-50-400-PPV-A	532 734	DNCB-32-400-PPV-A	532 747	DNCB-40-400-PPV-A	532 760	DNCB-50-400-PPV-A			
500	532 735	DNCB-32-500-PPV-A	532 748	DNCB-40-500-PPV-A	532 761	DNCB-50-500-PPV-A	532 735	DNCB-32-500-PPV-A	532 748	DNCB-40-500-PPV-A	532 761	DNCB-50-500-PPV-A			
Stroke [mm]	Piston Ø 63 mm					Piston Ø 80 mm					Piston Ø 100 mm				
25	532 763	DNCB-63-25-PPV-A	532 884	DNCB-80-25-PPV-A	532 897	DNCB-100-25-PPV-A	532 763	DNCB-63-25-PPV-A	532 884	DNCB-80-25-PPV-A	532 897	DNCB-100-25-PPV-A			
40	532 764	DNCB-63-40-PPV-A	532 885	DNCB-80-40-PPV-A	532 898	DNCB-100-40-PPV-A	532 764	DNCB-63-40-PPV-A	532 885	DNCB-80-40-PPV-A	532 898	DNCB-100-40-PPV-A			
50	532 765	DNCB-63-50-PPV-A	532 886	DNCB-80-50-PPV-A	532 899	DNCB-100-50-PPV-A	532 765	DNCB-63-50-PPV-A	532 886	DNCB-80-50-PPV-A	532 899	DNCB-100-50-PPV-A			
80	532 766	DNCB-63-80-PPV-A	532 887	DNCB-80-80-PPV-A	532 900	DNCB-100-80-PPV-A	532 766	DNCB-63-80-PPV-A	532 887	DNCB-80-80-PPV-A	532 900	DNCB-100-80-PPV-A			
100	532 767	DNCB-63-100-PPV-A	532 888	DNCB-80-100-PPV-A	532 901	DNCB-100-100-PPV-A	532 767	DNCB-63-100-PPV-A	532 888	DNCB-80-100-PPV-A	532 901	DNCB-100-100-PPV-A			
125	532 768	DNCB-63-125-PPV-A	532 889	DNCB-80-125-PPV-A	532 902	DNCB-100-125-PPV-A	532 768	DNCB-63-125-PPV-A	532 889	DNCB-80-125-PPV-A	532 902	DNCB-100-125-PPV-A			
160	532 769	DNCB-63-160-PPV-A	532 890	DNCB-80-160-PPV-A	532 903	DNCB-100-160-PPV-A	532 769	DNCB-63-160-PPV-A	532 890	DNCB-80-160-PPV-A	532 903	DNCB-100-160-PPV-A			
200	532 770	DNCB-63-200-PPV-A	532 891	DNCB-80-200-PPV-A	532 904	DNCB-100-200-PPV-A	532 770	DNCB-63-200-PPV-A	532 891	DNCB-80-200-PPV-A	532 904	DNCB-100-200-PPV-A			
250	532 771	DNCB-63-250-PPV-A	532 892	DNCB-80-250-PPV-A	532 905	DNCB-100-250-PPV-A	532 771	DNCB-63-250-PPV-A	532 892	DNCB-80-250-PPV-A	532 905	DNCB-100-250-PPV-A			
320	532 772	DNCB-63-320-PPV-A	532 893	DNCB-80-320-PPV-A	532 906	DNCB-100-320-PPV-A	532 772	DNCB-63-320-PPV-A	532 893	DNCB-80-320-PPV-A	532 906	DNCB-100-320-PPV-A			
400	532 773	DNCB-63-400-PPV-A	532 894	DNCB-80-400-PPV-A	532 907	DNCB-100-400-PPV-A	532 773	DNCB-63-400-PPV-A	532 894	DNCB-80-400-PPV-A	532 907	DNCB-100-400-PPV-A			
500	532 774	DNCB-63-500-PPV-A	532 895	DNCB-80-500-PPV-A	532 908	DNCB-100-500-PPV-A	532 774	DNCB-63-500-PPV-A	532 895	DNCB-80-500-PPV-A	532 908	DNCB-100-500-PPV-A			

Ordering data – Variable stroke			
Piston Ø [mm]	Stroke [mm]	Part No.	Type
32	2 ... 2,000	532 723	DNCB-32-...-PPV-A
40	2 ... 2,000	532 736	DNCB-40-...-PPV-A
50	2 ... 2,000	532 749	DNCB-50-...-PPV-A
63	3 ... 2,000	532 762	DNCB-63-...-PPV-A
80	3 ... 2,000	532 883	DNCB-80-...-PPV-A
100	3 ... 2,000	532 896	DNCB-100-...-PPV-A

