

Compact cylinders CDC, ISO 21287, Clean Design

FESTO



Compact cylinders CDC, ISO 21287, Clean Design

Key features

FESTO

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 agents
- 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 system
- Greater flexibility thanks to the wide range of variants

Variants

CDC-...

- Ø 20, 25 mm
- Without position sensing

CDC-...-A...-R

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

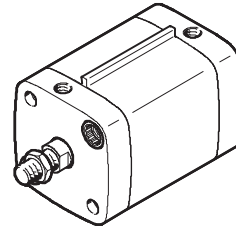
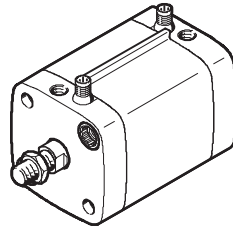
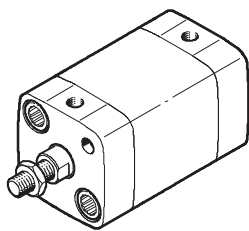
CDC-...-A-R

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



Note

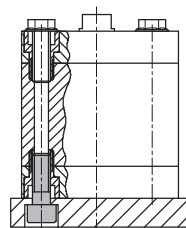
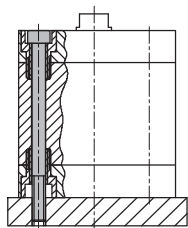
A combination of integrated and external position sensing is possible.



Mounting options

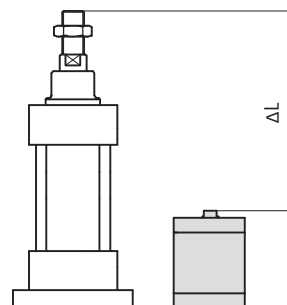
With through screws

Direct mounting



Size

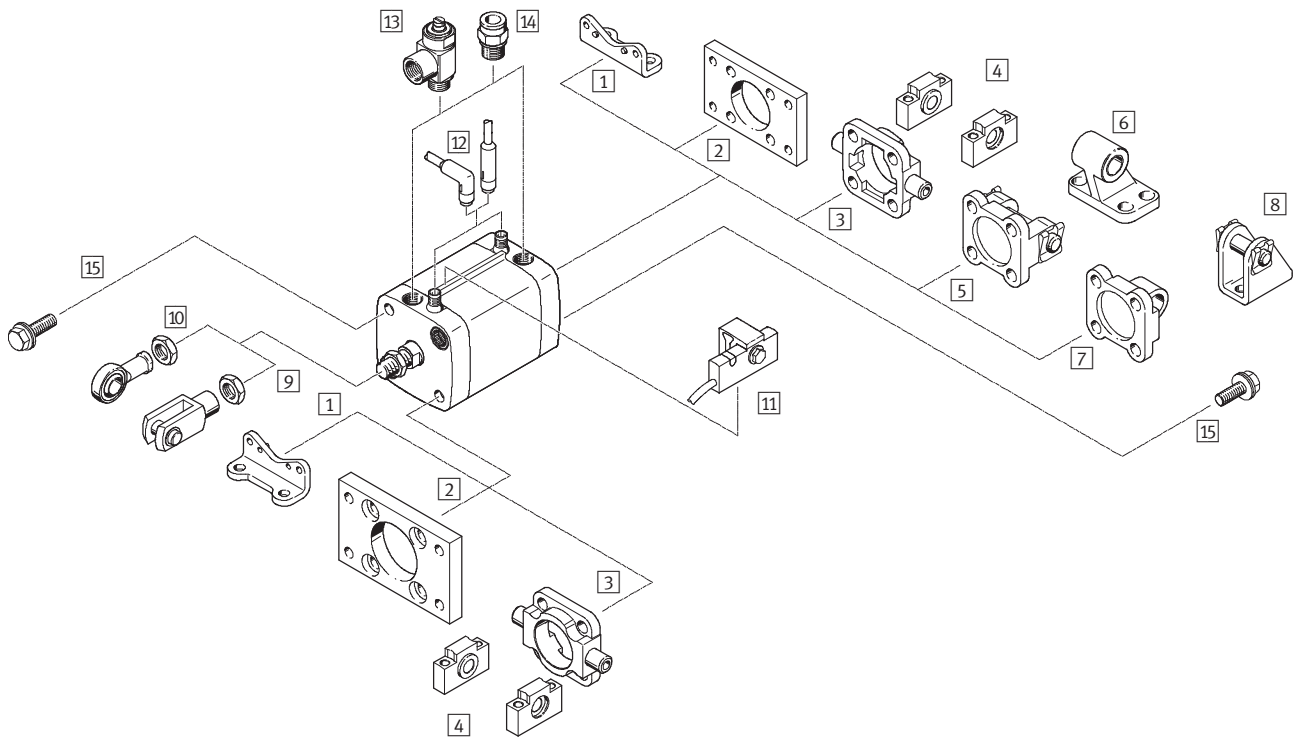
Space savings of up to 50% compared with cylinders to standard ISO 15552



