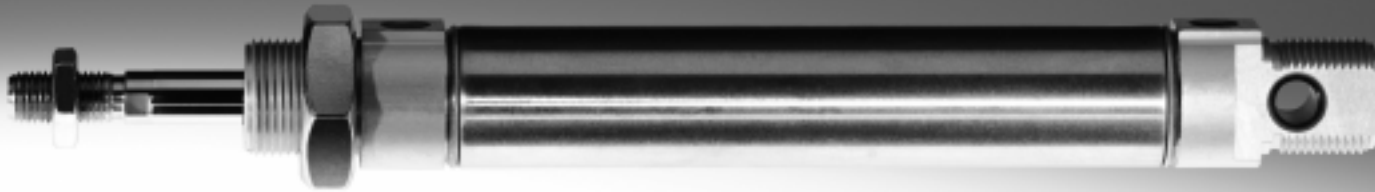


Round cylinders DSNU/ESNU

FESTO



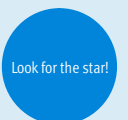
Festo core product range
Covers 80% of your automation tasks

Worldwide:
Superb:
Easy:

Always in stock
Festo quality at an attractive price
Reduces procurement and storing complexity

★ Ready for dispatch from the Festo factory in 24 hours
Held in stock in 13 service centres worldwide
More than 2200 products

★ Ready for dispatch in 5 days maximum from stock
Assembled for you in 4 service centres worldwide
Up to 6×10^{12} variants per product series



Round cylinders DSNU/ESNU

Key features



At a glance

DSNU-8 ... 63

- Stainless steel piston rod
- Good running performance and long service
- Piston rod with external and internal thread

- An extensive range of accessories makes it possible to install the cylinder virtually anywhere

DSNU-8 ... 25



ISO 6432

- Corresponds to standard design in accordance with ISO 6432. Variants are based on these standards

Wide choice of variants

DSNU/ESNU-...

- Piston \varnothing 8 ... 63
- Cylinder barrel made of stainless steel
- Bearing and end caps made of wrought aluminium alloy



DSNU/ESNU-...-MA

- Piston \varnothing 8 ... 63
- Cylinder barrel made of stainless steel
- Bearing cap with flange thread
- Short end cap with axial supply port



DSNU-...-MQ

- Piston \varnothing 8 ... 63
- Cylinder barrel made of stainless steel
- Bearing cap with flange thread
- Short end cap with lateral supply port



DSNU-...-MH

- Piston \varnothing 8 ... 63
- Cylinder barrel made of stainless steel
- Direct mounting on bearing cap
- Short end cap with lateral supply port



DSNU-...-KP

- Piston \varnothing 8 ... 63
- Cylinder barrel made of stainless steel
- With clamping unit



DSNU-...-Q

- Piston \varnothing 12 ... 63
- Cylinder barrel made of stainless steel
- With square piston rod






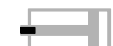




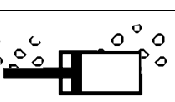
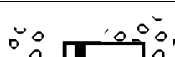


Cushioning types

	Cushioning P	Cushioning PPS	Cushioning PPV
Mode of operation	<ul style="list-style-type: none"> • The drive is fitted with flexible polymer end position cushioning 	<ul style="list-style-type: none"> • The drive is fitted with self-adjusting end position cushioning 	<ul style="list-style-type: none"> • The drive is fitted with adjustable end position cushioning
Application	<ul style="list-style-type: none"> • Small loads • Low speeds • Low impact energy 	<ul style="list-style-type: none"> • Small to medium loads • Low to medium speeds • Medium impact energy 	<ul style="list-style-type: none"> • Medium to large loads • High speeds • High impact energy
Advantages	<ul style="list-style-type: none"> • No adjustment required • Time-saving 	<ul style="list-style-type: none"> • No adjustment required • Time-saving • Powerful 	<ul style="list-style-type: none"> • Very powerful

Round cylinders DSNU/ESNU

Key features

Additional variants		
Symbol	Key features	Description
	S2 Through piston rod	For working at both ends with the same force in the advance and return stroke, for attaching external stops
	S6 Heat resistant seals	Temperature resistance up to max. 120 °C
	S10 Constant (slow speed) operation at low piston speeds	Suitable for slow stroke movements at a constant, stick-slip-free speed over the full stroke of the cylinder. Seal contains silicone grease (not free of paint-wetting impairment substances)
	S11 Low friction	The special seals considerably reduce system wear. This corresponds to a considerably lower response pressure. Seal contains silicone grease (not free of paint-wetting impairment substances)
	K2 Extended male piston rod thread	–
	K3 Female piston rod thread	–
	K5 Special thread on piston rod	Metric standard thread to ISO
	K6 Shortened male piston rod thread	–
	K8 Extended piston rod	–
	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
	R8 Dust protection (wiper seal) (32 ... 63 mm)	The cylinder is equipped with a hard-chrome plated piston rod and a rigid wiper seal, which protects against dry, dusty media
	A6 Metal wiper seal (32 ... 63 mm)	The cylinder is fitted with a hard-chrome plated piston rod and metal wiper seal which scrapes off hard particles (e.g. welding spatter) that stick to the piston rod. For use in welding systems, for example

Longer service life with bellows kit DADB



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 of the kit must be ducted via a pressure compensation hole in the connection section [1].

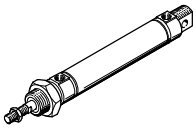
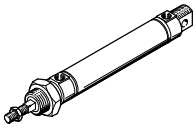
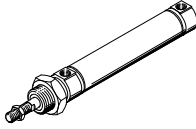
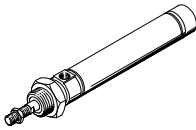
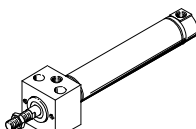
The kit protects the piston rod, seal and bearing against a wide variety of media, for example:

- dust
- chippings
- oil
- grease
- fuel

Round cylinders DSNU

Product range overview



Version	Version	Piston Ø [mm]	Stroke [mm]	Variable stroke ¹⁾ [mm]	Piston rod					
					Through S2	Extended K8	Male thread			Female thread K3
							Extended K2	Shortened K6	Special thread K5	
Double-acting	DSNU-... – Cylinder barrel made of stainless steel									
		8, 10	10, 15, 20, 25,	1 ... 100						
		12, 16	30, 35, 40, 50,	1 ... 200						
		20	60, 70, 80, 100,	1 ... 320						
		25	125, 150, 160,	1 ... 500	■	■	■	■	■	■
		32, 40, 50, 63	200, 250, 300, 320, 400, 500					above Ø 25	above Ø 20	
			25, 40, 50, 80, 100, 125, 160, 200, 250, 320	1 ... 500						
	DSNU-Q... – Protected against rotation									
		12, 16	–	5 ... 160						
		20	–	5 ... 200						
		25	–	5 ... 250	■	■	■	■	■	■
		32	–	5 ... 300						
		40, 50	–	5 ... 400					above Ø 25	above Ø 20
		63	–	5 ... 500						
	DSNU-MQ... – Lateral air connection									
		8, 10	–	1 ... 100						
		12, 16	–	1 ... 200						
		20	–	1 ... 320	–	■	■	■	■	■
		25	–	1 ... 500						
		32, 40, 50, 63	–	1 ... 500						
	DSNU-MA... – Axial air connection									
		8, 10	–	1 ... 100						
		12, 16	–	1 ... 200						
		20	–	1 ... 320						
		25	–	1 ... 500	–	■	■	■	■	■
32, 40, 50, 63		–	1 ... 500							
DSNU-MH... – Direct mounting										
	8, 10	–	1 ... 100							
	12, 16	–	1 ... 200							
	20	–	1 ... 320	■	■	■	■	■	■	
	25	–	1 ... 500							
	32, 40, 50, 63	–	1 ... 500							

1) Cylinders with position sensing require a minimum stroke of 10 mm to ensure reliable sensing

2) Variable stroke on request

Round cylinders DSNU

Product range overview

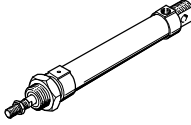
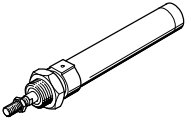
Piston rod	Cushioning			Position sensing	Clamping unit	Heat-resistant seal	Slow speed (constant motion operation)	Low friction	Corrosion protection	Dust protection (wiper seal)	Metal wiper seal	→ Page/ Internet
	Fixed	Adjustable	Self-adjusting									
	P	PPV ³⁾	PPS									
DSNU-... – Cylinder barrel made of stainless steel												
8 ... 63	■	■ above Ø 16	■ above Ø 16	■	■	■	■ above Ø 12	■ above Ø 12	■ above Ø 12	■ above Ø 32	■ above Ø 32	11
DSNU-Q... – Protected against rotation												
12 ... 63	■ Ø 12 and above Ø 32	■ above Ø 16	-	■	■	■ above Ø 32	-	-	■ above Ø 16	-	-	46
DSNU-MQ... – Lateral air connection												
8 ... 63	■	■ above Ø 16	■ above Ø 16	■	■	■	-	-	■	■ above Ø 32	■ above Ø 32	11
DSNU-MA... – Axial air connection												
8 ... 63	■ above Ø 32	-	-	■	■	■	-	-	■	-	■	11
DSNU-MH... – Direct mounting												
8 ... 63	■	■ above Ø 32	-	■	-	■	-	-	■	-	-	11

3) In the modular product system from Ø 12 mm

Round cylinders ESNU

Product range overview



Function	Version	Piston \varnothing	Stroke	Variable stroke ¹⁾	Cushioning Fixed	Position sensing
		[mm]	[mm]	[mm]	P	A
Single- acting	ESNU-... – with position sensing					
		8 ... 63	10, 25, 50	1 ... 50	■	■
	ESNU-MA-... – Axial air connection					
		8 ... 63	–	1 ... 50	■	■

1) Cylinders with position sensing require a minimum stroke of 10 mm to ensure reliable sensing

Round cylinders ESNU

Product range overview

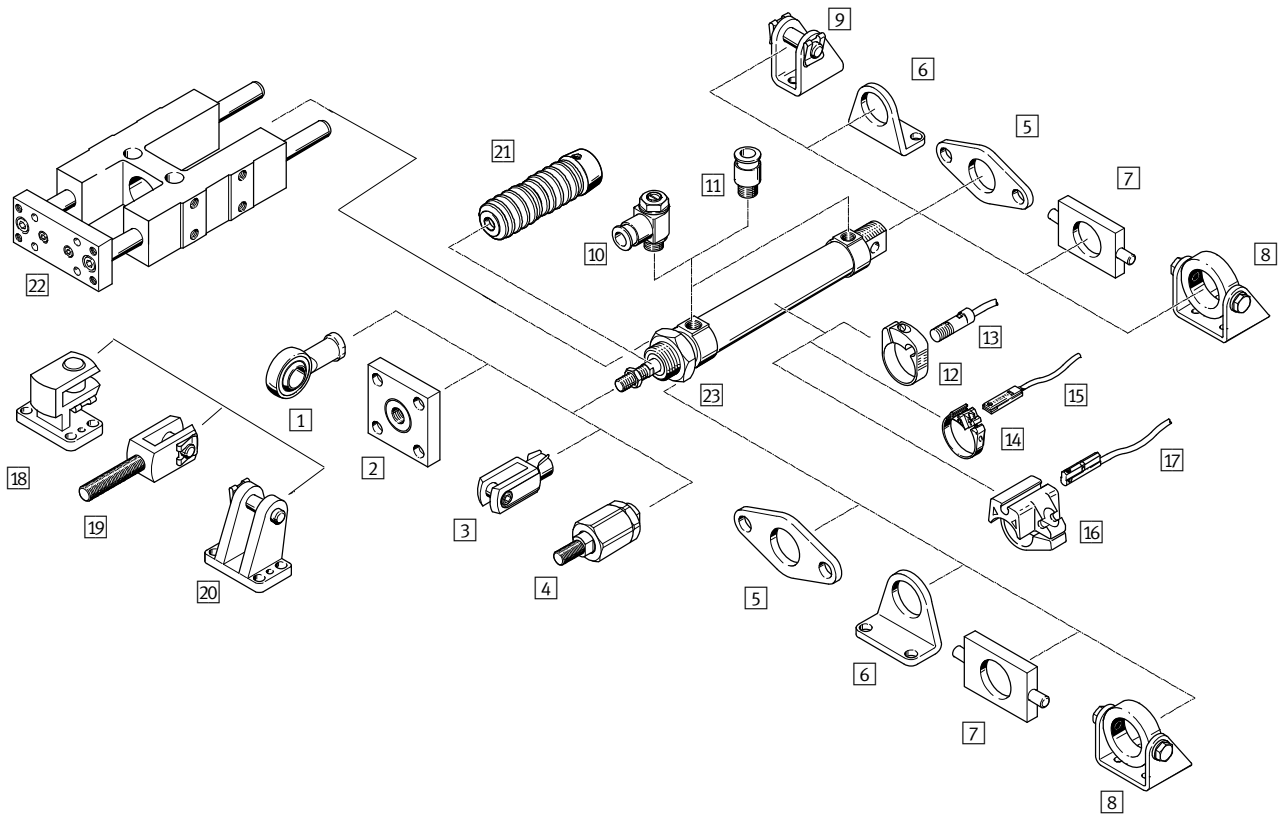
Piston Ø	Piston rod					→ Page/ Internet
	Extended K8	Male thread			Female thread K3	
		Extended K2	Shortened K6	Special thread K5		
ESNU-... – with position sensing						
8 ... 63	■	■	■	■	■	54
ESNU-MA-... – Axial air connection						
8 ... 63	■	■	■	■	■	54

2) In the modular product system from Ø 12 mm

Round cylinders DSNU/ESNU

Peripherals overview

FESTO

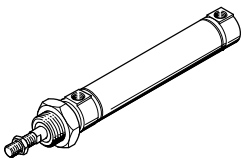


Variants

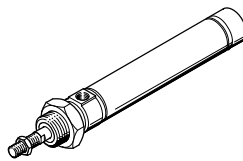
DSNU-MQ

DSNU-MA

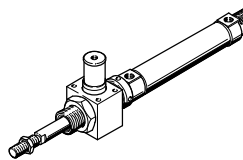
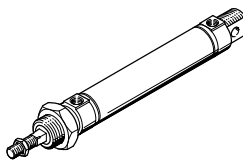
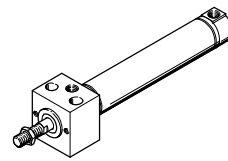
DSNU-MH



DSNU-Q



DSNU-KP

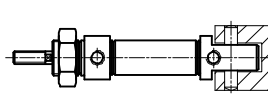
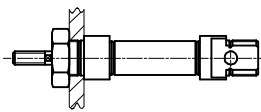
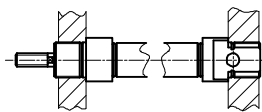


Mounting options

Mounting front and rear

Mounting with hex nut

Swivel mounting



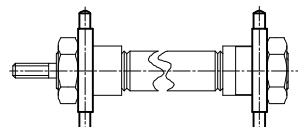
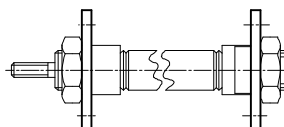
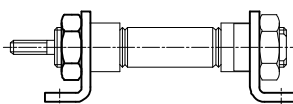
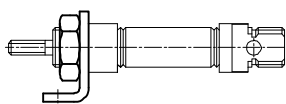
Installation variants with mounting attachments

Foot mounting (for short strokes)

Foot mounting

Flange mounting

Swivel mounting



Round cylinders DSNU/ESNU

Peripherals overview

Mounting attachments and accessories								
	Piston Ø	DSNU/ESNU	DSNU/ESNU				DSNU-Q	→ Page/ Internet
			MA	MQ	MH	KP		
1 Rod eye SGS/CRSGS	8 ... 63	■	■	■	■	■	■	72, 73
2 Coupling piece KSG/KSZ	12 ... 63	■	■	■	■	■	■	72
3 Rod clevis SG/CRSG	8 ... 63	■	■	■	■	■	■	72, 73
4 Self-aligning rod coupler FK/CRFK	8 ... 63	■	■	■	■	■	■	72, 73
5 Flange mounting FBN/CRFBN/CRFV	8 ... 63	■	■	■	-	■	■	68, 69
6 Foot mounting HBN/CRHBN/CRH	8 ... 63	■	■	■	-	■	■	66, 67
7 Swivel mounting ¹⁾ WBN	8 ... 63	■	■	■	-	■	■	70
8 Swivel mounting ¹⁾ SBN	20 ... 63	■	■	■	-	■	■	70
9 Clevis foot LBN/CRLBN	8 ... 63	■	-	-	-	■	■	71
10 One-way flow control valve GRLA/GRLZ/CRGRLA	8 ... 63	■	■	■	■	■	■	83
11 Push-in fitting QS	8 ... 63	■	■	■	■	■	■	qs
12 Mounting kit SMBR/CRSMBR	8 ... 63	■	■	■	■	■	■	80
13 Proximity sensor SMEO/SMT0/CRSMEO-4	8 ... 63	■	■	■	■	■	■	80
14 Mounting kit SMBR-8	12 ... 63	■	■	■	■	■	■	81
15 Proximity sensor SME/SMT-8	8 ... 63	■	■	■	■	■	■	81
16 Mounting kit SMBR-10	12 ... 63	■	■	■	■	■	■	82
17 Proximity sensor SME/SMT-10	8 ... 63	■	■	■	■	■	■	82
18 Right-angle clevis foot LQG	32 ... 63	■	■	■	■	■	■	73
19 Rod clevis SGA	32 ... 63	■	■	■	■	■	■	72
20 Clevis foot LBG	32 ... 63	■	■	■	■	■	■	73
21 Bellows kit ²⁾ DADB	12 ... 63	■	■	■	-	-	-	74
22 Guide unit FEN	8 ... 25	■	■	■	-	-	-	73
23 Hex nut MSK	16 ... 25	■	■	■	■	■	■	72

-  - Note

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

2) The bellows kit protects the cylinder (piston rod, seal and bearings) against a wide range of media and thus prevents premature wear.

It can only be used in combination with an extended piston rod (K8).

