



- Double-acting
- For contactless position sensing
- Robust tie rod design
- Comprehensive range of accessories

Specified types in accordance with
ATEX directive for potentially
explosive atmospheres

➔ www.festo.com/en/ex

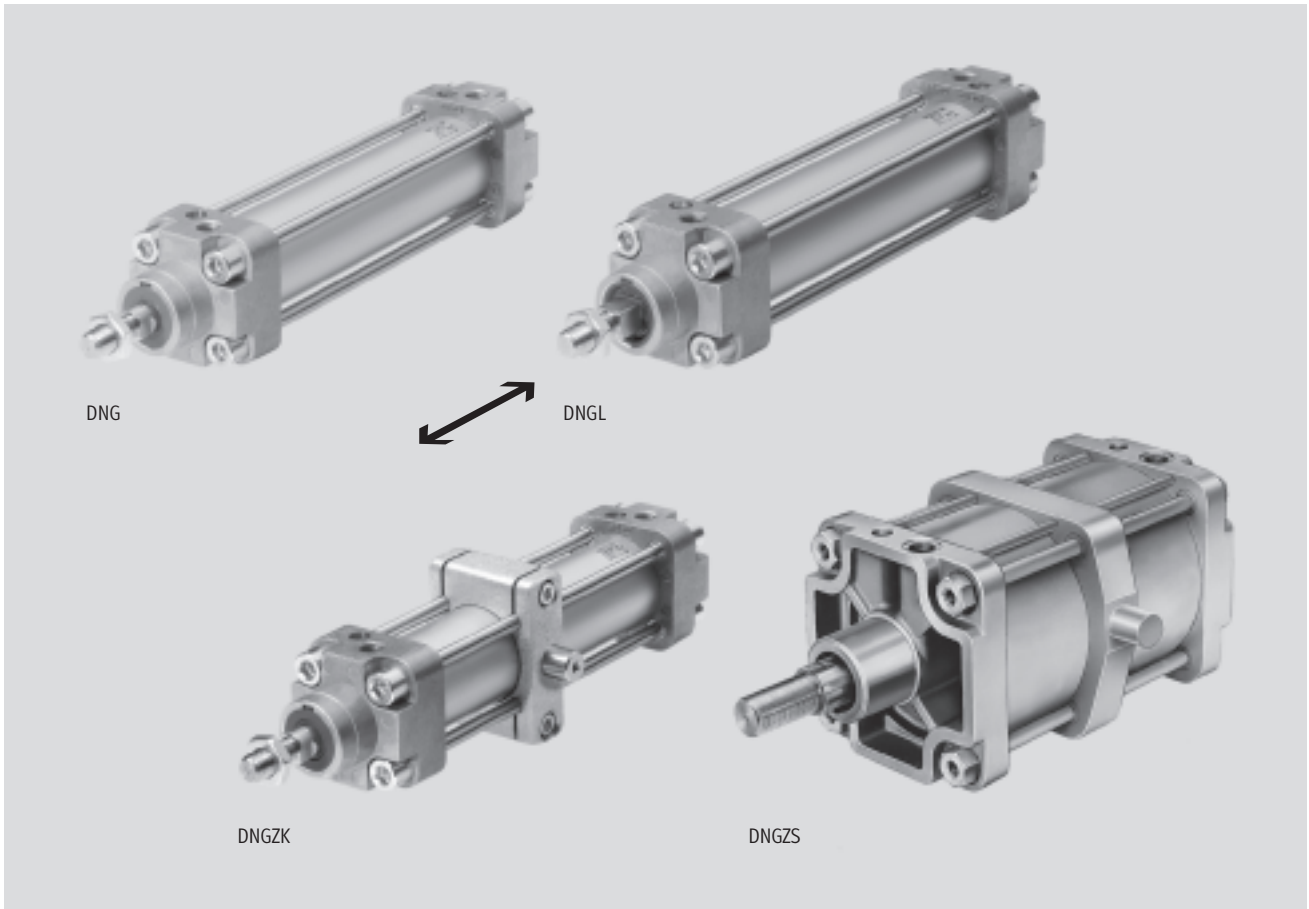
Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

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Features

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2



Brief description

- Double-acting
- For contactless position sensing
- With adjustable end-position cushioning at both ends
- Robust tie rod design
- DNGL/DNGLZ:
secured against rotation by means of square piston rod
- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)



DIN



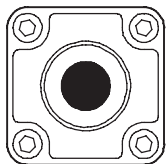
Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

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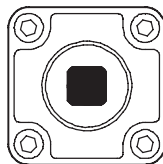
Features

Variants

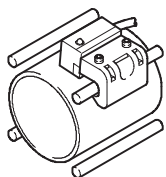
DNG/DNGZK/DNGZS



DNGL/DNGLZ with square piston rod (non-rotating)



Contactless sensing with proximity sensors SMEO-1/SMT0-1/SMPO-1



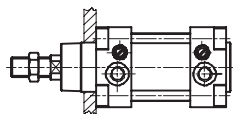
Depending on the stroke, each cylinder can have one or more proximity sensors attached to the tie rods (piston $\varnothing$ 32 ... 100 mm). With piston $\varnothing$ 125 ... 320 mm, they

are fixed to additional mounting rods that are included in the scope of delivery. The sensors are used for contactless sensing of end or intermediate positions of the cylinder.

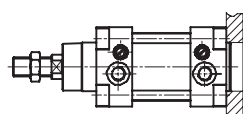
Mounting options

Installation of basic version

Mounting at front



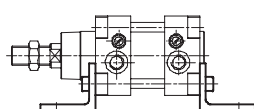
Mounting at rear



Installation options using mounting attachments

Foot mounting MS1¹⁾

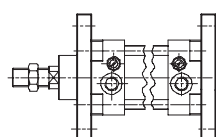
HNG



Flange mounting MF1/MF2¹⁾

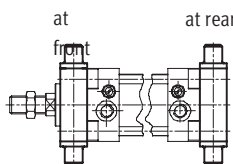
FNG

at front at rear



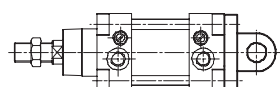
Trunnion flange

ZNG



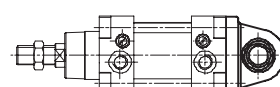
Swivel flange MP2¹⁾

SNG/SNGB/SNGL



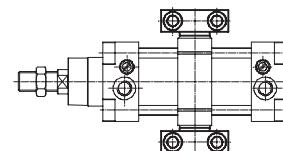
Swivel flange with spherical bearing

SSNG



Trunnion mounting kit MT4¹⁾

LNZG



1) Standard designation to ISO 15552 (ISO 6431)

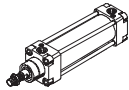
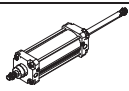
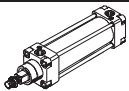
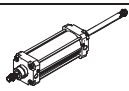
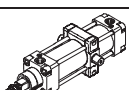
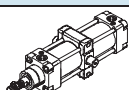
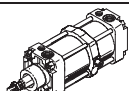
ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

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Product range overview

Function	Design	Type	Piston Ø [mm]	Stroke [mm]		Position sensing A	Cushioning Adjustable PPV
Double-acting	Basic version						
		DNG Single-ended piston rod	32, 40, 50, 63, 80, 100, 125	25, 40, 50, 100, 125, 160, 200, 250, 320, 400, 500	10 ... 2000	■	■
			160, 200	–	10 ... 2000		
			250, 320	–	10 ... 1100		
		DNG-...-S2 Through piston rod	32, 40, 50, 63, 80, 100, 125, 160, 200		10 ... 2000	■	■
			250, 320		10 ... 1100		
	Non-rotating piston rod						
		DNGL Single-ended piston rod	32	–	10 ... 300	■	■
			40	–	10 ... 400		
			50, 63	–	10 ... 500		
			80, 100	–	10 ... 600		
		DNGL-...-S2 Through piston rod	32	–	10 ... 300	■	■
			40	–	10 ... 400		
			50, 63	–	10 ... 500		
			80, 100	–	10 ... 600		
		DNLZ with central trunnion mounting	32	–	10 ... 300	■	■
			40	–	10 ... 400		
			50, 63	–	10 ... 500		
			80, 100	–	10 ... 600		
	with central trunnion mounting						
		DNGZK adjustable	32, 40, 50, 63	40, 50, 100, 125, 160, 200, 250, 320, 400, 500	10 ... 2000	■	■
			80, 100	50, 100, 125, 160, 200, 250, 320, 400, 500	10 ... 2000		
			125, 160, 200	–	10 ... 2000		
		DNGZS fixed	250, 320	–	10 ... 1100	■	■

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Product range overview

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Type	Piston rod		Heat-resistant seal	High corrosion protection	→ Page
	Male thread	Stainless steel S3			
Basic version					
DNG Single-ended piston rod	■	■	■	■	1 / 1.2-89
DNG-...-S2 Through piston rod	■	–	–	–	1 / 1.2-89
non-rotating piston rod					
DNGL Single-ended piston rod	■	–	■	–	1 / 1.2-89
DNGL-...-S2 Through piston rod	■	–	–	–	1 / 1.2-89
DNGLZ with central trunnion mounting	■	–	■	–	1 / 1.2-89
with central trunnion mounting					
DNGZK adjustable	■	■	■	■	1 / 1.2-89
DNGZS fixed	■	■	■	■	1 / 1.2-89

