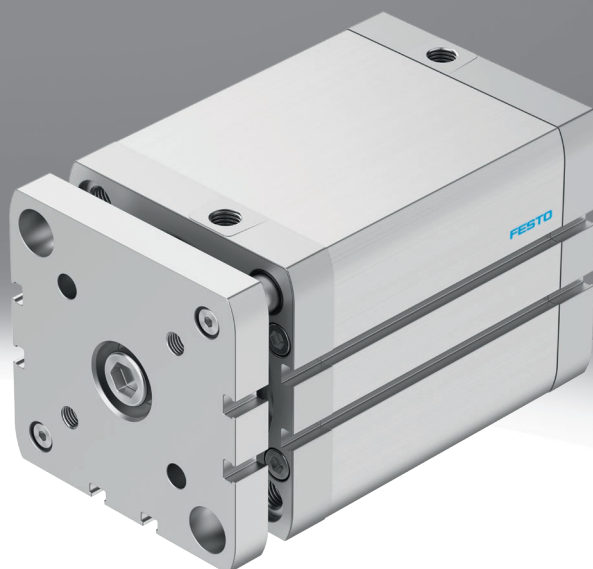


Compact cylinders ADNGF, standard hole pattern

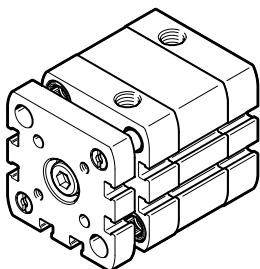
FESTO



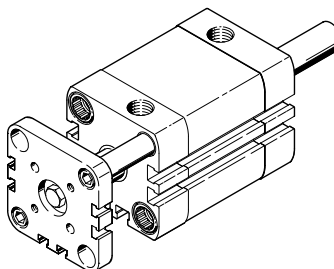
Characteristics and type codes

At a glance

With guide rod and yoke plate
ADNGF-...



With guide rod, yoke plate and through piston rod
ADNGF-...S2



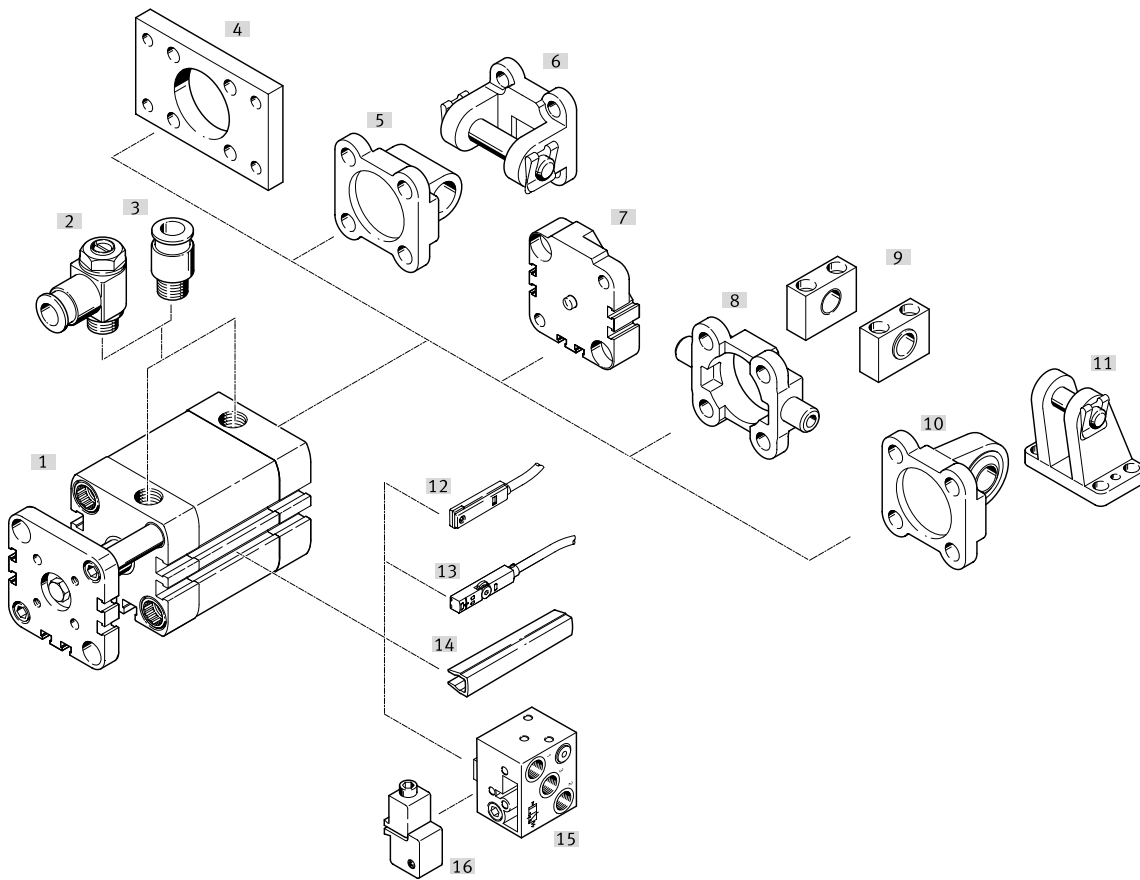
Cushioning types

	Cushioning P	Cushioning PPS
Mode of operation	The drive has elastic polymer flexible end-position cushioning	The drive has self-adjusting, pneumatic end-position cushioning
Application	- Small loads - Low speeds - Small cushioning capacity	- Larger loads - Higher speeds - Larger cushioning capacity
Advantages	- No adjustment required - Time-saving	- No adjustment required - Up to 4 times bigger cushioning capacity than ADNGF-...-P - Time-saving - Reduced noise

Type codes

001	Series	
ADNGF	Compact cylinder, double-acting, standard hole pattern	
002	Piston diameter	
12	12	
16	16	
20	20	
25	25	
32	32	
40	40	
50	50	
63	63	
80	80	
100	100	
003	Stroke	
...	1 ... 400	
004	Cushioning	
P	Elastic cushioning rings/plates on both sides	
PPS	Pneumatic cushioning, self-adjusting at both ends	
005	Position sensing	
A	For proximity sensor	
006	Piston rod type	
	At one end	
S2	Through piston rod	
007	Temperature range	
	Standard	
S6	Heat-resistant seals max. 120 °C	
008	Captive rating plate	
	Rating plate, glued	
TL	Laser etched rating plate	