Compact cylinders CDC, ISO 21287, Clean Design

Peripherals overview

FESTO



Mounting attachments and accessories		
	Brief description	→ Page/Internet
1	Foot mounting HNA-...-R3	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 SNCB-...-R3	For end cap 20
6	Clevis foot mounting CRLNG	For swivel flange SNCB-...-R3 20
7	Swivel flange SNCL-...-R3	For end cap 21
8	Clevis foot mounting CRLBN	For swivel flange SNCL-...-R3 21
9	Rod clevis CRSG	Permits a swivelling movement of the cylinder in one plane 26
10	Rod eye CRSGS	With spherical bearing 26
11	Proximity sensor SMT-C1	For attachment to the sensor mounting rail 22
12	Cable with socket SIM-K-...-CDN	– For electrical signal transmission and power supply – With food industry approval 24
13	One-way flow control valve CRGRLA	For regulating speed 25
14	Push-in fittings QS-F/QL-F/CRQS/CRQSL	For connecting compressed air tubing with standard external diameters 25
15	Blanking screws DAMD-P-...	For covering unused mounting threads 26

Type codes

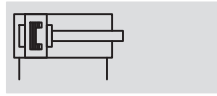
		CDC	-	32	-	50	-	A	-	P	-	A/B	-	SME	-	R	-	K2
Type																		
Double-acting																		
CDC	Compact cylinder, Clean Design																	
Piston Ø [mm]																		
Stroke [mm]																		
Piston rod thread																		
A	Male thread																	
I	Female thread																	
Cushioning																		
P	Flexible cushioning rings/pads at both ends																	
Position sensing																		
A	For proximity sensor																	
A/B	At both ends, integrated																	
A/I	Front, integrated																	
A/H	Rear, integrated																	
Proximity sensor																		
SME	Contacting (magnetic reed)																	
SMT	Contactless (magneto-resistive)																	
Sensor mounting rail																		
R	For external position sensing (only with Ø 32 ... 80 mm)																	
Variant																		
S2	Through piston rod																	
K2	Extended male piston rod thread																	
K5	Piston rod with special thread																	
K8	Extended piston rod																	
S6	Heat-resistant seals for temperatures up to 120 °C																	

Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

Function



- Ø - Diameter
20 ... 80 mm

- I - Stroke length
1 ... 500 mm

- T - www.festo.com

Variants



S2



K2



K5



K8



S6



CDC-...-A-P



CDC-...-A-P-R

General technical data							
Piston Ø	20	25	32	40	50	63	80
Pneumatic connection	M5	M5	G¼	G¼	G¼	G¼	G¼
Piston rod thread	M8	M8	M10x1.25	M10x1.25	M12x1.25	M12x1.25	M16x1.5
Design	Piston						
	Piston rod						
	Cylinder barrel						
Cushioning	Flexible cushioning rings/pads at both ends						
Position sensing	A	For proximity sensor					
	AI B	At both ends, built-in					
	AI V	Front, built-in					
	AI H	Rear, built-in					
Type of mounting	Via through-hole						
	With female thread						
	Via accessories						
Mounting position	Any						

Operating and environmental conditions								
Piston Ø		20	25	32	40	50	63	80
Operating medium		Filtered compressed air, lubricated or unlubricated						
Operating pressure	[bar]	0.8 ... 10			0.6 ... 10			
	S2 [bar]	1.2 ... 10			1 ... 10			0.8 ... 10
	S6 [bar]	1 ... 10	0.6 ... 10					
Ambient temperature ¹⁾	[°C]	−20 ... +80						
	S6 [°C]	0 ... +120						
Corrosion resistance class CRC ²⁾		3						

1) Note operating range of proximity sensors

2) 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 the surface

Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

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

Permissible impact velocity:

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

$v_{\text{perm.}}$ Permissible impact velocity

$E_{\text{perm.}}$ Max. impact energy

m_{dead} Moving load (drive)

m_{load} Moving work load

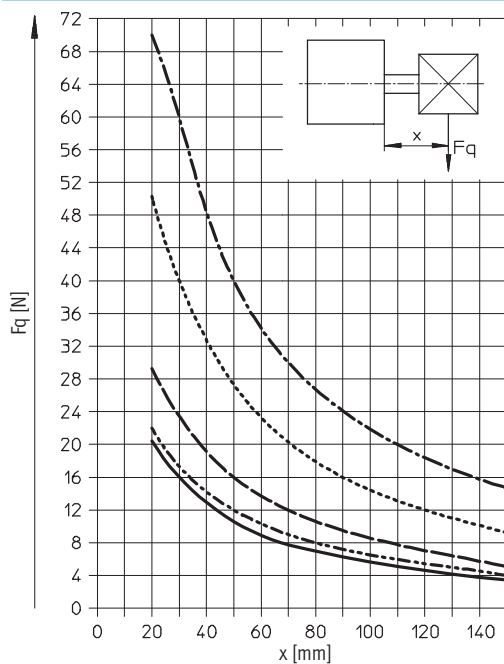
Maximum permissible load:

$$m_{\text{load}} = \frac{2 \times E_{\text{perm.}}}{v^2} - m_{\text{dead}}$$

 Note

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

Max. lateral force F_q as a function of projection x



- Ø 20
- - - Ø 25
- · - · - Ø 32/40
- Ø 50/63
- - - - - Ø 80

Compact cylinders CDC, ISO 21287, Clean Design

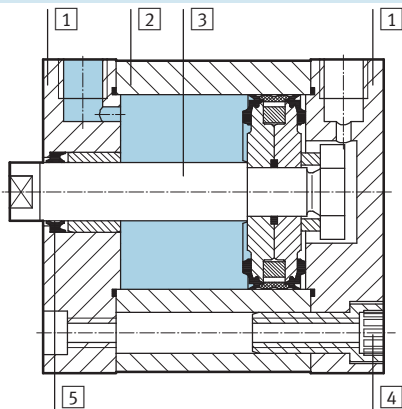
Technical data

FESTO

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



Compact 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	

Compact cylinders CDC, ISO 21287, Clean Design

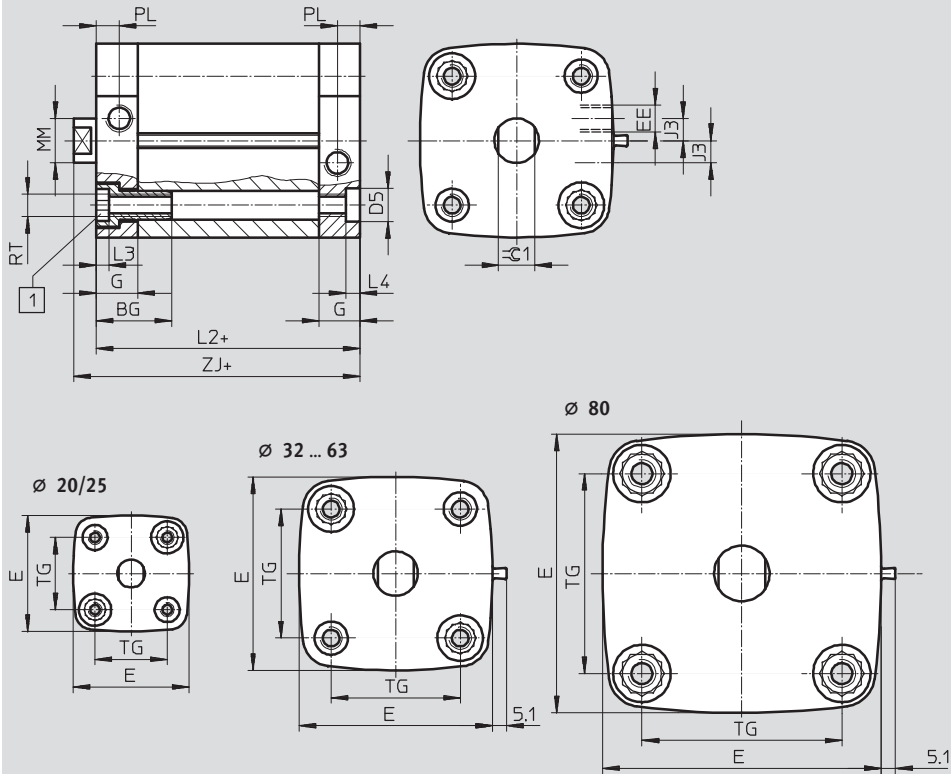
Technical data

FESTO

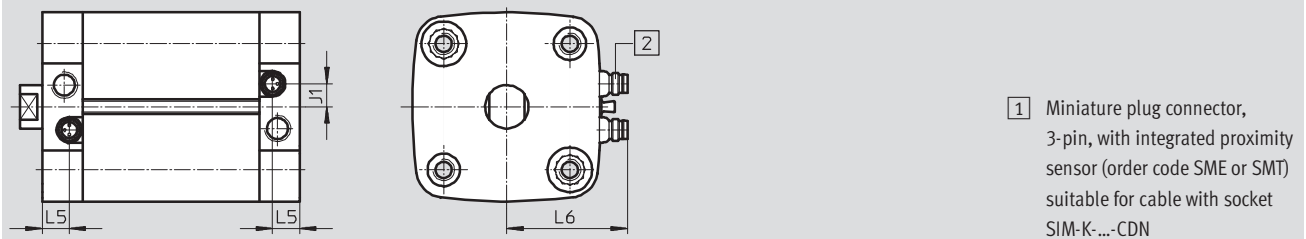
Dimensions

Download CAD data → www.festo.com

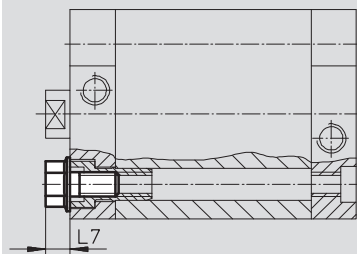
Basic version



With position sensing integrated in the end positions



Projection of blanking screw



Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

Ø	BG	D5	E	EE	G	J1	J3	L2	L3	L4
[mm]		F9				±0.1	±0.1			
20	19.5	9	36.8	M5	12	–	–	37	4.4	5
25			41.8			39				
32	26		49.8	G¼	15	5.8	7	44		
40			57.8			8	8	45		
50	27	12	69.7			8.5		49		
63			81.3			12		54		
80			–		100.4	16.5		15		54

Ø	L5	L6	L7	MM Ø h8	PL	RT	TG	ZJ	≈G1
[mm]		±2			±0.1			+1	h13
20	–	–	7	10	6	M5	22	42.7	9
25							26	44.7	
32	10	35	8.7	12	8.2	M6	32.5	50.2	10
40		39					38	51.2	
50		45	10.3	16		M8	46.5	53.2	13
63		50					56.5	57.2	
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 [mm]	20	25	32	40	50	63	80
Max. stroke length	50		100				150