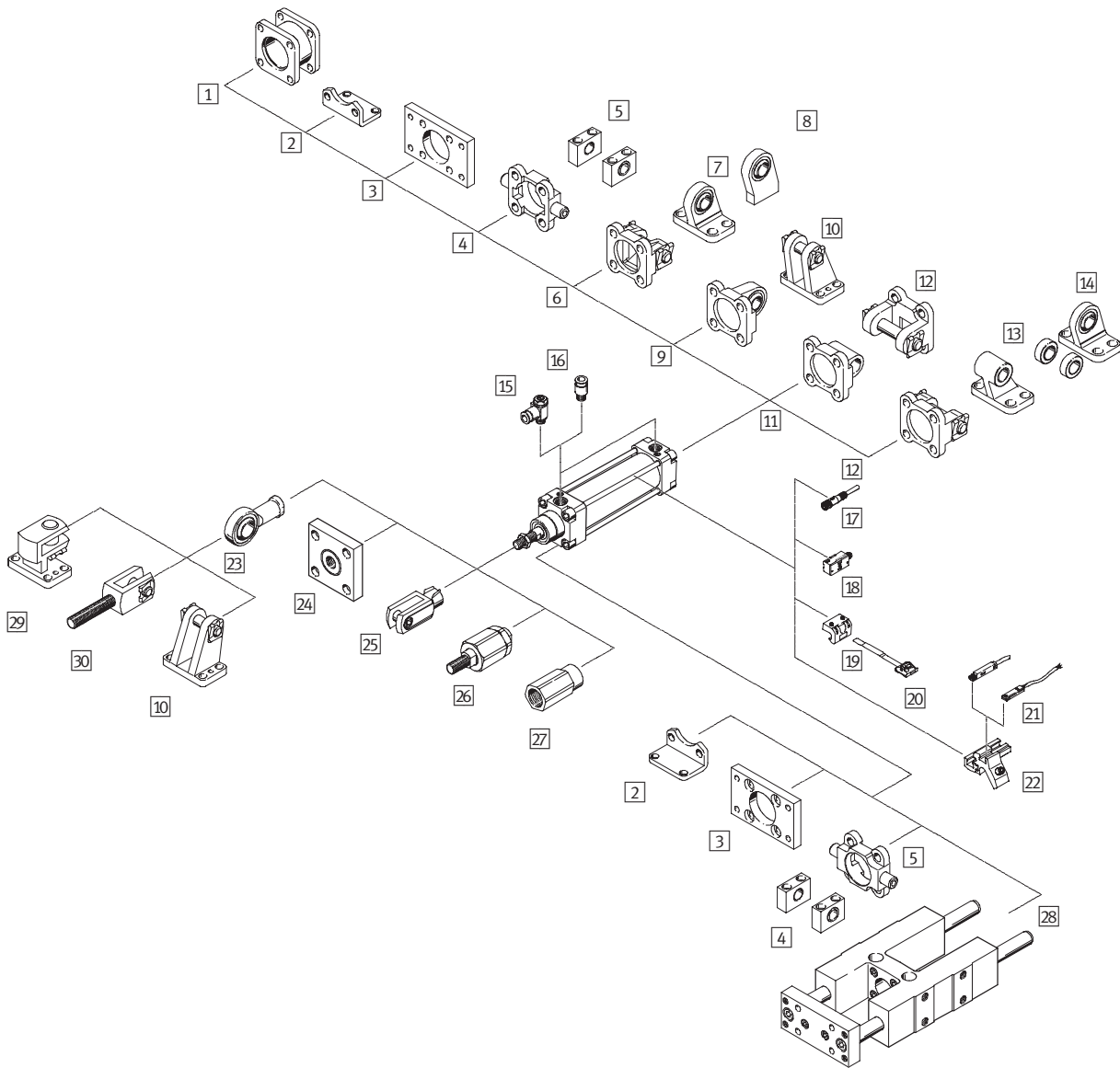
Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Peripherals overview

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ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2



Mounting attachments and accessories		
	Brief description	→ Page
1 Adapter kit DPNG	For connecting two DNG cylinders with identical piston $\varnothing$ to form a multi-position cylinder	1 / 1.2-99
2 Foot mounting HNG	For bearing and end caps corresponds to MS1 to ISO 15552	1 / 1.2-100
3 Flange mounting FNG	For bearing or end caps corresponds to MF1/MF2 to ISO 15552	1 / 1.2-101
4 Trunnion flange ZNG	For bearing or end caps	1 / 1.2-101
5 Trunnion support LNZG	Corresponds to MT4 to ISO 15552	1 / 1.2-102
6 Swivel flange SNG	For end caps	1 / 1.2-102

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Peripherals overview

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Mounting attachments and accessories		
	Brief description	→ Page
7	Clevis foot mounting LSNG	With spherical bearing 1 / 1.2-105
8	Clevis foot mounting LSNSG	Weld-on with spherical bearing 1 / 1.2-105
9	Swivel flange SSNG	With spherical bearing for clevis foot mounting LBG 1 / 1.2-103
10	Clevis foot mounting LBG	With non-rotating pivot pin 1 / 1.2-105
11	Swivel flange SNGL	For end caps corresponds to MP2 to ISO 15552 1 / 1.2-104
12	Swivel flange SNGB	For end caps corresponds to MP2 to ISO 15552 1 / 1.2-103
13	Clevis foot mounting LNG	For swivel flange SNGB 1 / 1.2-105
14	Clevis foot mounting LSN	With spherical bearing 1 / 1.2-105
15	One-way flow control valve GRLA	For speed regulation 1 / 1.2-105
16	Push-in fitting QS	For connecting compressed air tubing with standard O.D. Volume 3
17	Connecting cable, straight NEBU	– 1 / 1.2-108
	Connecting cable, angled NEBU	– 1 / 1.2-108
18	Proximity sensors SMEO-1/SMTO-1/SMPO-1-H-B	– 1 / 1.2-109
19	Sensor mounting kit SMB	For proximity sensor SMEO-1/SMTO-1 1 / 1.2-109
20	Sensor mounting kit SMBS	For proximity sensor SMPO-1-H-B 1 / 1.2-109
	Sensor mounting kit SMBR-8-8/100-S6	Corrosion resistant, for proximity sensor SME/SMT-8 1 / 1.2-109
21	Proximity sensors SME/SMT-8	– 1 / 1.2-108
22	Sensor mounting kit SMBZ-8- ...	For proximity sensor SME/SMT-8 1 / 1.2-108
23	Rod eye SGS	With spherical bearing 1 / 1.2-106
24	Coupling piece KSG/KSZ	For compensating radial deviations 1 / 1.2-106
25	Rod clevis SG	Permits a swivelling movement of the cylinder in one plane 1 / 1.2-106
26	Self-aligning rod coupler FK	For compensating radial and angular deviations 1 / 1.2-106
27	Adapter AD	– 1 / 1.2-106
28	Guided unit FENG	To protect against torsion at high torque loads 1 / 1.2-107
29	Right-angle clevis foot LQG	With non-rotating pivot pin 1 / 1.2-105
30	Rod clevis SGA	Suitable for spherical mounting of cylinders in conjunction with rod eye SGS 1 / 1.2-106

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Type codes

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ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

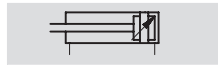
		DNG	–	50	–	80	–	PPV	–	A	–		–	
Type														
Double-acting														
DNG	Standard cylinder													
DNGL	Standard cylinder, non-rotating													
DNGLZ	Standard cylinder, non-rotating with central trunnion mounting													
DNGZK	Standard cylinder with central trunnion mounting (adjustable)													
DNGZS	Standard cylinder with central trunnion mounting (fixed)													
Piston Ø [mm]														
Stroke [mm]														
Cushioning														
PPV	Adjustable at both ends													
Position sensing														
A	For proximity sensing													
Trunnion flange axis distance														
XV	Trunnion flange position													
Variants														
S2	Through piston rod													
S3	Stainless steel piston rod													
S6	Heat resistant seal for temperatures up to 120 °C													
S8	High corrosion protection													

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

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Technical data

Function



Ø - Diameter
32 ... 320 mm

Stroke length
10 ... 2000 mm

 [www.festo.com/en/
Spare_parts_service](http://www.festo.com/en/Spare_parts_service)

Variants



S2



S3



S6

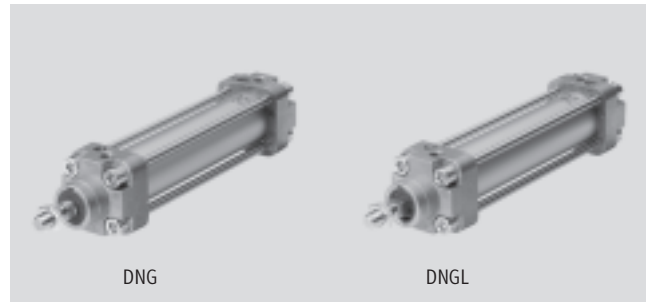


S8

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

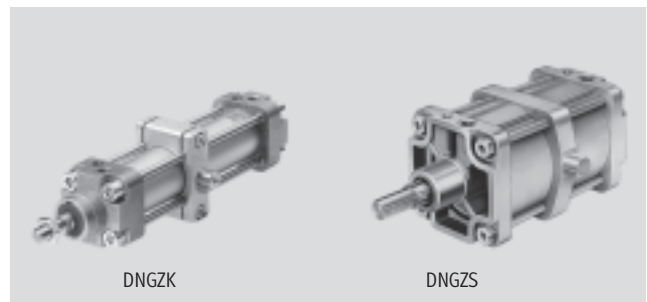


DIN



DNG

DNGL



DNGZK

DNGZS

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

General technical data											
Piston Ø	32	40	50	63	80	100	125	160	200	250	320
Pneumatic connection	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{1}{2}$	G $\frac{1}{2}$	G $\frac{3}{4}$	G $\frac{3}{4}$	G1	G1
Piston rod thread	M10x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5	M20x1.5	M27x2	M36x2	M36x2	M42x2	M48x2
Operating medium	Filtered compressed air, lubricated or unlubricated										
Design	Piston										
	Piston rod										
	Profile barrel										
Cushioning	Adjustable at both ends										
Cushioning length [mm]	19	21	23	23	30	30	40	40	50	60	66
Position sensing	For proximity sensing										
Type of mounting	Via accessories										
Mounting position	Any										

Operating and environmental conditions												
Piston Ø	32	40	50	63	80	100	125	160	200	250	320	
Operating pressure [bar]	12							10				
Ambient temperature ¹⁾ [°C]	-20 ... +80											