Peripherals overview

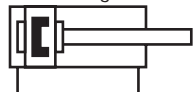


Mounting components and accessories

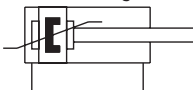
	Description	→ Page/Internet
[1] Compact cylinder ADNGF	Double-acting	4
[2] One-way flow control valve GRLA/GRLZ	For regulating speed	21
[3] Push-in fitting QS	For connecting tubing with standard O.D.	qs
[4] Flange mounting FNC	For end caps	13
[5] Swivel flange SNCL/SNCL-...-R3	For end caps	14
[6] Swivel flange SNCB/SNCB-...-R3	For end caps	18
[7] Multi-position kit DPNA	For connecting two cylinders with identical piston diameters to form a multi-position cylinder	17
[8] Trunnion flange ZNCf/CRZNG	For end caps	19
[9] Trunnion support LNZG	For trunnion flange ZNCf/CRZNG	20
[10] Swivel flange SNCS/CRSNCS/SNCS-...-R3	For end caps	15
[11] Clevis foot LBG/LBG-...-R3	For swivel flange SNCS	16
[12] Proximity switch SME-8	Can be integrated in the cylinder profile barrel	22
[13] Proximity switch SME/SMT-8M	Can be integrated in the cylinder profile barrel	22
[14] Slot cover ABP-5-S	For protecting the sensor cables and the sensor slots from contamination	23
[15] Proximity switch SMPO-8E	Pneumatic output signal	23
[16] Mounting kit SMB-8E	For proximity switch SMPO-8E	23

Data sheet

P cushioning



PPS cushioning



-  - Diameter
12 ... 100 mm
-  - Stroke length
1 ... 400 mm
-  - www.festo.com



General technical data

Piston Ø	12	16	20	25	32	40	50	63	80	100
Pneumatic connection	M5	M5	M5	M5	G1/8	G1/8	G1/8	G1/8	G1/8	G1/8
Design	Piston									
	Piston rod									
	Cylinder barrel									
Mode of operation	Double-acting									
Cushioning										
P	Elastic cushioning rings/pads at both ends									
PPS	–		Pneumatic cushioning, self-adjusting at both ends							
Cushioning length										
PPS	[mm]	–	3	3.5	4	5	6	7	7.5	10
Position sensing	Via proximity switch									
Type of mounting	With through-hole / female thread / accessories									
Mounting position	Any									

Operating and environmental conditions

Piston Ø	12	16	20	25	32	40	50	63	80	100
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]									
Note on operating/ pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)									
Operating pressure										
in [MPa]										
–	0.15 ... 1			0.1 ... 1						
PPS	–		0.19 ... 1				0.14 ... 1			
S2	0.15 ... 1				0.1 ... 1					
in [bar]										
–	1.5 ... 10			1 ... 10						
PPS	–		1.9 ... 10				1.4 ... 10			
S2	1.5 ... 10				1 ... 10					
in [psi]										
–	21.76 ... 145			14.5 ... 145						
PPS	–		27.56 ... 145				20.31 ... 145			
S2	21.76 ... 145				14.5 ... 145					
Ambient temperature ¹⁾ [°C]										
–	–20 ... +80									
S6	0 ... +120									
Corrosion resistance class CRC ²⁾	2 - moderate corrosion stress									

1) Note operating range of proximity switches

2) More information: www.festo.com/x/topic/kbk

Data sheet

Weight [g]										
Piston Ø	12	16	20	25	32	40	50	63	80	100
ADNGF-...										
Product weight with 0 mm stroke	76	88	153	203	310	432	656	930	1465	2205
Additional weight per 10 mm stroke	14	16	26	30	37	46	63	72	97	116
Moving mass with 0 mm stroke	23	31	58	73	125	174	291	400	761	1066
Additional mass per 10 mm stroke	4	6	11	11	17	17	28	28	43	43
ADNGF-...-S2										
Product weight with 0 mm stroke	78	92	160	214	313	435	667	941	1466	2212
Additional weight per 10 mm stroke	16	19	31	35	43	52	74	83	115	134
Moving mass with 0 mm stroke	26	36	67	79	131	173	296	406	775	1071
Additional mass per 10 mm stroke	10	16	26	26	40	40	67	67	103	103
ADNGF-...-PPS										
Product weight with 0 mm stroke	–	–	150	218	317	442	672	947	1474	2228
Additional weight per 10 mm stroke	–	–	26	30	37	46	63	72	97	116
Moving mass with 0 mm stroke	–	–	57	95	132	185	307	417	770	1089
Additional mass per 10 mm stroke	–	–	11	11	17	17	28	28	43	43

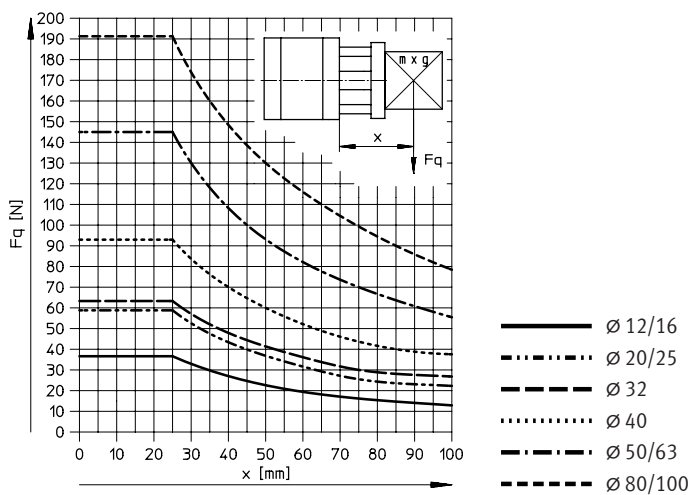
Data sheet

Forces [N] and impact energy [J]										
Piston Ø	12	16	20	25	32	40	50	63	80	100
Theoretical force at 6 bar, advancing										
—	68	121	188	295	483	754	1178	1870	3016	4712
S2	51	90	141	247	415	686	1057	1750	2827	4524
Theoretical force at 6 bar, retracting										
—	51	90	141	247	415	686	1057	1750	2827	4524
S2	51	90	141	247	415	686	1057	1750	2827	4524
Max. impact energy at the end positions										
—	0.07	0.15	0.2	0.3	0.4	0.7	1.0	1.3	1.8	2.5
S6	0.035	0.075	0.1	0.15	0.2	0.35	0.5	0.65	0.9	1.25

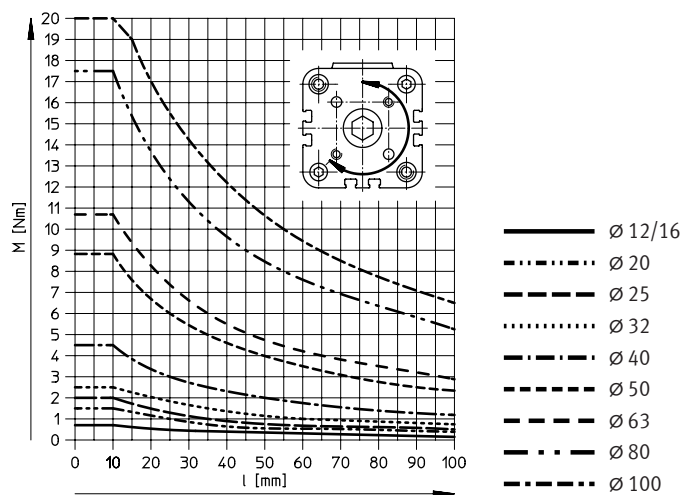
 **Note**
In combination with the self-adjusting cushioning (PPS), the maximum impact energy is still obtained.

