## **FESTO**





Key features

### Design

- With the CDC (Clean Design Compact) cylinder series, the ADN modular system has been expanded to include an easy to clean compact cylinder variant
- It is based on ISO 21287 for compact cylinders and, like the compact cylinder ADN, features short strokes and a compact design
- The compact cylinder CDC is designed as a double-acting pneumatic cylinder with piston, piston rod and profile barrel

### Easy to clean

- Clean Design means smooth surfaces without slots and edges, which means fewer places where dirt can collect
- For hygiene reasons, the threads on the cylinder caps should be sealed with suitable blanking screws
- Resistant to conventional cleaning
- Increased corrosion protection

### Easy to assemble

- Comprehensive range of mounting accessories for just about every type of installation
- Contactless position sensing via proximity sensors

### Versatile

- The variants can be configured according to individual needs thanks to the modular product
- Greater flexibility thanks to the wide range of variants

### Variants

CDC-...

- Ø 20, 25 mm
- Without position sensing



- Ø 32 ... 80 mm
- With position sensing integrated in the end positions

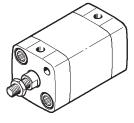


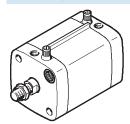
- Ø 32 ... 80 mm
- With sensor mounting rail for external position sensing



### Note

A combination of integrated and external position sensing is possible.



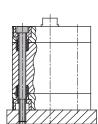




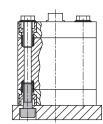
## **Mounting options**

With through screws

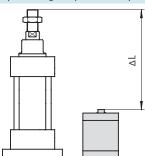




2

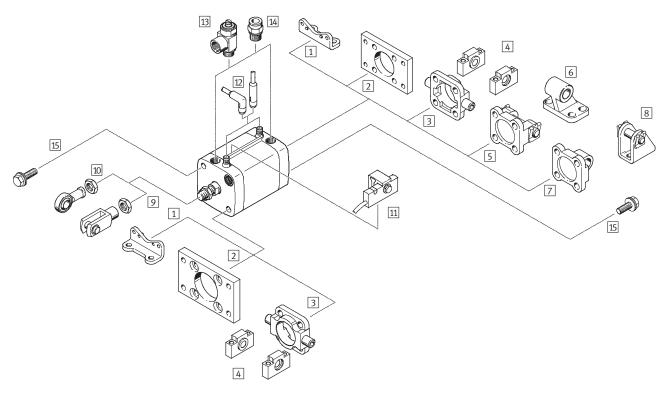


Space savings of up to 50% compared with cylinders to standard ISO 15552



## Compact cylinders CDC, ISO 21287, Clean Design Peripherals overview

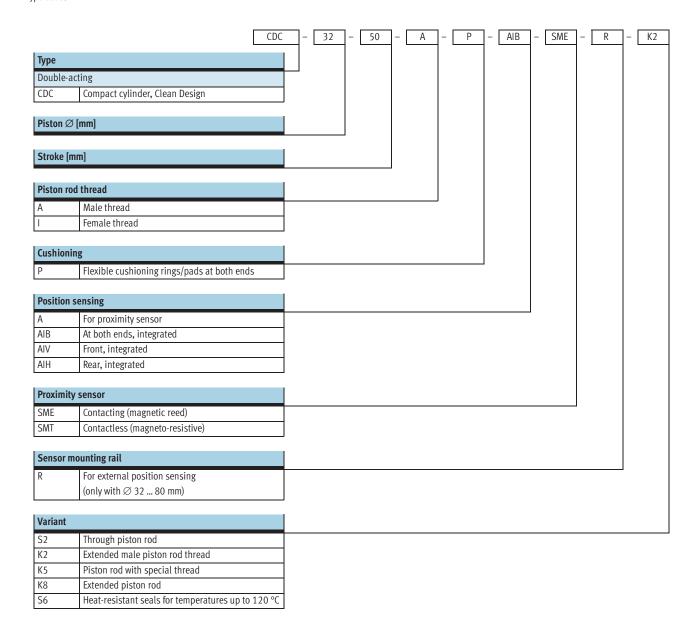




Μοι	inting attachments and accessori	ies	
		Brief description	→ Page/Internet
1	Foot mounting HNAR3	For bearing and end cap	18
2	Flange mounting CRFNG	For bearing or end cap	18
3	Trunnion flange CRZNG	For bearing or end cap in combination with trunnion supports CRLNZG	19
4	Trunnion supports CRLNZG	For trunnion flange CRZNG	19
5	Swivel flange SNCBR3	For end cap	20
6	Clevis foot mounting CRLNG	For swivel flange SNCBR3	20
7	Swivel flange SNCLR3	For end cap	21
8	Clevis foot mounting CRLBN	For swivel flange SNCLR3	21
9	Rod clevis CRSG	Permits a swivelling movement of the cylinder in one plane	24
10	Rod eye CRSGS	With spherical bearing	24
11	Proximity sensor SMT-C1	For attachment to the sensor mounting rail	22
12	Cable with socket SIM-KCDN	<ul> <li>For electrical signal transmission and power supply</li> <li>With food industry approval</li> </ul>	22
13	One-way flow control valve CRGRLA	For regulating speed	24
14	Push-in fittings QS-F/QSL-F/CRQS/CRQSL	For connecting compressed air tubing with standard external diameters	23
15	Blanking screws DAMD-P	For covering unused mounting threads	24

