

Standard Cylinders DNC – Metric Series, to ISO 15552

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DNC Standard Cylinders meet ISO 15552 mounting, rod, bore and thread dimension specifications for easy interchangeability.

- Piston Ø 32 to 63 mm
- Strokes of up to 2,000 mm
- Profile slot for proximity sensor on 3 sides
- Numerous variants for customized applications
- Spare parts service

Detailed product information → www.festo.com/catalog/dnc

Product Range Overview

Function	Version	Piston Ø [mm]	Stroke [mm]	Force [N]	Variants	
					PPV	A
Double-acting	DNC	32, 40, 50, 63	10 ... 2,000	415 ... 1,870	■	■

Variants

PPV Pneumatic cushioning adjustable at both ends A Position sensing

Contents

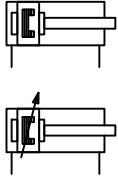
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Note: All metric products can be used within inch tubing systems via hybrid fittings (→ Overview on page 241)

Standard Cylinders DNC – Metric Series, to ISO 15552

Technical Data

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Materials
 Bearing and end caps:
 Die-cast aluminum
 Profile barrel: Anodized aluminum
 Piston rod: High-alloy steel
 Seals: Polyurethane



Pneumatic Cylinders and Actuators

1

Technical Data				
Piston Ø	32	40	50	63
Pneumatic connection	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{3}{8}$
End of piston rod	Male thread			
Piston rod thread	M10x1.25	M12x1.25	M16x1.5	M16x1.5
Cushioning	Pneumatic cushioning adjustable at both ends			
Cushioning length [mm]	20	20	22	22
Theoretical force at 6 bar, advancing [N]	483	754	1,178	1,870
Theoretical force at 6 bar, retracting [N]	415	633	990	1,682
Length at 0 mm stroke [mm]	146	163	179	194
Width [mm]	45	54	64	75
Height [mm]	45	54	64	75

Operating Conditions	
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium	Operation with lubricated medium possible (in which case lubricated operation will always be required)
Operating pressure [bar]	0.6 ... 12
Ambient temperature ¹⁾ [°C]	–20 ... +80

1) Note operating range of proximity sensors.

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Ordering Data

Ordering Data									
Piston Ø [mm]	Stroke [mm]	Part No.	Type	LT	Piston Ø [mm]	Stroke [mm]	Part No.	Type	LT
32	25	163305	DNC-32-25-PPV-A	1D	50	25	163369	DNC-50-25-PPV-A	1D
	40	163306	DNC-32-40-PPV-A	1D		40	163370	DNC-50-40-PPV-A	1D
	50	163307	DNC-32-50-PPV-A	1D		50	163371	DNC-50-50-PPV-A	1D
	80	163308	DNC-32-80-PPV-A	1D		80	163372	DNC-50-80-PPV-A	1D
	100	163309	DNC-32-100-PPV-A	1D		100	163373	DNC-50-100-PPV-A	1D
	125	163310	DNC-32-125-PPV-A	1D		125	163374	DNC-50-125-PPV-A	1D
	160	163311	DNC-32-160-PPV-A	1D		160	163375	DNC-50-160-PPV-A	1D
	200	163312	DNC-32-200-PPV-A	1D		200	163376	DNC-50-200-PPV-A	1D
	250	163313	DNC-32-250-PPV-A	3D		250	163377	DNC-50-250-PPV-A	3D
	320	163314	DNC-32-320-PPV-A	3D		320	163378	DNC-50-320-PPV-A	3D
	400	163315	DNC-32-400-PPV-A	3D		400	163379	DNC-50-400-PPV-A	3D
	500	163316	DNC-32-500-PPV-A	3D		500	163380	DNC-50-500-PPV-A	3D
	10 ... 2,000	163304	DNC-32- -PPV-A	3D		10 ... 2,000	163368	DNC-50- -PPV-A	3D
40	25	163337	DNC-40-25-PPV-A	1D	63	25	163401	DNC-63-25-PPV-A	1D
	40	163338	DNC-40-40-PPV-A	1D		40	163402	DNC-63-40-PPV-A	1D
	50	163339	DNC-40-50-PPV-A	1D		50	163403	DNC-63-50-PPV-A	1D
	80	163340	DNC-40-80-PPV-A	1D		80	163404	DNC-63-80-PPV-A	1D
	100	163341	DNC-40-100-PPV-A	1D		100	163405	DNC-63-100-PPV-A	1D
	125	163342	DNC-40-125-PPV-A	1D		125	163406	DNC-63-125-PPV-A	1D
	160	163343	DNC-40-160-PPV-A	1D		160	163407	DNC-63-160-PPV-A	1D
	200	163344	DNC-40-200-PPV-A	1D		200	163408	DNC-63-200-PPV-A	1D
	250	163345	DNC-40-250-PPV-A	3D		250	163409	DNC-63-250-PPV-A	3D
	320	163346	DNC-40-320-PPV-A	3D		320	163410	DNC-63-320-PPV-A	3D
	400	163347	DNC-40-400-PPV-A	3D		400	163411	DNC-63-400-PPV-A	3D
	500	163348	DNC-40-500-PPV-A	3D		500	163412	DNC-63-500-PPV-A	3D
	10 ... 2,000	163336	DNC-40- -PPV-A	3D		10 ... 2,000	163400	DNC-63- -PPV-A	3D