Max. energy conversion capacity [J]								
Piston Ø	20	25	32	40	50	63	80	100
For self-adjusting cushioning (PPS)	0.65	0.8	1	1.7	2.8	4.8	8	12

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

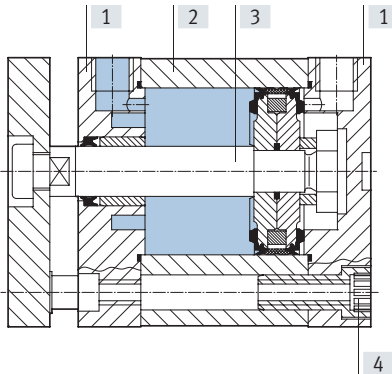


Torque M as a function of stroke length l



Data sheet

Materials



Compact cylinder		Basic version	S6
[1]	Cover		
	Ø 12 ... 80	Anodised aluminium	
	Ø 100	Coated die-cast aluminium	
[2]	Cylinder barrel	Anodised aluminium	
[3]	Piston rod	High-alloy steel	
[4]	Flange screws		
	Ø 12 ... 16	High-alloy steel	
	Ø 20 ... 63	Galvanised steel	
	Ø 80 ... 100	Standard screws, galvanised steel	
–	Seals	Polyurethane	Fluoro rubber

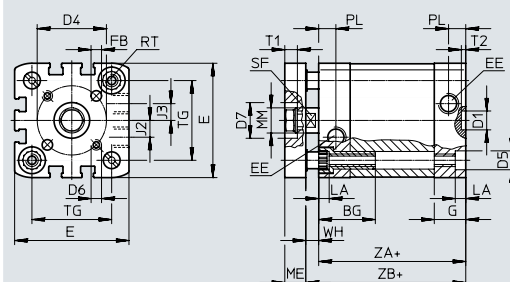
Data sheet

Dimensions – Basic version

Download CAD data → www.festo.com

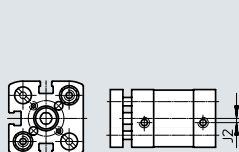
Ø 12 ... 63

Ø32 ... 63



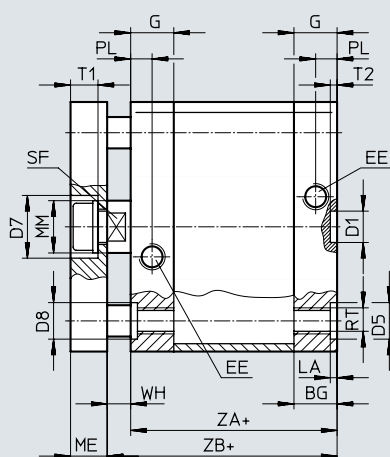
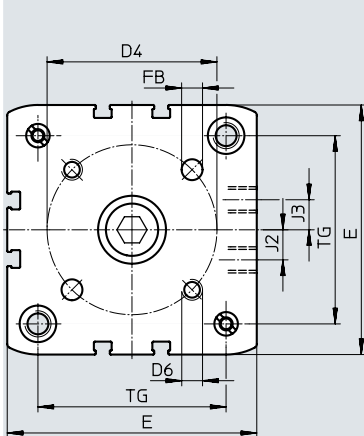
Ø12 ... 25

Ø12



+ = plus stroke length

Ø 80 ... 100



+ = plus stroke length

Ø	BG	D1 Ø	D4	D5 Ø	D6	D7 Ø	D8	E	EE	FB Ø	G	J2	J3	
[mm]	min.	H9	±0.1			H9				H8				
12	17	9	12	6 ^{F9}	M3	—	—	27.5 ^{+0.3}	M5	3	10.5	2	—	
16			14							29 ^{+0.3}		11	2.6	
20	19.5		17	9 ^{F9}	M4			35.5 ^{+0.3}		4	12	6		
25			22		M5	14		39.5 ^{+0.3}		5	15			
32	26	28			17	47 ^{+0.3}	G1/8	6	11.5					
40		33				54.5 ^{+0.3}								
50	27	12	42	12 ^{F9}	M6	22		15	65.5 ^{+0.3}	8	16.5	20		
63			50						75.5 ^{+0.3}					
80	17		65	15	M8	24	95.5 ^{+0.6}		10	21.5				
100	21.5		80			M10				113.5 ^{+0.6}				

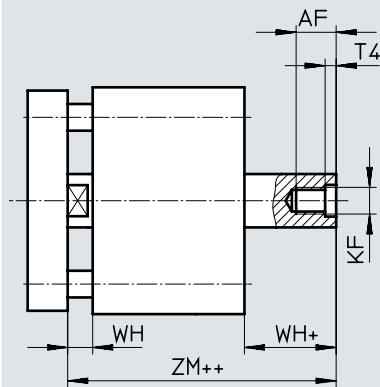
Ø	LA	ME	MM Ø H8	PL	RT	ST	T1	T2	TG	WH PPS	ZA	ZB PPS												
[mm]	+0.2		H8	+0.2		H13		+0.1	±0.2	+1.3 +1.4	±0.6	+1.2 +1.3												
12	3.5	6	6	6	M4	5	–	2.1	16	4.2	–	35	39.2	–										
16			8			7			18	4.7		39.7												
20			5			8			10	M5		9	22		5.5	5.5	37	42.5	42.5					
25	5	26		5.5	39		44.5	45.3																
32	10	12		8.2	M6		10	6			32.5			6						6.5	44	50	50.6	
40			12			16			M8	13		7.5	2.6		46.5	7.7	8.2	45	51.1					51.7
50																								
63	10.5	89		9	9.8		67	76			76.8													
80																								
100																								

Data sheet

Dimensions – Variants

Download CAD data → www.festo.com

S2 – Through piston rod

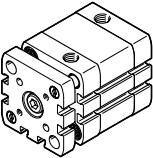


+ = plus stroke length

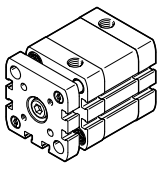
++ = plus 2x stroke length

Ø [mm]	AF min.	KF	T4	WH		ZM	
				+1.3	PPS +1.4		PPS
12	8	M3	1.5	4.2	–	44.5 ^{+0.5}	–
16	10	M4		4.7		45.7 ^{+0.5}	
20	14	M6	2.6	5.5	5.5	49.5 ^{+0.5}	49.5 ^{+0.5}
25					5.5	51.5 ^{+0.5}	51.5 ^{+0.5}
32	16	M8	3.3	6	6.5	57.5 ^{+0.5}	58.6 ^{+0.6}
40				6.1	6.6	58.6 ^{+0.6}	59.7 ^{+0.7}
50	20	M10	4.7	8.2	8.2	62.0 ^{+0.6}	63.1 ^{+0.7}
63				8.1	8	65.4 ^{+0.6}	66.5 ^{+0.7}
80		M12	6.1	8.9	9.4	73.2 ^{+0.6}	74.3 ^{+0.7}
100				9	9.8	86.4 ^{+0.6}	88 ^{+0.7}