Ordering data – Wearing parts kits ¹⁾			
Piston Ø [mm]	Part No.	Type	
32	665 294	DNCB-32-PPV-A	
40	665 295	DNCB-40-PPV-A	
50	665 296	DNCB-50-PPV-A	
63	665 297	DNCB-63-PPV-A	
80	665 298	DNCB-80-PPV-A	
100	665 299	DNCB-100-PPV-A	

1) Assembly grease included in scope of delivery

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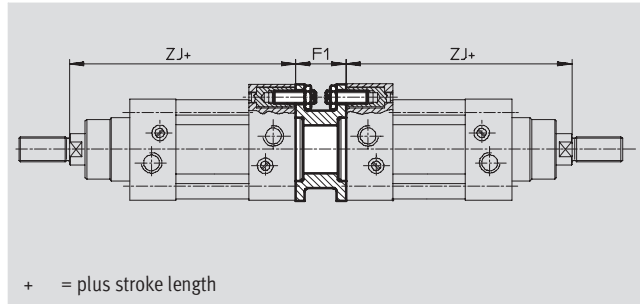
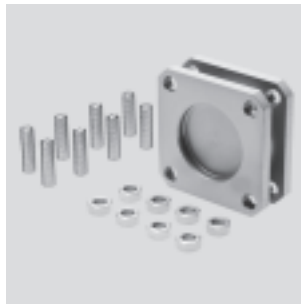
Accessories



Multi-position kit DPNC

Material:

Flange: Wrought aluminium alloy
 threaded pins, hex nuts: Galvanised steel



Dimensions and ordering data						
For \varnothing [mm]	F1	ZJ	Max. overall stroke length [mm]	Weight [g]	Part No.	Type
32	27	120	1,000	85	174 418	DPNC-32
40	27	135	1,000	115	174 419	DPNC-40
50	32	143	1,000	210	174 420	DPNC-50
63	28	158	1,000	360	174 421	DPNC-63
80	38	174	1,000	620	174 422	DPNC-80
100	38	189	1,000	1,190	174 423	DPNC-100

- Note
 The maximum overall stroke length may not be exceeded when combining cylinders and the multi-position kit.

Connecting two cylinders with identical piston \varnothing as a 3 or 4-position cylinder.

A 3 or 4-position cylinder consists of two separate cylinders whose piston rods advance in opposing directions.

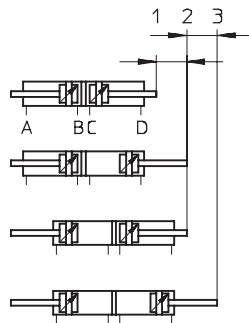
Depending upon actuation and stroke pattern, this type of cylinder can assume up to four positions. In each

case the cylinder is driven precisely against a stop. If one end of the piston rod is fixed, the cylinder barrel

executes the movement. The cylinder must be connected with flexible line connections.

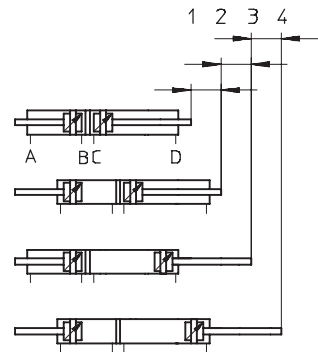
Implementing 3 positions

Two cylinders with identical stroke length must be connected to this end.



Implementing 4 positions

Two cylinders with different stroke lengths must be connected to this end.



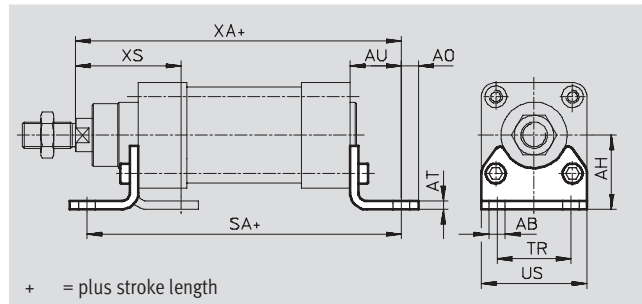
Standard cylinders DNCB, ISO 15552



Accessories

Foot mounting HNC

Material:
Galvanised steel
Free of copper, PTFE and silicone

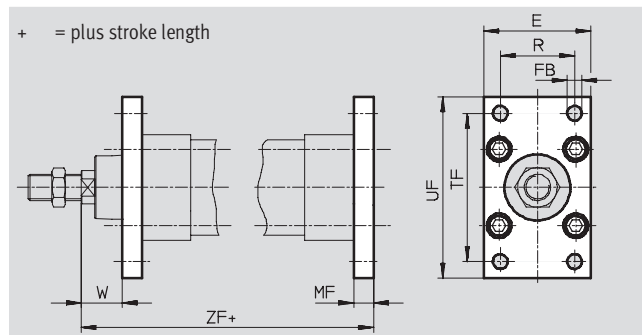


Dimensions and ordering data														
For \varnothing	AB \varnothing	AH	AO	AT	AU	SA	TR	US	XA	XS	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]														
32	7	32	6.5	4	24	142	32	45	144	45	2	135	174 369	HNC-32
40	10	36	9	4	28	161	36	54	163	53	2	180	174 370	HNC-40
50	10	45	9.5	5	32	170	45	64	175	62	2	325	174 371	HNC-50
63	10	50	12.5	5	32	185	50	75	190	63	2	405	174 372	HNC-63
80	12	63	15	6	41	210	63	93	215	81	2	820	174 373	HNC-80
100	14.5	71	17.5	6	41	220	75	110	230	86	2	1,000	174 374	HNC-100