Compact cylinders CDC, ISO 21287, Clean Design

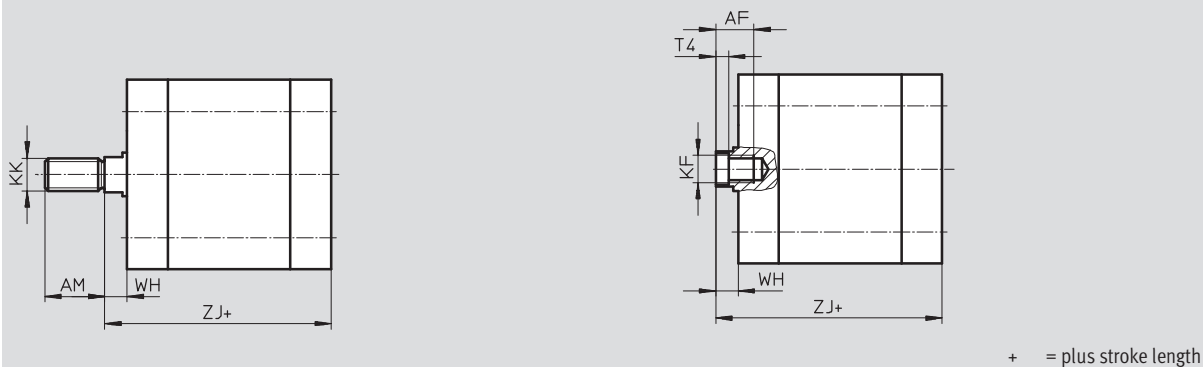
Technical data

FESTO

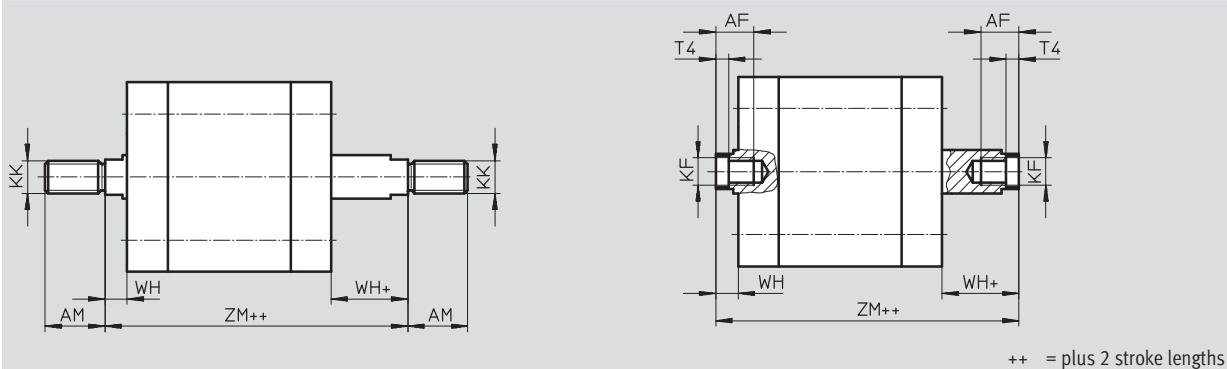
Dimensions – Variants

Download CAD data → www.festo.com

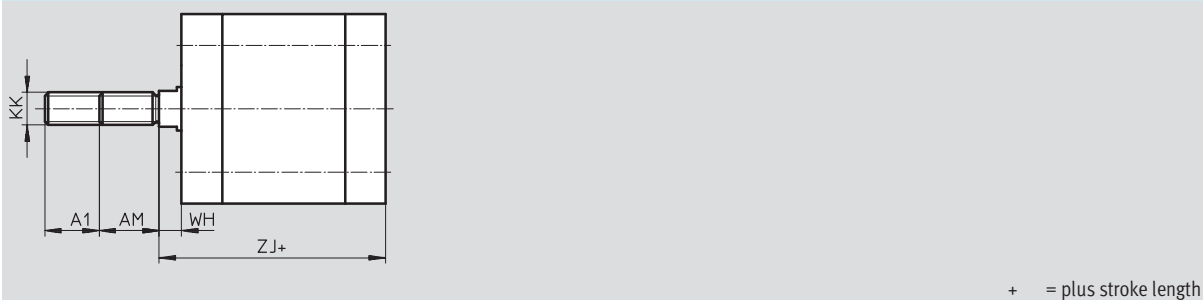
Basic version



S2 – Through piston rod



K2 – Extended male piston rod thread



Ø	A1	AF	AM	KF	KK	T4	WH	ZJ	ZM
[mm]		min.	−0.5				+1	+1	
20	1 ... 20	14	16	M6	M8	2.6	5.7	42.7	49.8
25								44.7	51.8
32		16	19	M8	M10x1.25	3.3	6.2	50.2	57.8
40								51.2	58.9
50		20	22	M10	M12x1.25	4.7	8.2	53.2	63.1
63								57.2	66.9
80	1 ... 30							28	M12

Compact cylinders CDC, ISO 21287, Clean Design

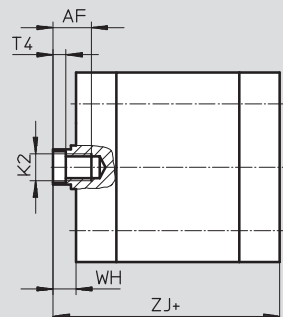
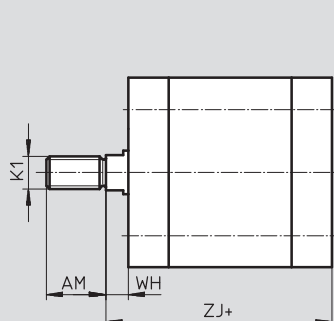
Technical data

FESTO

Dimensions – Variants

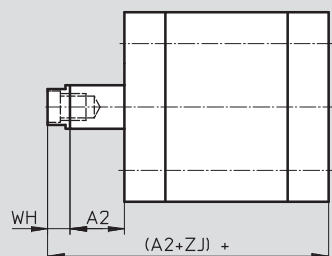
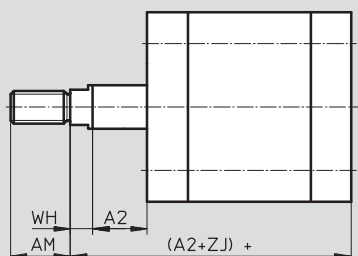
Download CAD data → www.festo.com

K5 – Special thread on piston rod



+ = plus stroke length

K8 – Extended piston rod



+ = plus stroke length

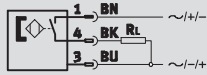
Ø	AF	A2	AM	K1	K2	T4	WH	ZJ
[mm]	min.		-0.5				+1	+1
20	14	1 ... 300	16	M10, M10x1.25	M5	2.6	5.7	42.7
25								44.7
32	16	1 ... 400	19	M10, M12	M6	3.3	6.2	50.2
40								51.2
50	20	1 ... 500	22	M12, M12	M8	4.7	8.2	53.2
63								57.2
80								63

Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

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 conformity)	To EU EMC Directive	
Note on materials	Free of copper and PTFE	
Input signal/measuring element		
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		
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 materials	Gold-plated brass	

Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

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-K-...-CDN
Corrosion resistance class CRC ¹⁾		3

1) Corrosion resistance class 3 according to Festo standard 940 070

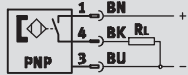
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

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 conformity)	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
Switching output		
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	[µA]	< 10
Output, further data		
Protection against short circuit	Yes	
Protection against overloading	Yes	
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 materials	Gold-plated brass	

Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

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-K-...-CDN
Corrosion resistance class CRC ¹⁾		3

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.