Round cylinders DSNU/ESNU

Type codes

FESTO

DSNU – 25 – 80 – PPV – A – MQ

Type	
Double-acting	
DSNU	Round cylinder
Single-acting	
ESNU	Round cylinder
Piston Ø [mm]	
Stroke [mm]	
Cushioning	
P	Flexible cushioning rings/pads at both ends
PPV	Pneumatic cushioning, adjustable at both ends
PPS	Pneumatic cushioning, self-adjusting at both ends
Position sensing	
A	Via proximity sensor
Variant	
MQ	Lateral air connection
MA	Axial air connection
MH	With mounting flange on bearing cap

Modular product system

Individually configurable

DSNU → page 28

ESNU → page 62

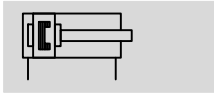
- Q – Square piston rod (protection against rotation)
- S2 – Through piston rod (piston rod type)
- K2 – Extended male piston rod thread
- K6 – Male piston rod thread, shortened at one end
- K3 – Female piston rod thread (female thread)
- K5 – Special piston rod thread (special thread)
- K8 – Extended piston rod at front
- KP – Clamping unit on the piston rod
- S6 – Heat-resistant seals for temperatures up to 120 °C (temperature resistance)
- S10 – Slow speed (constant motion at low piston rod speeds)
- S11 – Low friction
- EX4 – ATEX certification II 2GD
- R3 – All external cylinder surfaces conform to corrosion resistance class CRC 3 (corrosion protection)
- R8 – Dust protection (wiper seal) 32 ... 63 mm
- A6 – Metal wiper seal 32 ... 63 mm

Round cylinders DSNU

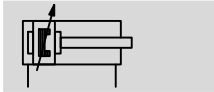
Technical data

Function

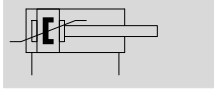
P cushioning



PPV cushioning



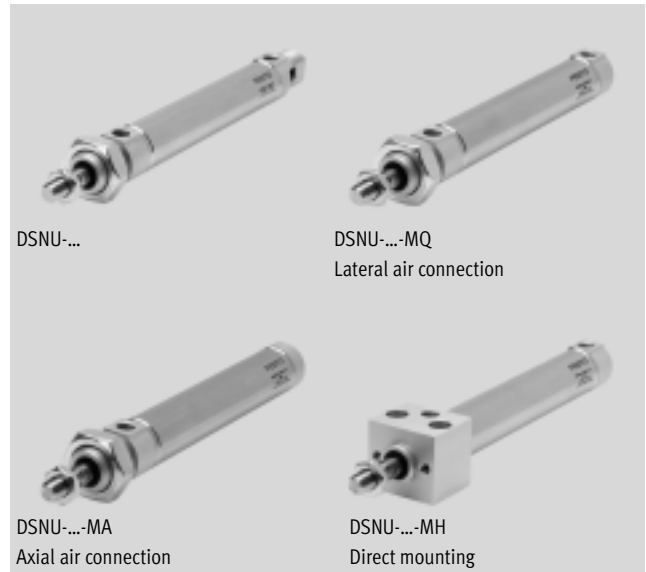
PPS cushioning



∅ - Diameter
8 ... 25 mm
ISO 6432

∅ - Diameter
32 ... 63 mm

— - Stroke length
1 ... 500 mm



General technical data											
Piston ∅	8	10	12	16	20	25	32	40	50	63	
Conforms	ISO 6432						-				
Pneumatic connection	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8	
Piston rod thread	M4	M4	M6	M6	M8	M10x1.25	M10x1.25	M12x1.25	M16x1.5	M16x1.5	
Stroke ¹⁾ [mm]	1 ... 100		1 ... 200		1 ... 320		1 ... 500				
Constructional design	Piston / Piston rod / Cylinder barrel										
Cushioning											
DSNU-...-P	Flexible cushioning rings/pads at both ends										
DSNU-...-PPV	-		Adjustable cushioning at both ends								
DSNU-...-PPS	-		Self-adjusting cushioning at both ends								
Cushioning length											
DSNU-...-PPV [mm]	-		9	12	15	17	14	18	20	21	
DSNU-...-PPS [mm]	-			12	15	17	14	18	20	21	
Position sensing	Via proximity sensor										
Type of mounting	Direct mounting (MH variant only)										
	Via accessories										
Mounting position	Any										

1) Cylinders with position sensing require a minimum stroke of 10 mm to ensure reliable sensing
Longer strokes on request.

• † - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders DSNU

Technical data

FESTO

Operating and environmental conditions											
Piston \varnothing	8	10	12	16	20	25	32	40	50	63	
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											
DSNU-...-	[bar]	1.5 ... 10 ¹⁾			1 ... 10						
DSNU-...-S10	[bar]	-			1.5 ... 10		1 ... 10		0.5 ... 10		0.4 ... 10
DSNU-...-S11	[bar]	-			0.45 ... 10		0.3 ... 10		0.2 ... 10		
DSNU-...-A6	[bar]	-			2 ... 10						
Ambient temperature ²⁾											
DSNU-...	[°C]	-20 ... +80									
DSNU-...-S6	[°C]	0 ... +120									
DSNU-...-S10	[°C]	+5 ... +80									
DSNU-...-S11	[°C]	+5 ... +80									
DSNU-...-R3	[°C]	-20 ... +80									
DSNU-...-S6-A6	[°C]	-			0 ... +120						
Corrosion resistance class CRC ³⁾											
DSNU-...	[°C]	2									
DSNU-...-R3	[°C]	3									
Maritime classification ⁴⁾											
DSNU-...-P	See certificate						-				
DSNU-...-PPV	See certificate						-				

1) With DSNU-12-...-PPV (pneumatic cushioning adjustable at both ends): 2 ... 10 bar

2) Note operating range of proximity sensors.

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Corrosion resistance class CRC 3 to Festo standard FN 940070

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

4) Additional information www.festo.com/sp → Certificates.

ATEX ¹⁾	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c T4
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c 120°C
Explosion-proof temperature rating	-20°C ≤ Ta ≤ +60°C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

1) Make sure that the accessories are suited for ATEX application.

Round cylinders DSNU

Technical data

Speed [mm/s]		16	20	25	32	40	50	63
Piston \varnothing		16	20	25	32	40	50	63
Speed with stick-slip-free operation, horizontal, without load, at 6 bar	S10	10 ... 100			8 ... 100			5 ... 100
Minimum speed, advancing	S11	2.7	5.3	<1 ¹⁾				
Minimum speed, retracting	S11	3.2	4.7	<1 ¹⁾				

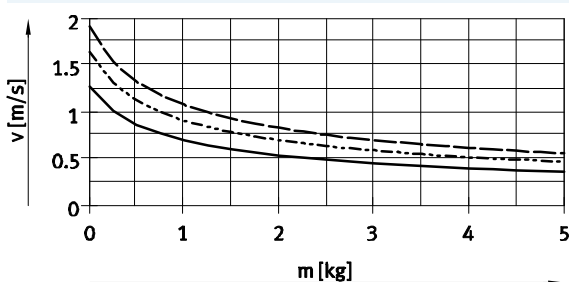
1) Measurements of less than 1 mm/s were not conducted

Force [N] and impact energy [J]		8	10	12	16	20	25	32	40	50	63
Piston \varnothing		8	10	12	16	20	25	32	40	50	63
Theoretical force at 6 bar, advancing		30	47	68	121	189	295	483	753	1178	1870
Theoretical force at 6 bar, retracting		23	40	51	104	158	247	415	633	990	1682
Max. impact energy at the end positions for flexible cushioning elements ¹⁾		0.03	0.05	0.07	0.15	0.20	0.30	0.40	0.70	1.00	1.30

1) The values are reduced by approx. 50% at an ambient temperature of 80 °C

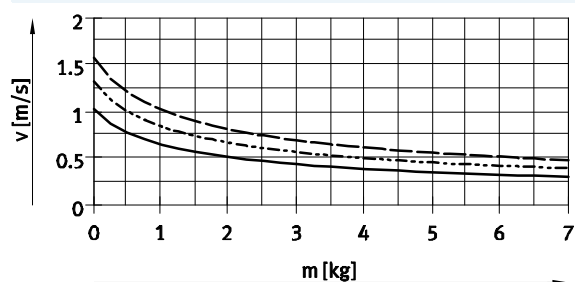
Average piston speed v as a function of payload m in combination with PPS cushionings

Piston \varnothing 16



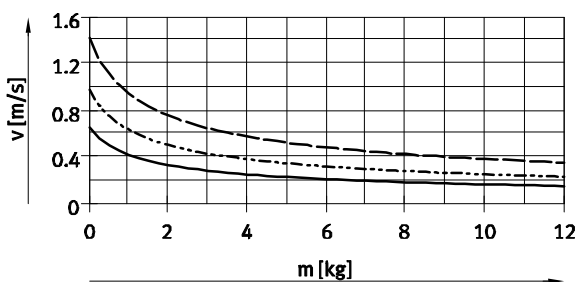
— DSNU-16-50
 - - - DSNU-16-100
 - · - DSNU-16-200

Piston \varnothing 20



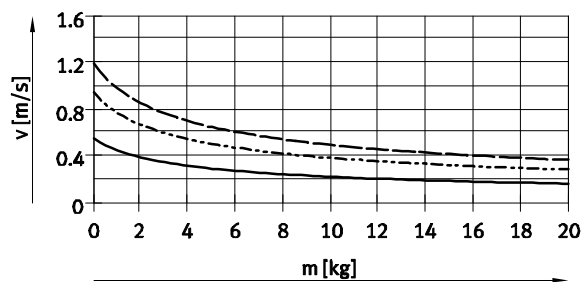
— DSNU-20-50
 - - - DSNU-20-100
 - · - DSNU-20-200

Piston \varnothing 25



— DSNU-25-50
 - - - DSNU-25-100
 - · - DSNU-25-200

Piston \varnothing 32



— DSNU-32-50
 - - - DSNU-32-100
 - · - DSNU-32-200

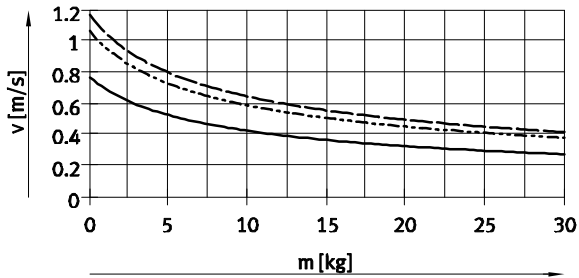
Round cylinders DSNU

Technical data

FESTO

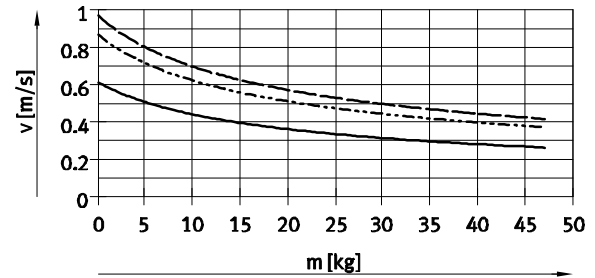
Average piston speed v as a function of payload m in combination with PPS cushionings

Piston \varnothing 40



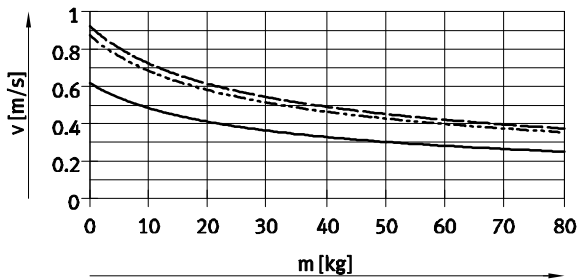
— DSNU-40-50
 - - - DSNU-40-100
 - · - DSNU-40-200

Piston \varnothing 50



— DSNU-50-50
 - - - DSNU-50-100
 - · - DSNU-50-200

Piston \varnothing 63



— DSNU-63-50
 - - - DSNU-63-100
 - · - DSNU-63-200

- · - Note
 Design software
 for flexible cushioning elements
 for PPV cushioning
 → ProDrive

Additional graphs
 for PPS cushioning
 → www.festo.com

- · - Note
 Average piston speed
 = stroke/movement time

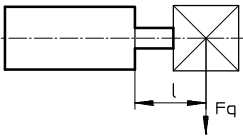
Round cylinders DSNU

Technical data

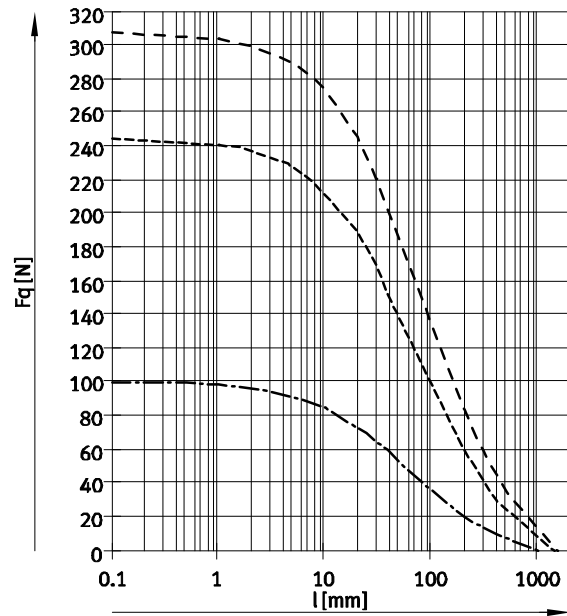
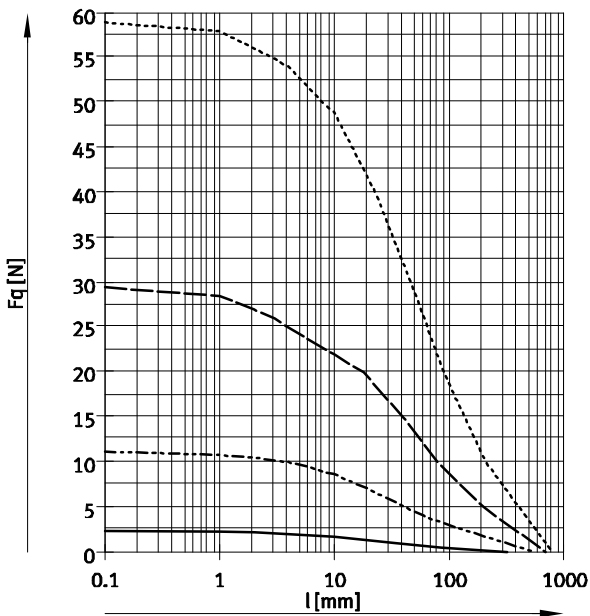
FESTO

Weight [g]										
Piston \varnothing	8	10	12	16	20	25	32	40	50	63
Product weight with 0 mm stroke	34.6	37.3	75	89.9	186.8	238	370.5	661	1087	1445
Additional weight per 10 mm stroke	2.4	2.7	4	4.6	7.2	11	15.5	24	40	44
Moving load with 0 mm stroke	7.5	8.5	18.5	23	44	71	121	230	413	459
Moving load per 10 mm stroke	1	1	2	2	4	6	9	16	25	25

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



DSNU-...



- \varnothing 8/10
- - - \varnothing 12/16
- \varnothing 20
- - - \varnothing 25

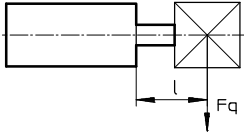
- - - \varnothing 32
- - - \varnothing 40
- - - \varnothing 50/63

Round cylinders DSNU

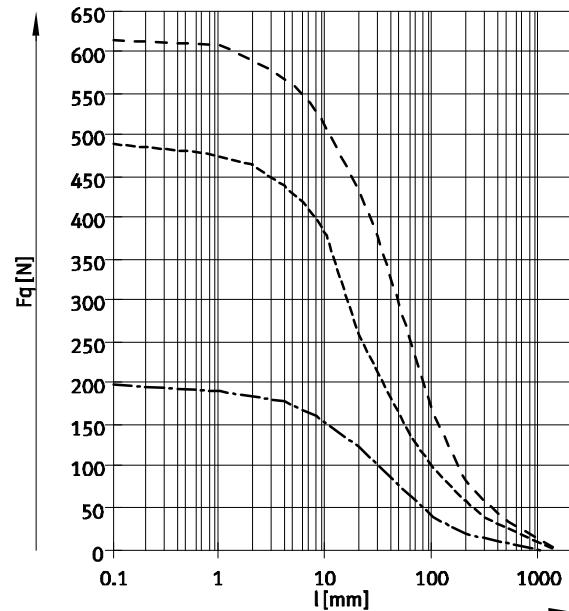
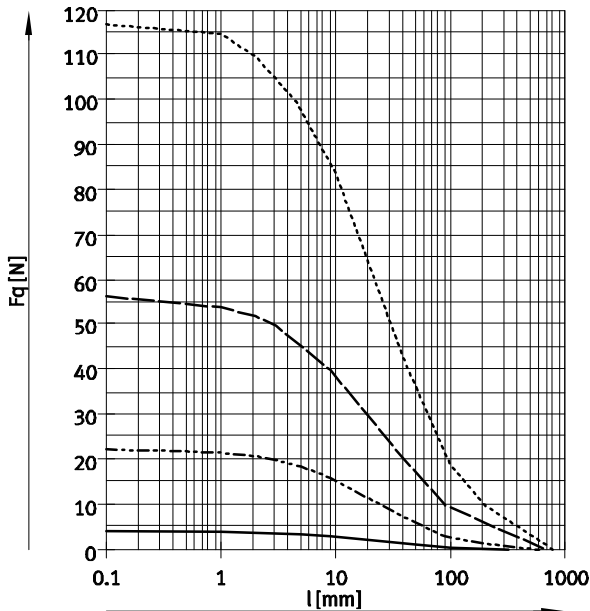
Technical data

FESTO

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



DSNU-...-S2 – Through piston rod

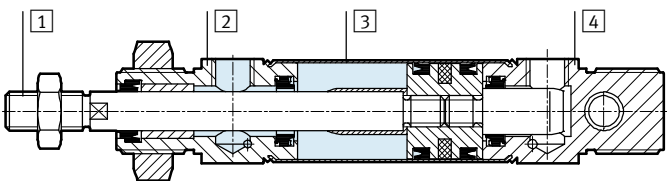


— Ø 8/10 - - - - - Ø 20
 - - - - - Ø 12/16 - · - · - · Ø 25

- - - - - Ø 32
 - - - - - Ø 40
 - · - · - · Ø 50/63

Materials

Sectional view



Round cylinder	8 ... 25	32 ... 63
1 Piston rod		
DSNU-...	High-alloy steel	
DSNU-...-R3	High-alloy stainless steel	
DSNU-...-A6		Hard-chromium plated tempered steel
2 Bearing cap	Anodised aluminium	
3 Cylinder barrel	High-alloy stainless steel	
4 End cap	Anodised aluminium	
- Seals		
DSNU-...	TPE-U(PU), NBR	
DSNU-...-S6	FPM	
DSNU-...-S10	FPM	FPM, TPE-U(PU)
DSNU-...-S11	FPM	FPM, TPE-U(PU)
DSNU-...-R3	TPE-U(PU), NBR	
Piston rod wiper seal		
DSNU-...-A6		CuZn
Note on materials		
DSNU-...-	RoHS compliant	
DSNU-...-S10/11	Contains PWIS (paint-wetting impairment substances)	