1) Note operating range of proximity sensors

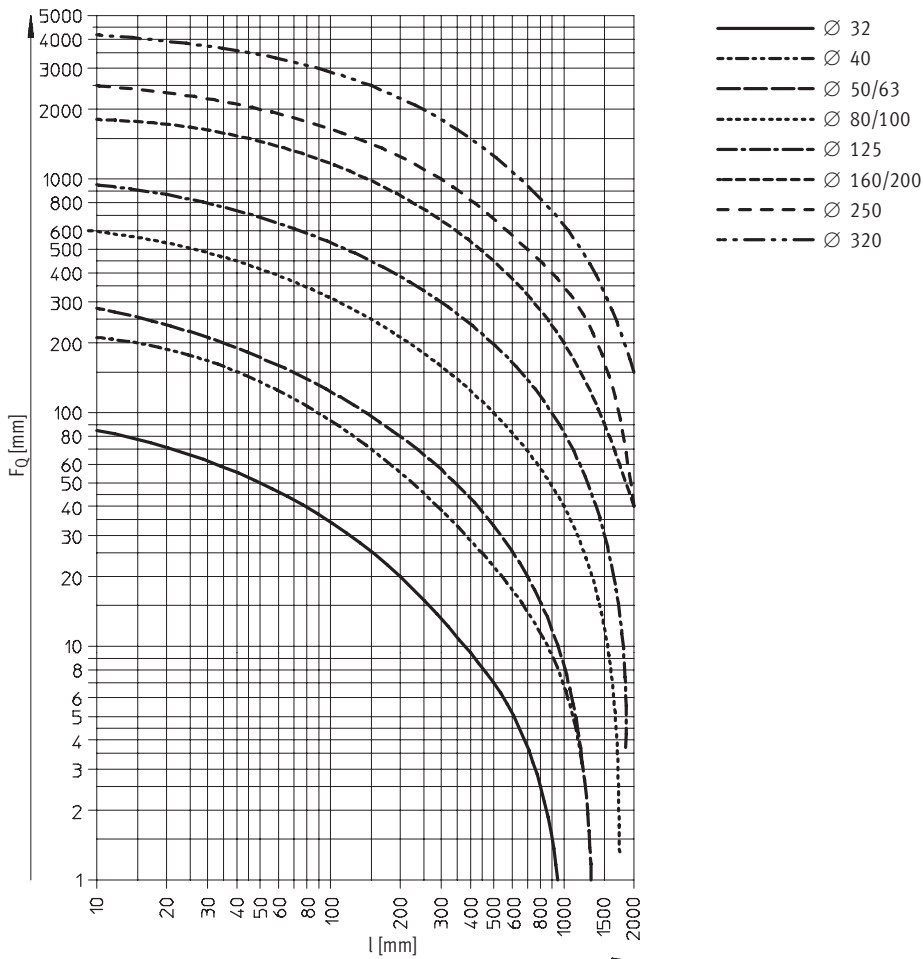
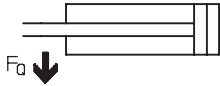
Forces [N]											
Piston Ø	32	40	50	63	80	100	125	160	200	250	320
Theoretical force at 6 bar, advancing	482	753	1,178	1,870	3,015	4,712	7,360	12,064	18,850	29,450	48,250
Theoretical force at 6 bar, retracting	415	633	990	1,682	2,720	4,418	6,880	11,310	18,096	28,270	46,380

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Technical data

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Lateral force F_Q as a function of the stroke length l



Weights [g]											
Piston Ø	32	40	50	63	80	100	125	160	200	250	320
DNG/DNGL											
Product weight at 0 mm stroke	565	790	1,400	1,725	2,875	4,100	7,305	17,265	20,115	30,800	53,200
Additional weight per 10 mm stroke	30	40	50	60	80	100	140	190	250	360	570
DNGZK/DNGLZ/DNGZS											
Product weight at 0 mm stroke	820	1,275	1,945	2,765	3,960	6,210	10,215	19,510			
Additional weight per 10 mm stroke	30	40	50	60	80	100	140	190			

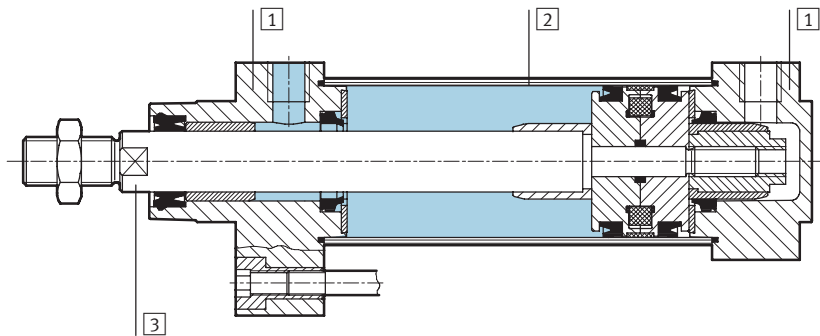
Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

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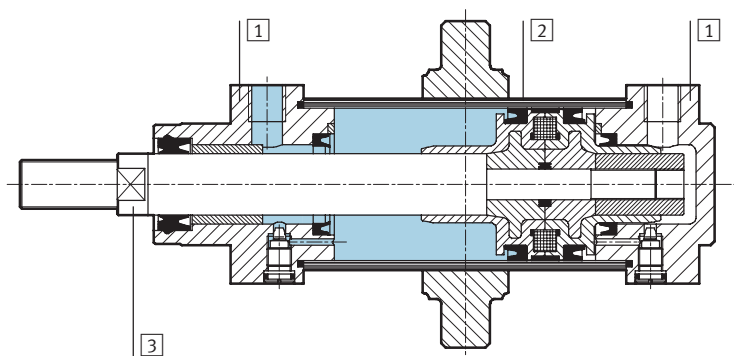
Technical data

Materials

Sectional view DNG/DNGL



Sectional view DNGZK/DNGLZ



Standard cylinder	DNG/DNGL	DNGZK/DNGLZ
1 Bearing and end caps	Aluminium (Ø250/320: high-alloy steel)	Die-cast aluminium (Ø 160/200: die-cast aluminium)
2 Cylinder barrel	Aluminium (Ø250/320: high-alloy steel)	Aluminium (Ø 160/200: brass)
3 Piston rod, tie rod	High-alloy steel	
– Seals	Polyurethane, nitrile rubber	

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Technical data

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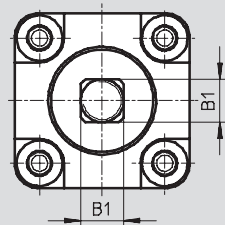
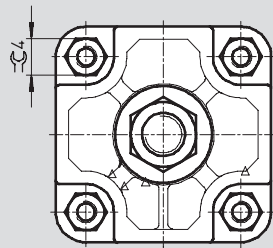
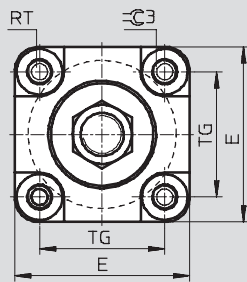
Dimensions

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

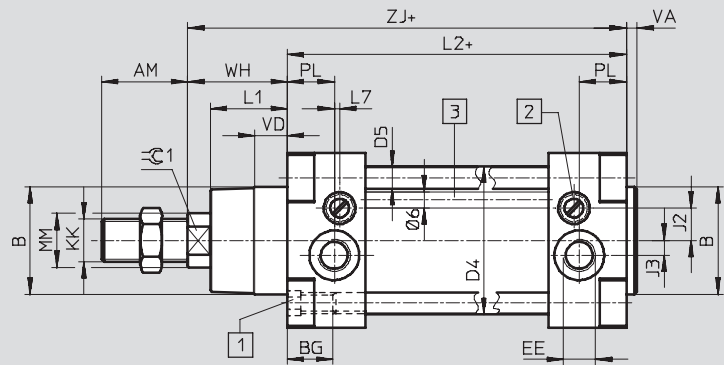
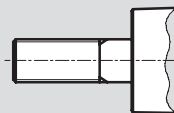
DNG/DNGL

DNG-32 ... 63

DNG-80 ... 320



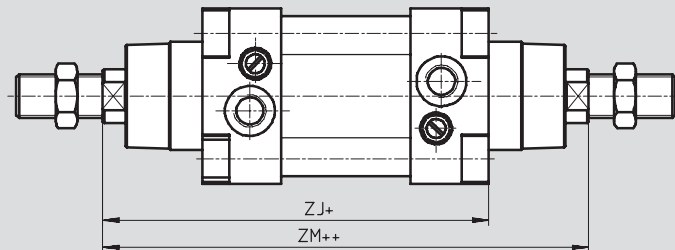
DNGL/DNGLZ



- 1 Socket head screw with female thread for mounting attachments
- 2 Regulating screw for adjustable end-position cushioning
- 3 From Ø 125 with additional rods for mounting proximity sensors

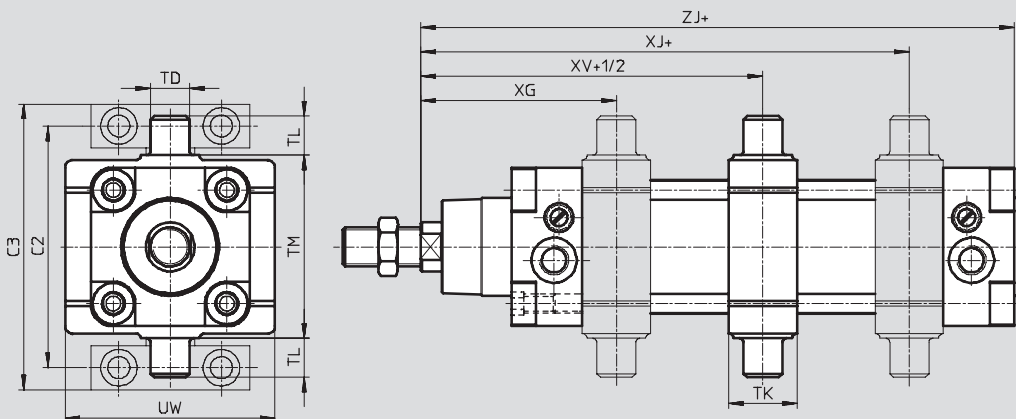
+ = plus stroke length

Variant S2 – Through piston rod



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

DNGZK/DNGLZ/DNGZS – with central trunnion mounting adjustable, fixed



+ = plus stroke length
+1/2 = plus half stroke length

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

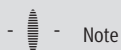
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Technical data

Ø [mm]	AM	B Ø d11	B1 f9	BG	C2	C3	D4 Ø	D5 Ø	E	EE	J2	J3
32	22	30	10	17	71	86	37	6	50	G1/8	7	–
40	24	35	12	16.5	87	105	45	6	55	G1/4	9.5	2.5
50	32	40	16	17	99	117	55	8	65	G1/4	12	5.5
63	32	45	16	19.5	116	136	68	8	75	G3/8	14	6
80	40	45	20	20	136	156	86	10	100	G3/8	15	7
100	40	55	20	20	164	189	107	10	120	G1/2	13	8
125	54	60	–	25	192	217	133	12	145	G1/2	13	8
160	72	65	–	24	245	280	168	16	186	G3/4	22	22
200	72	75	–	24	295	330	210	16	230	G3/4	22	22
250	84	90	–	25.5	375	370	254	18.3	270	G1	25	25
320	96	110	–	28.5	465	460	325	22	340	G1	30	30

Ø [mm]	KK	L1	L2	L7	MM Ø	PL	RT	TD Ø e9	TG	TK	TL
32	M10x1.25	19	94 ±0.4	5.8	12	8.8	M6	12	32.5	20	12
40	M12x1.25	21.5	105 ±0.7	5.3	16	11	M6	16	38	25	16
50	M16x1.5	28.5	106 ±0.7	2	20	17.5	M8	16	46.5	28	16
63	M16x1.5	28.5	121 ±0.8	5	20	18	M8	20	56.5	30	20
80	M20x1.5	34.5	128 ±0.8	8	25	17	M10	20	72	32	20
100	M20x1.5	37.5	138 ±0.8	13	25	18	M10	25	89	38	25
125	M27x2	46	160 ±1	14	32	18	M12	25	110	44	25
160	M36x2	55	180 ±1.1	–	40	25	M16	32	140	48	32
200	M36x2	65	180 ±1.6	–	40	28	M16	32	175	48	32
250	M42x2	67	200 ±2	–	50	31	M20	40	220	60	40
320	M48x2	82	220 ±2	–	63	31	M24	50	270	70	50