Data sheet

Ordering data						
Type	Piston ø	Stroke [mm]	P – Elastic cushioning rings/plates at both ends		PPS – Pneumatic cushioning, self-adjusting at both ends	
	[mm]	[mm]	Part no.	Type	Part no.	Type
	12	5	554205	ADNGF-12-5-P-A	–	
		10	554206	ADNGF-12-10-P-A		
		15	554207	ADNGF-12-15-P-A		
		20	554208	ADNGF-12-20-P-A		
		25	554209	ADNGF-12-25-P-A		
		30	554210	ADNGF-12-30-P-A		
		40	554211	ADNGF-12-40-P-A		
	16	5	554212	ADNGF-16-5-P-A	–	
		10	554213	ADNGF-16-10-P-A		
		15	554214	ADNGF-16-15-P-A		
		20	554215	ADNGF-16-20-P-A		
		25	554216	ADNGF-16-25-P-A		
		30	554217	ADNGF-16-30-P-A		
		40	554218	ADNGF-16-40-P-A		
		50	554219	ADNGF-16-50-P-A		
	20	5	554220	ADNGF-20-5-P-A	–	
		10	554221	ADNGF-20-10-P-A		
		15	554222	ADNGF-20-15-P-A		
		20	554223	ADNGF-20-20-P-A		
		25	554224	ADNGF-20-25-P-A		
		30	554225	ADNGF-20-30-P-A		
		40	554226	ADNGF-20-40-P-A		
		50	554227	ADNGF-20-50-P-A		
		60	554228	ADNGF-20-60-P-A		
	25	5	554229	ADNGF-25-5-P-A	–	
		10	554230	ADNGF-25-10-P-A		
		15	554231	ADNGF-25-15-P-A		
		20	554232	ADNGF-25-20-P-A		
		25	554233	ADNGF-25-25-P-A		
		30	554234	ADNGF-25-30-P-A		
		40	554235	ADNGF-25-40-P-A		
		50	554236	ADNGF-25-50-P-A		
		60	554237	ADNGF-25-60-P-A		
	32	5	554238	ADNGF-32-5-P-A	–	
		10	554239	ADNGF-32-10-P-A		
		15	554240	ADNGF-32-15-P-A		
		20	554241	ADNGF-32-20-P-A		
		25	554242	ADNGF-32-25-P-A		
		30	554243	ADNGF-32-30-P-A		
		40	554244	ADNGF-32-40-P-A		
		50	554245	ADNGF-32-50-P-A		
		60	554246	ADNGF-32-60-P-A		
		80	554247	ADNGF-32-80-P-A		
					577208	ADNGF-20-10-PPS-A
					577209	ADNGF-20-15-PPS-A
					577210	ADNGF-20-20-PPS-A
					577211	ADNGF-20-25-PPS-A
					577212	ADNGF-20-30-PPS-A
					577213	ADNGF-20-40-PPS-A
					577214	ADNGF-20-50-PPS-A
					577215	ADNGF-20-60-PPS-A
					577216	ADNGF-25-10-PPS-A
					577217	ADNGF-25-15-PPS-A
					577218	ADNGF-25-20-PPS-A
					577219	ADNGF-25-25-PPS-A
					577220	ADNGF-25-30-PPS-A
					577221	ADNGF-25-40-PPS-A
					577222	ADNGF-25-50-PPS-A
					577223	ADNGF-25-60-PPS-A
					574022	ADNGF-32-10-PPS-A
					574023	ADNGF-32-15-PPS-A
					574024	ADNGF-32-20-PPS-A
					574025	ADNGF-32-25-PPS-A
					574026	ADNGF-32-30-PPS-A
					574027	ADNGF-32-40-PPS-A
					574028	ADNGF-32-50-PPS-A
					574029	ADNGF-32-60-PPS-A
					574030	ADNGF-32-80-PPS-A

Data sheet

Ordering data						
Type	Piston ø	Stroke [mm]	P – Elastic cushioning rings/plates at both ends		PPS – Pneumatic cushioning, self-adjusting at both ends	
	[mm]	[mm]	Part no.	Type	Part no.	Type
	40	5	554248	ADNGF-40-5-P-A	–	
		10	554249	ADNGF-40-10-P-A	574031	ADNGF-40-10-PPS-A
		15	554250	ADNGF-40-15-P-A	574032	ADNGF-40-15-PPS-A
		20	554251	ADNGF-40-20-P-A	574033	ADNGF-40-20-PPS-A
		25	554252	ADNGF-40-25-P-A	574034	ADNGF-40-25-PPS-A
		30	554253	ADNGF-40-30-P-A	574035	ADNGF-40-30-PPS-A
		40	554254	ADNGF-40-40-P-A	574036	ADNGF-40-40-PPS-A
		50	554255	ADNGF-40-50-P-A	574037	ADNGF-40-50-PPS-A
		60	554256	ADNGF-40-60-P-A	574038	ADNGF-40-60-PPS-A
		80	554257	ADNGF-40-80-P-A	574039	ADNGF-40-80-PPS-A
	50	5	554258	ADNGF-50-5-P-A	–	
		10	554259	ADNGF-50-10-P-A	574040	ADNGF-50-10-PPS-A
		15	554260	ADNGF-50-15-P-A	574041	ADNGF-50-15-PPS-A
		20	554261	ADNGF-50-20-P-A	574042	ADNGF-50-20-PPS-A
		25	554262	ADNGF-50-25-P-A	574043	ADNGF-50-25-PPS-A
		30	554263	ADNGF-50-30-P-A	574044	ADNGF-50-30-PPS-A
		40	554264	ADNGF-50-40-P-A	574045	ADNGF-50-40-PPS-A
		50	554265	ADNGF-50-50-P-A	574046	ADNGF-50-50-PPS-A
		60	554266	ADNGF-50-60-P-A	574047	ADNGF-50-60-PPS-A
		80	554267	ADNGF-50-80-P-A	574048	ADNGF-50-80-PPS-A
	63	10	554268	ADNGF-63-10-P-A	574049	ADNGF-63-10-PPS-A
		15	554269	ADNGF-63-15-P-A	574050	ADNGF-63-15-PPS-A
		20	554270	ADNGF-63-20-P-A	574051	ADNGF-63-20-PPS-A
		25	554271	ADNGF-63-25-P-A	574052	ADNGF-63-25-PPS-A
		30	554272	ADNGF-63-30-P-A	574053	ADNGF-63-30-PPS-A
		40	554273	ADNGF-63-40-P-A	574054	ADNGF-63-40-PPS-A
		50	554274	ADNGF-63-50-P-A	574055	ADNGF-63-50-PPS-A
		60	554275	ADNGF-63-60-P-A	574056	ADNGF-63-60-PPS-A
	80	10	554277	ADNGF-80-10-P-A	574058	ADNGF-80-10-PPS-A
		15	554278	ADNGF-80-15-P-A	574059	ADNGF-80-15-PPS-A
		20	554279	ADNGF-80-20-P-A	574060	ADNGF-80-20-PPS-A
		25	554280	ADNGF-80-25-P-A	574061	ADNGF-80-25-PPS-A
		30	554281	ADNGF-80-30-P-A	574062	ADNGF-80-30-PPS-A
		40	554282	ADNGF-80-40-P-A	574063	ADNGF-80-40-PPS-A
		50	554283	ADNGF-80-50-P-A	574064	ADNGF-80-50-PPS-A
		60	554284	ADNGF-80-60-P-A	574065	ADNGF-80-60-PPS-A
	100	10	554286	ADNGF-100-10-P-A	–	
		15	554287	ADNGF-100-15-P-A	577225	ADNGF-100-15-PPS-A
		20	554288	ADNGF-100-20-P-A	577226	ADNGF-100-20-PPS-A
		25	554289	ADNGF-100-25-P-A	577227	ADNGF-100-25-PPS-A
		30	554290	ADNGF-100-30-P-A	577228	ADNGF-100-30-PPS-A
		40	554291	ADNGF-100-40-P-A	577229	ADNGF-100-40-PPS-A
		50	554292	ADNGF-100-50-P-A	577230	ADNGF-100-50-PPS-A
		60	554293	ADNGF-100-60-P-A	577231	ADNGF-100-60-PPS-A
		80	554294	ADNGF-100-80-P-A	577232	ADNGF-100-80-PPS-A