Round cylinders DSNU

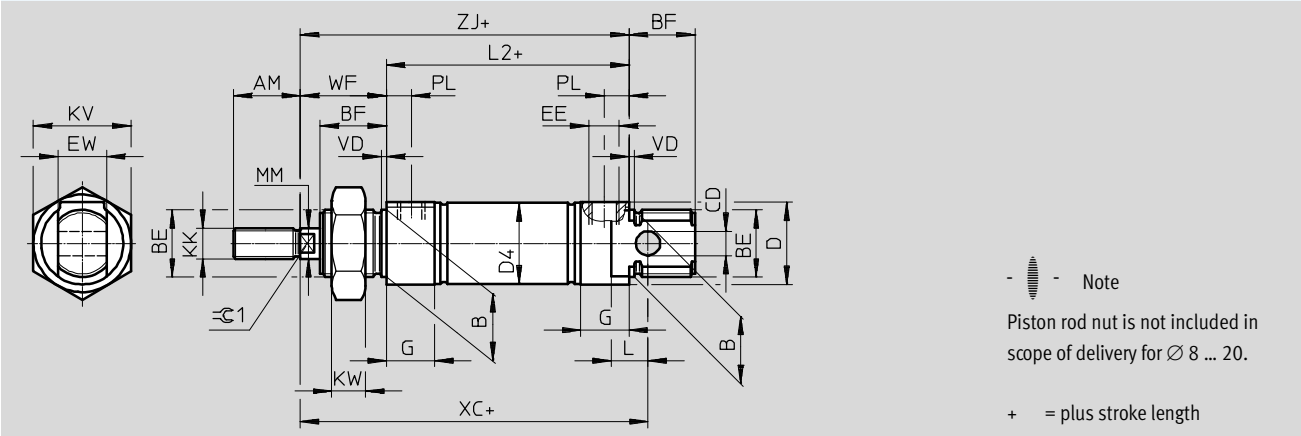
Technical data

FESTO

Dimensions

Download CAD data → www.festo.com

DSNU-8 ... 25



\varnothing [mm]	AM	B \varnothing h9	BE	BF	CD \varnothing H9	D \varnothing	D4 \varnothing	EE	EW	G	KK	KV
8	12	12	M12x1.25	12	4	15	9.3	M5	8	10	M4	19
10							11.3					
12	16	16	M16x1.5	17	6	20	13.3		12	16	M6	24
16							17.3					
20	20	22	M22x1.5	20	8	27	21.3	G1/8	16	16	M8	32
25	22			22			M10x1.25					

\varnothing [mm]	KW	L	L2	MM \varnothing	PL	VD	WF	XC ± 1	ZJ	≈ 1
8	6	6	46	4	6	2	16	64	62	-
10							22			
12	8	9	50	6	75		72			
16			56		82			78		
20	11	12	68	8	8.2	24	95	92	7	
25			69.5			10				28

-||- Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders DSNU

Technical data

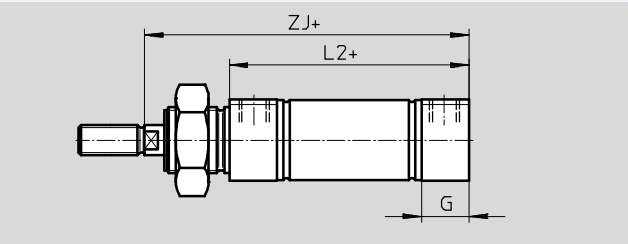
FESTO

Dimensions

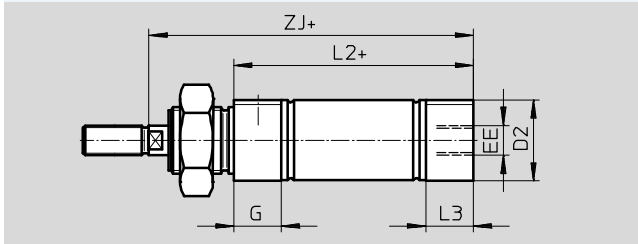
Download CAD data → www.festo.com

DSNU-8 ... 25

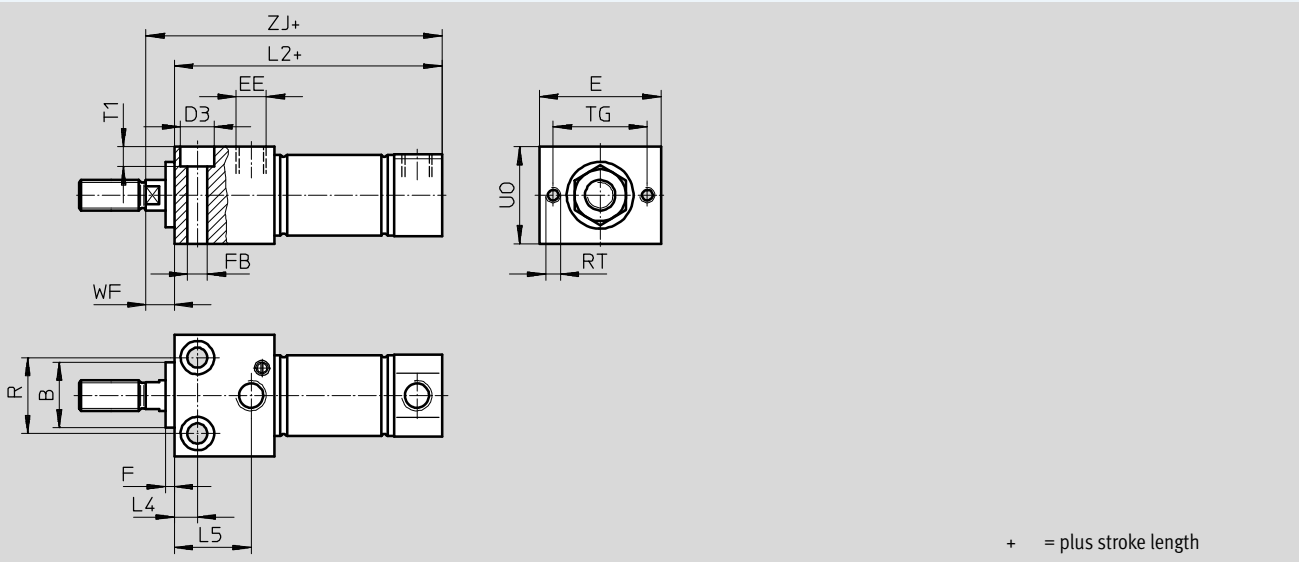
MQ – Lateral air connection



MA – Axial air connection



MH – With direct mounting



Ø [mm]	B Ø h9	D2 Ø	D3 Ø	E	EE	F	FB Ø	G	L2			
									DSNU-... -MQ	-MA	-MH	
8	12	10.5	6	24	M5	3	3.4	10	46	43.6	53.5	
10		12.5								43.1	53.8	
12	16	14.5	8	30			4.5		16	50	47.7	62
16		17.5								56	53.7	67.5
20	22	21.7	10	40	G1/8	5.5	16	68	66.5	81.5		
25		26.7							11	6.6	69.5	68.5

Ø [mm]	L3	L4	L5	R	RT	TG	T1	UO	WF	ZJ		
										DSNU-... -MQ	-MA	-MH
8	7.6	5	14	12	M3	18	3.4	16	8	62	59.6	61.5
10	7.1										59.1	61.8
12	7.7	6	18.1	16	M4	23	4.5	22	10	72	69.7	72
16											78	75.7
20	14.5	7.5	22.4	22	M5	31	5.5	28	10	92	90.5	91.5
25	14										25.2	25

– Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders DSNU

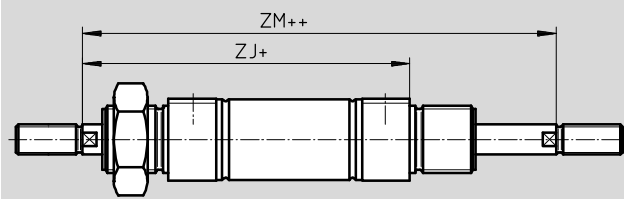
Technical data

Dimensions

Download CAD data → www.festo.com

DSNU-8 ... 25

S2 – Through piston rod



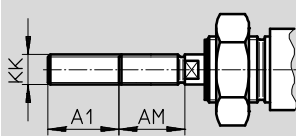
- - Note

The thread types at both piston rod ends are identical. In combination with variant Q, the left-hand piston rod end is square, the right-hand piston rod end round.

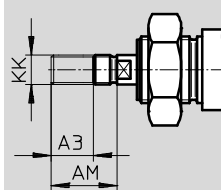
+ = plus stroke length

++ = plus 2x stroke length

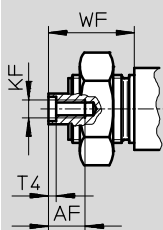
K2 – Extended male piston rod thread



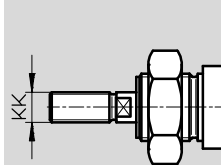
K6 – Shortened male piston rod thread



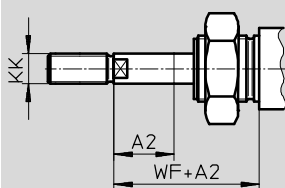
K3 – Female piston rod thread



K5 – Special thread on piston rod



K8 – Extended piston rod



- - Note

If variant K8 is required in combination with S2, the piston rod will only be extended on one side.

∅ [mm]	A1 max.	A2 max.	A3 max.	AM	AF	KF	KK		T4	WF	ZJ			ZM
							Basic thread	Special thread ¹⁾			DSNU-...			
											-MQ	-MA	-MH	
8	15	50	4	12	-	-	M4	-	-	16	62	59.6	61.5	78.4
10					-	-		-				59.1	61.8	
12	20	100		16	-	-	M6	-	-	22	72	69.7	72	94
16					-	-		-				78	75.7	77.8
20	25	110	8	20	12	M4	M8	-	2	24	92	90.5	91.5	116
25	35	150		22		M6	M10x1.25	M10	2.6	28	97.5	96.5	97.2	125.5

1) The special threads are only available as male threads. The scope of delivery does not include a hex nut for the piston rod thread.

Round cylinders DSNU

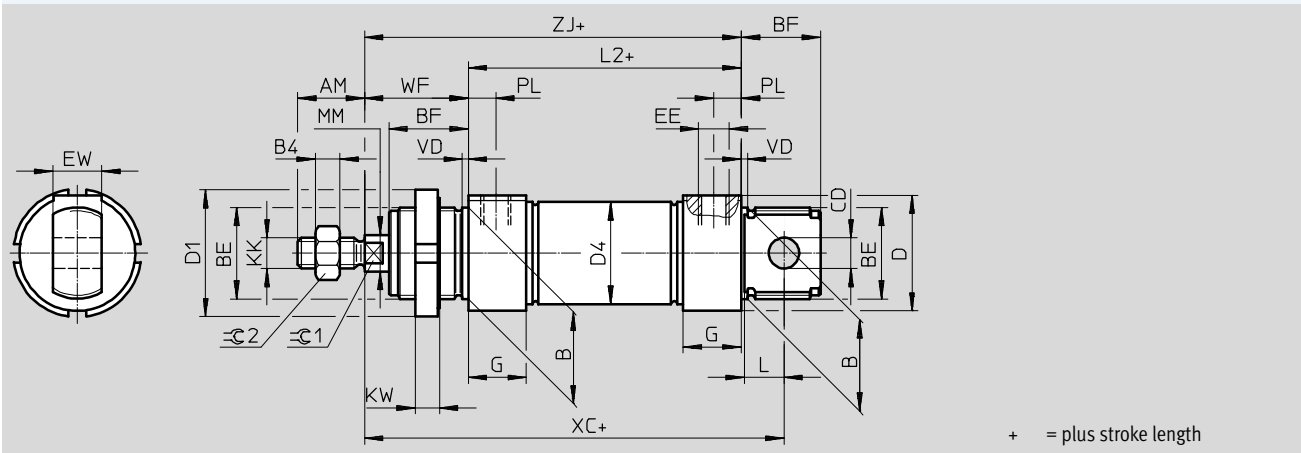
Technical data

FESTO

Dimensions

DSNU-32 ... 63

Download CAD data → www.festo.com



∅	AM	B	B4	BE	BF	CD	D	D1	D4	EE	EW	G
[mm]		∅ h9				∅ E10	∅	∅	∅			
32	22	30	5	M30x1.5	26	10	38	42	33.6	G1/8	16	19
40	24	38	6	M38x1.5	30	12	46	50	41.6	G1/4	18	25
50	32	45	8	M45x1.5	33	16	57	60	52.4		21	
63							70		65.4	G3/8		

∅	KK	KW	L	L2	MM	PL	VD	WF	XC	ZJ	∅C1	∅C2
[mm]					∅				±1			
32	M10x1.25	8	13	69.5	12	9	2	34	117.5	103.5	10	16
40	M12x1.25	10	15	84.6	16	12	3	39	139.6	123.6	13	18
50	M16x1.5		16	86.2	20			44	147.2	130.2		
63				94.2		13		45	156.2	139.2	17	24

Round cylinders DSNU

Technical data

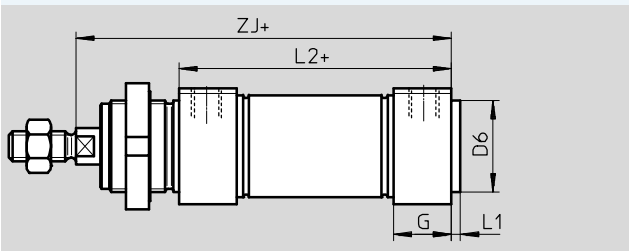


Dimensions

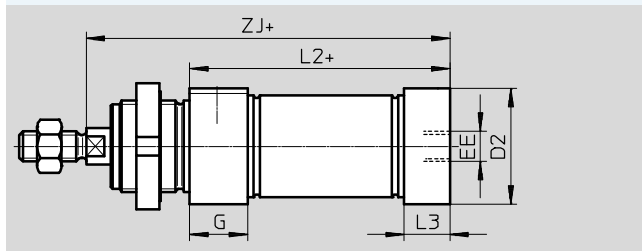
Download CAD data → www.festo.com

DSNU-32 ... 63

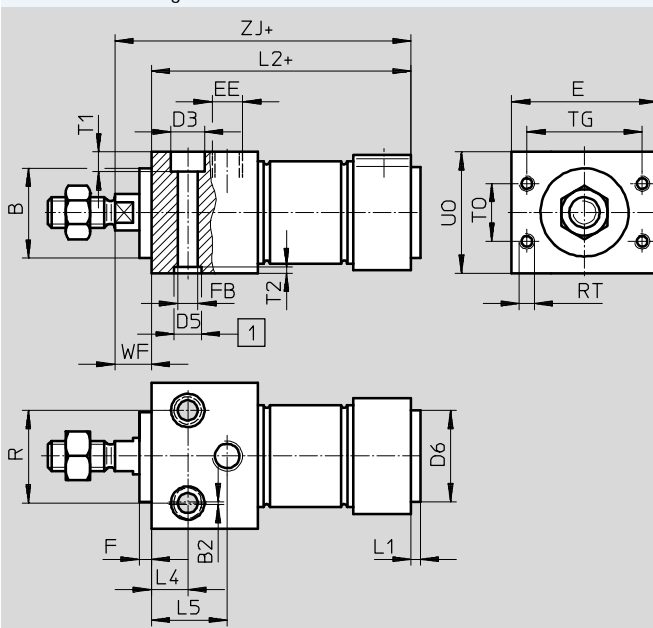
MQ – Lateral air connection



MA – Axial air connection



MH – Direct mounting



- 1 Centring holes
(2 centring sleeves included in scope of delivery)
- + = plus stroke length

Ø [mm]	B Ø h9	B2	E	EE	G	F	FB Ø	D2 Ø	D3	D5 Ø	D6 Ø	L1	L2		
													DSNU-... -MQ	-MA	-MH
32	30	1	48	G1/8	19	4	6.6	34	11	9	30	3	69.5	65.5	85.5
40	38		54	G1/4	25		9	42	14	12	38	4	84.6	77.6	104.6
50	45	2	64	G3/8	28	4	11	53	18	15	45	4	86.2	86.2	109.2
63			72					66					18	15	45

Ø [mm]	L3	L4	L5	R	RT	T0	T1	T2	TG	U0	WF	ZJ		
												DSNU-... -MQ	-MA	-MH
32	15	12	25	30	M5	19	6.6	2.1	38	40	12	103.5	99.5	97.5
40	18	15	32	38		24	9	2.6	42	48		12	123.6	116.5
50	25		35	42	M6	32	32	9	2.6	50	58	15	130.2	130.2
63	28	36	44	M8	36	36	11	3.1	52	72	15		139.2	139.2

Round cylinders DSNU

Technical data

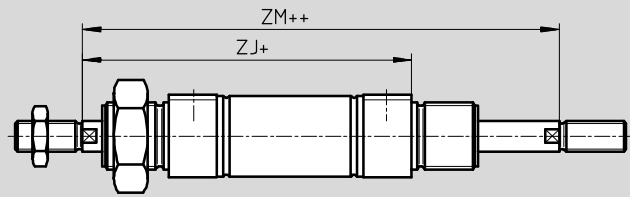


Dimensions

Download CAD data → www.festo.com

DSNU-32 ... 63

S2 – Through piston rod



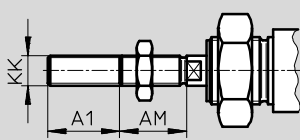
Note

The thread types at both piston rod ends are identical. In combination with variant Q, the left-hand piston rod end is square, the right-hand piston rod end round.

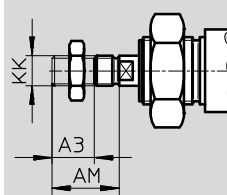
+ = plus stroke length

++ = plus 2x stroke length

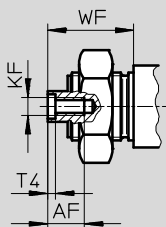
K2 – Extended male piston rod thread



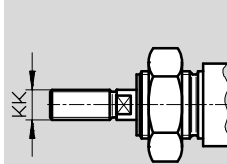
K6 – Shortened male piston rod thread



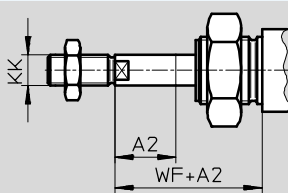
K3 – Female piston rod thread



K5 – Special piston rod thread



K8 – Extended piston rod



Note

If variant K8 is required in combination with S2, the piston rod will only be extended on one side.