Ø [mm]	TM	UW	VA	VD	WH	XG	XJ	XV	ZJ	ZM	≈C1	≈C3	≈C4
32	50	68	4	10.5	26	62 ±1.8	84 ±1.8	73 ±1.8	120	146	10	6	–
40	63	72	4	10.5	30	69 ±1.8	96 ±1.8	82.5 ±1.8	135	165	13	6	–
50	75	86	4	12	37	80 ±1.8	100 ±1.8	90 ±1.8	143	180	17	8	–
63	90	98	4	12.5	37	87 ±2.2	108 ±2.2	97.5 ±2.2	158	195	17	8	–
80	110	110	4	16.5	46	101 ±2.2	119 ±2.2	110 ±2.2	174	220	22	–	17
100	132	136	4	15.5	51	112 ±2.2	128 ±2.2	120 ±2.2	189	240	22	–	17
125	160	160	6	20.5	65	136 ±2.2	154 ±2.2	145 ±2.2	225	290	27	–	19
160	200	200	6	–	80	155 ±2.6	185 ±2.6	170 ±2.6	260	340	36	–	32
200	250	240	6	–	95	165 ±2.2	205 ±2.2	185 ±2.2	275	370	36	–	32
250	320	270	10	–	105	187	223	205	305	410	46	–	36
320	400	340	10	–	120	211	249	230	340	460	55	–	46



Note

DNGZS-250/-320-...-PPV-A:
The central trunnion mounting is fitted as standard tightly screwed with the tie rods in the cylinder mid-section. As a special design,

mounting is possible between the dimensions XG, XV and XJ.
The required dimension LX must be entered in the order (➔ 1 / 1.2-97).

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

Technical data

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Ordering data							
Design	Stroke [mm]	Piston Ø 32 [mm] Part No. Type ¹⁾		Piston Ø 40 [mm] Part No. Type ¹⁾		Piston Ø 50 [mm] Part No. Type ¹⁾	
Basic version							
	25	36 321	DNG-32-25-PPV-A	36 333	DNG-40-25-PPV-A	36 345	DNG-50-25-PPV-A
	40	36 322	DNG-32-40-PPV-A	36 334	DNG-40-40-PPV-A	36 346	DNG-50-40-PPV-A
	50	36 323	DNG-32-50-PPV-A	36 335	DNG-40-50-PPV-A	36 347	DNG-50-50-PPV-A
	80	36 324	DNG-32-80-PPV-A	36 336	DNG-40-80-PPV-A	36 348	DNG-50-80-PPV-A
	100	36 325	DNG-32-100-PPV-A	36 337	DNG-40-100-PPV-A	36 349	DNG-50-100-PPV-A
	125	36 326	DNG-32-125-PPV-A	36 338	DNG-40-125-PPV-A	36 350	DNG-50-125-PPV-A
	160	36 327	DNG-32-160-PPV-A	36 339	DNG-40-160-PPV-A	36 351	DNG-50-160-PPV-A
	200	36 328	DNG-32-200-PPV-A	36 340	DNG-40-200-PPV-A	36 352	DNG-50-200-PPV-A
	250	36 329	DNG-32-250-PPV-A	36 341	DNG-40-250-PPV-A	36 353	DNG-50-250-PPV-A
	320	36 330	DNG-32-320-PPV-A	36 342	DNG-40-320-PPV-A	36 354	DNG-50-320-PPV-A
	400	36 331	DNG-32-400-PPV-A	36 343	DNG-40-400-PPV-A	36 355	DNG-50-400-PPV-A
	500	36 332	DNG-32-500-PPV-A	36 344	DNG-40-500-PPV-A	36 356	DNG-50-500-PPV-A
Variable stroke	10 ... 2,000	30 000	DNG-32-...-PPV-A	30 001	DNG-40-...-PPV-A	30 002	DNG-50-...-PPV-A
Variant S2	10 ... 2,000	34 625	DNG-32-...-PPV-A-S2	34 626	DNG-40-...-PPV-A-S2	34 627	DNG-50-...-PPV-A-S2
Variant S3	10 ... 2,000	34 973	DNG-32-...-PPV-A-S3	34 974	DNG-40-...-PPV-A-S3	34 975	DNG-50-...-PPV-A-S3
Variant S6	10 ... 2,000	34 854	DNG-32-...-PPV-A-S6	34 855	DNG-40-...-PPV-A-S6	34 856	DNG-50-...-PPV-A-S6
Variant S8	10 ... 2,000	35 453	DNG-32-...-PPV-A-S8	35 454	DNG-40-...-PPV-A-S8	35 455	DNG-50-...-PPV-A-S8
with non-rotating piston rod							
Variable stroke	10 ... 300	30 049	DNGL-32-...-PPV-A	–		–	
	10 ... 400	–		30 050	DNGL-40-...-PPV-A	–	
	10 ... 500	–		–		30 051	DNGL-50-...-PPV-A
	10 ... 600	–		–		–	
Variant S2	10 ... 300	35 338	DNGL-32-...-PPV-A-S2	–		–	
	10 ... 400	–		35 339	DNGL-40-...-PPV-A-S2	–	
	10 ... 500	–		–		35 340	DNGL-50-...-PPV-A-S2
	10 ... 600	–		–		–	
Variant S6	10 ... 300	35 344	DNGL-32-...-PPV-A-S6	–		–	
	10 ... 400	–		35 345	DNGL-40-...-PPV-A-S6	–	
	10 ... 500	–		–		35 346	DNGL-50-...-PPV-A-S6
	10 ... 600	–		–		–	
with adjustable central trunnion mounting							
	40	36 405	DNGZK-32-40-PPV-A	36 416	DNGZK-40-40-PPV-A	36 427	DNGZK-50-40-PPV-A
	50	36 406	DNGZK-32-50-PPV-A	36 417	DNGZK-40-50-PPV-A	36 428	DNGZK-50-50-PPV-A
	80	36 407	DNGZK-32-80-PPV-A	36 418	DNGZK-40-80-PPV-A	36 429	DNGZK-50-80-PPV-A
	100	36 408	DNGZK-32-100-PPV-A	36 419	DNGZK-40-100-PPV-A	36 430	DNGZK-50-100-PPV-A
	125	36 409	DNGZK-32-125-PPV-A	36 420	DNGZK-40-125-PPV-A	36 431	DNGZK-50-125-PPV-A
	160	36 410	DNGZK-32-160-PPV-A	36 421	DNGZK-40-160-PPV-A	36 432	DNGZK-50-160-PPV-A
	200	36 411	DNGZK-32-200-PPV-A	36 422	DNGZK-40-200-PPV-A	36 433	DNGZK-50-200-PPV-A
	250	36 412	DNGZK-32-250-PPV-A	36 423	DNGZK-40-250-PPV-A	36 434	DNGZK-50-250-PPV-A
	320	36 413	DNGZK-32-320-PPV-A	36 424	DNGZK-40-320-PPV-A	36 435	DNGZK-50-320-PPV-A
	400	36 414	DNGZK-32-400-PPV-A	36 425	DNGZK-40-400-PPV-A	36 436	DNGZK-50-400-PPV-A
	500	36 415	DNGZK-32-500-PPV-A	36 426	DNGZK-40-500-PPV-A	36 437	DNGZK-50-500-PPV-A
Variable stroke	10 ... 2,000	34 440	DNGZK-32-...-PPV-A	34 441	DNGZK-40-...-PPV-A	34 442	DNGZK-50-...-PPV-A
Variant S3	10 ... 2,000	34 938	DNGZK-32-...-PPV-A-S3	34 939	DNGZK-40-...-PPV-A-S3	34 940	DNGZK-50-...-PPV-A-S3
Variant S6	10 ... 2,000	34 947	DNGZK-32-...-PPV-A-S6	34 948	DNGZK-40-...-PPV-A-S6	34 949	DNGZK-50-...-PPV-A-S6
Variant S8	10 ... 2,000	35 499	DNGZK-32-...-PPV-A-S8	35 520	DNGZK-40-...-PPV-A-S8	35 521	DNGZK-50-...-PPV-A-S8

1) The scope of delivery includes a hex nut for the piston rod thread.