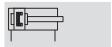
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Type codes





### Function



-N-Diameter 20 ... 80 mm

-T-Stroke length 1 ... 500 mm

www.festo.com/en/ Spare\_parts\_service











K5

S6











General technical data											
Piston $\varnothing$		20	25	32	40	50	63	80			
Pneumatic connection	Pneumatic connection		M5	G1/8	G1/8	G½8	G <sup>1</sup> /8	G1/8			
Piston rod thread		M8	M8	M10x1.25	M10x1.25	M12x1.25	M12x1.25	M16x1.5			
Design		Piston									
		Piston rod									
		Cylinder barrel	Cylinder barrel								
Cushioning		Flexible cushioning rings/pads at both ends									
Position sensing	А	For proximity sensor									
	AIB	At both ends, built-in									
	AIV	Front, built-in									
	AIH	Rear, built-in									
Type of mounting		Via through-hole									
		With female thread									
		Via accessories									
Mounting position		Any									

Operating and en	perating and environmental conditions										
Piston ∅	Piston Ø			25	32 40 50 63 80						
Operating mediun	n		Filtered compres	Filtered compressed air, lubricated or unlubricated							
Operating	Operating [bar]				0.6 10						
pressure	S2	[bar]	1.2 10		1 10			0.8 10			
	S6	[bar]	1 10	0.6 10							
Ambient		[°C]	-20 +80	-20 +80							
temperature <sup>1)</sup> S6 [°C]			0 +120								
Corrosion resistan	ice class C	RC <sup>2)</sup>	3								

Note operating range of proximity sensors
 Corrosion resistance class 3 to Festo standard 940 070
 Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for



Technical data

Forces [N] and impact energy [J	Forces [N] and impact energy [J]								
Piston ∅		20	25	32	40	50	63	80	
Theoretical force at 6 bar,		188	295	483	754	1,178	1,870	3,016	
advancing	S2	141	247	415	686	1,057	1,750	2,827	
Theoretical force at 6 bar,		141	247	415	686	1,057	1,750	2,827	
retracting									
Max. impact energy		0.2	0.3	0.4	0.7	1	1.3	1.8	
at the end positions	S6	0.1	0.15	0.2	0.35	0.5	0.65	0.9	

 $m_{load}$ 

Permissible impact velocity:

$$v_{perm.} = \sqrt{\frac{2 \times E_{perm.}}{m_{dead} + m_{load}}}$$

 $\begin{array}{ll} v_{perm.} & \text{Permissible impact velocity} \\ E_{perm.} & \text{Max. impact energy} \\ m_{dead} & \text{Moving load (drive)} \end{array}$ 

Moving work load

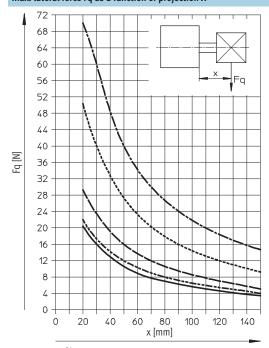
These specifications represent the maximum values which can be reached. Note the maximum permitted impact energy.

Note

Maximum permissible load:

$$m_{load} \; = \frac{2 \; x \; E_{perm.}}{v^2} \; - \; m_{dead} \label{eq:mload}$$

## Max. lateral force Fq as a function of projection X

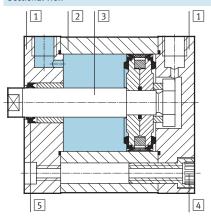




Weights [g]							
Piston Ø	20	25	32	40	50	63	80
Basic version							
Product weight with 0 mm stroke	133	170	277	377	567	790	1,475
Additional weight per 10 mm stroke	20	23	31	35	52	59	84
Moving load with 0 mm stroke	24	33	53	82	128	177	367
Additional load per 10 mm stroke	6	6	9	9	16	16	25
S2 – Through piston rod							
Product weight with 0 mm stroke	150	183	296	386	600	827	1,507
Additional weight per 10 mm stroke	26	29	40	44	67	74	109
Moving load with 0 mm stroke	34	40	64	81	144	195	367
Additional load per 10 mm stroke	12	12	18	18	32	32	49