∅ [mm]	A1 max.	A2 max.	A3 max.	AF	AM	KF	KK		T4	WF	ZJ			ZM
							Basic thread	Special thread ¹⁾			DSNU-...			
											-MQ	-MA	-MH	
32	35	500	8	12	22	M6	M10x1.25	M10	2.6	34	103.5	99.5	97.5	137.5
40					24	M8	M12x1.25	M12	3.3	39	123.6	111.6	116.6	162.6
50	70		10	16	32	M10	M16x1.5	M16	4.7	44	130.2	130.2	124.2	174.2
63										45	139.2	139.2	132.2	184.2

1) The special threads are only available as male threads. The scope of delivery does not include a hex nut for the piston rod thread

Round cylinders DSNU

Technical data

FESTO

★ Core product range

Ordering data							
Piston Ø [mm]	Stroke [mm]	P – Flexible cushioning rings/pads at both ends		PPV – Pneumatic cushioning, adjustable at both ends		PPS – Pneumatic cushioning, self-adjusting at both ends	
		A – With position sensing		A – With position sensing		A – With position sensing	
		Part No.	Type	Part No.	Type	Part No.	Type
12	10	★ 19189	DSNU-12-10-P-A	-			
	15	★ 1908255	DSNU-12-15-P-A				
	20	★ 1908256	DSNU-12-20-P-A				
	25	★ 19190	DSNU-12-25-P-A				
	30	★ 1908257	DSNU-12-30-P-A				
	40	★ 19191	DSNU-12-40-P-A				
	50	★ 19192	DSNU-12-50-P-A				
	60	★ 1908258	DSNU-12-60-P-A				
	80	★ 19193	DSNU-12-80-P-A				
	100	★ 19194	DSNU-12-100-P-A				
	125	★ 19195	DSNU-12-125-P-A				
	160	★ 19196	DSNU-12-160-P-A				
	200	★ 19197	DSNU-12-200-P-A				
16	10	★ 19198	DSNU-16-10-P-A	★ 1908266	DSNU-16-10-PPV-A	★ 1908274	DSNU-16-10-PPS-A
	15	★ 1908259	DSNU-16-15-P-A	★ 1908267	DSNU-16-15-PPV-A	★ 1908275	DSNU-16-15-PPS-A
	20	★ 1908260	DSNU-16-20-P-A	★ 1908268	DSNU-16-20-PPV-A	★ 1908276	DSNU-16-20-PPS-A
	25	★ 19199	DSNU-16-25-P-A	★ 33973	DSNU-16-25-PPV-A	★ 559263	DSNU-16-25-PPS-A
	30	★ 1908261	DSNU-16-30-P-A	★ 1908269	DSNU-16-30-PPV-A	★ 1908277	DSNU-16-30-PPS-A
	35	★ 1908262	DSNU-16-35-P-A	★ 1908270	DSNU-16-35-PPV-A	★ 1908278	DSNU-16-35-PPS-A
	40	★ 19200	DSNU-16-40-P-A	★ 19229	DSNU-16-40-PPV-A	★ 559264	DSNU-16-40-PPS-A
	50	★ 19201	DSNU-16-50-P-A	★ 19230	DSNU-16-50-PPV-A	★ 559265	DSNU-16-50-PPS-A
	60	★ 1908263	DSNU-16-60-P-A	★ 1908271	DSNU-16-60-PPV-A	★ 1908279	DSNU-16-60-PPS-A
	70	★ 1908264	DSNU-16-70-P-A	★ 1908272	DSNU-16-70-PPV-A	★ 1908280	DSNU-16-70-PPS-A
	80	★ 19202	DSNU-16-80-P-A	★ 19231	DSNU-16-80-PPV-A	★ 559266	DSNU-16-80-PPS-A
	100	★ 19203	DSNU-16-100-P-A	★ 19232	DSNU-16-100-PPV-A	★ 559267	DSNU-16-100-PPS-A
	125	★ 19204	DSNU-16-125-P-A	★ 19233	DSNU-16-125-PPV-A	★ 559268	DSNU-16-125-PPS-A
	150	★ 1908265	DSNU-16-150-P-A	★ 1908273	DSNU-16-150-PPV-A	★ 1908281	DSNU-16-150-PPS-A
	160	★ 19205	DSNU-16-160-P-A	★ 19234	DSNU-16-160-PPV-A	★ 559269	DSNU-16-160-PPS-A
	200	★ 19206	DSNU-16-200-P-A	★ 19235	DSNU-16-200-PPV-A	★ 559270	DSNU-16-200-PPS-A

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU

Technical data

FESTO

★ Core product range

Ordering data							
Piston Ø [mm]	Stroke [mm]	P – Flexible cushioning rings/pads at both ends		PPV – Pneumatic cushioning, adjustable at both ends		PPS – Pneumatic cushioning, self-adjusting at both ends	
		A – With position sensing		A – With position sensing		A – With position sensing	
		Part No.	Type	Part No.	Type	Part No.	Type
20	10	★ 19207	DSNU-20-10-P-A	★ 1908289	DSNU-20-10-PPV-A	★ 1908297	DSNU-20-10-PPS-A
	15	★ 1908282	DSNU-20-15-P-A	★ 1908290	DSNU-20-15-PPV-A	★ 1908298	DSNU-20-15-PPS-A
	20	★ 1908283	DSNU-20-20-P-A	★ 1908291	DSNU-20-20-PPV-A	★ 1908299	DSNU-20-20-PPS-A
	25	★ 19208	DSNU-20-25-P-A	★ 33974	DSNU-20-25-PPV-A	★ 559271	DSNU-20-25-PPS-A
	30	★ 1908284	DSNU-20-30-P-A	★ 1908292	DSNU-20-30-PPV-A	★ 1908300	DSNU-20-30-PPS-A
	35	★ 1908285	DSNU-20-35-P-A	★ 1908293	DSNU-20-35-PPV-A	★ 1908301	DSNU-20-35-PPS-A
	40	★ 19209	DSNU-20-40-P-A	★ 19236	DSNU-20-40-PPV-A	★ 559272	DSNU-20-40-PPS-A
	50	★ 19210	DSNU-20-50-P-A	★ 19237	DSNU-20-50-PPV-A	★ 559273	DSNU-20-50-PPS-A
	60	★ 1908286	DSNU-20-60-P-A	★ 1908294	DSNU-20-60-PPV-A	★ 1908302	DSNU-20-60-PPS-A
	70	★ 1908287	DSNU-20-70-P-A	★ 1908295	DSNU-20-70-PPV-A	★ 1908303	DSNU-20-70-PPS-A
	80	★ 19211	DSNU-20-80-P-A	★ 19238	DSNU-20-80-PPV-A	★ 559274	DSNU-20-80-PPS-A
	100	★ 19212	DSNU-20-100-P-A	★ 19239	DSNU-20-100-PPV-A	★ 559275	DSNU-20-100-PPS-A
	125	★ 19213	DSNU-20-125-P-A	★ 19240	DSNU-20-125-PPV-A	★ 559276	DSNU-20-125-PPS-A
	150	★ 1908288	DSNU-20-150-P-A	★ 1908296	DSNU-20-150-PPV-A	★ 1908304	DSNU-20-150-PPS-A
	160	★ 19214	DSNU-20-160-P-A	★ 19241	DSNU-20-160-PPV-A	★ 559277	DSNU-20-160-PPS-A
	200	★ 19215	DSNU-20-200-P-A	★ 19242	DSNU-20-200-PPV-A	★ 559278	DSNU-20-200-PPS-A
	250	★ 19216	DSNU-20-250-P-A	★ 19243	DSNU-20-250-PPV-A	★ 559279	DSNU-20-250-PPS-A
	300	★ 19217	DSNU-20-300-P-A	★ 19244	DSNU-20-300-PPV-A	★ 559280	DSNU-20-300-PPS-A
320	★ 34718	DSNU-20-320-P-A	★ 34720	DSNU-20-320-PPV-A	★ 559281	DSNU-20-320-PPS-A	
25	10	★ 19218	DSNU-25-10-P-A	★ 1908312	DSNU-25-10-PPV-A	★ 1908320	DSNU-25-10-PPS-A
	15	★ 1908305	DSNU-25-15-P-A	1908313	DSNU-25-15-PPV-A	★ 1908321	DSNU-25-15-PPS-A
	20	★ 1908306	DSNU-25-20-P-A	★ 1908314	DSNU-25-20-PPV-A	★ 1908322	DSNU-25-20-PPS-A
	25	★ 19219	DSNU-25-25-P-A	★ 33975	DSNU-25-25-PPV-A	★ 559282	DSNU-25-25-PPS-A
	30	★ 1908307	DSNU-25-30-P-A	★ 1908315	DSNU-25-30-PPV-A	★ 1908323	DSNU-25-30-PPS-A
	35	★ 1908308	DSNU-25-35-P-A	★ 1908316	DSNU-25-35-PPV-A	★ 1908324	DSNU-25-35-PPS-A
	40	★ 19220	DSNU-25-40-P-A	★ 19245	DSNU-25-40-PPV-A	★ 559283	DSNU-25-40-PPS-A
	50	★ 19221	DSNU-25-50-P-A	★ 19246	DSNU-25-50-PPV-A	★ 559284	DSNU-25-50-PPS-A
	60	★ 1908309	DSNU-25-60-P-A	★ 1908317	DSNU-25-60-PPV-A	★ 1908325	DSNU-25-60-PPS-A
	70	★ 1908310	DSNU-25-70-P-A	★ 1908318	DSNU-25-70-PPV-A	★ 1908326	DSNU-25-70-PPS-A
	80	★ 19222	DSNU-25-80-P-A	★ 19247	DSNU-25-80-PPV-A	★ 559285	DSNU-25-80-PPS-A
	100	★ 19223	DSNU-25-100-P-A	★ 19248	DSNU-25-100-PPV-A	★ 559286	DSNU-25-100-PPS-A
	125	★ 19224	DSNU-25-125-P-A	★ 19249	DSNU-25-125-PPV-A	★ 559287	DSNU-25-125-PPS-A
	150	★ 1908311	DSNU-25-150-P-A	★ 1908319	DSNU-25-150-PPV-A	★ 1908327	DSNU-25-150-PPS-A
	160	★ 19225	DSNU-25-160-P-A	★ 19250	DSNU-25-160-PPV-A	★ 559288	DSNU-25-160-PPS-A
	200	★ 19226	DSNU-25-200-P-A	★ 19251	DSNU-25-200-PPV-A	★ 559289	DSNU-25-200-PPS-A
	250	★ 19227	DSNU-25-250-P-A	★ 19252	DSNU-25-250-PPV-A	★ 559290	DSNU-25-250-PPS-A
	300	★ 19228	DSNU-25-300-P-A	★ 19253	DSNU-25-300-PPV-A	★ 559291	DSNU-25-300-PPS-A
320	★ 34719	DSNU-25-320-P-A	★ 34721	DSNU-25-320-PPV-A	★ 559292	DSNU-25-320-PPS-A	

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU

Technical data

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Ordering data							
Piston \varnothing [mm]	Stroke [mm]	P – Flexible cushioning rings/ pads at both ends A – With position sensing		PPV – Pneumatic cushioning, adjustable at both ends A – With position sensing		PPS – Pneumatic cushioning, self-adjusting at both ends A – With position sensing	
		Part No.	Type	Part No.	Type	Part No.	Type
8	10	19177	DSNU-8-10-P-A	-		-	
	15	1908247	DSNU-8-15-P-A				
	20	1908248	DSNU-8-20-P-A				
	25	19178	DSNU-8-25-P-A				
	30	1908249	DSNU-8-30-P-A				
	40	19179	DSNU-8-40-P-A				
	50	19180	DSNU-8-50-P-A				
	60	1908250	DSNU-8-60-P-A				
	80	19181	DSNU-8-80-P-A				
	100	19182	DSNU-8-100-P-A				
10	10	19183	DSNU-10-10-P-A	-		-	
	15	1908251	DSNU-10-15-P-A				
	20	1908252	DSNU-10-20-P-A				
	25	19184	DSNU-10-25-P-A				
	30	1908253	DSNU-10-30-P-A				
	40	19185	DSNU-10-40-P-A				
	50	19186	DSNU-10-50-P-A				
	60	1908254	DSNU-10-60-P-A				
	80	19187	DSNU-10-80-P-A				
	100	19188	DSNU-10-100-P-A				
25	400	35191	DSNU-25-400-P-A	35193	DSNU-25-400-PPV-A	559293	DSNU-25-400-PPS-A
	500	35192	DSNU-25-500-P-A	35194	DSNU-25-500-PPV-A	559294	DSNU-25-500-PPS-A
32	25	195980	DSNU-32-25-P-A	196020	DSNU-32-25-PPV-A	559295	DSNU-32-25-PPS-A
	40	195981	DSNU-32-40-P-A	196021	DSNU-32-40-PPV-A	559296	DSNU-32-40-PPS-A
	50	195982	DSNU-32-50-P-A	196022	DSNU-32-50-PPV-A	559297	DSNU-32-50-PPS-A
	80	195983	DSNU-32-80-P-A	196023	DSNU-32-80-PPV-A	559298	DSNU-32-80-PPS-A
	100	195984	DSNU-32-100-P-A	196024	DSNU-32-100-PPV-A	559299	DSNU-32-100-PPS-A
	125	195985	DSNU-32-125-P-A	196025	DSNU-32-125-PPV-A	559300	DSNU-32-125-PPS-A
	160	195986	DSNU-32-160-P-A	196026	DSNU-32-160-PPV-A	559301	DSNU-32-160-PPS-A
	200	195987	DSNU-32-200-P-A	196027	DSNU-32-200-PPV-A	559302	DSNU-32-200-PPS-A
	250	195988	DSNU-32-250-P-A	196028	DSNU-32-250-PPV-A	559303	DSNU-32-250-PPS-A
	320	195989	DSNU-32-320-P-A	196029	DSNU-32-320-PPV-A	559304	DSNU-32-320-PPS-A
40	25	195990	DSNU-40-25-P-A	196030	DSNU-40-25-PPV-A	559305	DSNU-40-25-PPS-A
	40	195991	DSNU-40-40-P-A	196031	DSNU-40-40-PPV-A	559306	DSNU-40-40-PPS-A
	50	195992	DSNU-40-50-P-A	196032	DSNU-40-50-PPV-A	559307	DSNU-40-50-PPS-A
	80	195993	DSNU-40-80-P-A	196033	DSNU-40-80-PPV-A	559308	DSNU-40-80-PPS-A
	100	195994	DSNU-40-100-P-A	196034	DSNU-40-100-PPV-A	559309	DSNU-40-100-PPS-A
	125	195995	DSNU-40-125-P-A	196035	DSNU-40-125-PPV-A	559310	DSNU-40-125-PPS-A
	160	195996	DSNU-40-160-P-A	196036	DSNU-40-160-PPV-A	559311	DSNU-40-160-PPS-A
	200	195997	DSNU-40-200-P-A	196037	DSNU-40-200-PPV-A	559312	DSNU-40-200-PPS-A
	250	195998	DSNU-40-250-P-A	196038	DSNU-40-250-PPV-A	559313	DSNU-40-250-PPS-A
	320	195999	DSNU-40-320-P-A	196039	DSNU-40-320-PPV-A	559314	DSNU-40-320-PPS-A

Round cylinders DSNU

Technical data

Ordering data							
Piston \varnothing [mm]	Stroke [mm]	P – Flexible cushioning rings/ pads at both ends		PPV – Pneumatic cushioning, adjustable at both ends		PPS – Pneumatic cushioning, self-adjusting at both ends	
		A – With position sensing		A – With position sensing		A – With position sensing	
		Part No.	Type	Part No.	Type	Part No.	Type
50	25	196000	DSNU-50-25-P-A	196040	DSNU-50-25-PPV-A	559315	DSNU-50-25-PPS-A
	40	196001	DSNU-50-40-P-A	196041	DSNU-50-40-PPV-A	559316	DSNU-50-40-PPS-A
	50	196002	DSNU-50-50-P-A	196042	DSNU-50-50-PPV-A	559317	DSNU-50-50-PPS-A
	80	196003	DSNU-50-80-P-A	196043	DSNU-50-80-PPV-A	559318	DSNU-50-80-PPS-A
	100	196004	DSNU-50-100-P-A	196044	DSNU-50-100-PPV-A	559319	DSNU-50-100-PPS-A
	125	196005	DSNU-50-125-P-A	196045	DSNU-50-125-PPV-A	559320	DSNU-50-125-PPS-A
	160	196006	DSNU-50-160-P-A	196046	DSNU-50-160-PPV-A	559321	DSNU-50-160-PPS-A
	200	196007	DSNU-50-200-P-A	196047	DSNU-50-200-PPV-A	559322	DSNU-50-200-PPS-A
	250	196008	DSNU-50-250-P-A	196048	DSNU-50-250-PPV-A	559323	DSNU-50-250-PPS-A
	320	196009	DSNU-50-320-P-A	196049	DSNU-50-320-PPV-A	559324	DSNU-50-320-PPS-A
63	25	196010	DSNU-63-25-P-A	196050	DSNU-63-25-PPV-A	559325	DSNU-63-25-PPS-A
	40	196011	DSNU-63-40-P-A	196051	DSNU-63-40-PPV-A	559326	DSNU-63-40-PPS-A
	50	196012	DSNU-63-50-P-A	196052	DSNU-63-50-PPV-A	559327	DSNU-63-50-PPS-A
	80	196013	DSNU-63-80-P-A	196053	DSNU-63-80-PPV-A	559328	DSNU-63-80-PPS-A
	100	196014	DSNU-63-100-P-A	196054	DSNU-63-100-PPV-A	559329	DSNU-63-100-PPS-A
	125	196015	DSNU-63-125-P-A	196055	DSNU-63-125-PPV-A	559330	DSNU-63-125-PPS-A
	160	196016	DSNU-63-160-P-A	196056	DSNU-63-160-PPV-A	559331	DSNU-63-160-PPS-A
	200	196017	DSNU-63-200-P-A	196057	DSNU-63-200-PPV-A	559332	DSNU-63-200-PPS-A
	250	196018	DSNU-63-250-P-A	196058	DSNU-63-250-PPV-A	559333	DSNU-63-250-PPS-A
	320	196019	DSNU-63-320-P-A	196059	DSNU-63-320-PPV-A	559334	DSNU-63-320-PPS-A

Round cylinders DSNU

Technical data

Ordering data					
Piston \varnothing [mm]	Stroke [mm]	P – Flexible cushioning rings/pads at both ends A – With position sensing		PPV – Pneumatic cushioning, adjustable at both ends A – With position sensing	
		Part No.	Type	Part No.	Type
Variable stroke lengths				Variable stroke lengths	
8	10 ... 100	14326	DSNU-8-...-P-A	-	
10	10 ... 100	14325	DSNU-10-...-P-A		
12	10 ... 200	14324	DSNU-12-...-P-A		
16	10 ... 200	14323	DSNU-16-...-P-A	14320	DSNU-16-...-PPV-A
20	10 ... 320	14328	DSNU-20-...-P-A	14321	DSNU-20-...-PPV-A
25	10 ... 500	14327	DSNU-25-...-P-A	14322	DSNU-25-...-PPV-A

-  - Note

Additional variants can be configured and ordered via the DSNU product modules → page 28.