Compact cylinders CDC, ISO 21287, Clean Design

Ordering data – Modular products

FESTO

M Mandatory data →

Module No.	Function	Stroke	Cushioning
	Piston Ø	Piston rod thread	Position sensing
543 305	CDC	20	1 ... 500
543 306		25	A
543 307		32	I
543 308		40	
543 309		50	
543 310		63	
543 311		80	
Order example			
543 306	CDC	- 25	- 225 - A - P

Ordering table										
Size	20	25	32	40	50	63	80	Condi- tions	Code	Enter code
[M] <										

[1] I Not with extended male thread K2

[2] **AIB, AIV, AIH** Only with proximity sensor SME, SMT

Transfer order code

	CDC	-		-		-		-	P
--	-----	---	--	---	--	---	--	---	---

Ordering data – Modular products

FESTO

Proximity sensor		Type of piston rod		Special thread		Temperature resistance
Sensor mounting rail		Male thread extended		Piston rod extended		
SME SMT	R	S2	...K2	"..."K5	K8	S6
-	-	-	-	-	-	-
		S2	20K2	"M10"K5	75K8	S6

On

Size		20	25	32	40	50	63	80	Condi- tions	Code	Enter code
0	Proximity sensor	–	–	SME (contacting)					3	-SME	
		–	–	SMT (contactless)					4	-SMT	
	Sensor mounting rail	–	–	Sensor mounting rail for external position sensing					5	-R	
	Type of piston rod	Through piston rod								-S2	
	Male thread extended [mm]	Extended male piston rod thread 1 ... 20 1 ... 30								-...K2	
	Piston rod with special thread	Male thread	M10x1.25 M10	M10 M12	M12 M16	M16 M20		-“...”K5			
		Female thread	M5	M6	M8	M10					
	Piston rod extended [mm]	Extended piston rod 1 ... 300 1 ... 400 1 ... 500							6	-...K8	
	Temperature resistance	Heat-resistant seals for temperatures up to 120 °C							7	-S6	

- 7 S6**

Tr

- - - - -

Compact cylinders CDC, ISO 21287, Clean Design

FESTO

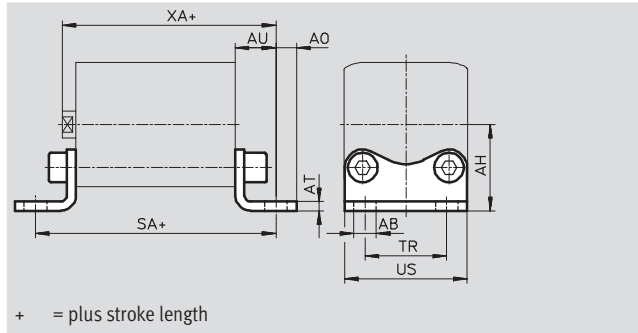
Accessories

Foot mounting HNA-...-R3

Material:

Steel with protective coating

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	AB Ø	AH	AO	AT	AU	SA	TR	US	XA	CRC ⁽¹⁾	Weight	Part No.	Type
[mm]	H14	JS14		±0.5	±0.2		±0.2	−0.5			[g]		
20	7	27	6.25	4	16	69	22	34.5	59	3	50	537 254	HNA-20-R3
25		29				71	26	38.5	61	3	55	537 255	HNA-25-R3
32		33.5				76	32	46	66	3	70	537 256	HNA-32-R3
40	10	38	9	5	21	81	36	54	69	3	90	537 257	HNA-40-R3
50		45	8			87	45	64	74	3	160	537 258	HNA-50-R3
63		50				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