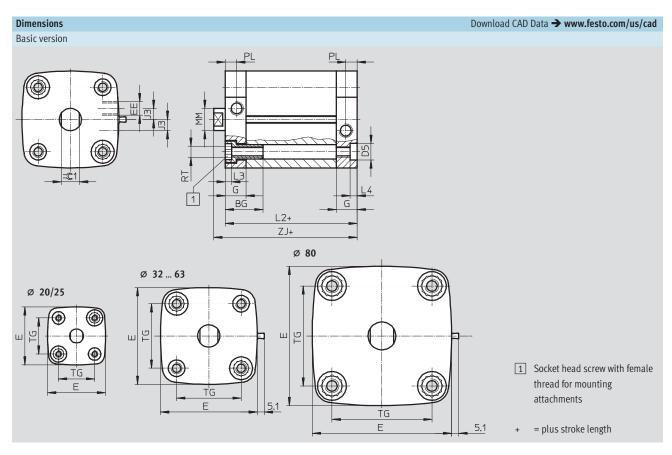
## Materials

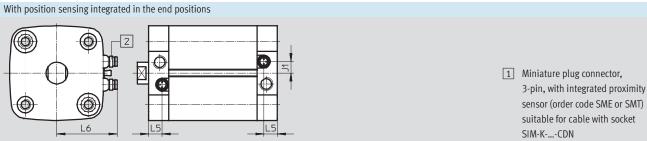
## Sectional view



Com	pact cylinder	Basic version	S6
1	End cap	Anodised aluminium	
2	Cylinder barrel	Anodised aluminium	
3	Piston rod	High-alloy steel	
4	Flange screws	Corrosion-resistant steel	
-	Seals	Polyurethane, nitrile rubber	Fluorocarbon rubber
-	Note on materials	Free of copper and PTFE	
		-	Contains PWIS (paint-wetting impairment substances)











Ø	BG	D5	E	EE	G	J1	J3	L2	L3	L4
[mm]		F9				±0.1	±0.1			
20	19.5		36.8	M5	12		_	37		
25	19.5	q	41.8	CINI	12	_		39		
32	26	9	49.8			5.8	7	44	4.4	5
40	20		57.8		15	8		45	4.4	,
50		12	69.7	G1/8	1)	8.5	8	40		
63	27	12	81.3			12	U	49		
80		-	100.4		16.5	15	·	54	8	-

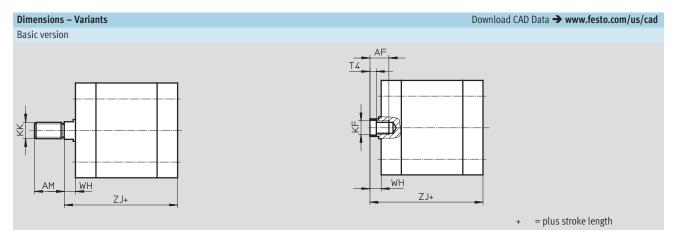
Ø	L5	L6	L7	MM Ø	PL	RT	TG	ZJ	<b>=</b> ©1
[mm]		±2		h8	±0.1			+1	h13
20	_	_	7	10	6	M5	22	42.7	q
25			,	10	O	לואו	26	44.7	9
32		35	8.7	12		M6	32.5	50.2	10
40	10	39	0.7	12		WIO	38	51.2	10
50	10	45	10.3	16	8.2	M8	46.5	53.2	13
63		50	10.5	10		WIO	56.5	57.2	1)
80	11.5	60	11.9	20		M10	72	63	17

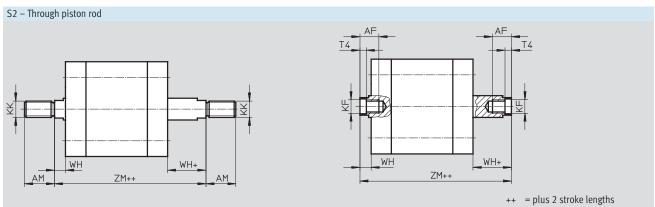
## Note

The following maximum stroke lengths apply in combination with a swivel mounting on the end cap:

Ø	20	25	32	40	50	63	80
[mm]							
Max. stroke length	5	0		10	00		150



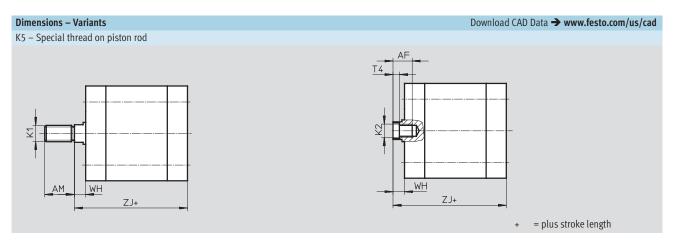


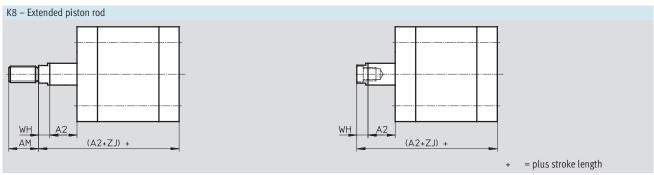




Ø	A1	AF	AM	KF	KK	T4	WH	ZJ	ZM
[mm]		min.	-0.5				+1	+1	
20		14	16	M6	M8	2.6	5.7	42.7	49.8
25	1	14	10	IVIO	IVIO	2.0	5.7	44.7	51.8
32	1 20	16	19	M8	M10x1.25	3.3	6.2	50.2	57.8
40	1 20	10	19	IVIO	WITOXI.23	5.5	0.2	51.2	58.9
50			22	M10	M12x1.25	4.7	8.2	53.2	63.1
63		20	22	WIO	WIIZXI.ZJ	4.7	0.2	57.2	66.9
80	1 30		28	M12	M16x1.5	6.1	9	63	73.5