Round cylinders DSNU

Ordering data – Modular products



Ordering table									
Size	8	10	12	16	20	25	Condi- tions	Code	Enter code
M Module No.	193986	193987	193988	193989	193990	193991			
Function	Standard cylinder, double-acting, based on ISO 6432							DSNU	DSNU
Piston Ø [mm]	8	10	12	16	20	25		★ -...	
Stroke [mm]	1 ... 100		1 ... 200		1 ... 320		1 ... 500		1
Cushioning	Flexible cushioning rings/pads at both ends							★ -P	
	-		-		Pneumatic cushioning, adjustable at both ends		2	★ -PPV	
	-		-		Pneumatic cushioning, self-adjusting at both ends		3	★ -PPS	
O Position sensing	Via proximity sensor						4	★ -A	
Cylinder end cap	Lateral supply port, end cap						5	★ -MQ	
	Axial supply port, end cap						5	-MA	
	With mounting flange at front (direct mounting), bearing cap						6	-MH	
↓ Type of piston rod	Through piston rod						7	★ -S2	

- 1 -... Longer strokes on request
- 2 **PPV** Not with MA.
In combination with S6, S10, S11 not with piston Ø 12 mm
- 3 **PPS** Not with MA, MH, S6, S10, S11
and not with combination MQ-R3

- 4 **A** Minimum stroke: 10 mm
- 5 **MQ, MA** Not with S2, S10, S11
- 6 **MH** Not with combination S6-R3.
Not with S10, S11
- 7 **S2** Not with S10, S11

- Note

The bellows kit DADB must not be used in combination with the variant MH.

The running characteristics change slightly when the bellows kit DADB is combined with the variant S10 or S11.

- M** Mandatory data
- O** Options

Transfer order code

DSNU - - - - - -

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU

Ordering data – Modular products

Ordering table									
Size	8	10	12	16	20	25	Condi- tions	Code	Enter code
↓ [O] Extended male thread [mm]	Extended male piston rod thread 1 ... 15		1 ... 20		1 ... 25	1 ... 35	[8]	-...K2	
Shortened male thread [mm]	Shortened male piston rod thread 1 ... 4				1 ... 8	1 ... 10	[9]	-...K6	
Female thread	-	-	-	-	(M4)	(M6)	[10]	★-K3	
Special thread	-	-	-	-	-	M10		-“...”K5	
Piston rod extended at one end [mm]	Extended piston rod at one end 1 ... 50		1 ... 100		1 ... 110	1 ... 150		★...K8	
Temperature resistance	Heat-resistant seals for temperatures up to 120 °C						[11]	★-S6	
Slow speed (constant motion)	-	-	Slow speed (constant motion at low piston speeds)				[12]	-S10	
Low friction	-	-	Low friction				[13]	-S11	
Corrosion protection	-	-	High corrosion protection					★-R3	
EU certification	II 2GD						[14]	-EX4	

- [8] **K2** Not with K3, K6
- [9] **K6** Not with K3
- [10] **K3** Not with K5
- [11] **S6** Not with S10, S11

- [12] **S10** Not with S11, R3
- [13] **S11** Not with R3
- [14] **EX4** Not with S6

- [M] Mandatory data
- [O] Options

Transfer order code

- [] - [] - [] - [] - [] - [] - [] - [] - [] - []

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ★ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU

Ordering data – Modular products



Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
M Module No.	193992	193993	193994	193995			
Function	Double-acting round cylinder					DSNU	DSNU
Piston \varnothing [mm]	32	40	50	63		★ -...	
Stroke [mm]	1 ... 500				1	★ -...	
Cushioning	Flexible cushioning rings/pads at both ends					★ -P	
	Pneumatic cushioning, adjustable at both ends				2	★ -PPV	
	Pneumatic cushioning, self-adjusting at both ends				3	★ -PPS	
O Position sensing	Via proximity sensor				4	★ -A	
Cylinder end cap	Lateral air connection, end cap				5	★ -MQ	
	Axial air connection, end cap				6	-MA	
	Mounting flange at front (direct mounting), bearing cap				7	-MH	
Type of piston rod	Through piston rod				8	★ -S2	

- | | | | |
|--------|---|------|----------------------------|
| 1 -... | Longer strokes on request | 7 MH | Not with combination S6-R3 |
| 2 PPV | Not with MA | | Not with S10, S11, R8 |
| 3 PPS | Not with MA, MH, S6, S10, S11
and not with combination MQ-R3 | 8 S2 | Not with MQ, MA, S10, S11 |
| 4 A | Minimum stroke: 10 mm | | |
| 5 MQ | Not with S2, S10, S11 | | |
| 6 MA | Not with S2, S10, S11, R8 | | |

- Note

The bellows kit DADB must not be used in combination with the variant MH.

The running characteristics change slightly when the bellows kit DADB is combined with the variant S10 or S11.

- M** Mandatory data
- O** Options

Transfer order code

DSNU - - - - - -

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU

Ordering data – Modular products



Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
↓ [0] Extended male thread [mm]	Piston rod with extended male thread 1 ... 35			1 ... 70	[9]	-...K2	
Shortened male thread [mm]	Piston rod with shortened male thread 1 ... 8			1 ... 10	[10]	-...K6	
Female thread	(M6)	(M8)	(M10)		[11]	★-K3	
Special thread	Piston rod with special thread M10			M12	M16		-“...”K5
Piston rod extended at one end [mm]	Extended piston rod at one end 1 ... 500					★...K8	
Temperature resistance	Heat-resistant seals for temperatures up to 120 °C				[12]	★-S6	
Slow speed (constant motion)	Slow speed (constant motion at low piston speeds)				[13]	-S10	
Running characteristics	Low friction				[14]	-S11	
Corrosion protection	High corrosion protection				[15]	★-R3	
Wiper seal	Dust protection					-R8	
	Metal wiper seal				[16]	-A6	
EU certification	II 2GD				[17]	-EX4	

- [9] **K2** Not with K3, K6
- [10] **K6** Not with K3
- [11] **K3** Not with K5
- [12] **S6** Not with S10, S11

- [13] **S10** Not with S11, R3, R8
- [14] **S11** Not with R3, R8
- [15] **R3** Not with R8
- [16] **A6** Not with S10, S11, MH, P, PPS, S6, R3, EX4
- [17] **EX4** Not with S6

- [M] Mandatory data
- [O] Options

Transfer order code

- [] - [] - [] - [] - [] - [] - [] - [] - [] - [] - []

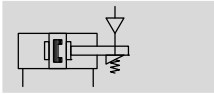
Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

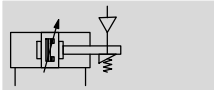
Round cylinders DSNU-KP, with clamping unit

Technical data

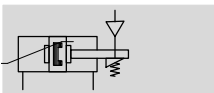
Function
P cushioning



PPV cushioning



PPS cushioning



∅ - Diameter
8 ... 25 mm
ISO 6432

∅ - Diameter
32 ... 63 mm

l - Stroke length
1 ... 500 mm



⚠ - Note

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 addi-

tional measures in accordance with statutory minimum requirements, the product is not suitable for use in safety-related sections of control systems.

General technical data											
Piston ∅	8	10	12	16	20	25	32	40	50	63	
Conforms	ISO 6432						-				
Pneumatic connection	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8	
Piston rod thread	M4	M4	M6	M6	M8	M10x1.25	M10x1.25	M12x1.25	M16x1.5	M16x1.5	
Stroke ¹⁾ [mm]	1 ... 100		1 ... 200		1 ... 320		1 ... 500				
Constructional design	Piston / Piston rod / Cylinder barrel										
Cushioning											
DSNU-...-P	Flexible cushioning rings/pads at both ends										
DSNU-...-PPV	-		Pneumatic cushioning, adjustable at both ends								
DSNU-...-PPS	-		Self-adjusting cushioning at both ends								
Cushioning length											
DSNU-...-PPV [mm]	-		9	12	15	17	14	18	20	21	
DSNU-...-PPS [mm]	-		12	15	17	14	18	20	21		
Position sensing	Via proximity sensor										
Type of mounting	Via through-holes Via accessories										
Mounting position	Any										
Clamping unit holding force [N]	80	80	180	180	350	350	600	1000	1400	2000	
Axial play under load [mm]	0.2		0.3			0.5		0.8			
Clamping unit pneumatic connection	M5							G1/8			

1) Cylinders with position sensing require a minimum stroke of 10 mm to ensure reliable sensing. Longer strokes on request.

⚠ - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders DSNU-KP, with clamping unit

Technical data

Operating and environmental 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]	3 ... 10
Ambient temperature ¹⁾ [°C]	-10 ... +80
Corrosion resistance class CRC ²⁾	
DSNU-...-	2
DSNU-...-R3	3

1) Note operating range of proximity sensors.

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Corrosion resistance class CRC 3 to Festo standard FN 940070

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

Force [N] and impact energy [J]										
Piston Ø	8	10	12	16	20	25	32	40	50	63
Theoretical force at 6 bar, advancing	30	47	68	121	189	295	483	753	1178	1870
Theoretical force at 6 bar, retracting	23	40	51	104	158	247	415	633	990	1682
Max. impact energy at the end positions for flexible cushioning elements ¹⁾	0.03	0.05	0.07	0.15	0.20	0.30	0.40	0.70	1	1.30

1) The values are reduced by approx. 50% at an ambient temperature of 80 °C

Weight [g]										
Piston Ø	8	10	12	16	20	25	32	40	50	63
Product weight with 0 mm stroke	97.6	100.3	193	207.9	393.8	456	711.5	1287	2059	2556
Additional weight per 10 mm stroke	2.4	2.7	4	4.6	7.2	11	15.5	24	40	44
Moving load with 0 mm stroke	7.5	8.5	18.5	23	44	71	121	230	413	459
Moving load per 10 mm stroke	1	1	2	2	4	6	9	16	25	25

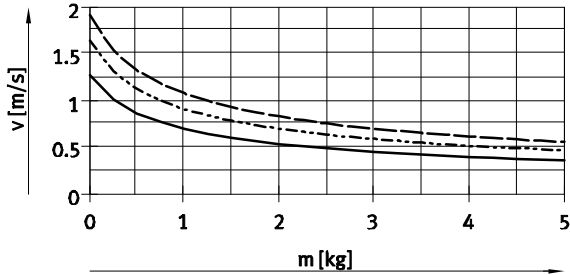
Round cylinders DSNU-KP, with clamping unit

Technical data

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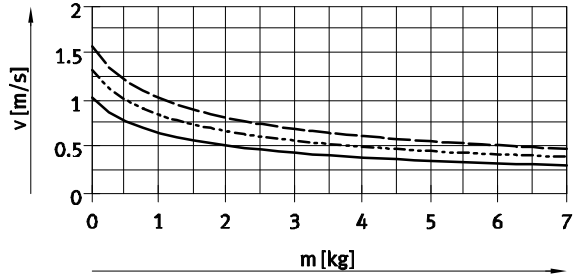
Average piston speed v as a function of payload m in combination with cushioning PPS

Piston \varnothing 16



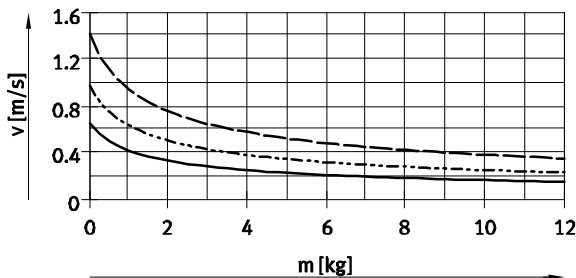
— DSNU-16-50
 - - - DSNU-16-100
 - · - DSNU-16-200

Piston \varnothing 20



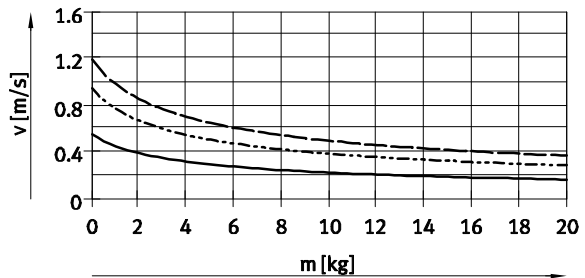
— DSNU-20-50
 - - - DSNU-20-100
 - · - DSNU-20-200

Piston \varnothing 25



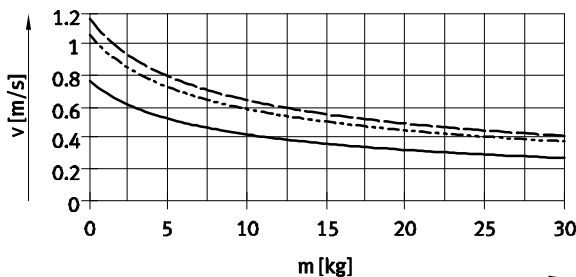
— DSNU-25-50
 - - - DSNU-25-100
 - · - DSNU-25-200

Piston \varnothing 32



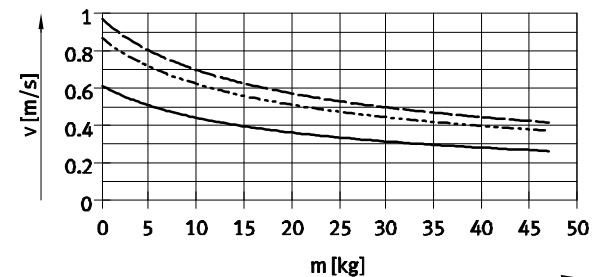
— DSNU-32-50
 - - - DSNU-32-100
 - · - DSNU-32-200

Piston \varnothing 40



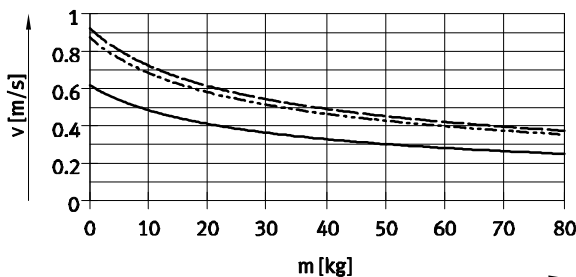
— DSNU-40-50
 - - - DSNU-40-100
 - · - DSNU-40-200

Piston \varnothing 50



— DSNU-50-50
 - - - DSNU-50-100
 - · - DSNU-50-200

Piston \varnothing 63



— DSNU-63-50
 - - - DSNU-63-100
 - · - DSNU-63-200

- - - Note
 Design software
 for flexible cushioning elements
 PPV cushioning
 → ProDrive

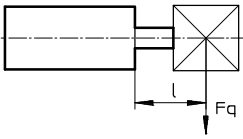
Additional graphs
 for PPS cushioning
 → www.festo.com

- - - Note
 Average piston speed
 = stroke/movement time

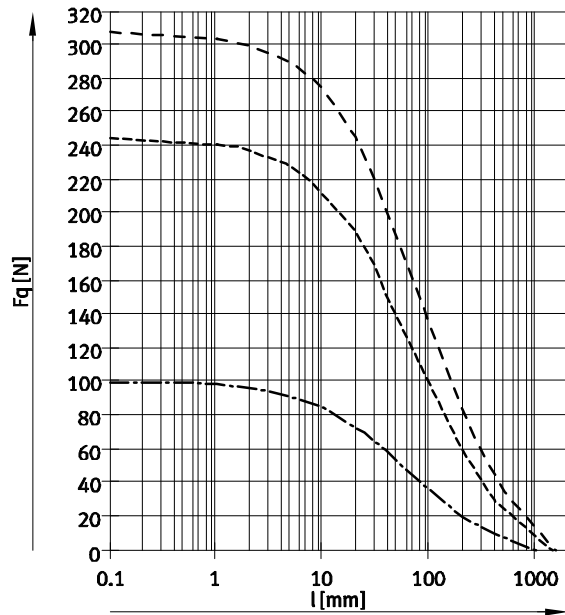
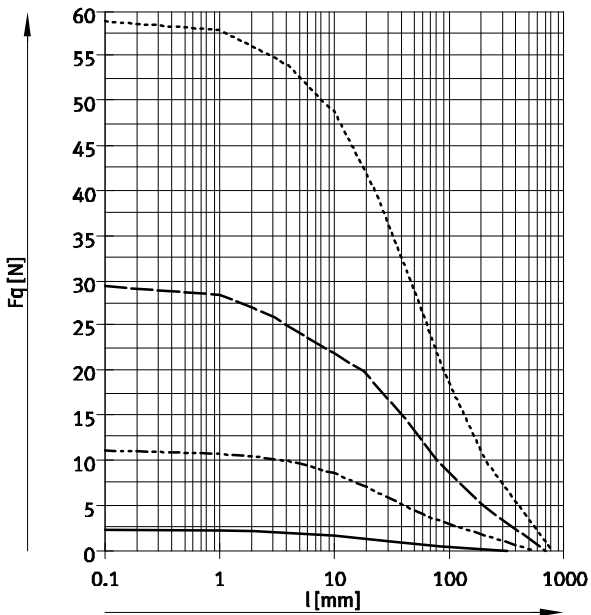
Round cylinders DSNU-KP, with clamping unit

Technical data

Max. lateral force F_q as a function of the projection l



DSNU-...