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

Flange mounting FNC

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data													
For \varnothing	E	FB \varnothing H13	MF	R	TF	UF	W	ZF	CRC ¹⁾	Weight [g]	Part No.	Type	
[mm]													
32	45	7	10	32	64	80	16	130	2	240	174 376	FNC-32	
40	54	9	10	36	72	90	20	145	2	280	174 377	FNC-40	
50	65	9	12	45	90	110	25	155	2	520	174 378	FNC-50	
63	75	9	12	50	100	120	25	170	2	690	174 379	FNC-63	
80	93	12	16	63	126	150	30	190	2	1,650	174 380	FNC-80	
100	110	14	16	75	150	175	35	205	2	2,400	174 381	FNC-100	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

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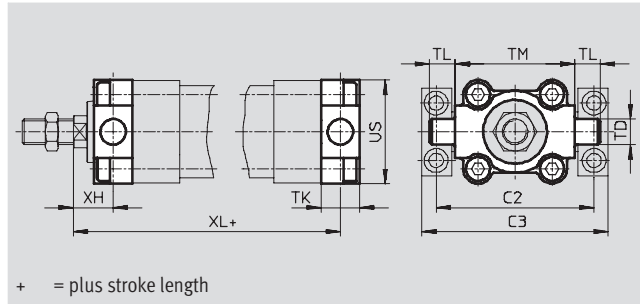
Accessories



Trunnion flange ZNCF

Material:

Corrosion resistant cast steel
Free of copper, PTFE and silicone



Dimensions and ordering data

For Ø	C2	C3	TD Ø e9	TK	TL	TM	US	XH	XL	CRC ¹⁾	Weight [g]	Part No.	Type
32	71	86	12	16	12	50	45	18	128	2	130	174 411	ZNCF-32
40	87	105	16	20	16	63	54	20	145	2	240	174 412	ZNCF-40
50	99	117	16	24	16	75	64	25	155	2	390	174 413	ZNCF-50
63	116	136	20	24	20	90	75	25	170	2	600	174 414	ZNCF-63
80	136	156	20	28	20	110	93	32	188	2	1,150	174 415	ZNCF-80
100	164	189	25	38	25	132	110	32	208	2	2,030	174 416	ZNCF-100

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

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

Standard cylinders DNCB, ISO 15552

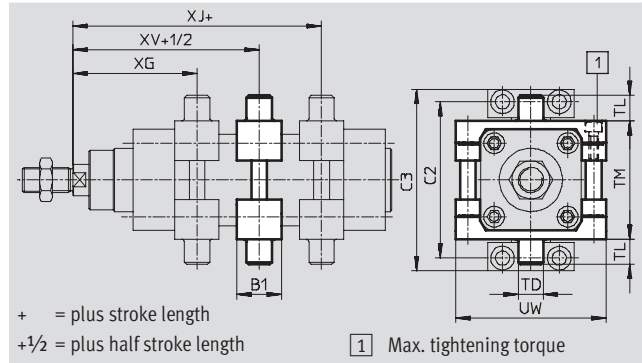
Accessories



Trunnion mounting kit ZNCM

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

Material:
Tempered steel



Dimensions and ordering data							
For \varnothing	B1	C2	C3	TD \varnothing e9	TL	TM	UW
[mm]							
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

For \varnothing	XG	XJ	XV	Max. tightening torque [Nm]	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]								
32	69	73	77	4 +1	2	210	163 525	ZNCM-32
40	79	82.5	86	8 +1	2	385	163 526	ZNCM-40
50	87	90	93	8 +2	2	595	163 527	ZNCM-50
63	98	97.5	100	18 +2	2	890	163 528	ZNCM-63
80	111	110	109	28 +2	2	1,450	163 529	ZNCM-80
100	123	120	117	28 +2	2	2,045	163 530	ZNCM-100