Ordering data – Modular product system

Ordering table															
Size	12	16	20	25	32	40	50	63	80	100	Condi- tions	Code		Enter code	
Module no.	537123	537124	537125	537126	537127	537128	537129	537130	537131	537132					
Function	Compact cylinder, double-acting, standard hole pattern											ADNGF		ADNGF	
Size [mm]	12	16	20	25	32	40	50	63	80	100		-...			
Stroke [mm]	1 ... 200		3 ... 200		5 ... 300					5 ... 400			-...		
Cushioning	Elastic cushioning rings/pads at both ends												-P		
	—		Pneumatic cushioning, self-adjusting at both ends									[1]	-PPS		
Position sensing	Via proximity switch												-A		-A
Piston rod type	Through piston rod											[2]	-S2		
Temperature resistance	Heat-resistant seals max. 120°C											[3]	-S6		
Captive rating plate	Laser-etched rating plate												-TL		

[1] PPS Not with temperature resistance S6
Minimum stroke 5 mm

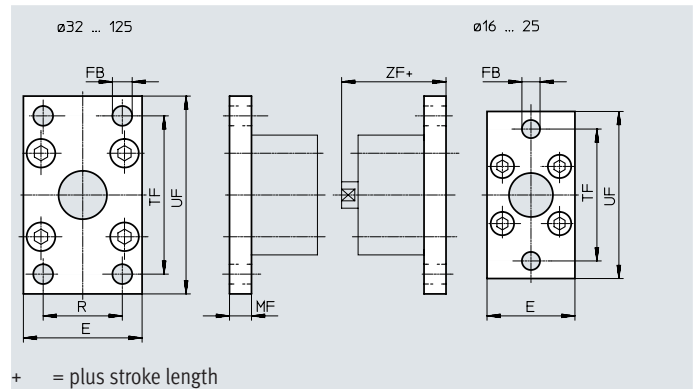
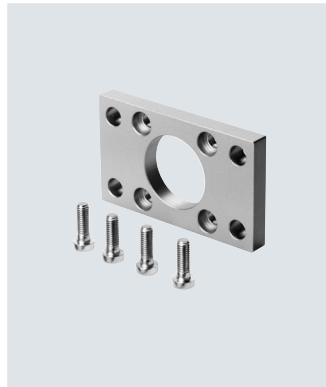
[2] S2 Minimum stroke 5 mm from size 25 onwards
Max. stroke 250 mm

[3] S6 Max. stroke 250 mm

Accessories

Flange mounting FNC

Material:
Galvanised steel
RoHS-compliant



+ = plus stroke length

Dimensions and ordering data

Dimensions and ordering data

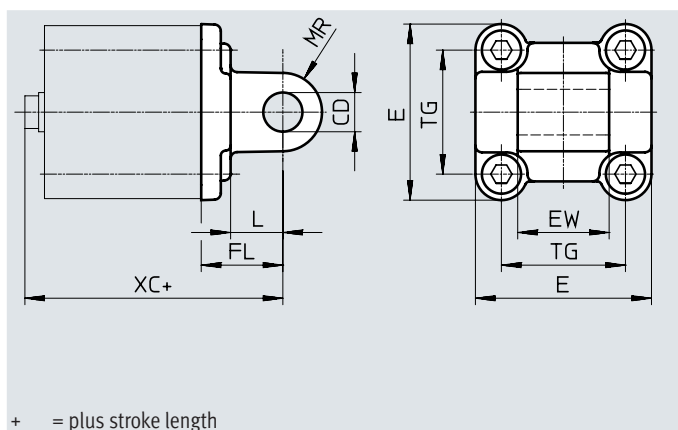
For ø	E	FB ø	MF	R	TF	UF	ZF	CRC ¹⁾	Weight	Part no.	Type
[mm]						±1			[g]		
12	28	5.5	8	—	40	50	48	1 - low	79	537245	FNC-12
16	29				43	55		1 - low	88	537246	FNC-16
20	36	6.6			55	70	51	1 - low	141	537247	FNC-20
25	40				60	76	53	1 - low	165	537248	FNC-25
32	45	7	10	32	64	80	60	1 - low	221	174376	FNC-32
40	54	9		36	72	90	61	1 - low	291	174377	FNC-40
50	65		12	45	90	110	65	1 - low	536	174378	FNC-50
63	75	50		100	120	69	1 - low	679	174379	FNC-63	
80	93	12	16	63	126	150	79	1 - low	1495	174380	FNC-80
100	110	14		75	150	175	92	1 - low	2041	174381	FNC-100

1) More information: www.festo.com/x/topic/kbk

Accessories

Swivel flange
SNCL/SNCL-...-R3

Material:
SNCL 12 ... 25:
Wrought aluminium alloy
SNCL 32 ... 100:
Die-cast aluminium
SNCL-...-R3:
Wrought aluminium alloy with
protective coating
RoHS-compliant



+ = plus stroke length

Dimensions and ordering data								
For $\varnothing$	CD $\varnothing$	E	EW	FL	L	MR	TG	XC
[mm]	H9			± 0.2				
12	6	25 _{-0.6}	12 _{H12}	16	10	6	16	56
16		27.5 _{-0.6}					18	
20	8	34.5 _{-0.6}	16 _{H12}	20	14	8	22	63
25		38.5 _{-0.6}					26	
32	10	45 $\pm 0.2/-0.5$	26 $-0.2/-0.6$	22	13	10	32.5	72
40	12	54 _{-0.5}	28 $-0.2/-0.6$	25	16	12	38	76
50		64 _{-0.6}	32 $-0.2/-0.6$	27			46.5	
63	16	75 _{-0.6}	40 $-0.2/-0.6$	32	21	16	56.5	89
80		93 _{-0.8}	50 $-0.2/-0.6$	36			72	
100	20	110 $\pm 0.3/-0.8$	60 $-0.2/-0.6$	41	27	20	89	117