- ∅ 8/10
- - - ∅ 12/16
- ∅ 20
- - - ∅ 25

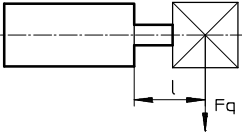
- - - ∅ 32
- - - ∅ 40
- - - ∅ 50/63

Round cylinders DSNU-KP, with clamping unit

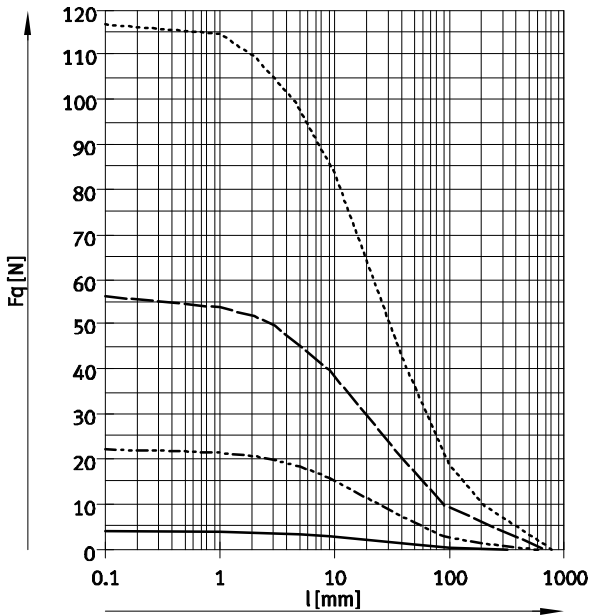
Technical data

FESTO

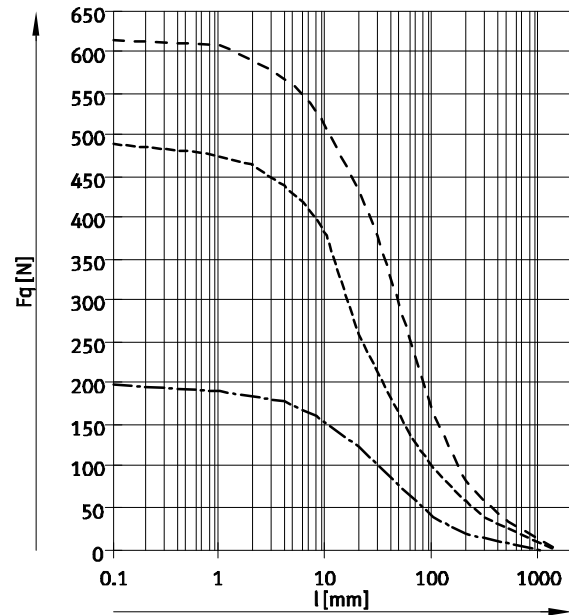
Max. lateral force F_q as a function of the projection l



S2 – Through piston rod



- $\varnothing 8/10$
- - - $\varnothing 12/16$
- $\varnothing 20$
- - - $\varnothing 25$



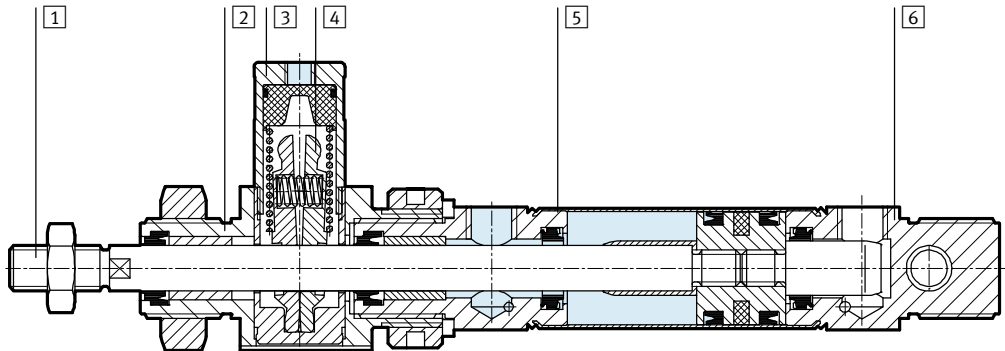
- - - $\varnothing 32$
- - - $\varnothing 40$
- - - $\varnothing 50/63$

Round cylinders DSNU-KP, with clamping unit

Technical data

Materials

Sectional view



Round cylinder

1	Piston rod	
	DSNU-...	High-alloy steel
	DSNU-...-R3	High-alloy stainless steel
2	Bearing cap	Anodised aluminium
3	Housing, clamping unit	Wrought aluminium alloy
4	Clamping jaws	Brass
5	Cylinder barrel	High-alloy stainless steel
6	End cap	Anodised aluminium
-	Piston, clamping unit	Polyacetate
-	Spring	Spring steel
-	Seals	TPE-U(PU), NBR
	Note on materials	RoHS compliant

Round cylinders DSNU-KP, with clamping unit

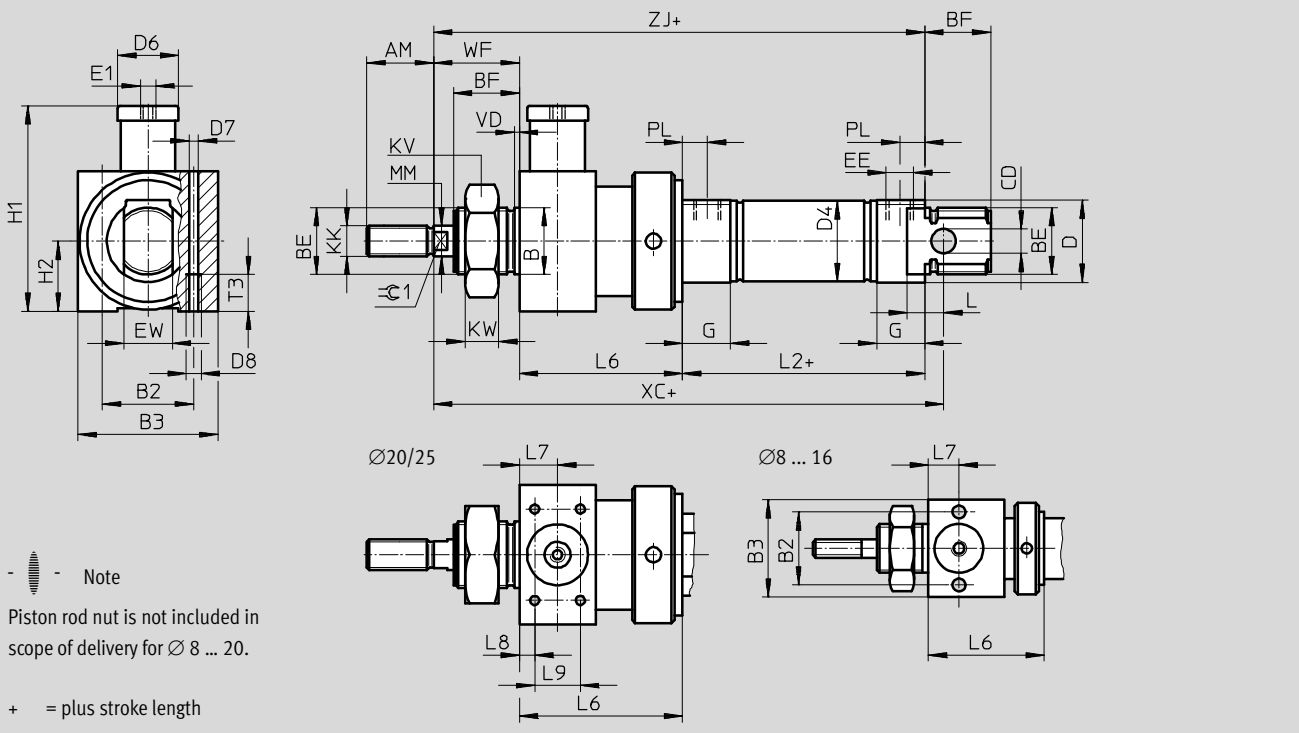
Technical data

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Dimensions

Download CAD data → www.festo.com

DSNU-8 ... 25



Ø	AM	B	B2	B3	BE	BF	CD	D	D4	D6	D7	D8
[mm]		Ø h9					Ø H9	Ø	Ø	Ø	Ø	
8	12	12	19.5	27	M12x1.25	12	4	15	9.3	12	4.2	M5
10									11.3			
12	16	16	24	32	M16x1.5	17	6	20	13.3	16	4.2	M5
16									17.3			
20	20	22	27	36	M22x1.5	20	8	27	21.3	20	4.2	M5
25						22			26.5			

Ø	E1	EE	EW	G	H1	H2	KK	KV	KW	MM	L	L2
[mm]										Ø		
8	M5	M5	8	10	34.5	13.5	M4	19	6	4	6	46
10												
12			12	41	16	M6	24	8	6	9	50	
16		16	16	62.5	18	M8	32	11	8	12	68	
20		G1/8	16	16	62.5	18	M10x1.25	32	11	10	12	69.5

Ø	L6	L7	L8	L9	T3	PL	VD	WF	XC	≈C1
[mm]									±1	
8	29 ±0.65	8	-	-	11	6	2	16	93	-
10			-	-						-
12	38 ±0.75	10	-	-	11	6	2	22	113	5
16			-	-						
20	47 ±0.75	13	4.5	20	11	8.2	2	24	142	7
25										

- - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders DSNU-KP, with clamping unit

Technical data



Dimensions

Download CAD data → www.festo.com

DSNU-8 ... 25

S2 – Through piston rod

+ = plus stroke length
 ++ = plus 2x stroke length

- - Note
 The thread types at both piston rod ends are identical. The clamping unit is mounted on only one side.

In combination with variant Q (→ page 50) the right-hand piston rod is square, the left-hand piston rod round. The clamping unit is mounted on the left-hand, round piston rod.

In combination with variant K8 the piston rod is only extended at the right hand. The clamping unit is mounted on the left side of the piston rod that is not extended.

In combination with variant K8 and Q the piston rod is only extended at the right-hand, square piston rod.

∅	ZJ	ZM
[mm]		
8	91	107
10		
12	110	132
16	116	138
20	139	163
25	145.5	173.5

- - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders DSNU-KP, with clamping unit

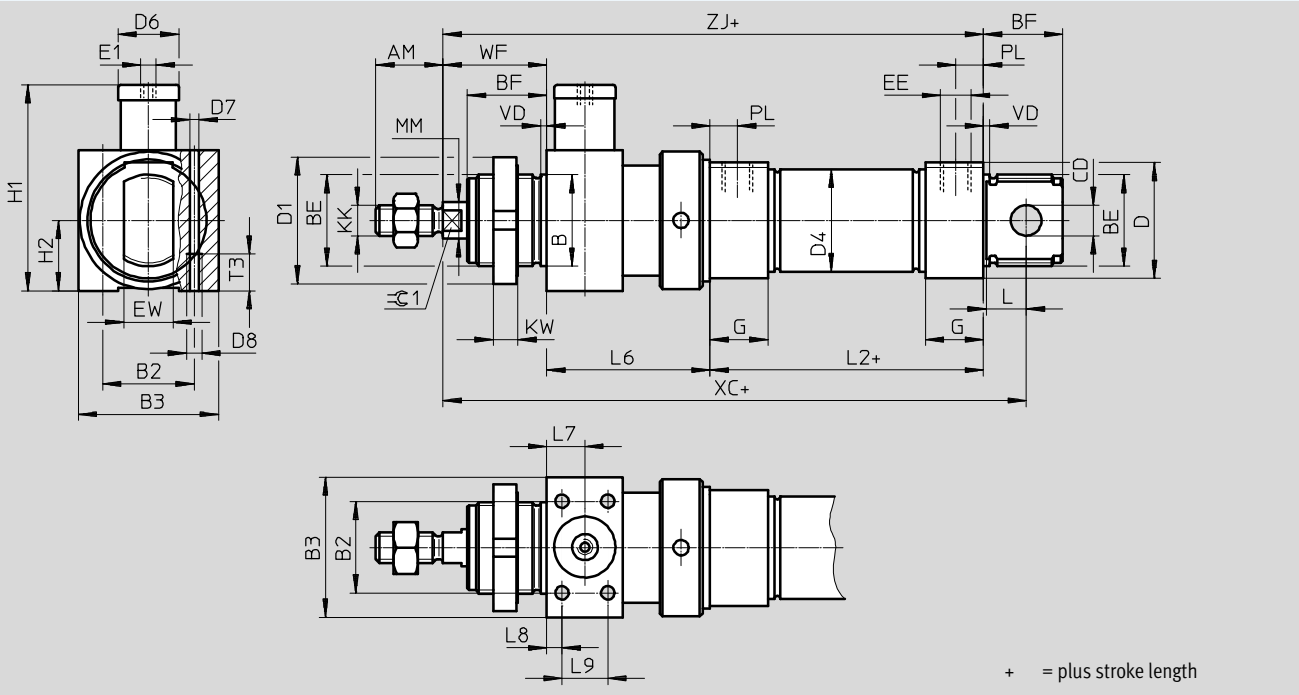
Technical data

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Dimensions

Download CAD data → www.festo.com

DSNU-32 ... 63



∅	AM	B	B2	B3	BE	BF	CD	D	D1	D4	D6	D7
[mm]		∅ h9					∅ E10	∅	∅	∅		
32	22	30	30	46	M30x1.5	26	10	38	42	33.6	20	4.4
40	24	38	36	56	M38x1.5	30	12	46	50	41.6	24	6.8
50	32	45	50	65	M45x1.5	33	16	57	60	52.4	30	8.5
63			54	72	M45x1.5			70		65.4		

∅	D8	E1	EE	EW	G	H1	H2	KK	KW	MM	L	L2
[mm]										∅		
32	M5	M5	G1/8	16	19	67.5	23	M10x1.25	8	12	13	69.5
40	M8	G1/8	G1/4	18	25	89	28	M12x1.25	10	16	15	84.6
50	M10	G1/8		21		107.5	32.5	M16x1.5		20	16	86.2
63		G1/8	G3/8	28	121.5	36			94.2			

∅	L6	L7	L8	L9	T3	PL	VD	WF	XC	≈C1
[mm]	±0.75								±1	
32	55	12.5	5	15	12	9	2	34.5	173	10
40	69	17	7	20	18	12	3	40.5	210.1	13
50	78	20		26	20			45.5	226.7	17
63	86	24	8	32	21	13		46.5	243.7	

Round cylinders DSNU-KP, with clamping unit

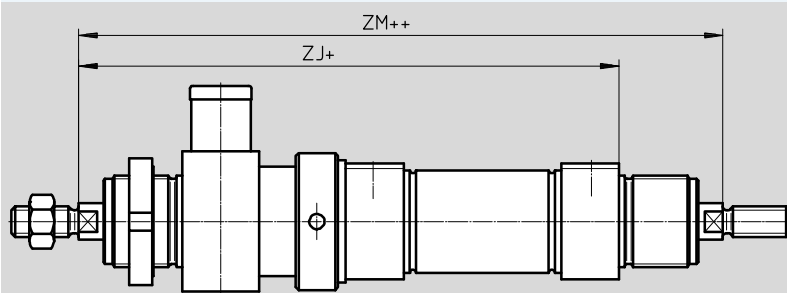
Technical data

Dimensions

Download CAD data → www.festo.com

DSNU-32 ... 63

S2 – Through piston rod



+ = plus stroke length
 ++ = plus 2x stroke length

Note

The thread types at both piston rod ends are identical. The clamping unit is mounted on only one side.

In combination with variant Q (→ page 50) the right-hand piston rod is square, the left-hand piston rod round. The clamping unit is mounted on the left-hand, round piston rod.

In combination with variant K8 the piston rod is only extended at the right hand. The clamping unit is mounted on the left side of the piston rod that is not extended.

In combination with variant K8 and Q the piston rod is only extended at the right-hand, square piston rod.

∅	ZJ	ZM
[mm]		
32	159	191
40	194.1	230.1
50	209.7	250.7
63	226.7	268.7

Round cylinders DSNU-KP, with clamping unit

Ordering data – Modular products



Ordering table									
Size	8	10	12	16	20	25	Condi- tions	Code	Enter code
M Module No.	193986	193987	193988	193989	193990	193991			
Function	Standard cylinder, double-acting, based on ISO 6432							DSNU	DSNU
Piston Ø [mm]	8	10	12	16	20	25		-...	
Stroke [mm]	1 ... 100		1 ... 200		1 ... 320	1 ... 500	1	-...	
Cushioning	Flexible cushioning rings/pads at both ends							-P	
	-		-		Pneumatic cushioning, adjustable at both ends		2	-PPV	
	-		-		Pneumatic cushioning, self-adjusting at both ends		3	-PPS	
O Position sensing	Via proximity sensor						4	-A	
Cylinder end cap	Lateral supply port, end cap						5	-MQ	
	Axial supply port, end cap						5	-MA	
↓ Type of piston rod	Through piston rod							-S2	

- 1** -... Longer strokes on request
- 2** **PPV** Not with MA.
- 3** **PPS** Not with MA, MH and not with combination MQ-R3

- 4** **A** Minimum stroke: 10 mm
- 5** **MQ, MA** Not with S2

- M** Mandatory data
- O** Options

Transfer order code

DSNU - - - - - -

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU-KP, with clamping unit

Ordering data – Modular products

Ordering table									
Size	8	10	12	16	20	25	Condi- tions	Code	Enter code
↓ [O] Extended male thread [mm]	Extended male piston rod thread 1 ... 15		1 ... 20		1 ... 25	1 ... 35	[6]	-...K2	
Shortened male thread [mm]	Shortened male piston rod thread 1 ... 4				1 ... 8	1 ... 10	[7]	-...K6	
Female thread	-	-	-	-	(M4)	(M6)	[8]	-K3	
Special thread	Piston rod with special thread - - - - - M10							-“...”K5	
Piston rod extended at one end [mm]	Extended piston rod at one end 1 ... 50		1 ... 100		1 ... 110	1 ... 150		...K8	
Clamping unit	Attached							-KP	-KP

- [6] **K2** Not with K3, K6
- [7] **K6** Not with K3
- [8] **K3** Not with K5

- [M] Mandatory data
- [O] Options

Transfer order code

- [] - [] - [] - [] - [] - [] - **KP** []

Festo core product range ★ Ready for dispatch from the Festo factory in 24 hours
☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU-KP, with clamping unit

Ordering data – Modular products



Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
M Module No.	193992	193993	193994	193995			
Function	Double-acting round cylinder					DSNU	DSNU
Piston Ø [mm]	32	40	50	63		-...	
Stroke [mm]	1 ... 500				1	-...	
Cushioning	Flexible cushioning rings/pads at both ends					-P	
	Pneumatic cushioning, adjustable at both ends				2	-PPV	
	Pneumatic cushioning, self-adjusting at both ends				3	-PPS	
O Position sensing	Via proximity sensor				4	-A	
Cylinder end cap	Lateral air connection, end cap				5	-MQ	
	Axial air connection, end cap				5	-MA	
↓ Type of piston rod	Through piston rod					-S2	

- 1** -... Longer strokes on request
- 2** **PPV** Not with MA
- 3** **PPS** Not with MA, MH
and not with combination MQ-R3

- 4** **A** Minimum stroke: 10 mm
- 5** **MQ, MA** Not with S2

- M** Mandatory data
- O** Options

Transfer order code

DSNU - - - - - -

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU-KP, with clamping unit

Ordering data – Modular products

Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
↓ O	Extended male thread [mm]	Piston rod with extended male thread 1 ... 35 1 ... 70			6	-...K2	
	Shortened male thread [mm]	Piston rod with shortened male thread 1 ... 8 1 ... 10			7	-...K6	
	Female thread	(M6)	(M8)	(M10)	8	-K3	
	Special thread	Piston rod with special thread M10 M12 M16				-“...”K5	
	Piston rod extended at one end [mm]	Extended piston rod at one end 1 ... 500				...K8	
	Clamping unit	Attached				-KP	-KP

- 6 K2 Not with K3, K6
- 7 K6 Not with K3
- 8 K3 Not with K5

- M Mandatory data
- O Options

Transfer order code

- [] - [] - [] - [] - [] - KP []

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

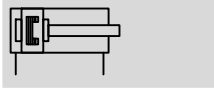
Round cylinders DSNU-Q, protected against rotation

FESTO

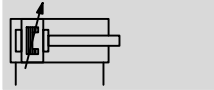
Technical data

Function

P cushioning



PPV cushioning



∅ - Diameter
12 ... 25 mm
ISO 6432

∅ - Diameter
32 ... 63 mm

┆ - Stroke length
5 ... 500 mm



General technical data								
Piston ∅	12	16	20	25	32	40	50	63
Conforms	ISO 6432				-			
Pneumatic connection	M5	M5	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8
Piston rod thread	M6	M6	M8	M10x1.25	M10x1.25	M12x1.25	M16x1.5	M16x1.5
Stroke ¹⁾ [mm]	5 ... 160		5 ... 200	5 ... 250	5 ... 300	5 ... 400		5 ... 500
Constructional design	Piston Protected against rotation with square piston rod							
Max. torque at the piston rod [Nm]	0.10	0.10	0.20	0.45	0.8	1.1	0.45	0.45
Cushioning								
DSNU-...-P	Flexible cushioning rings/pads at both ends	-			Flexible cushioning rings/pads at both ends			
DSNU-...-PPV	-	Adjustable cushioning at both ends						
Cushioning length (PPV) [mm]	-	12	15	17	14	18	20	21
Position sensing	Via proximity sensor							
Type of mounting	Via accessories							
Mounting position	Any							

1) Cylinders with position sensing require a minimum stroke of 10 mm to ensure reliable sensing. Longer strokes on request.