LT = Lead time

1D typically ships same day/next day

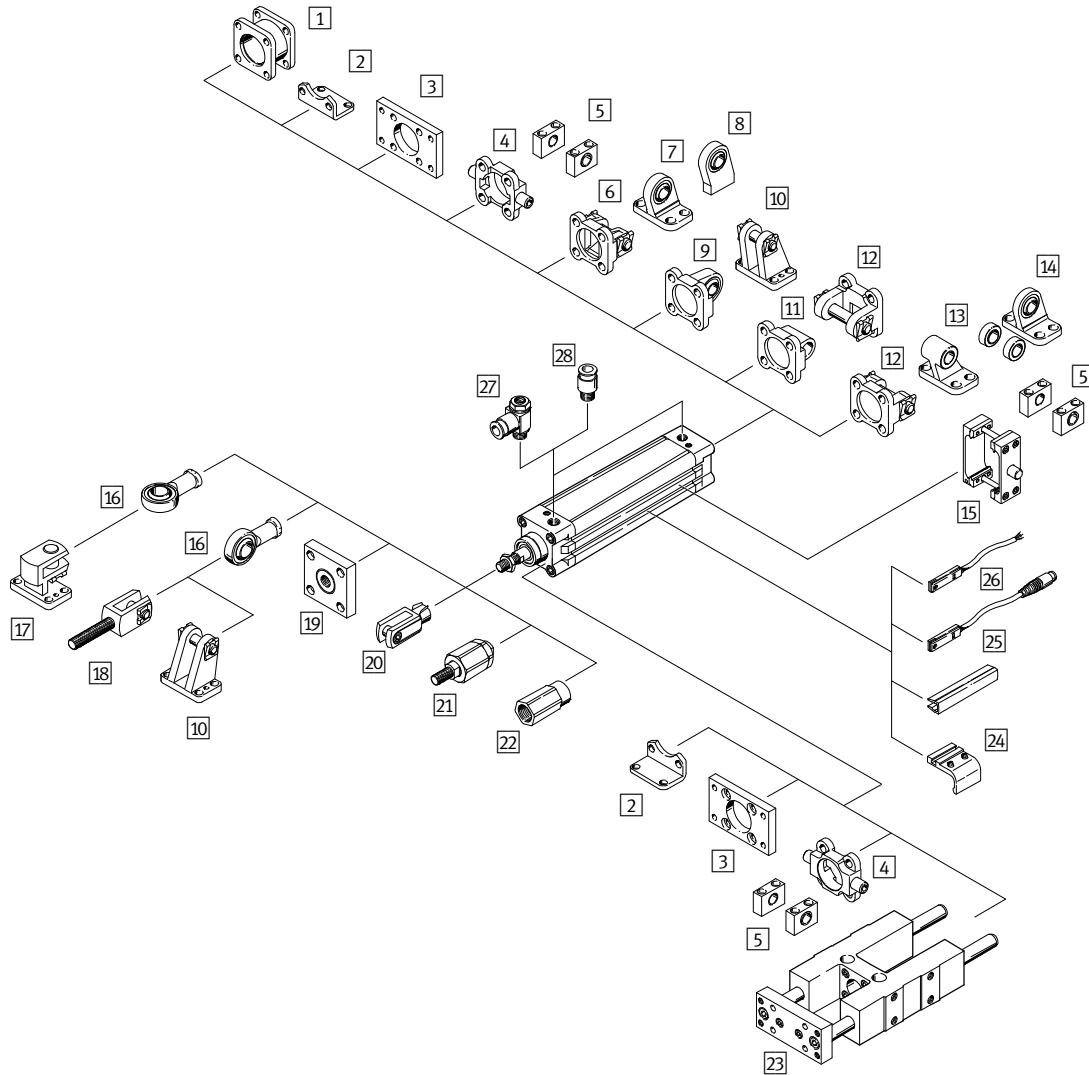
3D typically ships within 3 days

Standard Cylinders DNC – Metric Series, to ISO 15552

Accessories

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Peripherals Overview



Accessories	→ Page/Internet
1 Multi-position kit DPNC	dpnc
2 Foot mounting HNC	32
3 Flange mounting FNC	32
4 Trunnion flange ZNCF	32
5 Trunnion support LNZG	32
6 Swivel flange SNC	32
7 Clevis foot LSNG	32
8 Clevis foot LSNSG	lsnsg
9 Swivel flange SNCS	32
10 Clevis foot LBG	32
11 Swivel flange SNCL	32
12 Swivel flange SNCB	32
13 Clevis foot LNG	32
14 Clevis foot LSN	32

Accessories	→ Page/Internet
15 Trunnion mounting kit ZNCM	32
16 Rod eye SGS	33
17 Right-angle clevis foot LQG	lqg
18 Rod clevis SGA	sga
19 Coupling piece KSG	ksg
20 Rod clevis SG	33
21 Self-aligning rod coupler FK	33
22 Adapter AD	ad
23 Guide unit FENG	feng
24 Mounting kit SMB-8-FENG	feng
25 Slot cover ABP-5-S	abp-s
26 Proximity sensor SME/SMT-8	33
27 One-way flow control valve GRLA	15
28 Push-in fitting QS	33

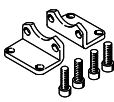
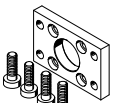
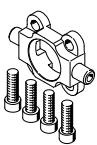