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

Standard cylinders DNCB, ISO 15552

Accessories



LNZG trunnion support

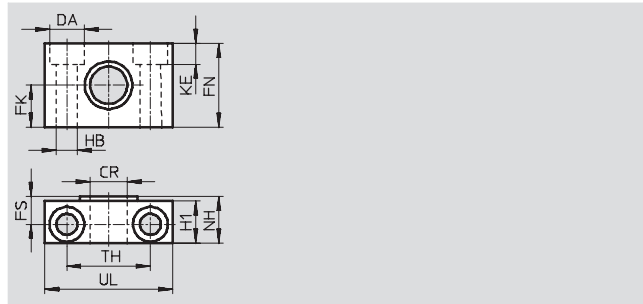
Material:

Trunnion support:

Anodised aluminium

Plain bearing: Plastic

Free of copper, PTFE and silicone



Dimensions and ordering data															
For \varnothing	CR	DA	FK	FN	FS	H1	HB	KE	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	\varnothing D11	\varnothing H13	\varnothing ± 0.1				\varnothing H13			± 0.2			[g]		
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2	125	32 959	LNZG-32
40, 50	16	15	18	36	12	18	9	9	21	36	55	2	400	32 960	LNZG-40/50
63, 80	20	18	20	40	13	20	11	11	23	42	65	2	480	32 961	LNZG-63/80
100	25	20	25	50	16	24.5	14	13	28.5	50	75	2	960	32 962	LNZG-100/125

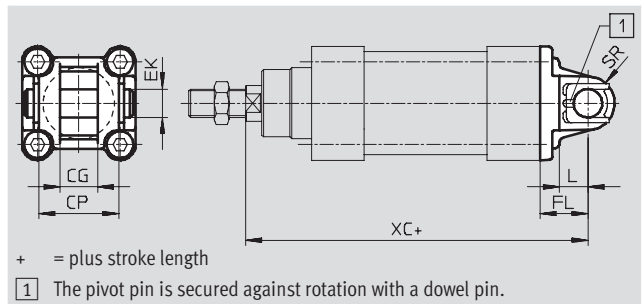
1) Corrosion resistance class 2 according to Festo standard 940 070

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

Swivel flange SNC

Material:

Die-cast aluminium



Dimensions and ordering data											
For \varnothing	CG	CP	EK	FL	L	SR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H14	h14	\varnothing	± 0.2					[g]		
32	14	34	10	22	13	10	142	2	90	174 383	SNC-32
40	16	40	12	25	16	12	160	2	120	174 384	SNC-40
50	21	45	16	27	16	12	170	2	240	174 385	SNC-50
63	21	51	16	32	21	16	190	2	320	174 386	SNC-63
80	25	65	20	36	22	20	210	2	625	174 387	SNC-80
100	25	75	20	41	27	20	230	2	830	174 388	SNC-100

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

Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

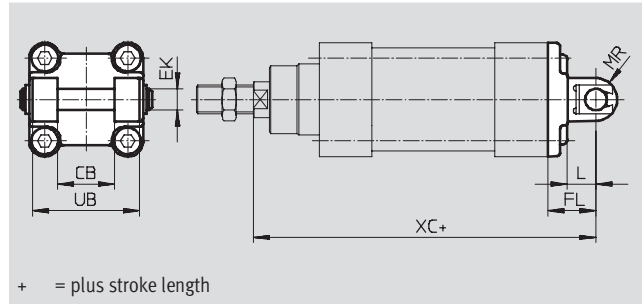
Standard cylinders DNCB, ISO 15552



Accessories

Swivel flange SNCB

Material:
Die-cast aluminium
Free of copper, PTFE and silicone

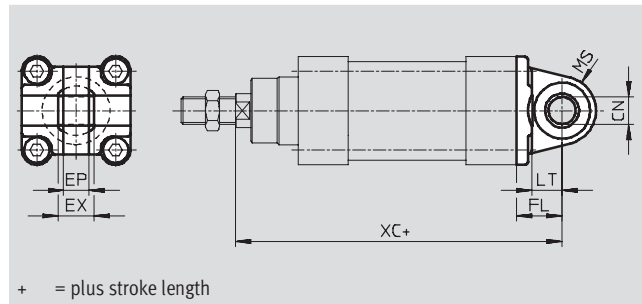
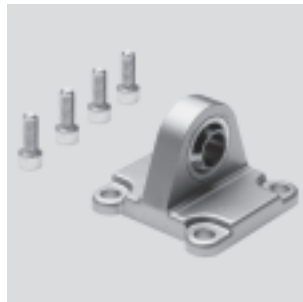


Dimensions and ordering data												
For \varnothing	CB	EK	FL	L	ML	MR	UB	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H14	\varnothing e8	± 0.2				h14			[g]		
32	26	10	22	13	55	10	45	142	2	100	174 390	SNCB-32
40	28	12	25	16	63	12	52	160	2	150	174 391	SNCB-40
50	32	12	27	16	71	12	60	170	2	225	174 392	SNCB-50
63	40	16	32	21	83	16	70	190	2	365	174 393	SNCB-63
80	50	16	36	22	103	16	90	210	2	610	174 394	SNCB-80
100	60	20	41	27	127	20	110	230	2	925	174 395	SNCB-100