Ø	AF	A2	AM	K1	K2	T4	WH	ZJ
[mm]	min.		-0.5				+1	+1
20	14	1 300	16	M10, M10x1.25	M5	2.6	5.7	42.7
25	14	1 500	10	W10, W10x1.23	101.5	2.0	5.7	44.7
32	16		19	M10, M12	M6	3.3	6.2	50.2
40	10	1 400	17	WIIO, WIIZ	WIO	<i>J</i> . <i>J</i>	0.2	51.2
50		1 400	22	M12, M12	M8	4.7	8.2	53.2
63	20		22	10112, 10112	WIO	4.7	0.2	57.2
80		1 500	28	M16, M20	M10	6.1	9	63

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## Proximity sensor, magnetic reed

(order code SME)



## Note

The proximity sensor can only be ordered in conjunction with the order code AIB, AIV and AIH (integrated position sensing) in the modular product system.



Technical data		
General information		
Design		Integrated
Based on standard		EN 60947-5-2
CE mark (see declaration of conformi	ty)	To EU EMC Directive
Note on materials		Free of copper and PTFE
Input signal/measuring element		T.,
Measuring principle		Magnetic reed
Ambient temperature	[°C]	-20 +60
Switching output		
Switching output		Contacting, bipolar
Switching element function		N/O contact
Reproducibility of switching point	[mm]	±0.1
Hysteresis	[mm]	1 4, depending on the cylinder used
Switch-on time	[ms]	0.5
Switch-off time	[ms]	0.5
Max. output current	[mA]	500
Max. switching capacity AC	[W]	10 VA
Max. switching capacity DC	[W]	10 W
Inductive protective circuit		Adapted to MZ coil with LED
Residual current	[mA]	0
Output, further data		Tu
Protection against short circuit		No .
Protection against overloading		No
Electronic components		
Operating voltage range	[V AC]	12 30
	[V DC]	12 30
Protection against polarity reversal		No
Electromechanical components		
Electrical connection		Plug, M8x1, 3-pin
Connection direction		Lateral
Information on crimp connector mate	erials	Gold-plated brass

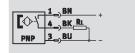


Technical data		
Mechanical components		
Tightening torque	[Nm]	0.3
Mounting position		Any
Product weight	[g]	2.7
Information on housing materials		Polyamide, epoxy resin, nickel-plated brass
Display/operation		
Switching status display		Yellow LED
Immissions/emissions		
Degree of protection		IP65, IP67 to EN 60529
		IP69K, to DIN 40050 Part 9
		Only in conjunction with plug socket with cable SIM-KCDN
Corrosion resistance class CRC <sup>1)</sup>		3

<sup>1)</sup> Corrosion resistance class 3 according to Festo standard 940 070 Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the

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## Proximity sensor, magneto-resistive (order code SMT)



## Note

The proximity sensor can only be ordered in conjunction with the order code AIB, AIV and AIH (integrated position sensing) in the modular product system.



Technical data		
General information		
Design		Integrated
Based on standard		EN 60947-5-2
CE mark (see declaration of conformit	ty)	To EU EMC Directive
Note on materials		Free of copper and PTFE
Input signal/measuring element		
Measuring principle		Magneto-resistive
Ambient temperature	[°C]	-20 +60
Cuitabina autout		
Switching output		Louis
Switching output		PNP
Switching element function		N/O contact
Reproducibility of switching point	[mm]	±0.1
Hysteresis	[mm]	1 4, depending on the cylinder used
Switch-on time	[ms]	0.5
Switch-off time	[ms]	0.5
Max. output current	[mA]	100
Max. switching capacity DC	[W]	3
Voltage drop	[V]	< 2
Inductive protective circuit		Adapted to MZ, MY, ME coils
Residual current	[μΑ]	<10
Output, further data		
Protection against short circuit		Yes
Protection against overloading		Yes
Trotection against overtoading		
Electronic components		
Operating voltage range	[V DC]	5 30
Residual ripple	[%]	10
Protection against polarity reversal		Yes
Electromechanical components		
Electrical connection		Plug, M8x1, 3-pin
Connection direction		Lateral
Information on crimp connector mate	rials	Gold-plated brass