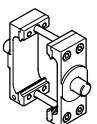
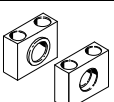
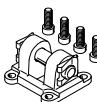
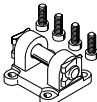
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Accessories

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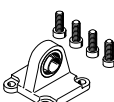
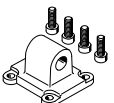
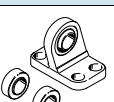
Ordering Data – Mounting Attachments

Technical Data → www.festo.com/catalog/ctype or <order code>

	For Ø	Part No.	Type
Foot mounting HNC			
	32	174369	HNC-32
	40	174370	HNC-40
	50	174371	HNC-50
	63	174372	HNC-63
Flange mounting FNC			
	32	174376	FNC-32
	40	174377	FNC-40
	50	174378	FNC-50
	63	174379	FNC-63
Trunnion flange ZNCF			
	32	174411	ZNCF-32
	40	174412	ZNCF-40
	50	174413	ZNCF-50
	63	174414	ZNCF-63
Trunnion mounting kit ZNCM			
	32	163525	ZNCM-32
	40	163526	ZNCM-40
	50	163527	ZNCM-50
	63	163528	ZNCM-63
Trunnion support LNZG			
	32	32959	LNZG-32
	40, 50	32960	LNZG-40/50
	63	32961	LNZG-63/80
Swivel flange SNC			
	32	174383	SNC-32
	40	174384	SNC-40
	50	174385	SNC-50
	63	174386	SNC-63
Swivel flange SNCB			
	32	174390	SNCB-32
	40	174391	SNCB-40
	50	174392	SNCB-50
	63	174393	SNCB-63