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

Swivel flange SNCS

Material:
Die-cast aluminium



Dimensions and ordering data												
For \varnothing	CN	EP	EX	FL	LT	MS	XC	CRC ¹⁾	Weight	Part No.	Type	
[mm]	\varnothing	-0.2		± 0.2					[g]			
32	10	10.5	14	22	13	15	142	2	85	174 397	SNCS-32	
40	12	12	16	25	16	17	160	2	125	174 398	SNCS-40	
50	16	15	21	27	18	20	170	2	210	174 399	SNCS-50	
63	16	15	21	32	21	22	190	2	280	174 400	SNCS-63	
80	20	18	25	36	22	27	210	2	540	174 401	SNCS-80	
100	20	18	25	41	27	29	230	2	700	174 402	SNCS-100	

1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

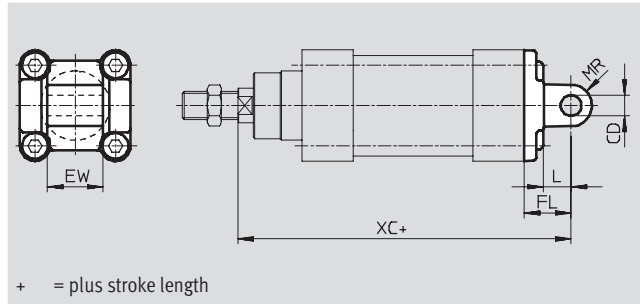
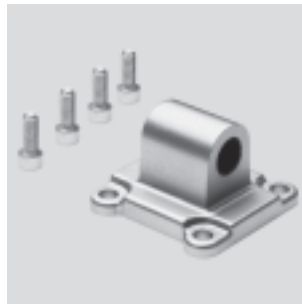
Standard cylinders DNCB, ISO 15552

Accessories



Swivel flange SNCL

Material:
Die-cast aluminium
Free of copper, PTFE and silicone



Dimensions and ordering data										
For Ø	CD	EW	FL	L	MR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø	h12	±0.2					[g]		
32	10	26	22	13	10	142	2	75	174 404	SNCL-32
40	12	28	25	16	12	160	2	100	174 405	SNCL-40
50	12	32	27	16	12	170	2	160	174 406	SNCL-50
63	16	40	32	21	16	190	2	250	174 407	SNCL-63
80	16	50	36	22	16	210	2	405	174 408	SNCL-80
100	20	60	41	27	20	230	2	655	174 409	SNCL-100





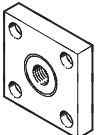
1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface


Ordering data – Mounting attachments				Technical data → www.festo.com			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Clevis foot LSNG				Weld-on clevis foot LSNSG			
	32	31 740	LSNG-32		32	31 747	LSNSG-32
	40	31 741	LSNG-40		40	31 748	LSNSG-40
	50	31 742	LSNG-50		50	31 749	LSNSG-50
	63	31 743	LSNG-63		63	31 750	LSNSG-63
	80	31 744	LSNG-80		80	31 751	LSNSG-80
	100	31 745	LSNG-100		100	31 752	LSNSG-100
Clevis foot LBG				Clevis foot LNG			
	32	31 761	LBG-32		32	33 890	LNG-32
	40	31 762	LBG-40		40	33 891	LNG-40
	50	31 763	LBG-50		50	33 892	LNG-50
	63	31 764	LBG-63		63	33 893	LNG-63
	80	31 765	LBG-80		80	33 894	LNG-80
	100	31 766	LBG-100		100	33 895	LNG-100
Clevis foot LSN				Right-angle clevis foot LQG			
	32	5 561	LSN-32		32	31 768	LQG-32
	40	5 562	LSN-40		40	31 769	LQG-40
	50	5 563	LSN-50		50	31 770	LQG-50
	63	5 564	LSN-63		63	31 771	LQG-63
	80	5 565	LSN-80		80	31 772	LQG-80
	100	5 566	LSN-100		100	31 773	LQG-100

Standard cylinders DNCB, ISO 15552

Accessories

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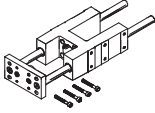
Ordering data – Piston rod attachments				Technical data → www.festo.com			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye SGS				Rod clevis SGA			
	32	9 261	SGS-M10x1,25		32	32 954	SGA-M10x1,25
	40	9 262	SGS-M12x1,25		40	10 767	SGA-M12x1,25
	50	9 263	SGS-M16x1,5		50	10 768	SGA-M16x1,5
	63				63		
	80	9 264	SGS-M20x1,5		80	10 769	SGA-M20x1,5
	100				100		
Rod clevis SG				Self-aligning rod coupler FK			
	32	6 144	SG-M10x1,25		32	6 140	FK-M10x1,25
	40	6 145	SG-M12x1,25		40	6 141	FK-M12x1,25
	50	6 146	SG-M16x1,5		50	6 142	FK-M16x1,5
	63				63		
	80	6 147	SG-M20x1,5		80	6 143	FK-M20x1,5
	100				100		
Coupling piece KSG							
	32	32 963	KSG-M10x1,25				
	40	32 964	KSG-M12x1,25				
	50	32 965	KSG-M16x1,5				
	63						
	80	32 966	KSG-M20x1,5				
	100						