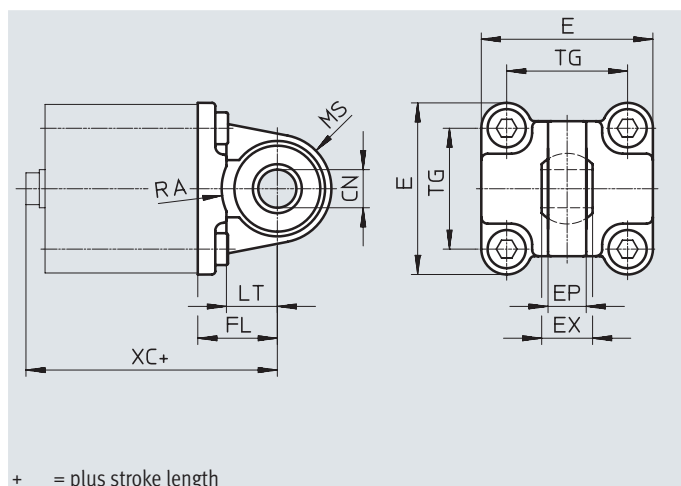
For $\varnothing$ [mm]	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part no.	Type	CRC ¹⁾	Weight [g]	Part no.	Type
12	2 - moderate	20	537790	SNCL-12	3 - high	20	537794	SNCL-12-R3
16	2 - moderate	21	537791	SNCL-16	3 - high	21	537795	SNCL-16-R3
20	2 - moderate	38	537792	SNCL-20	3 - high	38	537796	SNCL-20-R3
25	2 - moderate	41	537793	SNCL-25	3 - high	41	537797	SNCL-25-R3
32	1 - low	71	174404	SNCL-32	–	–	–	–
40	1 - low	95	174405	SNCL-40	–	–	–	–
50	1 - low	158	174406	SNCL-50	–	–	–	–
63	1 - low	225	174407	SNCL-63	–	–	–	–
80	1 - low	436	174408	SNCL-80	–	–	–	–
100	1 - low	606	174409	SNCL-100	–	–	–	–

1) More information: www.festo.com/x/topic/kbk

Accessories

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

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



Dimensions and ordering data

For Ø	CN Ø		E		EP	EX	FL
[mm]	ADNGF-...	ADNGF-...-R3	ADNGF-...	ADNGF-...-R3	±0.2		±0.2
32	10 ^{+0.013}	10+0.015/-0.04	45+0.2/-0.5	45 _{-0.5}	10.5	14	22
40	12 ^{+0.015}	12+0.018/-0.04	54 _{-0.5}	54 _{-0.5}	12	16	25
50	16 ^{+0.015}	16+0.018/-0.04	64 _{-0.6}	64 _{-0.6}	15	21	27
63	16 ^{+0.015}	16+0.018/-0.04	74.5±0.5	75 _{-0.6}	15	21	32
80	20 ^{+0.018}	20+0.021/-0.04	92.2±0.8	93 _{-0.8}	18	25	36
100	20 ^{+0.018}	20+0.021/-0.04	109+1/-0.7	109+1/-0.7	18	25	41

For Ø	LT	MS		RA		TG	XC
		ADNGF-...	ADNGF-...-R3	ADNGF-... +1	ADNGF-...-R3 +1		
[mm]							
32	13	15 ^{+0.5}	15 ^{+0.5}	14.5	14.5	32.5	72.2
40	16	17 ^{+0.5}	17 ^{+0.5}	17.5	17.5	38	75.2
50	16	20 ^{+0.5}	20 ^{+0.5}	18.5	19	46.5	80.2
63	21	23 _{-0.5}	22 ^{+0.5}	23	23	56.5	89.2
80	22	28 _{-0.5}	27 ^{+0.5}	25	25	72	99
100	27	30±0.5	30±0.5	95	100	89	117

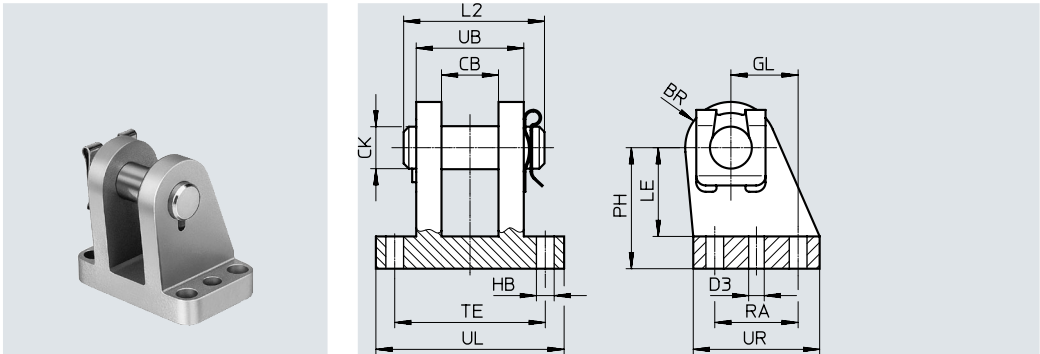
For Ø	Basic version				High corrosion protection			
	CRC ¹⁾	Weight [g]	Part no.	Type	CRC ¹⁾	Weight [g]	Part no.	Type
[mm]								
32	1 - low	86	174397	SNCS-32	4 - particularly high	161	2895920	CRSNCS-32
40	1 - low	122	174398	SNCS-40	4 - particularly high	239	2895921	CRSNCS-40
50	1 - low	216	174399	SNCS-50	4 - particularly high	403	2895922	CRSNCS-50
63	2 - moderate	281	174400	SNCS-63	4 - particularly high	576	2895923	CRSNCS-63
80	2 - moderate	557	174401	SNCS-80	4 - particularly high	1173	2895924	CRSNCS-80
100	2 - moderate	683	174402	SNCS-100	3 - high	684	2895925	SNCS-100-R3

1) More information: www.festo.com/x/topic/kbk

Accessories

Clevis foot LBG/LBG-...-R3
The pivot pin is secured against rotation with a spring pin.