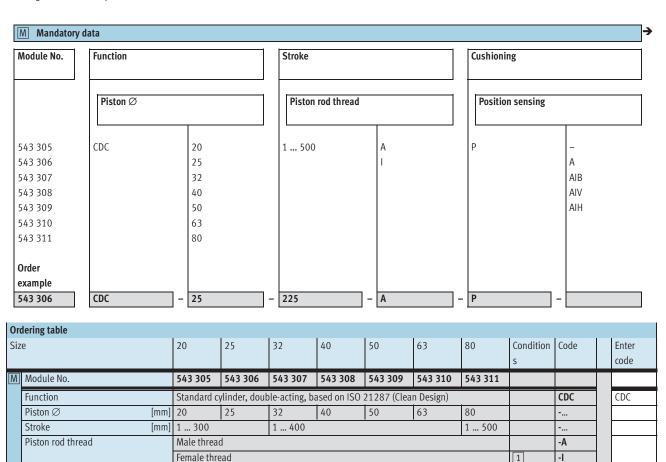


Technical data		
Mechanical components		
Tightening torque	[Nm]	0.3
Mounting position		Any
Product weight	[g]	2.7
Information on housing materials		Polyamide, epoxy resin, nickel-plated brass
Display/operation		
Switching status display		Yellow LED
Immissions/emissions		
Degree of protection		IP65, IP67 to EN 60529
		IP69K, to DIN 40050 Part 9
		Only in conjunction with plug socket with cable SIM-KCDN
Corrosion resistance class CRC <sup>1)</sup>		3

<sup>1)</sup> Corrosion resistance class 3 according to Festo standard 940 070 Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the



Ordering data – Modular products



1 Not with extended male thread K2

Cushioning

Position sensing

2 AIB, AIV, AIH Only with proximity sensor SME, SMT

Transfer order coo	le					
	CDC	-	-	-	-	P

Flexible cushioning rings/pads at both ends

For proximity sensor

Front, integrated

Rear, integrated

At both ends, integrated

Without position

sensing

-P

-A

-AIB

-AIV

-AIH

2

2

2

-P

## Compact cylinders CDC, ISO 21287, Clean Design Ordering data – Modular products



Proximity so	ensor	Туре	of piston roo	I			Special th	read			Temperature re	esistance
Sensor m	ounting rail	Ma	ile thread ex	tended			Piston ro	od extended				
SME SMT	R	S2		K2			"…"K5		K8		S6	
	-	- <b>S</b> 2		- 20K2	-	-	"M10"K5		75K8	<b>-</b>	<b>S6</b>	
dering table				_		_				<del></del>		
ze		20	25	32	40		50	63	80	Conditi	ion Code	Enter
Drovimit	ncor			CME (		_			<u>'</u>		CHE	
Proximity Se	:11501			SME (conta	_					3	-SME	
		-	-	SMT (conta	ctless)					4	-SMT	
Sensor mou	nting rail	- -	-  -  -	SMT (conta	_	or (	external po	sition sensi	ng	_	-SMT	
Sensor mou	nting rail on rod	- Through p		SMT (conta	ctless)	or (	external po	osition sensi	ng	4	-SMT	
Sensor mou	nting rail on rod l extended	Extended i	-   -   iston rod male piston r	SMT (conta	ctless)	or (	external po	osition sensi	1	4	-SMT -R -S2	
Sensor mou Type of pisto Male thread	nting rail on rod I extended [mm]	Extended I	male piston r	SMT (conta Sensor mo	ctless)			sition sensi	1 30	4	-SMT -R -S2 K2	
Sensor mou Type of pisto Male thread	nting rail on rod l extended [mm]	Extended i	male piston r	SMT (conta	ctless)	1	external po	sition sensi	1	4	-SMT -R -S2	
Sensor mou Type of pisto Male thread	nting rail on rod l extended [mm]	Extended 1 1 20 M10x1.25	male piston r	SMT (conta Sensor mo od thread	ctless)	1	W12	sition sensi	1 30 M16	4	-SMT -R -S2 K2	
Sensor mou Type of pisto Male thread	nting rail on rod l extended [mm] with Male thread ad Female thread	Extended (1 20 M10x1.25 M10	male piston r	SMT (conta Sensor mo od thread M10 M12	ctless)	1	W12 W16	osition sensi	1 30 M16 M20	4	-SMT -R -S2 K2	
Sensor mou Type of pisto Male thread Piston rod w special thre	nting rail on rod l extended [mm] with Male thread ad Female thread	Extended (1 20 M10x1.25 M10 M5	male piston r	SMT (conta Sensor mo od thread M10 M12	ctless)	1	W12 W16	sition sensi	1 30 M16 M20	4	-SMT -R -S2 K2	
Type of pisto Male thread Piston rod w special thre	nting rail on rod l extended [mm] with Male thread ad Female thread extended	Extended   1 20   M10x1.25   M10   M5   Extended   1 300	male piston r	SMT (conta Sensor mo od thread M10 M12 M6	ctless) unting rail fo	1	W12 W16 W8	sition sensi	1 30 M16 M20 M10	5	-SMT -R -S2K2 -""K5	

	Transfer order co	de							
-		- [	-	-	-	-	-	-	

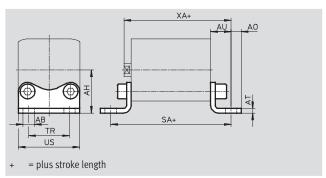
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Accessorie