┆ - Note: This product conforms to ISO 1179-1 and to ISO 228-1

Operating and environmental conditions								
Piston ∅	12	16	20	25	32	40	50	63
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]	1.5 ... 10 ¹⁾		1 ... 10					
Ambient temperature ²⁾								
DSNU-... [°C]	-20 ... +80							
DSNU-Q-...-S6 [°C]	-				0 ... +120			
Corrosion resistance class CRC ³⁾								
DSNU-... [2]	2							
DSNU-...-R3 [3]	3							
Maritime classification ⁴⁾	See certificate				-			

1) With DSNU-12-...-Q-PPV (pneumatic cushioning adjustable at both ends): 2 ... 10 bar

2) Note operating range of proximity sensors.

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Corrosion resistance class CRC 3 to Festo standard FN 940070

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

4) Additional information www.festo.com/sp → Certificates.

Round cylinders DSNU-Q, protected against rotation

Technical data

ATEX ¹⁾	
ATEX category for gas	II 2G
Explosion ignition protection type for gas	c T4
ATEX category for dust	II 2D
Explosion ignition protection type for dust	c 120°C
Explosion-proof temperature rating	-20°C ≤ Ta ≤ +60°C
CE marking (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)

1) Make sure that the accessories are suited for ATEX application.

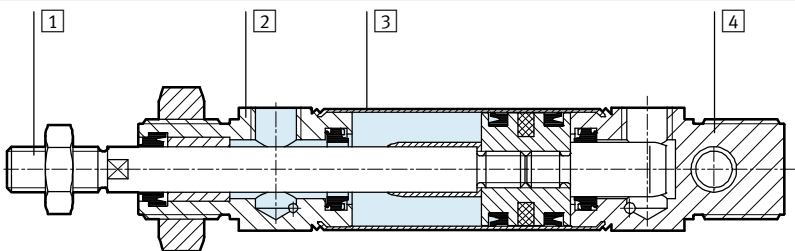
Forces [N] and impact energy [J]								
Piston Ø	12	16	20	25	32	40	50	63
Theoretical force at 6 bar, advancing	68	121	189	295	483	753	1178	1870
Theoretical force at 6 bar, retracting	51	104	158	247	415	633	990	1682
Max. impact energy at the end positions for flexible cushioning elements ¹⁾	0.07	0.15	0.20	0.30	0.40	0.70	1	1.3

1) The values are reduced by approx. 50% at an ambient temperature of 80 °C

Weight [g]								
Piston Ø	12	16	20	25	32	40	50	63
Product weight with 0 mm stroke	80	110	215	275	370.5	661	1087	1445
Additional weight per 10 mm stroke	4.1	4.7	7.1	10.9	15.5	24	40	44
Moving load with 0 mm stroke	18.5	23	44	71	121	230	413	459
Moving load per 10 mm stroke	2	2	4	6	9	16	25	25

Materials

Sectional view



Round cylinder		
1	Piston rod	
	DSNU-... DSNU-...-R3	High-alloy steel High-alloy stainless steel
2	Bearing cap	Anodised aluminium
3	Cylinder barrel	High-alloy stainless steel
4	End cap	Anodised aluminium
-	Seals	TPE-U(PU), NBR
	Note on materials	RoHS compliant

Round cylinders DSNU-Q, protected against rotation

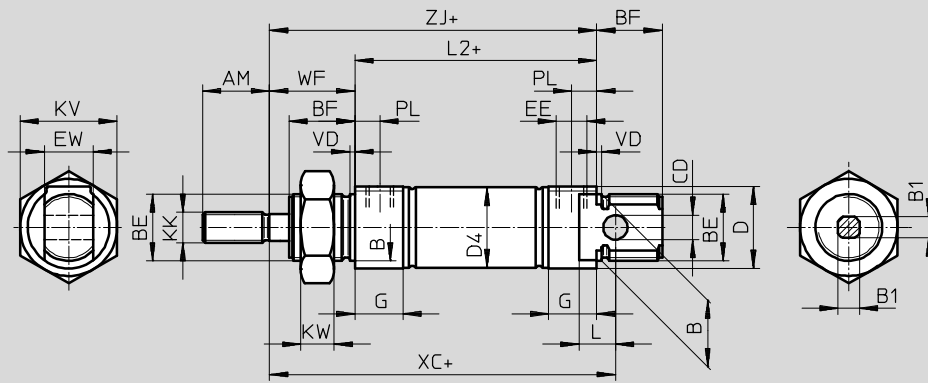
Technical data

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Dimensions

Download CAD data → www.festo.com

DSNU-12 ... 25

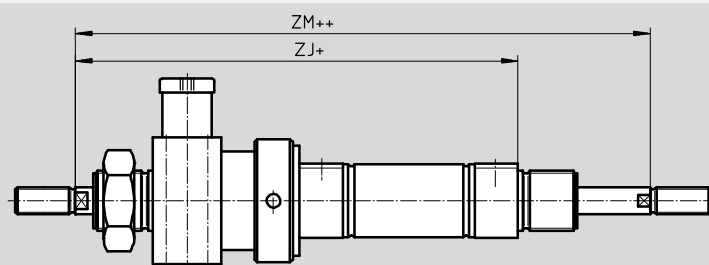


∅	AM	B	B1	BE	BF	CD	D	D4	EE	EW
[mm]		∅ h9	□			∅ H9	∅	∅		
12	16	16	5.5	M16x1.5	17	6	20	13.3	M5	12
16								17.3		
20	22	22	7	M22x1.5	20	8	27	21.3	G1/8	16
25			9		22			26.5		

∅	G	KK	KV	KW	L	L2	PL	VD	WF	XC	ZJ
[mm]										±1	
12	10	M6	24	8	9	50	6	2	22	75	72
16						56				82	78
20	16	M8	32	11	12	68	8.2		24	95	92
25		M10x1.25				69.5	28		104	97.5	

Note: This product conforms to ISO 1179-1 and to ISO 228-1

S2 – Through piston rod



Note

The thread types at both piston rod ends are identical. The clamping unit is mounted on only one side. In

combination with variant Q, the right-hand piston rod is square, the left-hand piston rod round.

The clamping unit is mounted on the left-hand, round piston rod.

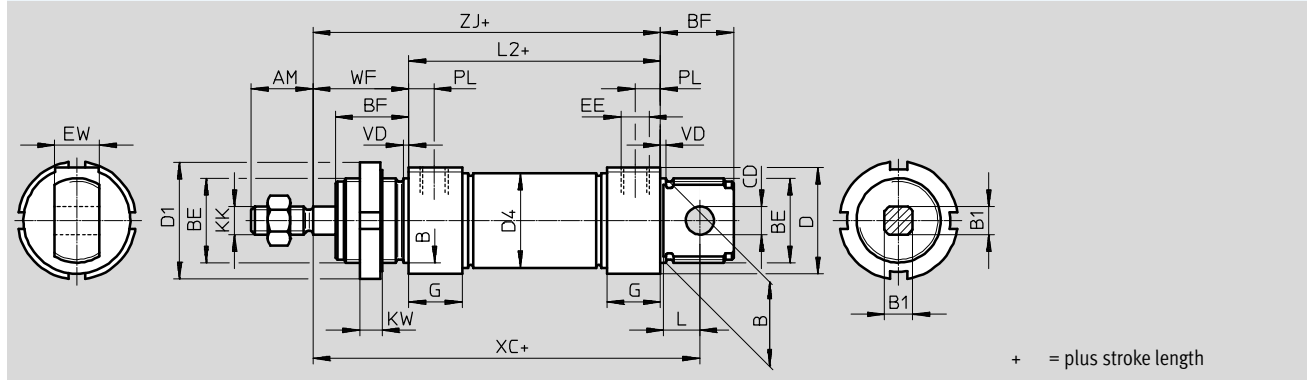
+ = plus stroke length
++ = plus 2x stroke length

∅	ZJ	ZM
[mm]		
12	110	132
16	116	138
20	139	163
25	145.5	173.5

Round cylinders DSNU-Q, protected against rotation

Technical data

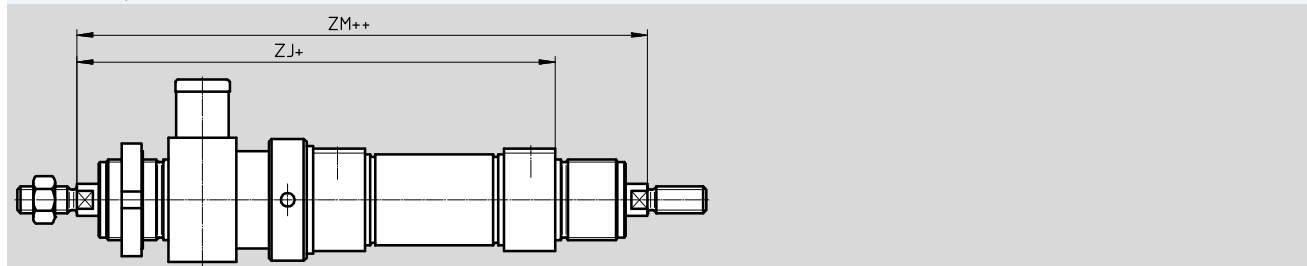
Dimensions Download CAD data → www.festo.com
 DSNU-32 ... 63



∅	AM	B	B1	BE	BF	CD	D	D1	D4	EE	EW
[mm]		∅ h9	□			∅ E10	∅	∅	∅		
32	22	30	10	M30x1.5	26	10	38	42	33.6	G1/8	16
40	24	38	12	M38x1.5	30	12	46	50	41.6	G1/4	18
50	32	45	16	M45x1.5	33	16	57	60	52.4	G1/4	21
63	32	45	16	M45x1.5	33	16	70	60	65.4	G3/8	21

∅	G	KK	KW	L	L2	PL	VD	WF	XC	ZJ
[mm]									±1	
32	19	M10x1.25	8	13	69.5	9	2	34	117.5	103.5
40	25	M12x1.25	10	15	84.6	12	3	39	139.6	123.6
50	25	M16x1.5	10	16	86.2	12	3	44	147.2	130.2
63	28	M16x1.5	10	16	94.2	13	3	45	156.2	139.2

S2 – Through piston rod



Note
 The thread types at both piston rod ends are identical. The clamping unit is mounted on only one side. In combination with variant Q, the right-hand piston rod is square, the left-hand piston rod round. The clamping unit is mounted on the left-hand, round piston rod.
 + = plus stroke length
 ++ = plus 2x stroke length

∅	ZJ	ZM
[mm]		
32	159	191
40	194.1	230.1
50	209.7	250.7
63	226.7	268.7

Round cylinders DSNU-Q, protected against rotation

Ordering data – Modular products



Ordering table							
Size	12	16	20	25	Condi- tions	Code	Enter code
M Module No.	193988	193989	193990	193991			
Function	Standard cylinder, double-acting, based on ISO 6432						DSNU
Piston Ø [mm]	12	16	20	25		★ -...	DSNU
Stroke [mm]	5 ... 160		5 ... 200	5 ... 250	1	★ -...	
Cushioning	Flexible cushion- ing rings/pads at both ends		-	-	-		★ -P
	-		Pneumatic cushioning, adjustable at both ends			2	★ -PPV
O Position sensing	Via proximity sensor				3	★ -A	
Cylinder end cap	Lateral supply port, end cap				4	★ -MQ	
	Axial supply port, end cap		-	-	-	4	-MA
	-		With mounting flange at front (direct mounting), bearing cap			5	-MH
Protection against rotation	Square piston rod					★ -Q	-Q
↓ Type of piston rod	Through piston rod					★ -S2	

- 1 -... Longer strokes on request
- 2 **PPV** Not with MA
- 3 **A** Minimum stroke: 10 mm

- 4 **MQ, MA** Not with S2
- 5 **MH** Not with combination Q-R3

- Note
The bellows kit DADB must not be used in combination with the variant Q.

M Mandatory data
O Options

Transfer order code

DSNU - - - - - - - **Q** -

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU-Q, protected against rotation

Ordering data – Modular products

Ordering table							
Size	12	16	20	25	Condi- tions	Code	Enter code
↓ [O] Extended male thread [mm]	Extended male piston rod thread 1 ... 20			1 ... 25	1 ... 35	[6]	-...K2
Shortened male thread [mm]	Shortened male piston rod thread 1 ... 4			1 ... 8	1 ... 10	[7]	-...K6
Female thread	-		(M4)	(M6)	[8]	★-K3	
Special thread	-		-	M10		-“...”K5	
Piston rod extended at one end [mm]	Extended piston rod at one end 1 ... 100		1 ... 110	1 ... 150		★...K8	
Clamping unit	Attached				[9]	-KP	
Corrosion protection	-		High corrosion protection			★-R3	
EU certification	II 2GD				[10]	-EX4	

- [6] **K2** Not with K3, K6
- [7] **K6** Not with K3
- [8] **K3** Not with K5

- [9] **KP** Only with S2.
Not with R3
- [10] **EX4** Not with KP

- [M] Mandatory data
- [O] Options

Transfer order code

- [] - [] - [] - [] - [] - [] - [] - []

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU-Q, protected against rotation

Ordering data – Modular products



Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
M Module No.	193992	193993	193994	193995			
Function	Double-acting round cylinder					DSNU	DSNU
Piston Ø [mm]	32	40	50	63		★ -...	
Stroke [mm]	5 ... 300	5 ... 400		5 ... 500	1	★ -...	
Cushioning	Flexible cushioning rings/pads at both ends					★ -P	
	Pneumatic cushioning, adjustable at both ends				2	★ -PPV	
O Position sensing	Via proximity sensor				3	★ -A	
Cylinder end cap	Lateral air connection, end cap				4	★ -MQ	
	Axial air connection, end cap				4	-MA	
	Mounting flange at front (direct mounting), bearing cap				5	-MH	
Protection against rotation	Square piston rod					★ -Q	-Q
↓ Type of piston rod	Through piston rod					★ -S2	

- 1 -... Longer strokes on request
- 2 **PPV** Not with MA
- 3 **A** Minimum stroke: 10 mm

- 4 **MQ, MA** Not with S2
- 5 **MH** Not with combinations: Q-R3, S6-R3
Not with KP

- Note

The bellows kit DADB must not be used in combination with the variant Q.

- M** Mandatory data
- O** Options

Transfer order code

DSNU - - - - - - - **Q** -

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ★ Ready for dispatch in 5 days maximum from stock

Round cylinders DSNU-Q, protected against rotation

Ordering data – Modular products

Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
↓ 0 Extended male thread [mm]	Piston rod with extended male thread 1 ... 35			1 ... 70	6	-...K2	
Shortened male thread [mm]	Piston rod with shortened male thread 1 ... 8			1 ... 10	7	-...K6	
Female thread	Piston rod with female thread (M6) (M8) (M10)				8	★ -K3	
Special thread	Piston rod with special thread M10 M12 M16					-“...”K5	
Piston rod extended at one end [mm]	Extended piston rod at one end 1 ... 500					★ ...K8	
Clamping unit	Attached				9	-KP	
Temperature resistance	Heat-resistant seals for temperatures up to 120 °C					★ -S6	
Corrosion protection	High corrosion protection					★ -R3	
EU certification	II 2GD				10	-EX4	

- 6 **K2** Not with K3, K6
- 7 **K6** Not with K3
- 8 **K3** Not with K5

- 9 **KP** Only with S2
Not with S6, R3
- 10 **EX4** Not with KP

- M Mandatory data
- O Options

Transfer order code

- [] - [] - [] - [] - [] - [] - [] - [] - []

Festo core product range

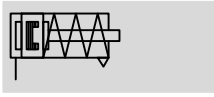
- ★ Ready for dispatch from the Festo factory in 24 hours
- ★ Ready for dispatch in 5 days maximum from stock

Round cylinders ESNU

Technical data

FESTO

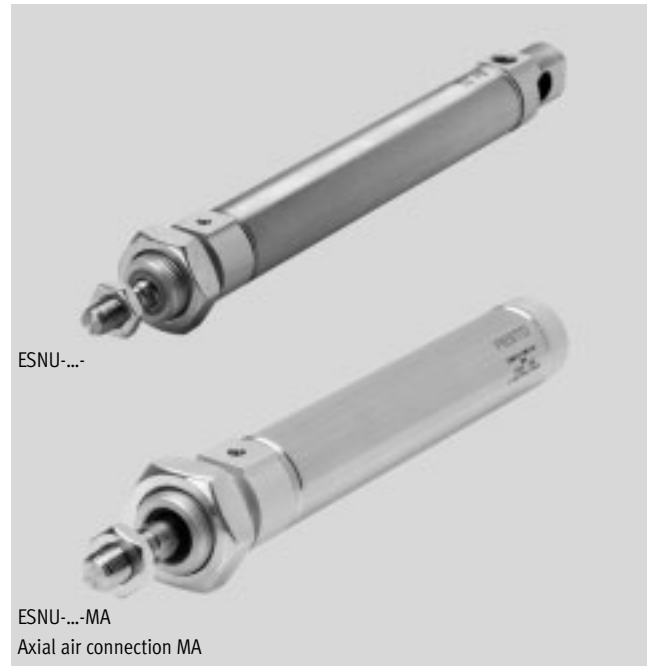
Function
Flexible cushioning



⊘ - Diameter
8 ... 25 mm
ISO 6432

⊘ - Diameter
32 ... 63 mm

┆ - Stroke length
1 ... 50 mm



General technical data											
Piston ∅	8	10	12	16	20	25	32	40	50	63	
Conforms	ISO 6432						-				
Pneumatic connection	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8	
Piston rod thread	M4	M4	M6	M6	M8	M10x1.25	M10x1.25	M12x1.25	M16x1.5	M16x1.5	
Stroke ¹⁾	[mm] 1 ... 50										
Constructional design	Piston / Piston rod / Cylinder barrel										
Cushioning	Flexible cushioning rings/pads at both ends										
Position sensing	Via proximity sensor										
Type of mounting	Via accessories										
Mounting position	Any										

1) Cylinders with position sensing require a minimum stroke of 10 mm to ensure reliable sensing

• Note: This product conforms to ISO 1179-1 and to ISO 228-1

Operating and environmental conditions											
Piston ∅	8	10	12	16	20	25	32	40	50	63	
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] 1.5 ... 10			1.2 ... 10							
Ambient temperature ¹⁾	[°C] -20 ... +80										
Corrosion resistance class CRC ²⁾	2										

1) Note operating range of proximity sensors.