Ordering Data – Mounting Attachments

Technical Data → www.festo.com/catalog/ctype or <order code>

Swivel flange SNCS			
	32	174397	SNCS-32
	40	174398	SNCS-40
	50	174399	SNCS-50
	63	174400	SNCS-63
Swivel flange SNCL			
	32	174404	SNCL-32
	40	174405	SNCL-40
	50	174406	SNCL-50
	63	174407	SNCL-63
Clevis foot LSNG			
	32	31740	LSNG-32
	40	31741	LSNG-40
	50	31742	LSNG-50
	63	31743	LSNG-63
Clevis foot LBG			
	32	31761	LBG-32
	40	31762	LBG-40
	50	31763	LBG-50
	63	31764	LBG-63
Clevis foot LSN			
	32	5561	LSN-32
	40	5562	LSN-40
	50	5563	LSN-50
	63	5564	LSN-63
Clevis foot LNG			
	32	33890	LNG-32
	40	33891	LNG-40
	50	33892	LNG-50
	63	33893	LNG-63

Lead Time LT for all products on this page: **1D** typically ships same day/next day

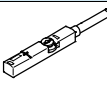
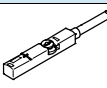
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Accessories

Ordering Data – Piston Rod Attachments			
Technical Data → www.festo.com/catalog/ctype or <order code>			
	For Ø	Part No.	Type
Rod eye SGS			
	32	9261	SGS-M10x1,25
	40	9262	SGS-M12x1,25
	50, 63	9263	SGS-M16x1,5
Rod clevis SG			
	32	6144	SG-M10x1,25
	40	6145	SG-M12x1,25
	50, 63	6146	SG-M16x1,5
Self-aligning rod coupler FK			
	32	6140	FK-M10x1,25
	40	6141	FK-M12x1,25
	50, 63	6142	FK-M16x1,5

Ordering Data – One-way Flow Control Valves for Exhaust Air Flow Control				
Technical Data → 254				
Function	For Ø [mm]	Tubing O.D. [mm]	Part No.	Type
	32	4	197580	GRLA-1/8-QS-4-RS-D
		6	197581	GRLA-1/8-QS-6-RS-D
	40, 50	6	162967	GRLA-1/4-QS-6-RS-B
		8	162968	GRLA-1/4-QS-8-RS-B
	63	6	162969	GRLA-3/8-QS-6-RS-B
		8	162970	GRLA-3/8-QS-8-RS-B

Ordering Data – Proximity Sensors and Connecting Cables			
	Description	Part No.	Type
Proximity sensor for T-slot, magneto-resistive – N/O contact Technical data → 164			
	PNP, cable, 2.5 m	543867	SMT-8M-PS-24V-K-2,5-OE
	PNP, plug	543866	SMT-8M-PS-24V-K-0,3-M8D
	NPN, cable, 2.5 m	543870	SMT-8M-NS-24V-K-2,5-OE
	NPN, plug	543871	SMT-8M-NS-24V-K-0,3-M8D
Magnetic reed – N/O contact Technical data → 165			
	Cable, 2.5 m	543862	SME-8M-ZS-24V-K-2,5-OE
	Plug	543861	SME-8M-DS-24V-K-0,3-M8D
Connecting cable, straight socket			
	2.5 m	541333	NEBU-M8G3-K-2.5-LE3

Ordering Data – Push-in Fittings QB				
Technical Data → 246				
Function	For Ø [mm]	Tubing O.D. [mm]	Part No.	Type
	32	4	153001	QS-1/8-4
		6	153002	QS-1/8-6
	40, 50	6	153003	QS-1/4-6
		8	153005	QS-1/4-8
	63	6	190645	QS-3/8-6
		8	153006	QS-3/8-8

Lead Time LT for all products on this page: **1D** typically ships same day/next day