## Foot mounting HNA-...-R3

Material: Steel with protective coating Free of copper, PTFE and silicone



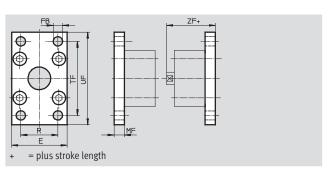


Dimension	ns and order	ring data											
For Ø	AB	AH	AO	AT	AU	SA	TR	US	XA	CRC <sup>1)</sup>	Weight	Part No.	Туре
	Ø												
[mm]	H14	JS14		±0.5	±0.2		±0.2	-0.5			[g]		
20		27	6.25			69	22	34.5	59	3	50	537 254	HNA-20-R3
25	7	29	0.23	4	16	71	26	38.5	61	3	55	537 255	HNA-25-R3
32		33.5	7	4		76	32	46	66	3	70	537 256	HNA-32-R3
40		38	9		18	81	36	54	69	3	90	537 257	HNA-40-R3
50	10	45	8	Е	21	87	45	64	74	3	160	537 258	HNA-50-R3
63	]	50	٦	)	21	91	50	75	78	3	180	537 259	HNA-63-R3
80	12	63	10.5	6	26	106	63	63	89	3	380	537 260	HNA-80-R3

<sup>1)</sup> Corrosion resistance class 3 according to Festo standard 940 070 Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Flange mounting CRFNG





Dimension	imensions and ordering data														
For Ø	E	FB	MF	R	TF	UF	ZF	CRC <sup>1)</sup>	Weight	Part No.	Туре				
		Ø													
[mm]		H13							[g]						
32	45	7	10	32	64	80	54	4	225	161 846	CRFNG-32				
40	54	9	10	36	72	90	55	4	300	161 847	CRFNG-40				
50	65	9	12	45	90	110	57	4	540	161 848	CRFNG-50				
63	75	9	12	50	100	120	61	4	680	161 849	CRFNG-63				
80	93	12	16	63	126	150	70	4	1,500	161 850	CRFNG-80				

<sup>1)</sup> Corrosion resistance class 4 according to Festo standard 940 070 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

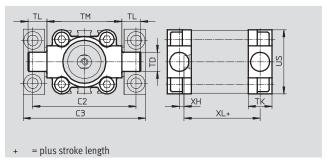


Accessories

## Trunnion flange CRZNG

Material: CRZNG: Electrolytically polished special steel casting Free of copper, PTFE and silicone



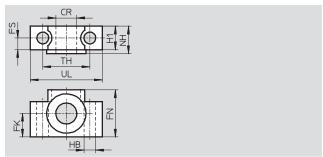


Dimension	mensions and ordering data														
For Ø	C2	C3	TD	TK	TL	TM	US	XH	XL	CRC <sup>1)</sup>	Weight	Part No.	Туре		
			Ø												
[mm]			e9												
32	71	86	12	16	12	50	45	2	52	4	150	161 852	CRZNG-32		
40	87	105	16	20	16	63	54	4	55	4	285	161 853	CRZNG-40		
50	99	117	16	24	16	75	64	4	57	4	473	161 854	CRZNG-50		
63	116	136	20	24	20	90	75	4	61	4	687	161 855	CRZNG-63		
80	136	156	20	28	20	110	93	5	81	4	1,296	161 856	CRZNG-80		

<sup>1)</sup> Corrosion resistance class 4 according to Festo standard 940 070 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

## Trunnion supports CRLNZG





Dimension	mensions and ordering data														
For $\varnothing$	CR	FK	FN	FS	H1	HB	NH	TH	UL	CRC <sup>1)</sup>	Weight	Part No.	Туре		
	Ø	Ø				Ø									
[mm]	D11	±0.1				H13		±0.2			[g]				
32	12	15	30	10.5	15	6.6	18	32	46	4	200	161 874	CRLNZG-32		
40,50	16	18	36	12	18	9	21	36	55	4	330	161 875	CRLNZG-40/50		
63,80	20	20	40	13	20	11	23	42	65	4	440	161 876	CRLNZG-63/80		

<sup>1)</sup> Corrosion resistance class 4 according to Festo standard 940 070 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.



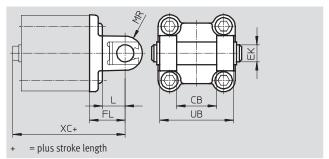
Accessories

## Swivel flange SNCB-...-R3

### Material:

Die-cast aluminium with protective coating, high corrosion protection Free of copper, PTFE and silicone





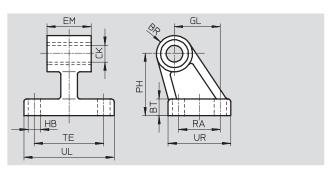
Dimension	mensions and ordering data														
For Ø	СВ	EK	FL	L	MR	UB	XC	CRC <sup>1)</sup>	Weight	Part No.	Туре				
		Ø													
[mm]	H14	e8	±0.2			h14			[g]						
32	26	10	22	13	8.5	45	72	3	100	176 944	SNCB-32-R3				
40	28	12	25	16	12	52	76	3	150	176 945	SNCB-40-R3				
50	32	12	27	16	12	60	80	3	225	176 946	SNCB-50-R3				
63	40	16	32	21	16	70	89	3	365	176 947	SNCB-63-R3				
80	50	16	36	22	16	90	99	3	610	176 948	SNCB-80-R3				