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

Technical data

Ordering data							
Design	Stroke [mm]	Piston Ø 63 [mm] Part No. Type ¹⁾		Piston Ø 80 [mm] Part No. Type ¹⁾		Piston Ø 100 [mm] Part No. Type ¹⁾	
Basic version							
	25	36 357	DNG-63-25-PPV-A	36 369	DNG-80-25-PPV-A	36 381	DNG-100-25-PPV-A
	40	36 358	DNG-63-40-PPV-A	36 370	DNG-80-40-PPV-A	36 382	DNG-100-40-PPV-A
	50	36 359	DNG-63-50-PPV-A	36 371	DNG-80-50-PPV-A	36 383	DNG-100-50-PPV-A
	80	36 360	DNG-63-80-PPV-A	36 372	DNG-80-80-PPV-A	36 384	DNG-100-80-PPV-A
	100	36 361	DNG-63-100-PPV-A	36 373	DNG-80-100-PPV-A	36 385	DNG-100-100-PPV-A
	125	36 362	DNG-63-125-PPV-A	36 374	DNG-80-125-PPV-A	36 386	DNG-100-125-PPV-A
	160	36 363	DNG-63-160-PPV-A	36 375	DNG-80-160-PPV-A	36 387	DNG-100-160-PPV-A
	200	36 364	DNG-63-200-PPV-A	36 376	DNG-80-200-PPV-A	36 388	DNG-100-200-PPV-A
	250	36 365	DNG-63-250-PPV-A	36 377	DNG-80-250-PPV-A	36 389	DNG-100-250-PPV-A
	320	36 366	DNG-63-320-PPV-A	36 378	DNG-80-320-PPV-A	36 390	DNG-100-320-PPV-A
	400	36 367	DNG-63-400-PPV-A	36 379	DNG-80-400-PPV-A	36 391	DNG-100-400-PPV-A
	500	36 368	DNG-63-500-PPV-A	36 380	DNG-80-500-PPV-A	36 392	DNG-100-500-PPV-A
Variable stroke	10 ... 2,000	30 003	DNG-63-...-PPV-A	30 004	DNG-80-...-PPV-A	30 005	DNG-100-...-PPV-A
Variant S2	10 ... 2,000	34 628	DNG-63-...-PPV-A-S2	34 629	DNG-80-...-PPV-A-S2	34 630	DNG-100-...-PPV-A-S2
Variant S3	10 ... 2,000	34 976	DNG-63-...-PPV-A-S3	34 977	DNG-80-...-PPV-A-S3	34 978	DNG-100-...-PPV-A-S3
Variant S6	10 ... 2,000	34 857	DNG-63-...-PPV-A-S6	34 858	DNG-80-...-PPV-A-S6	34 859	DNG-100-...-PPV-A-S6
Variant S8	10 ... 2,000	35 456	DNG-63-...-PPV-A-S8	35 457	DNG-80-...-PPV-A-S8	35 458	DNG-100-...-PPV-A-S8
with non-rotating piston rod							
Variable stroke	10 ... 300	–		–		–	
	10 ... 400	–		–		–	
	10 ... 500	30 052	DNGL-63-...-PPV-A	–		–	
	10 ... 600	–		30 053	DNGL-80-...-PPV-A	30 054	DNGL-100-...-PPV-A
Variant S2	10 ... 300	–		–		–	
	10 ... 400	–		–		–	
	10 ... 500	35 341	DNGL-63-...-PPV-A-S2	–		–	
	10 ... 600	–		35 342	DNGL-80-...-PPV-A-S2	35 343	DNGL-100-...-PPV-A-S2
Variant S6	10 ... 300	–		–		–	
	10 ... 400	–		–		–	
	10 ... 500	35 347	DNGL-63-...-PPV-A-S6	–		–	
	10 ... 600	–		35 348	DNGL-80-...-PPV-A-S6	35 349	DNGL-100-...-PPV-A-S6
with adjustable central trunnion mounting							
	40	36 438	DNGZK-63-40-PPV-A	–		–	
	50	36 439	DNGZK-63-50-PPV-A	36 449	DNGZK-80-50-PPV-A	36 459	DNGZK-100-50-PPV-A
	80	36 440	DNGZK-63-80-PPV-A	36 450	DNGZK-80-80-PPV-A	36 460	DNGZK-100-80-PPV-A
	100	36 441	DNGZK-63-100-PPV-A	36 451	DNGZK-80-100-PPV-A	36 461	DNGZK-100-100-PPV-A
	125	36 442	DNGZK-63-125-PPV-A	36 452	DNGZK-80-125-PPV-A	36 462	DNGZK-100-125-PPV-A
	160	36 443	DNGZK-63-160-PPV-A	36 453	DNGZK-80-160-PPV-A	36 463	DNGZK-100-160-PPV-A
	200	36 444	DNGZK-63-200-PPV-A	36 454	DNGZK-80-200-PPV-A	36 464	DNGZK-100-200-PPV-A
	250	36 445	DNGZK-63-250-PPV-A	36 455	DNGZK-80-250-PPV-A	36 465	DNGZK-100-250-PPV-A
	320	36 446	DNGZK-63-320-PPV-A	36 456	DNGZK-80-320-PPV-A	36 466	DNGZK-100-320-PPV-A
	400	36 447	DNGZK-63-400-PPV-A	36 457	DNGZK-80-400-PPV-A	36 467	DNGZK-100-400-PPV-A
	500	36 448	DNGZK-63-500-PPV-A	36 458	DNGZK-80-500-PPV-A	36 468	DNGZK-100-500-PPV-A
Variable stroke	10 ... 2,000	34 443	DNGZK-63-...-PPV-A	34 444	DNGZK-80-...-PPV-A	34 445	DNGZK-100-...-PPV-A
Variant S3	10 ... 2,000	34 941	DNGZK-63-...-PPV-A-S3	34 942	DNGZK-80-...-PPV-A-S3	34 943	DNGZK-100-...-PPV-A-S3
Variant S6	10 ... 2,000	34 950	DNGZK-63-...-PPV-A-S6	34 951	DNGZK-80-...-PPV-A-S6	34 952	DNGZK-100-...-PPV-A-S6
Variant S8	10 ... 2,000	35 522	DNGZK-63-...-PPV-A-S8	35 523	DNGZK-80-...-PPV-A-S8	35 524	DNGZK-100-...-PPV-A-S8

1) The scope of delivery includes a hex nut for the piston rod thread.

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Technical data

FESTO

Ordering data				
Design	Stroke [mm]	Piston Ø 32 [mm] Part No. Type ¹⁾	Piston Ø 40 [mm] Part No. Type ¹⁾	Piston Ø 50 [mm] Part No. Type ¹⁾
with non-rotating piston rod and adjustable central trunnion mounting				
Variable stroke	10 ... 300	35 320 DNGLZ-32-...-PPV-A	–	–
	10 ... 400	–	35 321 DNGLZ-40-...-PPV-A	–
	10 ... 500	–	–	35 322 DNGLZ-50-...-PPV-A
	10 ... 600	–	–	–
Variant S6	10 ... 300	35 332 DNGLZ-32-...-PPV-A-S6	–	–
	10 ... 400	–	35 333 DNGLZ-40-...-PPV-A-S6	–
	10 ... 500	–	–	35 334 DNGLZ-50-...-PPV-A-S6
	10 ... 600	–	–	–

1) The scope of delivery includes a hex nut for the piston rod thread.

Ordering data				
Design	Stroke [mm]	Piston Ø 125 [mm] Part No. Type ¹⁾	Piston Ø 160 [mm] Part No. Type ¹⁾	Piston Ø 200 [mm] Part No. Type ¹⁾
Basic version				
	25	36 393 DNG-125-25-PPV-A	–	–
	40	36 394 DNG-125-40-PPV-A		
	50	36 395 DNG-125-50-PPV-A		
	80	36 396 DNG-125-80-PPV-A		
	100	36 397 DNG-125-100-PPV-A		
	125	36 398 DNG-125-125-PPV-A		
	160	36 399 DNG-125-160-PPV-A		
	200	36 400 DNG-125-200-PPV-A		
	250	36 401 DNG-125-250-PPV-A		
	320	36 402 DNG-125-320-PPV-A		
	400	36 403 DNG-125-400-PPV-A		
	500	36 404 DNG-125-500-PPV-A		
	500	36 404 DNG-125-500-PPV-A		
Variable stroke	10 ... 2,000	30 006 DNG-125-...-PPV-A	33 024 DNG-160-...-PPV-A	33 025 DNG-200-...-PPV-A
	10 ... 1,100	–	–	–
Variant S2	10 ... 2,000	34 631 DNG-125-...-PPV-A-S2	34 632 DNG-160-...-PPV-A-S2	34 633 DNG-200-...-PPV-A-S2
	10 ... 1,100	–	–	–
Variant S3	10 ... 2,000	34 979 DNG-125-...-PPV-A-S3	34 980 DNG-160-...-PPV-A-S3	34 981 DNG-200-...-PPV-A-S3
	10 ... 1,100	–	–	–
Variant S6	10 ... 2,000	34 860 DNG-125-...-PPV-A-S6	34 861 DNG-160-...-PPV-A-S6	34 862 DNG-200-...-PPV-A-S6
	10 ... 1,100	–	–	–
Variant S8	10 ... 2,000	35 459 DNG-125-...-PPV-A-S8	35 497 DNG-160-...-PPV-A-S8	35 498 DNG-200-...-PPV-A-S8
	10 ... 1,100	–	–	–
with adjustable central trunnion mounting				
Variable stroke	10 ... 2,000	34 446 DNGZK-125-...-PPV-A	34 447 DNGZK-160-...-PPV-A	34 456 DNGZK-200-...-PPV-A
Variant S3	10 ... 2,000	34 944 DNGZK-125-...-PPV-A-S3	34 945 DNGZK-160-...-PPV-A-S3	34 946 DNGZK-200-...-PPV-A-S3
Variant S6	10 ... 2,000	34 953 DNGZK-125-...-PPV-A-S6	34 954 DNGZK-160-...-PPV-A-S6	34 955 DNGZK-200-...-PPV-A-S6
Variant S8	10 ... 2,000	35 525 DNGZK-125-...-PPV-A-S8	35 526 DNGZK-160-...-PPV-A-S8	35 527 DNGZK-200-...-PPV-A-S8

1) The scope of delivery includes a hex nut for the piston rod thread.

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Technical data

FESTO

Ordering data				
Design	Stroke [mm]	Piston Ø 63 [mm] Part No. Type ¹⁾	Piston Ø 80 [mm] Part No. Type ¹⁾	Piston Ø 100 [mm] Part No. Type ¹⁾
with non-rotating piston rod and adjustable central trunnion mounting				
Variable stroke	10 ... 300	–	–	–
	10 ... 400	–	–	–
	10 ... 500	35 323 DNGLZ-63-...-PPV-A	–	–
	10 ... 600	–	35 324 DNGLZ-80-...-PPV-A	35 325 DNGLZ-100-...-PPV-A
Variant S6	10 ... 300	–	–	–
	10 ... 400	–	–	–
	10 ... 500	35 335 DNGLZ-63-...-PPV-A-S6	–	–
	10 ... 600	–	35 336 DNGLZ-80-...-PPV-A-S6	35 337 DNGLZ-100-...-PPV-A-S6

1) The scope of delivery includes a hex nut for the piston rod thread.

Ordering data			
Design	Stroke [mm]	Piston Ø 250 [mm] Part No. Type ¹⁾	Piston Ø 320 [mm] Part No. Type ¹⁾
Basic version			
	25	–	–
	40		
	50		
	80		
	100		
	125		
	160		
	200		
	250		
	320		
	400		
	500		
Variable stroke	10 ... 2,000	–	–
	10 ... 1,100	151 892 DNG-250-...-PPV-A	151 897 DNG-320-...-PPV-A
Variant S2	10 ... 2,000	–	–
	10 ... 1,100	151 893 DNG-250-...-PPV-A-S2	151 898 DNG-320-...-PPV-A-S2
Variant S3	10 ... 2,000	–	–
	10 ... 1,100	151 894 DNG-250-...-PPV-A-S3	151 899 DNG-320-...-PPV-A-S3
Variant S6	10 ... 2,000	–	–
	10 ... 1,100	151 895 DNG-250-...-PPV-A-S6	151 900 DNG-320-...-PPV-A-S6
Variant S8	10 ... 2,000	–	–
	10 ... 1,100	151 896 DNG-250-...-PPV-A-S8	151 901 DNG-320-...-PPV-A-S8
with fixed central trunnion mounting			
Variable stroke	10 ... 1,100	➔ 1 / 1.2-98	

1) The scope of delivery includes a hex nut for the piston rod thread.