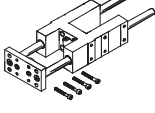
Ordering data – One-way flow control valves				Technical data → www.festo.com	
	Connection		Material	Part No.	Type
	For Ø	For tubing OD			
	32	3	Metal design	193 142	GRLA-1/8-QS-3-D
		4		193 143	GRLA-1/8-QS-4-D
		6		193 144	GRLA-1/8-QS-6-D
		8		193 145	GRLA-1/8-QS-8-D
	40, 50	6		193 146	GRLA-1/4-QS-6-D
		8		193 147	GRLA-1/4-QS-8-D
		10		193 148	GRLA-1/4-QS-10-D
		6		193 149	GRLA-3/8-QS-6-D
	63, 80	8		193 150	GRLA-3/8-QS-8-D
		10		193 151	GRLA-3/8-QS-10-D
		6		193 152	GRLA-1/2-QS-12-D
		12			

Standard cylinders DNCB, ISO 15552

Accessories





Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only)				Technical data → www.festo.com		
	Stroke [mm]	Part No.	Type	Stroke [mm]	Part No.	Type
	for Ø 32 mm			for Ø 40 mm		
	10 ... 50	34 493	FENG-32-50-KF	10 ... 50	34 499	FENG-40-50-KF
	10 ... 100	34 494	FENG-32-100-KF	10 ... 100	34 500	FENG-40-100-KF
	10 ... 160	34 495	FENG-32-160-KF	10 ... 160	34 501	FENG-40-160-KF
	10 ... 200	34 496	FENG-32-200-KF	10 ... 200	34 502	FENG-40-200-KF
	10 ... 250	150 289	FENG-32-250-KF	10 ... 250	34 503	FENG-40-250-KF
	10 ... 320	34 497	FENG-32-320-KF	10 ... 320	34 504	FENG-40-320-KF
	10 ... 400	150 290	FENG-32-400-KF	10 ... 400	150 291	FENG-40-400-KF
	10 ... 500	34 498	FENG-32-500-KF	10 ... 500	34 505	FENG-40-500-KF
	for Ø 50 mm			for Ø 63 mm		
	10 ... 50	34 506	FENG-50-50-KF	10 ... 50	34 513	FENG-63-50-KF
	10 ... 100	34 507	FENG-50-100-KF	10 ... 100	34 514	FENG-63-100-KF
	10 ... 160	34 508	FENG-50-160-KF	10 ... 160	34 515	FENG-63-160-KF
	10 ... 200	34 509	FENG-50-200-KF	10 ... 200	34 516	FENG-63-200-KF
	10 ... 250	34 510	FENG-50-250-KF	10 ... 250	34 517	FENG-63-250-KF
	10 ... 320	34 511	FENG-50-320-KF	10 ... 320	34 518	FENG-63-320-KF
	10 ... 400	150 292	FENG-50-400-KF	10 ... 400	34 519	FENG-63-400-KF
	10 ... 500	34 512	FENG-50-500-KF	10 ... 500	34 520	FENG-63-500-KF
	for Ø 80 mm			for Ø 100 mm		
	10 ... 50	34 521	FENG-80-50-KF	10 ... 50	34 529	FENG-100-50-KF
	10 ... 100	34 522	FENG-80-100-KF	10 ... 100	34 530	FENG-100-100-KF
	10 ... 160	34 523	FENG-80-160-KF	10 ... 160	34 531	FENG-100-160-KF
	10 ... 200	34 524	FENG-80-200-KF	10 ... 200	34 532	FENG-100-200-KF
	10 ... 250	34 525	FENG-80-250-KF	10 ... 250	34 533	FENG-100-250-KF
	10 ... 320	34 526	FENG-80-320-KF	10 ... 320	34 534	FENG-100-320-KF
	10 ... 400	34 527	FENG-80-400-KF	10 ... 400	34 535	FENG-100-400-KF
	10 ... 500	34 528	FENG-80-500-KF	10 ... 500	34 536	FENG-100-500-KF



Ordering data – Guide units for variable strokes				Technical data → www.festo.com		
	For Ø [mm]	Stroke [mm]	With recirculating ball bearing guide Part No. Type	With sliding bearing guide Part No. Type		
	32	10 ... 500	34 487 FENG-32-...-KF	34 481	FENG-32-...	
	40	10 ... 500	34 488 FENG-40-...-KF	34 482	FENG-40-...	
	50	10 ... 500	34 489 FENG-50-...-KF	34 483	FENG-50-...	
	63	10 ... 500	34 490 FENG-63-...-KF	34 484	FENG-63-...	
	80	10 ... 500	34 491 FENG-80-...-KF	34 485	FENG-80-...	
	100	10 ... 500	34 492 FENG-100-...-KF	34 486	FENG-100-...	