1) Corrosion resistance class 3 according to Festo standard 940 070

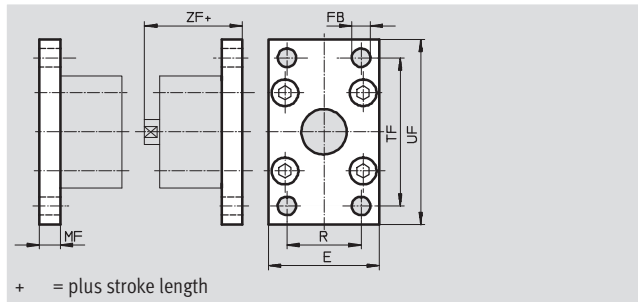
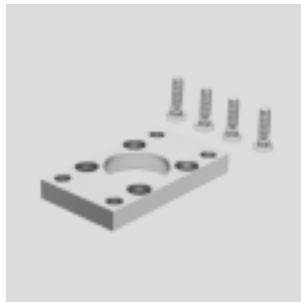
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

Flange mounting CRFNG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data										
For Ø	E	FB Ø	MF	R	TF	UF	ZF	CRC ¹⁾	Weight	Part No. Type
[mm]		H13							[g]	
32	45	7	10	32	64	80	54	4	240	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	550	161 848 CRFNG-50
63	75	9	12	50	100	120	61	4	710	161 849 CRFNG-63
80	93	12	16	63	126	150	70	4	1,680	161 850 CRFNG-80

1) 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

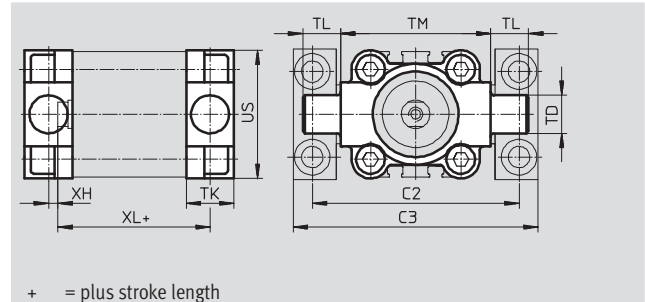
FESTO

Trunnion flange CRZNG

Material:

CRZNG: Electrolytically polished
special steel casting

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	C2	C3	TD Ø e9	TK	TL	TM	US	XH	XL	CRC ¹⁾	Weight	Part No.	Type
[mm]													
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	260	161 853	CRZNG-40
50	99	117	16	24	16	75	64	4	57	4	430	161 854	CRZNG-50
63	116	136	20	24	20	90	75	4	61	4	640	161 855	CRZNG-63
80	136	156	20	28	20	110	93	5	81	4	1,300	161 856	CRZNG-80

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

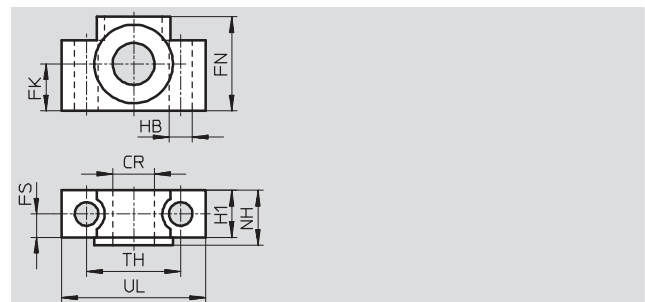
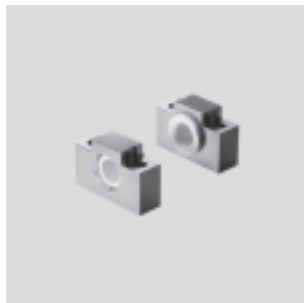
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Trunnion supports CRLNZG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data													
For Ø	CR Ø D11	FK Ø ±0.1	FN	FS	H1	HB Ø H13	NH	TH ±0.2	UL	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]													
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

1) 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

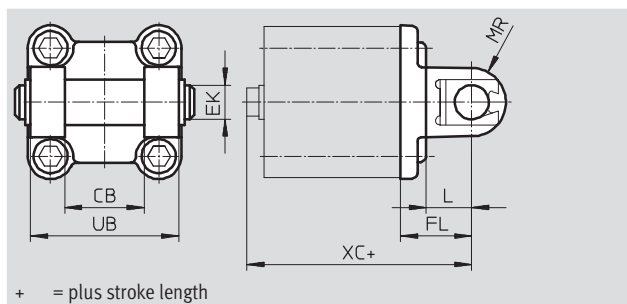
FESTO

Swivel flange SNCB-...-R3

Material:

Die-cast aluminium with protective coating, high corrosion protection

Free of copper, PTFE and silicone



Dimensions and ordering data

For Ø	CB	EK Ø	FL ±0.2	L	MR	UB h14	XC	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]	H14	e8									
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