<sup>1)</sup> Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Clevis foot CRLNG





Dimension	mensions and ordering data														
For Ø	BR	BT	CK	EM	GL	HB	PH	RA	TE	UL	UR	CRC <sup>1)</sup>	Weight	Part No.	Туре
			Ø			Ø									
[mm]			D11	-0.4		H13							[g]		
32	10	8	10	25.8	21	6.6	32	18	38	51	31	4	120	161 840	CRLNG-32
40	11	10	12	27.8	24	6.6	36	22	41	54	35	4	160	161 841	CRLNG-40
50	12	12	12	31.8	33	9	45	30	50	65	45	4	280	161 842	CRLNG-50
63	15	12	16	39.8	37	9	50	35	52	67	50	4	375	161 843	CRLNG-63
80	15	14	16	49.8	47	11	63	40	66	86	60	4	580	161 844	CRLNG-80

<sup>1)</sup> Corrosion resistance class 4 according to Festo standard 940 070 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

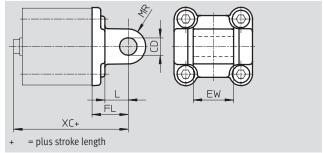


Accessorie

## Swivel flange SNCL-...-R3

Material: SNCL-...-R3: Die-cast aluminium with protective coating Free of copper, PTFE and silicone



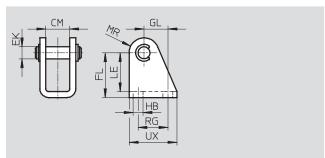


Dimension	Dimensions and ordering data												
For $\varnothing$	CD	EW	FL	L	MR	XC	CRC <sup>1)</sup>	Weight	Part No.	Туре			
	Ø												
[mm]	H9	h12	±0.2					[g]					
20	Q	16	20	14	Q	63	3	40	537 796	SNCL-20-R3			
25	0	10	20	14	δ	65	3	45	537 797	SNCL-25-R3			

1) Corrosion resistance class 3 according to Festo standard 940 070
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Clevis foot CRLBN, stainless steel





Dimension	imensions and ordering data												
For Ø	CM	EK	FL	GL	НВ	LE	MR	RG	UX	CRC <sup>1)</sup>	Weight	Part No.	Туре
		Ø											
[mm]											[g]		
20/25	16.1	8	30 +0.4/-0.2	16	6.6	26	10	20	32	4	62	161 863	CRLBN-20/25

<sup>1)</sup> Corrosion resistance class 4 according to Festo standard 940 070 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

# Compact cylinders CDC, ISO 21287, Clean Design Accessories



Ordering data – I	Proximity sensors for T-slot, magneto-	resistive				Technical data → Internet: smt						
	Type of mounting	Type										
N/O contact	N/O contact											
	Is mounted on the mounting rail	PNP	Cable, 3-wire	5.0	571 339	SMT-C1-PS-24V-K-5,0-OE						
			Plug M8x1, 3-pin	0.3	571 342	SMT-C1-PS-24V-K-0,3-M8D						
			Plug M12x1, 3-pin	0.3	571 341	SMT-C1-PS-24V-K-0,3-M12						

Ordering data	- Connecting cables for SMT-C1				Technical data → Internet: 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
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541 363	NEBU-M12G5-K-2.5-LE3
			5	541 364	NEBU-M12G5-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
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	541 367	NEBU-M12W5-K-2.5-LE3
			5	541 370	NEBU-M12W5-K-5-LE3

Ordering data -	Connecting cables for integrated proxi	mity sensor			Technical data → Internet: sim
	Electrical connection, left	Electrical connection, right	Part No.	Туре	
			[m]		
N .	Straight socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	525 259	SIM-K-GD-2,5-CDN
<b>6</b>			5	525 260	SIM-K-GD-5-CDN
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	525 261	SIM-K-WD-2,5-CDN
<b>₹</b>			5	525 262	SIM-K-WD-5-CDN

## Note

The connecting cables SIM-... are suitable for foodstuffs, resistant to cleaning and disinfecting agents to DIN 11483.