Material:
LBG 32 ... 63: Stainless steel casting
LBG 80 ... 100: Spheroidal graphite cast iron
LBG-...-R3: High-alloy stainless steel
RoHS-compliant



Dimensions and ordering data														
For $\varnothing$	CL	CM	EK $\varnothing$	FL	GL	HB $\varnothing$	L2	LE	MR	RF	RG	S1 $\varnothing$	UK	UX
[mm]														
32	28	14.1	10	32	16	6.8	35	24	12	42	20	4.8	56	36
40	30	16.1	12	36	20	6.8	39	26	14	44	26	5.8	58	41.5
50	40	21.1	16	45	25	9.2	50	33	15	56	31	5.8	70	47
63	40	21.1	16	50	25	9.2	50	38	17	56	31	7.8	70	49
80	50	25.1	20	63	30	11	60	49	17	70	36	7.8	89	55
100	50	25.1	20	71	41	11	60	56	20	70	46	9.8	89	65

For $\varnothing$	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part no.	Type	CRC ¹⁾	Weight [g]	Part no.	Type
[mm]								
32	2 - moderate	220	31761	LBG-32	3 - high	220	2078790	LBG-32-R3
40	2 - moderate	300	31762	LBG-40	3 - high	300	2078792	LBG-40-R3
50	2 - moderate	540	31763	LBG-50	3 - high	540	2078794	LBG-50-R3
63	2 - moderate	580	31764	LBG-63	3 - high	580	2078795	LBG-63-R3
80	1 - low	1050	31765	LBG-80	3 - high	1050	2078797	LBG-80-R3
100	1 - low	1375	31766	LBG-100	3 - high	1375	2078799	LBG-100-R3

1) More information: www.festo.com/x/topic/kbk

Accessories

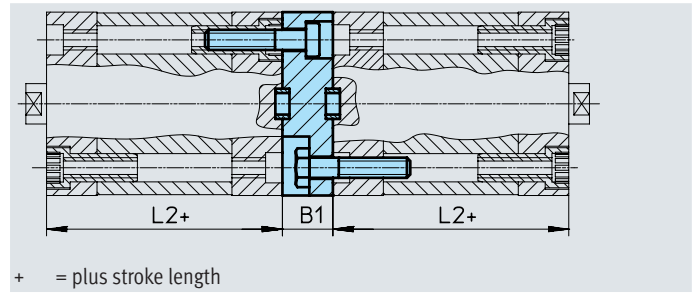
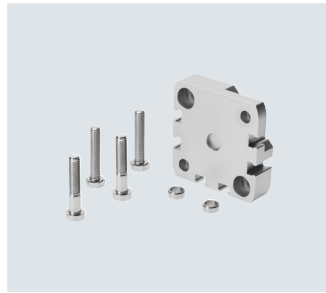
Multi-position kit DPNA

Material:

Flange: Wrought aluminium alloy

Screws: Galvanised steel

RoHS-compliant



Dimensions and ordering data							
For ø [mm]	L2	B1	Max. overall stroke length [mm]	CRC ¹⁾	Weight [g]	Part no.	Type
12	35	13	600	2 - moderate	28	537263	DPNA-12
16	35				33	537264	DPNA-16
20	37				50	537265	DPNA-20
25	39				60	537266	DPNA-25
32	44	15	800		99	537267	DPNA-32
40	45				129	537268	DPNA-40
50	45				196	537269	DPNA-50
63	49				249	537270	DPNA-63
80	54	17	1000		474	537271	DPNA-80
100	67	19.5			712	537272	DPNA-100

1) More information: www.festo.com/x/topic/kbk

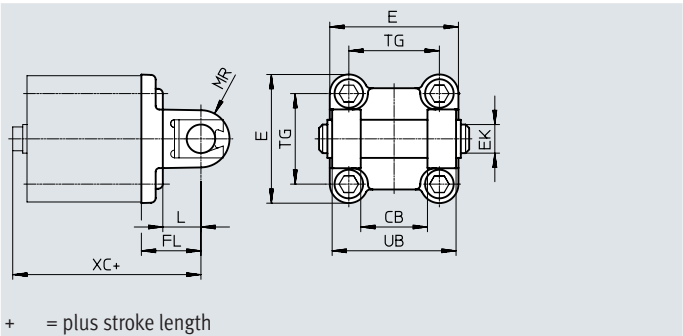
Note

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

Accessories

Swivel flange
SNCB/SNCB-...-R3

Material:
SNCB: Die-cast aluminium
SNCB-...-R3: Die-cast aluminium with
protective coating
RoHS-compliant



Dimensions and ordering data									
For ø	CB	E	EK ø	FL	L	MR	TG	UB	XC
[mm]	H14		H9/e8	±0.2		-0.5		h14	
32	26	45+0.2/-0.5	10	22	13	8.5	32.5	45	72
40	28	54 _{-0.5}	12	25	16	12	38	52	76
50	32	64 _{-0.6}	12	27	16	12	46.5	60	80
63	40	75 _{-0.6}	16	32	21	16	56.5	70	89
80	50	93 _{-0.8}	16	36	22	16	72	90	99
100	60	110+0.3/-0.8	20	41	27	20	89	110	117

For ø [mm]	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part no.	Type	CRC ¹⁾	Weight [g]	Part no.	Type
32	1 - low	103	174390	SNCB-32	3 - high	100	176944	SNCB-32-R3
40	1 - low	155	174391	SNCB-40	3 - high	151	176945	SNCB-40-R3
50	1 - low	233	174392	SNCB-50	3 - high	228	176946	SNCB-50-R3
63	1 - low	375	174393	SNCB-63	3 - high	371	176947	SNCB-63-R3
80	1 - low	636	174394	SNCB-80	3 - high	632	176948	SNCB-80-R3
100	1 - low	1035	174395	SNCB-100	3 - high	986	176949	SNCB-100-R3

1) More information: www.festo.com/x/topic/kbk

Accessories

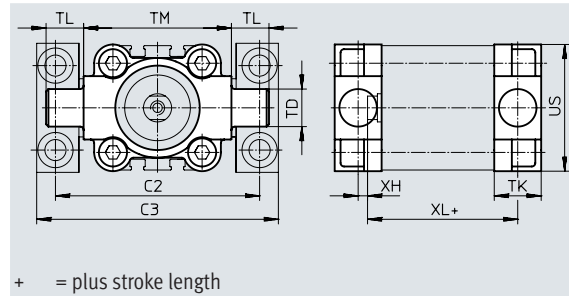
Trunnion flange ZNCF/CRZNG

Material:

ZNCF: Stainless steel casting

CRZNG: Electropolished stainless steel casting

RoHS-compliant



Dimensions and ordering data									
For Ø	C2	C3	TD Ø e9	TK	TL	TM	US	XH	XL
[mm]									
32	71	86	12	16	12	50	45	2	52
40	87	105	16	20	16	63	54	4	55
50	99	117	16	24	16	75	64	4	57
63	116	136	20	24	20	90	75	4	61
80	136	156	20	28	20	110	93	5	81
100	164	189	25	38	25	132	110	10	86