Standard cylinders DNCB, ISO 15552

Accessories

FESTO

Ordering data – Proximity sensor for T-slot, magneto-resistive							Technical data → www.festo.com	
	Mounting	Switch output	Electrical connection			Cable length [m]	Part No.	Type
			Cable	M8 plug	M12 plug			
NO contact								
	Insertable from above	PNP	3-wire	–	–	2.5	525 898	SMT-8F-PS-24V-K2,5-OE
				NPN	–		–	525 909
		–	2-wire	–	–	2.5	525 908	SMT-8F-ZS-24V-K2,5-OE
		PNP	–	3-pin	–		0.3	525 899
		NPN	–	–	–	0.3	525 910	SMT-8F-NS-24V-K0,3-M8D
		PNP	–	–	3-pin		0.3	525 900
	Insertable, flush with the cylinder profile	PNP	3-wire	–	–	2.5	175 436	SMT-8-PS-K-LED-24-B
				–	3-pin		–	0.3

Ordering data – Proximity sensor for T-slot, magnetic reed						Technical data → www.festo.com	
	Mounting	Electrical connection		Cable length [m]	Part No.	Type	
		Cable	M8 plug				
NO contact							
	Insertable from above	3-wire	–	2.5	525 895	SME-8F-DS-24V-K2,5-OE	
			–		–	5.0	525 897
		2-wire	–	2.5	525 907	SME-8F-ZS-24V-K2,5-OE	
			3-pin		0.3	525 896	SME-8F-DS-24V-K0,3-M8D
	Insertable, flush with the cylinder profile	3-wire	–	2.5	150 855	SME-8-K-LED-24	
			–		3-pin	0.3	150 857

Ordering data – Plug sockets with cable						Technical data → www.festo.com	
	Mounting	Switch output		Connection	Cable length [m]	Part No.	Type
		PNP	NPN				
Straight socket							
	M8 union nut	■	■	3-pin	2.5	159 420	SIM-M8-3GD-2,5-PU
					5	159 421	SIM-M8-3GD-5-PU
	M12 union nut	■	■	3-pin	2.5	159 428	SIM-M12-3GD-2,5-PU
					5	159 429	SIM-M12-3GD-5-PU
Angled plug socket							
	M8 union nut	■	■	3-pin	2.5	159 422	SIM-M8-3WD-2,5-PU
					5	159 423	SIM-M8-3WD-5-PU
	M12 union nut	■	■	3-pin	2.5	159 430	SIM-M12-3WD-2,5-PU
					5	159 431	SIM-M12-3WD-5-PU

Ordering data – Slot cover for T-slot				Part No.	Type
	Mounting	Length [m]			
	Insertable from above	2x 0.5		151 680	ABP-5-S

Products and services – everything from a single source

Products incorporating new ideas are created when enthusiasm for technology and efficiency come together. Tailor-made service goes without saying when the customer is the focus of attention.



Pneumatic and electrical drives

- Pneumatic cylinders
- Semi-rotary drives
- Handling modules
- Servopneumatic positioning systems
- Electromechanical drives
- Positioning controllers and controllers



Valves and valve terminals

- Standard valves
- Universal and application-optimised valves
- Manually and mechanically actuated valves
- Shut-off, pressure control and flow control valves
- Proportional valves
- Safety valves

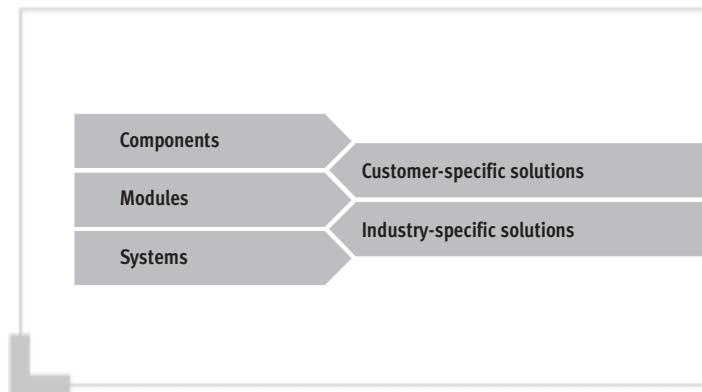
Fieldbus systems/ electrical peripherals