# Compact cylinders CDC, ISO 21287, Clean Design Accessories



Ordering data	- Push-in fittings	5			Technical data → Internet: o	quick star	
	Connection		Material	Weight [g]	Part No. Type	PU <sup>3)</sup>	
	Thread	Tubing O.D.					
With external I	hex						
	M5	4	Brass, nickel-plated and	6.1	533 844 QS-F-M5-4 <sup>1)</sup>	10	
		6	chrome-plated	9.3	533 845 QS-F-M5-6 <sup>1)</sup>		
-	G1/8	4		8	193 408 QS-F-G <sup>1</sup> / <sub>8</sub> -4 <sup>1)</sup>		
		6		12	193 409 QS-F-G <sup>1</sup> /8-6 <sup>1)</sup>		
		8		14	193 410 QS-F-G <sup>1</sup> / <sub>8</sub> -8 <sup>1)</sup>		
		•		•	•	•	
	M5	4	Stainless steel	6	162 860 CRQS-M5-4 <sup>1)</sup>	1	
		6		8.4	162 861 CRQS-M5-6 <sup>1)</sup>		
	R1/8	6		9.9	162 862 CRQS-1/8-6 <sup>2)</sup>		
		8		13	162 863 CRQS-1/8-8 <sup>2)</sup>		
			·	•		•	
With internal h	тех						
	M5	4	Brass, nickel-plated and	6	533 924 QS-F-M5-4-I <sup>1)</sup>	10	
		6	chrome-plated	9	537 014 QS-F-M5-6-I <sup>1)</sup>		
-	G1/8	4		8.6	533 927 QS-F-G <sup>1</sup> / <sub>8</sub> -4-I <sup>1)</sup>		
		6		13.4	533 928 QS-F-G <sup>1</sup> / <sub>8</sub> -6-I <sup>1</sup> )		
		8		13.1	533 929 QS-F-G <sup>1</sup> / <sub>8</sub> -8-I <sup>1</sup> )		

- With sealing ring
   With PTFE coating
   Packaging unit quantity

Ordering data	– Push-in L-fittin	gs			Technical data → Internet	: quick star
	Connection		Material	Weight [g]	Part No. Type	PU <sup>3)</sup>
	Thread	Tubing O.D.				
With external h	nex					
	M5	4	Brass, nickel-plated and	10.1	533 849 QSL-F-M5-4 <sup>1)</sup>	10
		6	chrome-plated	14.7	533 850 QSL-F-M5-6 <sup>1)</sup>	
_	G1/8	4		17.6	193 418 QSL-F-G <sup>1</sup> / <sub>8</sub> -4 <sup>1)</sup>	
		6		16	193 419 QSL-F-G <sup>1</sup> /8-6 <sup>1)</sup>	
		8		20	193 420 QSL-F-G <sup>1</sup> /8-8 <sup>1)</sup>	
			·			
	M5	4	Stainless steel	13	162 870 CRQSL-M5-4 <sup>1)</sup>	1
0000 CO		6		19	162 871 CRQSL-M5-6 <sup>1)</sup>	
	R <sup>1</sup> /8	6		20	162 872 CRQSL-1/8-6 <sup>2)</sup>	
		8		27	162 873 CRQSL-1/8-8 <sup>2)</sup>	

- With sealing ring
   With PTFE coating
   Packaging unit quantity

## Compact cylinders CDC, ISO 21287, Clean Design Accessories



Ordering data -	Plastic tubing, standard O.D.	Technical data → Internet: tubing		
		Туре		
	Good resistance to chemicals and hydrolysis	PLN		
6	Pneumatic tubing with resistance to high temperatures and chemicals	PFAN		
	Approved for use in the food industry and hydrolysis-resistant	PUN-H		

	Ordering data - One-way flow control valves     Technical data → Internet: crgrl										
		Connection		Material We		Part No.	Туре				
ı		Thread	For push-in fitting								
ľ	(S)	M5	CRQS/CRQSL/CRQST,	Electrolytically polished special	14	161 403	CRGRLA-M5-B				
		G1/8	Quick Star	steel casting	44	161 404	CRGRLA-1/8-B				

(	Ordering data – Blanking screws, corrosion-resistant										
		For Ø	Material	CRC <sup>1)</sup>	Weight [g]	Part No.	Туре	PU <sup>3)</sup>			
r	000	20, 25	High-alloy steel	3	5.5	543 714	DAMD-P-M5-10-R1 <sup>2)</sup>	4			
1		32, 40			9	543 715	DAMD-P-M6-12-R1 <sup>2)</sup>				
	0	50,63			17.5	543 716	DAMD-P-M8-16-R1 <sup>2)</sup>				
L		80			30	543 717	DAMD-P-M10-16-R1 <sup>2)</sup>				

<sup>1)</sup> Corrosion resistance class 3 according to Festo standard 940 070 Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the

surface.
2) With sealing ring
3) Packaging unit quantity

Ordering data – C	orrosion and acid-	resistant pis	ston rod attachments			T	echnical data 🗲 Internet: crsg
Designation	For Ø	Part No.	Туре	Designation	For Ø	Part No.	Туре
Rod eye CRSGS				Rod clevis CRSG			
~ <b>(</b>	20, 25	195 581	CRSGS-M8		20, 25	13 568	CRSG-M8
	32, 40	195 582	CRSGS-M10x1,25		32, 40	13 569	CRSG-M10x1,25
	50,63	195 583	CRSGS-M12x1,25	46	50, 63	13 570	CRSG-M12x1,25
	80	195 584	CRSGS-M16x1,5		80	13 571	CRSG-M16x1,5

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## **A Complete Suite of Automation Services**

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



**Custom Automation Components** Complete custom engineered solutions



**Custom Control Cabinets** Comprehensive engineering support and on-site services



**Complete Systems** Shipment, stocking and storage services

## The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical Electromechanical actuators, motors, controllers & drives



**Pneumatics** Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices PLC's, operator interfaces, sensors and I/O devices

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Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

### Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



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