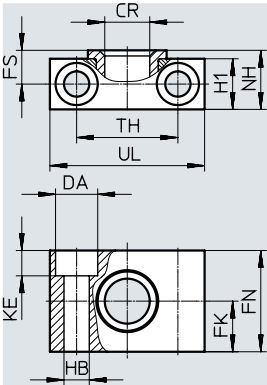
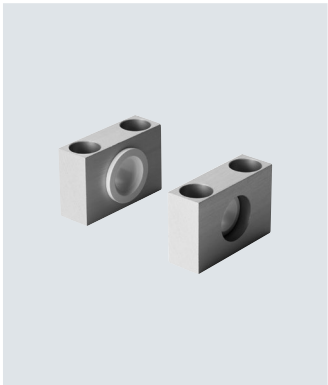
For Ø [mm]	Basic version				R3 – High corrosion protection			
	CRC ¹⁾	Weight [g]	Part no.	Type	CRC ¹⁾	Weight [g]	Part no.	Type
32	2 - moderate	150	174411	ZNCF-32	4 - particularly high	150	161852	CRZNG-32
40	2 - moderate	285	174412	ZNCF-40	4 - particularly high	285	161853	CRZNG-40
50	2 - moderate	473	174413	ZNCF-50	4 - particularly high	473	161854	CRZNG-50
63	2 - moderate	687	174414	ZNCF-63	4 - particularly high	687	161855	CRZNG-63
80	2 - moderate	1296	174415	ZNCF-80	4 - particularly high	1296	161856	CRZNG-80
100	2 - moderate	2254	174416	ZNCF-100	4 - particularly high	2254	161857	CRZNG-100

1) More information: www.festo.com/x/topic/kbk

Accessories

Trunnion support LNZZ

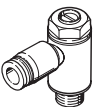
Material:
Trunnion support: Anodised
aluminium
Plain bearing: Polymer
RoHS-compliant



Dimensions and ordering data																
For $\varnothing$	CR $\varnothing$	DA $\varnothing$	FK $\varnothing$	FN	FS	H1	HB $\varnothing$	KE	NH	TH	UL	CRC ¹⁾	Weight	Part no.	Type	
[mm]	D11	H13	± 0.1				H13			± 0.2			[g]			
32	12	11	15	30	10.5	15	6.6	6.8	18	32	46	2 - moderate	83	32959	LNZZ-32	
40, 50	16	15	18	36	12	18	9	9	21	36	55	2 - moderate	129	32960	LNZZ-40/50	
63, 80	20	18	20	40	13	20	11	11	23	42	65	2 - moderate	178	32961	LNZZ-63/80	
100	25	20	25	50	16	24.5	14	13	28.5	50	75	2 - moderate	306	32962	LNZZ-100/125	

1) More information: www.festo.com/x/topic/kbk

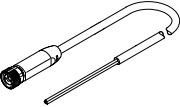
Accessories

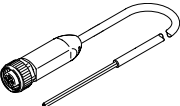
Ordering data – One-way flow control valves			Data sheets → Internet: grl		
	Connection		Material	Part no.	Type
	For Ø	For tubing O.D.			
For exhaust air					
	12, 16, 20, 25	3	Metal design	193137	GRLA-M5-QS-3-D
		4		193138	GRLA-M5-QS-4-D
		6		193139	GRLA-M5-QS-6-D
	32, 40, 50, 63, 80, 100	3		193142	GRLA-1/8-QS-3-D
		4		193143	GRLA-1/8-QS-4-D
		6		193144	GRLA-1/8-QS-6-D
		8		193145	GRLA-1/8-QS-8-D
For supply air					
	12, 16, 20, 25	3	Metal design	193153	GRLZ-M5-QS-3-D
		4		193154	GRLZ-M5-QS-4-D
		6		193155	GRLZ-M5-QS-6-D
	32, 40, 50, 63, 80, 100	3		193156	GRLZ-1/8-QS-3-D
		4		193157	GRLZ-1/8-QS-4-D
		6		193158	GRLZ-1/8-QS-6-D
		8		193159	GRLZ-1/8-QS-8-D

Accessories

Ordering data – Proximity switch for T-slot, magneto-resistive						Data sheets → Internet: smt
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O contact						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	2.5	574335	SMT-8M-A-PS-24V-E-2.5-OE
			Plug M8x1, 3-pin	0.3	574334	SMT-8M-A-PS-24V-E-0.3-M8D
			Plug M12x1, 3-pin	0.3	574337	SMT-8M-A-PS-24V-E-0.3-M12
		NPN	Cable, 3-wire	2.5	574338	SMT-8M-A-NS-24V-E-2.5-OE
			Plug M8x1, 3-pin	0.3	574339	SMT-8M-A-NS-24V-E-0.3-M8D
N/C contact						
	Inserted in the slot from above, flush with the cylinder profile, short design	PNP	Cable, 3-wire	7.5	574340	SMT-8M-A-PO-24V-E-7.5-OE

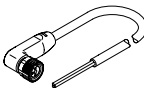
Ordering data – Proximity switch for T-slot, magnetic reed						Data sheets → Internet: sme
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part no.	Type
N/O contact						
	Inserted in the slot from above, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	543862	SME-8M-DS-24V-K-2.5-OE
				5.0	543863	SME-8M-DS-24V-K-5.0-OE
			Cable, 2-wire Plug M8x1, 3-pin	2.5	543872	SME-8M-ZS-24V-K-2.5-OE
				0.3	543861	SME-8M-DS-24V-K-0.3-M8D
	Inserted in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	2.5	150855	SME-8-K-LED-24
			Plug M8x1, 3-pin	0.3	150857	SME-8-S-LED-24
N/C contact						
	Inserted in the slot lengthwise, flush with the cylinder profile	Contacting	Cable, 3-wire	7.5	160251	SME-8-O-K-LED-24

Connecting cables NEBA, straight, connection M8						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	8078223	NEBA-M8G3-U-2.5-N-LE3
				5 m	8078224	NEBA-M8G3-U-5-N-LE3

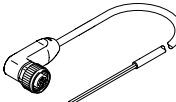
Connecting cables NEBA, straight, connection M12						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5 m	8078236	NEBA-M12G5-U-2.5-N-LE3
				5 m	8078237	NEBA-M12G5-U-5-N-LE3

Accessories

Connecting cables NEBA, angled, connection M8

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	Open end	3	2.5 m	8078230	NEBA-M8W3-U-2.5-N-LE3
				5 m	8078231	NEBA-M8W3-U-5-N-LE3

Connecting cables NEBA, angled, connection M12

	Electrical connection 1, connector system	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	3	2.5 m	8078245	NEBA-M12W5-U-2.5-N-LE3
				5 m	8078246	NEBA-M12W5-U-5-N-LE3

Ordering data – Proximity switch in block design, pneumatic

Data sheets → Internet: smpo

	Pneumatic connection	Part no.	Type
3/2-way valve, normally closed			
	M5 female thread	178563	SMPO-8E

Ordering data – Mounting kit for proximity switch SMPO-8E

Data sheets → Internet: smb

	Mounting	Part no.	Type
	Clamped in T-slot	178230	SMB-8E

Ordering data – Slot cover for T-slot

	Mounting	Length	Part no.	Type
	Insertable	2x 0.5 m	151680	ABP-5-S