- Fieldbus Direct
- Installation system CP/CPI
- Modular electrical terminal CPX



Compressed air preparation

- Service unit combinations
- Filter regulators
- Filters
- Pressure regulators
- Lubricators
- On-off and soft-start valves
- Dryers
- Pressure amplifiers
- Accessories for compressed air preparation



Services from Festo to increase your productivity – across the entire value creation sequence



Engineering – for greater speed in the development process

- CAD models
- 14 engineering tools
- Digital catalogue
- FluidDRAW®
- More than 1,000 technical consultants and project engineers worldwide
- Technical hotlines



Supply chain – for greater speed in the procurement process

- E-commerce and online shop
- Online order tracking
- Euro special manufacturing service
- Logistics optimisation



Gripping and vacuum technology

- Vacuum generators
- Vacuum grippers
- Vacuum security valves
- Vacuum accessories
- Standard grippers
- Micro grippers
- Precision grippers
- Heavy-duty grippers



Sensors and monitoring units

- Proximity sensors
- Pressure and flow sensors
- Display and operating units
- Inductive and optical proximity sensors
- Displacement encoders for positioning cylinders
- Optical orientation detection and quality inspection



Controllers/bus systems

- Pneumatic and electropneumatic controllers
- Programmable logic controllers
- Fieldbus systems and accessories
- Timers/counters
- Software for visualisation and data acquisition
- Display and operating units



Accessories

- Pipes
- Tubing
- Pipe connectors and fittings
- Electrical connection technology
- Silencers
- Reservoirs
- Air guns

All in all, 100% product and service quality

A customer-oriented range with unlimited flexibility: Components combine to produce ready-to-install modules and systems. Included in this are special designs – since at Festo, most industry-specific products and customer-specific solutions are based on the 23,000 plus catalogue products. Combined with the services for the entire value creation sequence, the end result is unbeatable economy.



Assembly – for greater speed in the assembly/commissioning process

- Prepack
- Preassembly
- Turnkey pneumatics
- Handling solutions



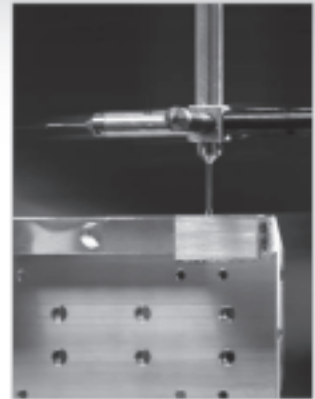
Operation – for greater speed in the operational process

- Spare parts service
- Energy saving service
- Compressed air consumption analysis
- Compressed air quality analysis
- Customer service

Aspects of quality

Quality can be viewed from a number of aspects. A short virtual tour of the Research and Development department, the Production department or the Customer Service Centre speaks more than a thousand words.

3D engineering and simulation



Innovation quality

Let's look at some of the figures:

- 6.5% of turnover
- 2,800 patents with 100 new applications every year
- 3D engineering and simulation
- 10,600 employees worldwide
- Each and every one of them a lateral thinker

Production quality

Your interest is quality and economy – therefore we place considerable value on:

- Minimum production tolerances
- Ultra-modern, proprietary production methods
- Core competencies in production
- Defined quality standards across the entire production chain
- Strict quality assurance systems: on that you can depend.



Price quality

More service for less money. Many of the new and further developments in the Festo product range have one thing in common: they are technically superior and more attractively priced than their predecessor product. Examples are to be found in all product segments: among the drives, valves, valve terminals; among the service units, and among the range of accessories.



Range quality

For individual solutions. Festo offers components as industry-specific catalogue products as well as standards-based and highly individual special designs. Ready-to-install combinations of these components play an integral part in the Festo product portfolio as modules or systems. Incidentally, an increasing number of components can be individually configured as modular products.



Didactic quality

To complement the products and services for automation, Festo Didactic offers exceptionally efficient training hardware, learning software and seminars of the highest quality. Optimally tailored to your value creation sequence. In short – training in practical applications for practical application.

What must be observed when using Festo components?

Specified limit values for technical data and any specific instructions must be adhered to by the user in order to ensure recommended operating conditions.

When pneumatic components are used, the user shall ensure that they are operated using correctly prepared compressed air without aggressive media.

When Festo components are used in safety-oriented applications, the user shall ensure that all applicable

national and local safety laws and regulations, for example the machine directive, together with the relevant references to standards are observed. Unauthorised conversions or modifications to products and systems from Festo involve a safety risk and are thus not permissible.

Festo does not accept any liability for resulting damages.

You should contact Festo's advisors if one of the following apply to your application:

- The ambient conditions and conditions of use or the operating medium differ from the specified technical data.
- The product is to perform a safety function.
- A risk or safety analysis is required.
- You are unsure about the product's suitability for use in the planned application.
- You are unsure about the product's suitability for use in safety-oriented applications.

All technical data applies at the time of going to print.

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