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

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Round cylinders ESNU

Technical data

FESTO

Force [N] and impact energy [J]										
Piston Ø	8	10	12	16	20	25	32	40	50	63
Theoretical force at 6 bar, advancing	24	41	61	107	169	270	442	688	1071	1763
Spring return force										
10 mm stroke	4.9	4.9	6.3	13.2	18.3	22.9	36	60	95	95
25 mm stroke	4.1	4.1	5.4	11.9	16.5	21.2	30	50	82	82
50 mm stroke	2.8	4.8	3.9	9.8	13.6	18.5	20	30	60	60
Max. impact energy at the end positions ¹⁾	0.03	0.05	0.07	0.15	0.20	0.30	0.40	0.70	1	1.3

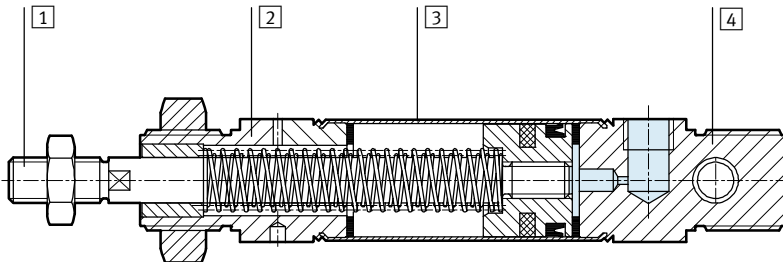
1) The values are reduced by approx. 50% at ambient temperatures of 80 °C

Weight ESNU-... [g]										
Piston Ø	8	10	12	16	20	25	32	40	50	63
Product weight with 0 mm stroke	35	37.3	75	89.9	186.8	238	370.5	661	1087	1445
Additional weight per 10 mm stroke	2.4	2.7	4	4.6	7.2	11	15.5	24	40	44

Weight ESNU-...-MA [g]										
Piston Ø	8	10	12	16	20	25	32	40	50	63
Product weight with 0 mm stroke	30	33	65	81	167	222	330	585	1013	1369
Additional weight per 10 mm stroke	2.4	2.7	4	4.6	7.2	11	15.5	24	40	44

Materials

Sectional view



Round cylinder	
1	Piston rod High-alloy steel
2	Bearing cap Anodised aluminium
3	Cylinder barrel High-alloy stainless steel
4	End cap Anodised aluminium
-	Seals TPE-U(PU), NBR
-	Spring Spring steel
Note on materials RoHS compliant	

Round cylinders ESNU

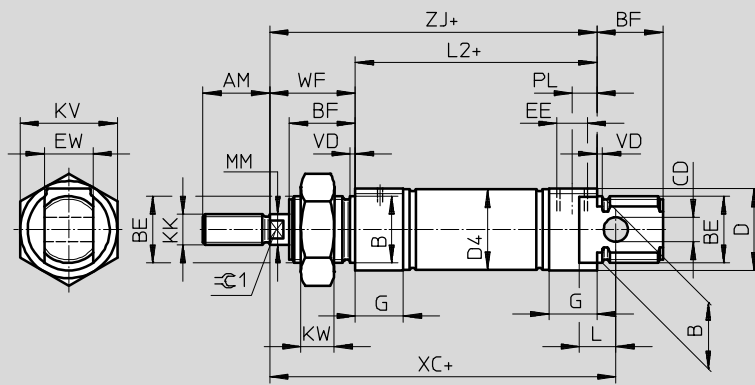
Technical data

FESTO

Dimensions

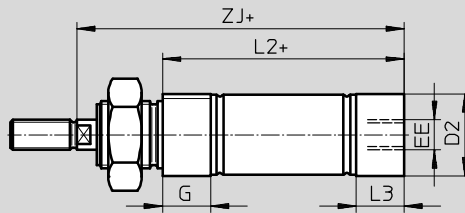
ESNU-8 ... 25

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Note
Piston rod nut is not included in scope of delivery for \varnothing 8 ... 20.
+ = plus stroke length

MA – Axial air connection



+ = plus stroke length

\varnothing [mm]	AM	B \varnothing h9	BE	BF	CD \varnothing H9	D \varnothing	D2 \varnothing	D4 \varnothing	EE	EW	G	KK	KV
8	12	12	M12x1.25	12	4	15	10.5	9.3	M5	8	10	M4	19
10							12.5	11.3					
12	16	16	M16x1.5	17	6	20	14.5	13.3	M5	12	10	M6	24
16							17.5	17.3					
20	20	22	M22x1.5	20	8	27	21.7	21.3	G1/8	16	16	M8	32
25				22			22	26.7					

\varnothing [mm]	KW	L	L2		L3	MM \varnothing	PL	VD	WF	XC ± 1	ZJ		$\approx \pm 0.1$
			ESNU- ...	-MA							ESNU- ...	-MA	
8	6	6	46	43.6	7.6	4	6	2	16	64	62	59.6	-
10				43.1								59.1	
12	8	9	50	47.7	7.7	6	6	2	22	75	72	69.7	5
16				53.7								75.7	
20	11	12	68	66.5	14.5	8	8.2	2	24	95	92	90.5	7
25				69.5								68.5	

Note: This product conforms to ISO 1179-1 and to ISO 228-1

Round cylinders ESNU

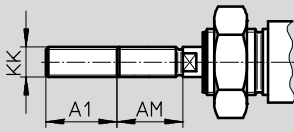
Technical data

Dimensions

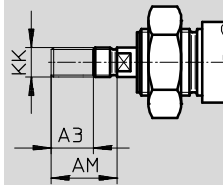
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ESNU-8 ... 25

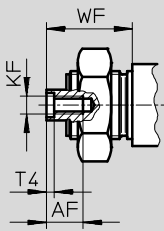
K2 – Extended male piston rod thread



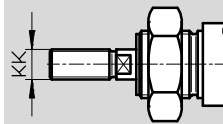
K6 – Shortened male piston rod thread



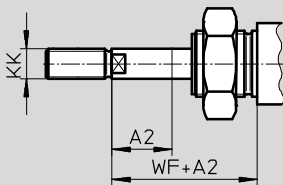
K3 – Female piston rod thread



K5 – Special piston rod thread



K8 – Extended piston rod



∅ [mm]	A1 max.	A2 max.	A3 max.	AF	AM	KF	KK		T4	WF
							Basic thread	Special thread ¹⁾		
8	15	50	4	–	12	–	M4	–	–	16
10				–		–				
12				–		–				
16	20		8	–	16	–	M6	–	–	22
20						25		20	M4	
25	35			22	12	22	M6	M10x1.25	M10	2.6

1) The special threads are only available as male threads. The scope of delivery does not include a hex nut for the piston rod thread.

Round cylinders ESNU

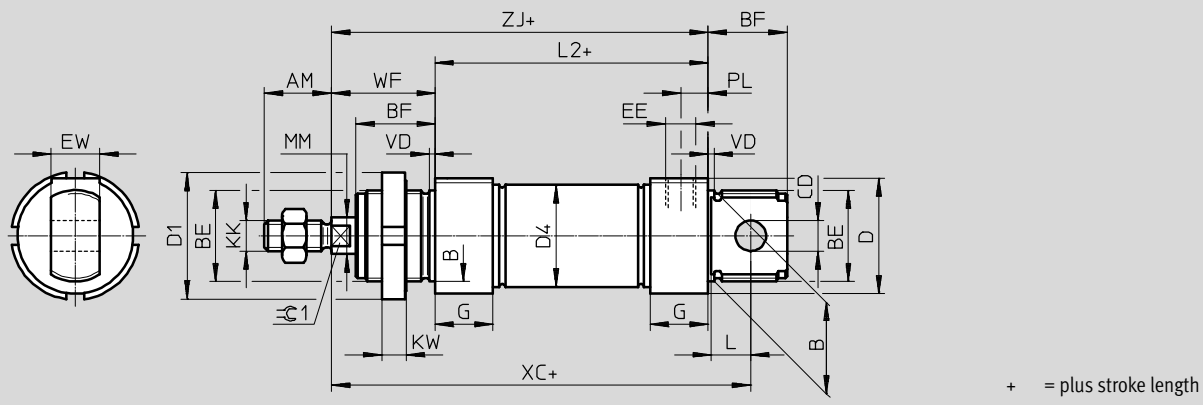
Technical data

FESTO

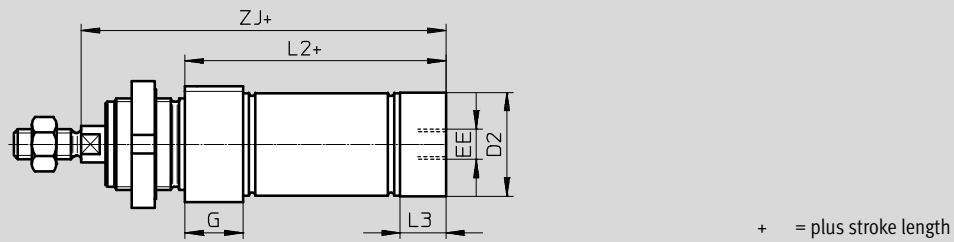
Dimensions

ESNU-32 ... 63

Download CAD data → www.festo.com



MA – Axial air connection



∅	AM	B	BE	BF	CD	D	D1	D2	D4	EE	EW	G	KK
[mm]		∅ h9			∅ E10	∅	∅	∅	∅				
32	22	30	M30x1.5	26	10	38	42	34	33.6	G1/8	16	19	M10x1.25
40	24	38	M38x1.5	30	12	46	50	42	41.6	G1/4	18	25	M12x1.25
50	32	45	M45x1.5	33	16	57	60	53	52.4		G3/8		21
63						70		66	65.4				

∅	KW	L	L2		L3	PL	MM	VD	WF	XC ±1	ZJ		≈C1
			ESNU- ...	-MA							ESNU- ...	-MA	
[mm]							∅						
32	8	13	69.5	65.5	15	9	12	2	34	117.5	103.5	99.5	10
40	10	15	84.6	77.6	18	12	16	3	39	139.6	123.6	116.6	13
50		16	86.2	86.2	25				44	147.2	130.2	130.2	17
63		94.2	94.2	28	13	45	156.2		139.2	139.2			

Round cylinders ESNU

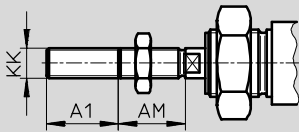
Technical data

Dimensions

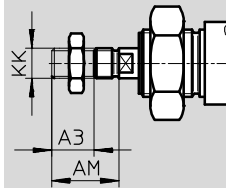
Download CAD data → www.festo.com

ESNU-32 ... 63

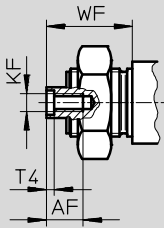
K2 – Extended male piston rod thread



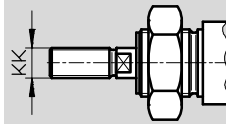
K6 – Shortened male piston rod thread



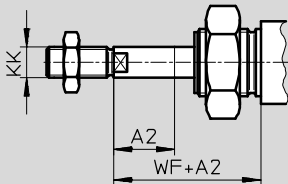
K3 – Female piston rod thread



K5 – Special piston rod thread



K8 – Extended piston rod



∅ [mm]	A1 max.	A2 max.	A3 max.	AF	AM	KF	KK		T4	WF
							Basic thread	Special thread ¹⁾		
32	35	50	8	12	22	M6	M10x1.25	M10	2.6	34
40					24	M8	M12x1.25	M12	3.3	39
50			10	16	32	M10	M16x1.5	M16	4.7	44
63										45

1) The special threads are only available as male threads. The scope of delivery does not include a hex nut for the piston rod thread.

Round cylinders ESNU

Technical data

FESTO

Ordering data					
Piston Ø [mm]	Stroke [mm]	Without position sensing		A – With position sensing	
		Part No.	Type	Part No.	Type
8	10	–		19254	ESNU-8-10-P-A
	25			19255	ESNU-8-25-P-A
	50			19256	ESNU-8-50-P-A
10	10	–		19257	ESNU-10-10-P-A
	25			19258	ESNU-10-25-P-A
	50			19259	ESNU-10-50-P-A
12	10	–		19260	ESNU-12-10-P-A
	25			19261	ESNU-12-25-P-A
	50			19262	ESNU-12-50-P-A
16	10	–		19263	ESNU-16-10-P-A
	25			19264	ESNU-16-25-P-A
	50			19265	ESNU-16-50-P-A
20	10	–		19266	ESNU-20-10-P-A
	25			19267	ESNU-20-25-P-A
	50			19268	ESNU-20-50-P-A
25	10	–		19269	ESNU-25-10-P-A
	25			19270	ESNU-25-25-P-A
	50			19271	ESNU-25-50-P-A
32	10	195870	ESNU-32-10-P	196376	ESNU-32-10-P-A
	25	195871	ESNU-32-25-P	196377	ESNU-32-25-P-A
	50	195872	ESNU-32-50-P	196378	ESNU-32-50-P-A
40	10	195873	ESNU-40-10-P	196379	ESNU-40-10-P-A
	25	195874	ESNU-40-25-P	196380	ESNU-40-25-P-A
	50	195875	ESNU-40-50-P	196381	ESNU-40-50-P-A
50	10	195876	ESNU-50-10-P	196382	ESNU-50-10-P-A
	25	195877	ESNU-50-25-P	196383	ESNU-50-25-P-A
	50	195878	ESNU-50-50-P	196384	ESNU-50-50-P-A
63	10	195879	ESNU-63-10-P	196385	ESNU-63-10-P-A
	25	195880	ESNU-63-25-P	196386	ESNU-63-25-P-A
	50	195881	ESNU-63-50-P	196387	ESNU-63-50-P-A

Round cylinders ESNU

Technical data

Ordering data			
∅ [mm]	Stroke [mm]	Part No.	Type
Variable stroke lengths			
8	1 ... 50	14119	ESNU-8-...-P-A
10	1 ... 50	14118	ESNU-10-...-P-A
12	1 ... 50	14317	ESNU-12-...-P-A
16	1 ... 50	14316	ESNU-16-...-P-A
20	1 ... 50	14319	ESNU-20-...-P-A
25	1 ... 50	14318	ESNU-25-...-P-A

Round cylinders ESNU

Ordering data – Modular products



Ordering table									
Size	8	10	12	16	20	25	Condi- tions	Code	Enter code
M Module No.	193996	193997	193998	193999	194000	194001			
Function	Standard cylinder, single-acting pushing, based on ISO 6432							ESNU	ESNU
Piston Ø [mm]	8	10	12	16	20	25		-...	
Stroke [mm]	1 ... 50								
Cushioning	Flexible cushioning rings/pads at both ends							-P	-P
O Position sensing	Via proximity sensor						1	-A	
↓ End cap	Axial air connection							-MA	

1 A Minimum stroke: 10 mm

M Mandatory data

O Options

Transfer order code

Round cylinders ESNU

Ordering data – Modular products

Ordering table										
Size	8	10	12	16	20	25	Condi- tions	Code	Enter code	
↓ [O] Extended male thread [mm]	Extended male piston rod thread 1 ... 15 1 ... 20 1 ... 25 1 ... 35						[2]	-...K2		
Shortened male thread [mm]	Shortened male piston rod thread 1 ... 4 1 ... 8							-...K6		
Female thread	-	-	-	-	(M4)	(M6)	[3]	-K3		
Special thread	Piston rod with special thread - - - - - M10							-”...”K5		
Extended piston rod [mm]	Extended piston rod 1 ... 50							...K8		

[2] **K2** Not with female thread K3, shortened male thread K6

[3] **K3** Not with special thread K5, shortened male thread K6

[M] Mandatory data

[O] Options

Transfer order code

- - - - -

Round cylinders ESNU

Ordering data – Modular products



Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
M Module No.	194002	194003	194004	194005			
Function	Single-acting round cylinder					ESNU	ESNU
Piston Ø [mm]	32	40	50	63		-...	
Stroke [mm]	1 ... 50					-...	
Cushioning	Flexible cushioning rings/pads at both ends					-P	-P
O Position sensing	Via proximity sensor				1	-A	
↓ End cap	Axial air connection					-MA	

1 A Minimum stroke: 10 mm

M Mandatory data

O Options

Transfer order code

ESNU - - - **P** - - -

Round cylinders ESNU

Ordering data – Modular products



Ordering table							
Size	32	40	50	63	Condi- tions	Code	Enter code
↓ [O] Extended male thread [mm]	Piston rod with extended male thread 1 ... 35				[2]	-...K2	
Shortened male thread [mm]	Piston rod with shortened male thread 1 ... 8		1 ... 10			-...K6	
Female thread	Piston rod with female thread (M6) (M8)		(M10)		[3]	-K3	
Special thread	Piston rod with special thread M10 M12		M16			-“...”K5	
Extended piston rod [mm]	Extended piston rod 1 ... 50					...K8	

[2] **K2** Not with female thread K3, shortened male thread K6

[3] **K3** Not with special thread K5, shortened male thread K6

[M] Mandatory data

[O] Options

Transfer order code

- - - -