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders DNG/DNGL/DNGZK/DNGZS, to ISO 15552

Ordering data – Modular product DNGZS

FESTO

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

M Mandatory data						O Options		
Module No.	Function	Piston Ø	Stroke	Cushioning	Position sensing	Trunnion flange position	Temperature-resistant	Corrosion protection
157 500 157 504	DNGZS	250 320	10 ... 1 100	PPV	A	...XV	S6	S3 S8
Ordering example								
157 504	DNGZS	- 320	- 600	- PPV	- A	- 215XV	- S6	- S3

Ordering table								
Size		250		320		Condi- tions	Code	Enter code
M	Module No.	157 500		157 504				
	Function	Standard cylinder, double-acting, with central trunnion mounting to ISO 15552					DNGZS	
	Piston Ø [mm]	250	320		-...			
	Stroke [mm]	10 ... 1 100				-...		
	Cushioning	Pneumatic cushioning adjustable at both ends				-PPV	-PPV	
	Position sensing	For proximity sensing				-A	-A	
O	Trunnion flange position [mm]	187 ... 1 323	211 ... 1 349	1	-...XV			
	Temperature-resistant	Heat-resistant seals up to max. 120 °C				-S6		
	Corrosion protection	Stainless steel piston rod				- S3		
		High corrosion protection including piston rod, stainless steel			2	-S8		

1 ...XV Trunnion flange at standard mid-position of cylinder:
Piston Ø 250 mm: $205 \text{ mm} + \frac{\text{Stroke}}{2}$
Piston Ø 320 mm: $230 \text{ mm} + \frac{\text{Stroke}}{2}$

2 S8 Not with S6.

Transfer order code

	DNGZS	-		-		-	PPV	-	A	-		-		-	
--	-------	---	--	---	--	---	-----	---	---	---	--	---	--	---	--

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

Accessories

Adapter kit DPNG

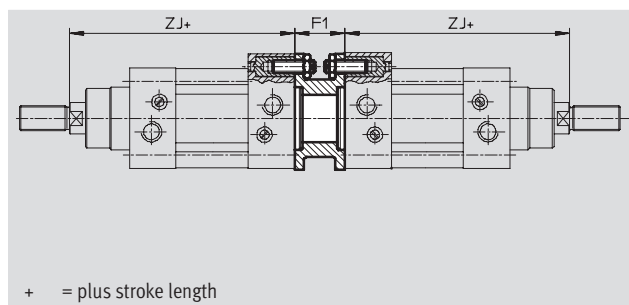
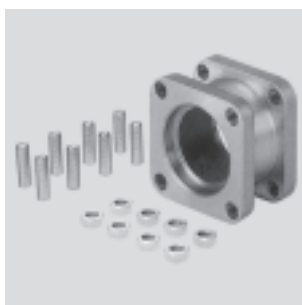
for piston $\varnothing$ 32 ... 100 mm

Material:

Flange: Wrought aluminium alloy;

Threaded studs, hex nuts: Galvanised steel

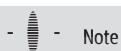
Free of copper, PTFE and silicone



+ = plus stroke length

Dimensions and ordering data

For $\varnothing$	F1	ZJ	Max. overall stroke length [mm]	CRC ¹⁾	Weight [g]	Part No.	Type
32	27	120	1,000	2	85	159 485	DPNG-32
40	27	135	1,000	2	115	159 486	DPNG-40
50	32	143	1,000	2	210	159 487	DPNG-50
63	28	158	1,000	2	360	159 488	DPNG-63
80	38	174	1,000	2	620	159 489	DPNG-80
100	38	189	1,000	2	1,190	159 490	DPNG-100



Note

The maximum overall stroke length may not be exceeded when combining cylinders and the adapter kit.

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

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

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

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

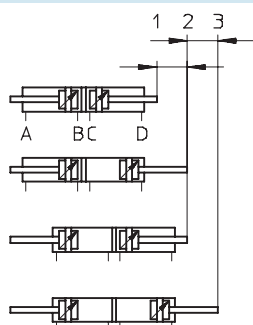
A 3 or 4-position cylinder consists of two separate cylinders whose piston rods advance in opposing directions. This means that depending upon actuation and stroke pattern, this type

of cylinder can assume up to four positions. In each case the cylinder is driven precisely against a stop. Note that when one end of the piston rod is

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

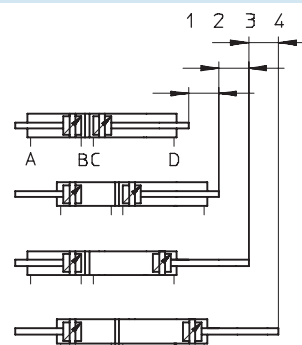
To achieve 3 positions

Two cylinders with identical stroke length must be connected together.



To achieve 4 positions

Two cylinders with different stroke lengths must be connected together.



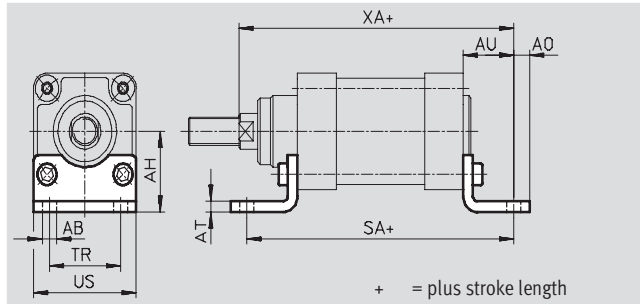
Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Accessories

FESTO

Foot mounting HNG

Material:
Galvanised steel
Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	AB Ø H14	AH	AO	AT	AU	SA	TR	US	XA	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]													
32	7	32	6.5	4	24	142	32	45	144	2	225	32 947	HNG-32
40	10	36	9	4	28	161	36	54	163	2	270	32 948	HNG-40
50	10	45	9.5	5	32	170	45	64	175	2	400	32 949	HNG-50
63	10	50	12.5	5	32	185	50	75	190	2	480	32 950	HNG-63
80	12	63	15	6	41	210	63	93	215	2	1,080	32 951	HNG-80
100	14.5	71	17.5	6	41	220	75	110	230	2	1,250	32 952	HNG-100
125	16.5	90	22	8	45	250	90	131	270	2	2,025	32 953	HNG-125
160	18.5	115	20	10	60	300	115	169	320	2	2,200	34 476	HNG-160
200	24	135	30	12	70	320	135	214	345	2	3,795	34 477	HNG-200
250	28	165	35	20	75	350	165	270	380	2	8,000	157 510	HNG-250
320	35	185	40	23	85	390	200	340	425	2	13,000	157 511	HNG-320

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

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

Accessories

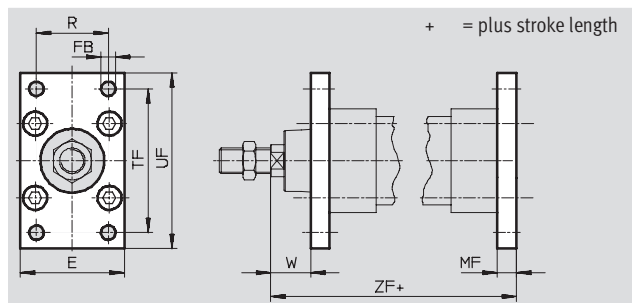
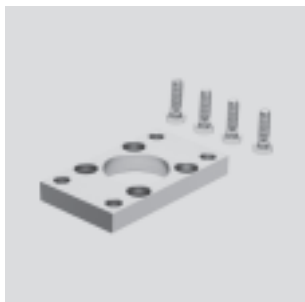
Flange mounting FNG

Material:

FNG-32 ... 100: Galvanised steel

FNG-125 ... 320: Painted nodular
graphite cast iron

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	E	FB	MF	R	TF	UF	W	ZF	CRC ¹⁾	Weight	Part No.	Type	
[mm]		Ø								[g]			
32	45	7	10	32	64	80	16	130	2	245	32 940	FNG-32	
40	54	9	10	36	72	90	20	145	2	290	32 941	FNG-40	
50	65	9	12	45	90	110	25	155	2	520	32 942	FNG-50	
63	75	9	12	50	100	120	25	170	2	690	32 943	FNG-63	
80	93	12	16	63	126	150	30	190	2	1,660	32 944	FNG-80	
100	110	14	16	75	150	175	35	205	2	2,395	32 945	FNG-100	
125	140	16	20	90	180	220	45	245	2	4,560	32 946	FNG-125	
160	180	18	20	115	230	280	60	280	2	6,200	34 478	FNG-160	
200	220	22	25	135	270	320	70	300	2	8,200	34 479	FNG-200	
250	270	26	25	165	330	390	80	330	2	13 100	157 508	FNG-250	
320	340	33	30	200	400	470	90	370	2	21 500	157 509	FNG-320	

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

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

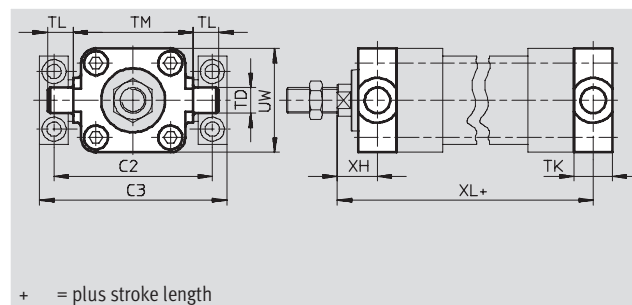
Trunnion flange ZNG

for trunnion mounting LN2G

Material:

Corrosion resistant cast steel

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	C2	C3	TD	TK	TL	TM	UW	XH	XL	CRC ¹⁾	Weight	Part No.	Type
[mm]			Ø e9								[g]		
32	71	86	12	16	12	50	50	18	128	2	190	31 754	ZNG-32
40	87	105	16	20	16	63	55	20	145	2	330	31 755	ZNG-40
50	99	117	16	24	16	75	65	25	155	2	535	31 756	ZNG-50
63	116	136	20	24	20	90	75	25	170	2	800	31 757	ZNG-63
80	136	156	20	28	20	110	100	32	188	2	1,380	31 758	ZNG-80
100	164	189	25	38	25	132	120	32	208	2	2,745	31 759	ZNG-100
125	192	217	25	50	25	160	150	40	250	2	5,100	31 760	ZNG-125

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

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

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Accessories

FESTO

LNZG trunnion support

Material:

Trunnion support:

32 ... 125: Anodised aluminium

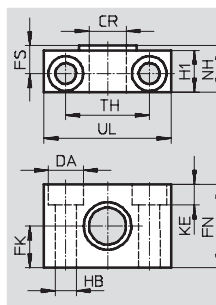
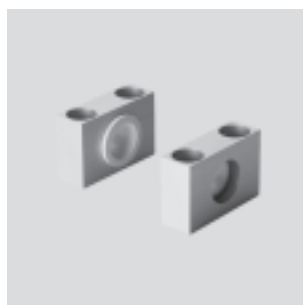
160 ... 320: Galvanised steel

Plain bearing:

32 ... 200: Plastic

250 ... 320: Sintered bronze

Free of copper, PTFE and silicone



Dimensions and ordering data

For Ø	CR	DA	FK	FN	FS	H1	HB	KE	NH	TH	UL	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø	Ø H13	Ø				Ø H13						[g]		
32	12 D11	11	15 ±0.1	30	10.5	15	6.6	6.8	18	32 ±0.2	46	2	125	32 959	LNZG-32
40/50	16 D11	15	18 ±0.1	36	12	18	9	9	21	36 ±0.2	55	2	400	32 960	LNZG-40/50
63/80	20 D11	18	20 ±0.1	40	13	20	11	11	23	42 ±0.2	65	2	480	32 961	LNZG-63/80
100/125	25 D11	20	25 ±0.1	50	16	24.5	14	13	28.5	50 ±0.2	75	2	960	32 962	LNZG-100/125
160/200	32 D11	26	30 ±0.2	60	22.5	36	18	17	40	60 ±0.3	92	2	1,965	35 780	LNZG-160/200
250	40 G7	33	35 ±0.2	70	27.5	45	22	21.5	50	90 ±0.3	140	2	5,500	157 516	LNZG-250
320	50 G7	40	40 ±0.2	80	32.5	55	26	21.5	60	100 ±0.3	150	2	6,580	157 517	LNZG-320

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

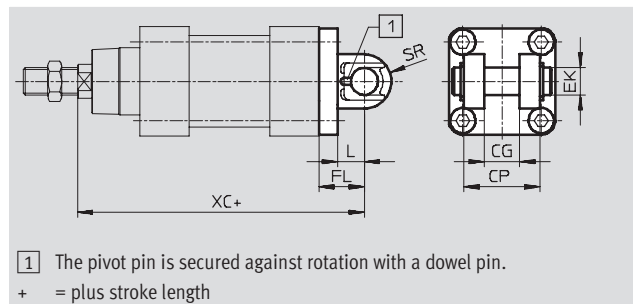
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

Swivel flange SNG

for clevis foot LSNG/LSNSG

Material:

Die-cast aluminium



1) The pivot pin is secured against rotation with a dowel pin.
+ = plus stroke length

Dimensions and ordering data

For Ø	CG	CP	EK	FL	L	SR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H14	d12	Ø						[g]		
32	14	34	10	22	13	11	142	2	190	32 968	SNG-32
40	16	40	12	25	16	13	160	2	270	32 969	SNG-40
50	21	45	16	27	16	15	170	2	445	32 970	SNG-50
63	21	51	16	32	21	18	190	2	675	32 971	SNG-63
80	25	65	20	36	22	20	210	2	1,265	32 972	SNG-80
100	25	75	20	41	27	22	230	2	1,790	32 973	SNG-100
125	37	97	30	50	30	26	275	2	4,000	32 974	SNG-125
160	43	122	35	55	35	32	315	2	6,558	152 597	SNG-160
200	43	122	35	60	35	32	335	2	9,678	152 598	SNG-200

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

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

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

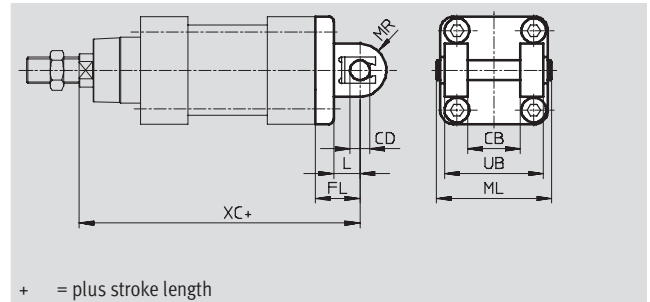
Accessories

Swivel flange SNGB

for clevis foot LN/LSN

Material:

Die-cast aluminium



Dimensions and ordering data												
For Ø	CB	CD	FL	L	ML	MR	UB	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø	Ø					h14			[g]		
32	26	10	22	13	55	10	45	142	2	125	34 540	SNGB-32
40	28	12	25	16	63	12	52	160	2	175	34 541	SNGB-40
50	32	12	27	16	71	12	60	170	2	243	34 542	SNGB-50
63	40	16	32	21	83	16	70	190	2	380	34 543	SNGB-63
80	50	16	36	22	103	16	90	210	2	610	34 544	SNGB-80
100	60	20	41	27	127	20	110	230	2	1,040	34 545	SNGB-100
125	70	25	50	30	148	25	130	275	2	1,750	34 546	SNGB-125
160	90	30	55	35	188	25	170	315	2	3,100	34 547	SNGB-160
200	90	30	60	35	188	25	170	335	2	9,900	34 548	SNGB-200
250	110	40	70	47	231	40	200	375	2	15 200	157 512	SNGB-250
320	120	45	80	52	253	45	220	420	2	26 450	157 513	SNGB-320

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

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

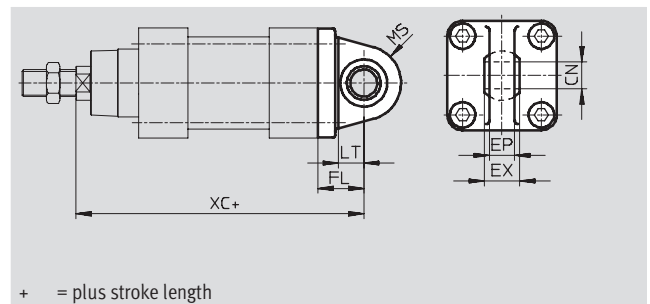
Swivel flange SSNG

with spherical bearing

for clevis foot LBG

Material:

Nodular graphite cast iron



Dimensions and ordering data											
For Ø	CN	EP	EX	FL	LT	MS	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø								[g]		
32	10	10.5	14	22	–	16	142	2	195	34 291	SSNG-32
40	12	12	16	25	–	18	160	2	255	34 292	SSNG-40
50	16	15	21	27	–	21	170	2	430	34 293	SSNG-50
63	16	15	21	32	19	23	190	2	565	34 294	SSNG-63
80	20	18	25	36	21	27	210	2	940	34 295	SSNG-80
100	20	18	25	41	24	30	230	2	1,510	34 296	SSNG-100
125	30	25	37	50	28	40	275	2	3,082	34 568	SSNG-125

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

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

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

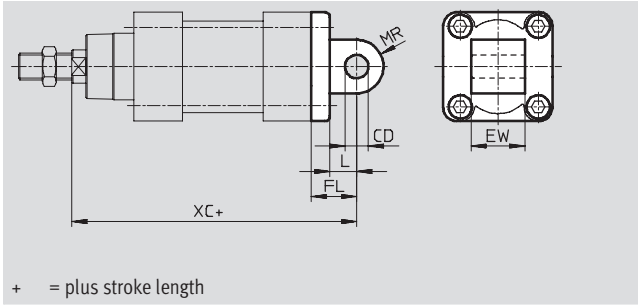


Accessories

Swivel flange SNGL

Material:
Die-cast aluminium

Variant CT:
Free of copper, PTFE and silicone



Dimensions and ordering data									
For Ø	CD	EW	FL	L	MR	XC	CRC ¹⁾	Weight	Part No. Type
[mm]	Ø							[g]	
32	10	26	22	13	10	142	2	75	151 527 SNGL-32
40	12	28	25	16	12	160	2	106	151 528 SNGL-40
50	12	32	27	16	12	170	2	183	151 529 SNGL-50
63	16	40	32	21	16	190	2	270	151 530 SNGL-63
80	16	50	36	22	16	210	2	503	151 531 SNGL-80
100	20	60	41	27	20	230	2	767	151 532 SNGL-100
125	25	70	50	30	25	275	2	1,433	151 533 SNGL-125
160	30	90	55	35	25	315	2	2,252	151 534 SNGL-160
200	30	90	60	35	25	335	2	3,306	151 535 SNGL-200

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

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

Accessories

Ordering data – Mounting attachments				Technical data → 1 / 10.1-2			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Clevis foot LSNG				Weld-on clevis foot LSNSG			
	32	31 740	LSNG-32		32	31 747	LSNSG-32
	40	31 741	LSNG-40		40	31 748	LSNSG-40
	50	31 742	LSNG-50		50	31 749	LSNSG-50
	63	31 743	LSNG-63		63	31 750	LSNSG-63
	80	31 744	LSNG-80		80	31 751	LSNSG-80
	100	31 745	LSNG-100		100	31 752	LSNSG-100
	125	31 746	LSNG-125		125	31 753	LSNSG-125
	160	152 599	LSNG-160		160	–	
	200	152 600	LSNG-200		200	–	
Clevis foot LBG				Clevis foot LNG			
	32	31 761	LBG-32		32	33 890	LNG-32
	40	31 762	LBG-40		40	33 891	LNG-40
	50	31 763	LBG-50		50	33 892	LNG-50
	63	31 764	LBG-63		63	33 893	LNG-63
	80	31 765	LBG-80		80	33 894	LNG-80
	100	31 766	LBG-100		100	33 895	LNG-100
	125	31 767	LBG-125		125	33 896	LNG-125
	160	–			160	–	
	200	–			200	33 898	LNG-200
Clevis foot LSN				Clevis foot, right-angled LQG			
	32	5 561	LSN-32		32	31 768	LQG-32
	40	5 562	LSN-40		40	31 769	LQG-40
	50	5 563	LSN-50		50	31 770	LQG-50
	63	5 564	LSN-63		63	31 771	LQG-63
	80	5 565	LSN-80		80	31 772	LQG-80
	100	5 566	LSN-100		100	31 773	LQG-100
	125	6 987	LSN-125		125	31 774	LQG-125
	160	6 988	LSN-160		160	–	
	200	6 989	LSN-200		200	–	
	250	6 990	LSN-250		250	–	
	320	6 991	LSN-320		320	–	

Ordering data – One-way flow control valves				Technical data → Volume 2	
	Connection		Material	Part No.	Type
	Thread	For tubing OD			
	G1/8	3	Metal design	193 142	GRLA-1/8-QS-3-D
		4		193 143	GRLA-1/8-QS-4-D
		6		193 144	GRLA-1/8-QS-6-D
		8		193 145	GRLA-1/8-QS-8-D
	G1/4	6		193 146	GRLA-1/4-QS-6-D
		8		193 147	GRLA-1/4-QS-8-D
		10		193 148	GRLA-1/4-QS-10-D
		12		193 149	GRLA-3/8-QS-6-D
	G3/8	6		193 150	GRLA-3/8-QS-8-D
		8		193 151	GRLA-3/8-QS-10-D
		10		193 152	GRLA-1/2-QS-12-D
		12			
	G1/2	12			

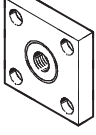
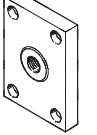
ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

Accessories

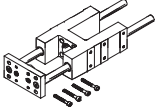
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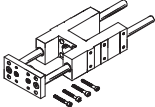
Ordering data – Piston rod attachments				Technical data → 1 / 10.3-2			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye SGS				Rod clevis SGA			
	32	9 261	SGS-M10x1,25		32	32 954	SGA-M10x1,25
	40	9 262	SGS-M12x1,25		40	10 767	SGA-M12x1,25
	50	9 263	SGS-M16x1,5		50	10 768	SGA-M16x1,5
	63				63		
	80	9 264	SGS-M20x1,5		80	10 769	SGA-M20x1,5
	100				100		
	125	10 774	SGS-M27x2		125	10 770	SGA-M27x2
	160	10 775	SGS-M36x2		160	10 775	SGA-M36x2
	200				200		
	250	10 776	SGS-M42x2		–	–	–
	320	10 777	SGS-M48x2		–	–	–
Rod clevis SG				Self-aligning rod coupler FK			
	32	6 144	SG-M10x1,25		32	6 140	FK-M10x1,25
	40	6 145	SG-M12x1,25		40	6 141	FK-M12x1,25
	50	6 146	SG-M16x1,5		50	6 142	FK-M16x1,5
	63				63		
	80	6 147	SG-M20x1,5		80	6 143	FK-M20x1,5
	100				100		
	125	14 987	SG-M27x2-B		125	10 485	FK-M27x2
	160	9 581	SG-M36x2		160	10 746	FK-M36x2
	200				200		
	250	9 582	SG-M42x2		250	–	–
	320	9 583	SG-M48x2		320	–	–
Coupling piece KSG				Coupling piece KSZ			
	32	32 963	KSG-M10x1,25		32	36 125	KSZ-M10x1,25
	40	32 964	KSG-M12x1,25		40	36 126	KSZ-M12x1,25
	50	32 965	KSG-M16x1,5		50	36 127	KSZ-M16x1,5
	63				63		
	80	32 966	KSG-M20x1,5		80	36 128	KSZ-M20x1,5
	100				100		
	125	32 967	KSG-M27x2		125	–	–
Adapter AD							
	32	157 333	AD-M10x1,25-1/8				
		157 334	AD-M10x1,25-1/4				
	40	160 256	AD-M12x1,25-1/4				
		160 257	AD-M12x1,25-3/8				

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

FESTO

Accessories

Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only)				Technical data → 1 / 10.4-2			
	Stroke [mm]	Part No.	Type		Stroke [mm]	Part No.	Type
	For Ø 32 mm				For Ø 40 mm		
	10 ... 50	34 493	FENG-32-50-KF		10 ... 50	34 499	FENG-40-50-KF
	10 ... 100	34 494	FENG-32-100-KF		10 ... 100	34 500	FENG-40-100-KF
	10 ... 160	34 495	FENG-32-160-KF		10 ... 160	34 501	FENG-40-160-KF
	10 ... 200	34 496	FENG-32-200-KF		10 ... 200	34 502	FENG-40-200-KF
	10 ... 250	150 289	FENG-32-250-KF		10 ... 250	34 503	FENG-40-250-KF
	10 ... 320	34 497	FENG-32-320-KF		10 ... 320	34 504	FENG-40-320-KF
	10 ... 400	150 290	FENG-32-400-KF		10 ... 400	150 291	FENG-40-400-KF
	10 ... 500	34 498	FENG-32-500-KF		10 ... 500	34 505	FENG-40-500-KF
	For Ø 50 mm				For Ø 63 mm		
	10 ... 50	34 506	FENG-50-50-KF		10 ... 50	34 513	FENG-63-50-KF
	10 ... 100	34 507	FENG-50-100-KF		10 ... 100	34 514	FENG-63-100-KF
	10 ... 160	34 508	FENG-50-160-KF		10 ... 160	34 515	FENG-63-160-KF
	10 ... 200	34 509	FENG-50-200-KF		10 ... 200	34 516	FENG-63-200-KF
	10 ... 250	34 510	FENG-50-250-KF		10 ... 250	34 517	FENG-63-250-KF
	10 ... 320	34 511	FENG-50-320-KF		10 ... 320	34 518	FENG-63-320-KF
	10 ... 400	150 292	FENG-50-400-KF		10 ... 400	34 519	FENG-63-400-KF
	10 ... 500	34 512	FENG-50-500-KF		10 ... 500	34 520	FENG-63-500-KF
	For Ø 80 mm				For Ø 100 mm		
	10 ... 50	34 521	FENG-80-50-KF		10 ... 50	34 529	FENG-100-50-KF
	10 ... 100	34 522	FENG-80-100-KF		10 ... 100	34 530	FENG-100-100-KF
	10 ... 160	34 523	FENG-80-160-KF		10 ... 160	34 531	FENG-100-160-KF
	10 ... 200	34 524	FENG-80-200-KF		10 ... 200	34 532	FENG-100-200-KF
	10 ... 250	34 525	FENG-80-250-KF		10 ... 250	34 533	FENG-100-250-KF
	10 ... 320	34 526	FENG-80-320-KF		10 ... 320	34 534	FENG-100-320-KF
	10 ... 400	34 527	FENG-80-400-KF		10 ... 400	34 535	FENG-100-400-KF
	10 ... 500	34 528	FENG-80-500-KF		10 ... 500	34 536	FENG-100-500-KF

Ordering data – Guide units for variable strokes					Technical data → 1 / 10.4-2	
	For Ø [mm]	Stroke [mm]	With recirculating ball bearing guide		With sliding bearing guide	
			Part No.	Type	Part No.	Type
	32	10 ... 500	34 487	FENG-32-...-KF	34 481	FENG-32-...
	40	10 ... 500	34 488	FENG-40-...-KF	34 482	FENG-40-...
	50	10 ... 500	34 489	FENG-50-...-KF	34 483	FENG-50-...
	63	10 ... 500	34 490	FENG-63-...-KF	34 484	FENG-63-...
	80	10 ... 500	34 491	FENG-80-...-KF	34 485	FENG-80-...
	100	10 ... 500	34 492	FENG-100-...-KF	34 486	FENG-100-...

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

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Accessories

Ordering data – Connecting cables				Technical data → www.festo.com/catalogue/nebu	
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type
	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 333	NEBU-M8G3-K-2.5-LE3
			5	541 334	NEBU-M8G3-K-5-LE3
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	541 338	NEBU-M8W3-K-2.5-LE3
			5	541 341	NEBU-M8W3-K-5-LE3

Ordering data – Proximity sensors for T-slot, magneto-resistive					Technical data → www.festo.com/catalogue/sm	
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	2.5	543 867	SMT-8M-PS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543 866	SMT-8M-PS-24V-K-0,3-M8D
			Plug M12x1, 3-pin	0.3	543 869	SMT-8M-PS-24V-K-0,3-M12
		NPN	Cable, 3-wire	2.5	543 870	SMT-8M-NS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543 871	SMT-8M-NS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	PNP	Cable, 3-wire	2.5	175 436	SMT-8-PS-K-LED-24-B
			Plug M8x1, 3-pin	0.3	175 484	SMT-8-PS-S-LED-24-B
N/C contact						
	Insertable in the slot from above, flush with cylinder profile	PNP	Cable, 3-wire	7.5	543 873	SMT-8M-PO-24V-K7,5-OE

Ordering data – Proximity sensors for T-slot, magnetic reed					Technical data → www.festo.com/catalogue/smb	
	Type of mounting	Switch output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Insertable in the slot from above, flush with cylinder profile	Contacting	Cable, 3-wire	2.5	543 862	SME-8M-DS-24V-K-2,5-OE
				5.0	543 863	SME-8M-DS-24V-K-5,0-OE
			Cable, 3-wire	2.5	543 872	SME-8M-ZS-24V-K-2,5-OE
			Plug M8x1, 3-pin	0.3	543 861	SME-8M-DS-24V-K-0,3-M8D
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	150 855	SME-8-K-LED-24
			Plug M8x1, 3-pin	0.3	150 857	SME-8-S-LED-24
N/C contact						
	Insertable in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	160 251	SME-8-O-K-LED-24

Ordering data – Mounting kits for proximity sensors SME/SMT-8			Technical data → www.festo.com/catalogue/smbz	
	For Ø	Materials	Part No.	Type
	32 ... 100 mm	Rail: Wrought aluminium alloy, anodised	537 806	SMBZ-8-32/100
	125 ... 320 mm	Screws: High-alloy steel Free of copper and PTFE	537 808	SMBZ-8-125/320

Standard cylinders DNG/DNGL/DNGZK/DNGZS, ISO 15552

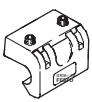
Accessories

FESTO

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)
1.2

Ordering data – Rectangular proximity sensors, magneto-resistive						Technical data → www.festo.com/catalogue/sm	
	Mounting	Switch output	Electrical connection		Cable length [m]	Part No.	Type
			Cables	M8 plug			
NO contact							
	Via accessories	PNP	3-wire	–	2.5	151 683	SMT0-1-PS-K-LED-24-C
			–	3-pin	–	151 685	SMT0-1-PS-S-LED-24-C
		NPN	3-wire	–	2.5	151 684	SMT0-1-NS-K-LED-24-C
			–	3-pin	–	151 686	SMT0-1-NS-S-LED-24-C

Ordering data – Rectangular proximity sensors, magnetic reed					Technical data → www.festo.com/catalogue/sm	
	Mounting	Electrical connection		Cable length [m]	Part No.	Type
		Cables	M8 plug			
NO contact						
	Via accessories	3-wire	–	2.5	30 459	SMEO-1-LED-24-B
		3-wire	–	5.0	151 672	SMEO-1-LED-24-K5-B
		–	3-pin	–	150 848	SMEO-1-S-LED-24-B

Ordering data – Mounting kits for proximity sensors SMEO/SMT0-1				Technical data → www.festo.com/catalogue/smb	
	For Ø	Mounting		Part No.	Type
	32 ... 50 mm	Directly on the mounting or tie rod		36 162	SMB-2-B
	125 ... 320 mm				
	63 ... 100 mm			36 163	SMB-3-B

Ordering data – Rectangular proximity sensors, pneumatic			Technical data → www.festo.com/catalogue/sm	
	Mounting	Pneumatic connection	Part No.	Type
3/2-way valve, normally closed				
	Via accessories	Barbed fitting for tubing ID of 3 mm	31 008	SMPO-1-H-B

Ordering data – Mounting kits for proximity sensors SMPO-1				Technical data → www.festo.com/catalogue/smb	
	For Ø	Mounting		Part No.	Type
	32 ... 100 mm	On the cylinder barrel via clamping strap		151 226	SMBS-2

Ordering data – Mounting kits for proximity sensors SME/SMT-8				Technical data → www.festo.com/catalogue/smb	
	For Ø	Mounting	CRC ¹⁾	Part No.	Type
	32 ... 100 mm	On the cylinder barrel via clamping strap	4	538 937	SMBR-8-8/100-S6

1) Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required