1) Corrosion resistance class 3 according to Festo standard 940 070

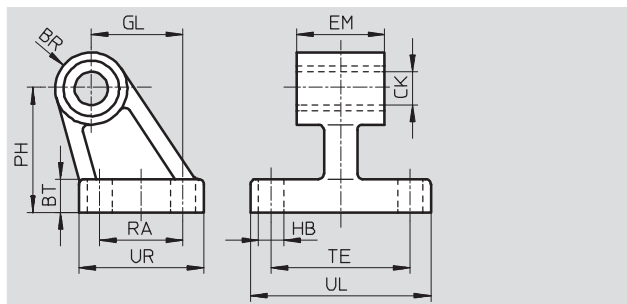
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

Clevis foot CRLNG

Material:

High-alloy steel

Free of copper, PTFE and silicone



Dimensions and ordering data

For Ø	BR	BT	CK Ø	EM	GL	HB Ø	PH	RA	TE	UL	UR	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]			D11	-0.4		H13									
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

1) 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.

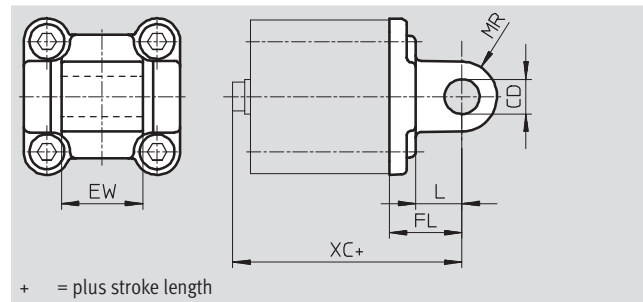
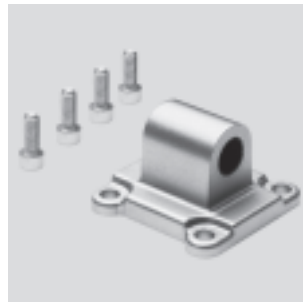
Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Accessories

Swivel flange SNCL-...-R3

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

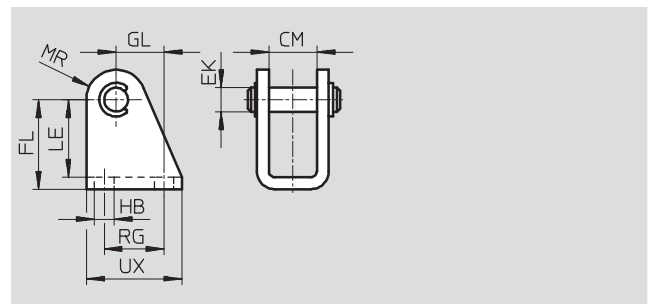


Dimensions and ordering data										
For Ø	CD	EW	FL	L	MR	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	Ø	h12	±0.2					[g]		
20	8	16	20	14	8	63	3	40	537 796	SNCL-20-R3
25						65	3	45	537 797	SNCL-25-R3

- 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

Material:
High-alloy steel
Free of copper, PTFE and silicone



Dimensions and ordering data												
For Ø	CM	EK	FL	GL	HB	LE	MR	RG	UX	CRC ¹⁾	Weight	Part No. Type
[mm]		Ø									[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

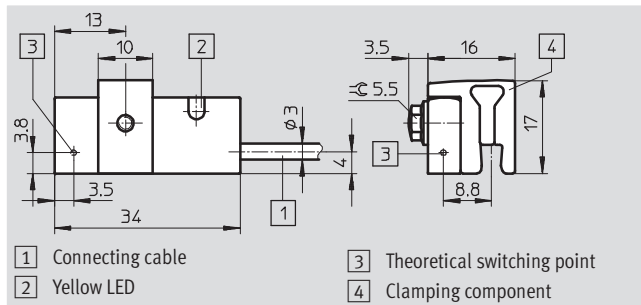
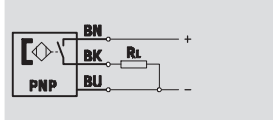
- 1) Corrosion resistance class 4 according to Festo standard 940 070
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

Compact cylinders CDC, ISO 21287, Clean Design

Accessories

FESTO

Proximity sensor SMT-C1



Technical data		
General information		
Design	Block-shaped	
Based on standard	EN 60947-5-2	
Certification	C-Tick	
CE mark (see declaration of conformity)	To EU EMC Directive	
Note on materials	Free of copper, PTFE and halogen	
Input signal/measuring element		
Measuring principle	Magneto-inductive	
Method of measurement	Absolute	
Ambient temperature	[°C]	−20 ... +70
Switching output		
Switching output	PNP	
Switching element function	N/O contact	
Hysteresis	[mm]	≤ 2.0
Switch-on time	[ms]	≤ 0.5
Switch-off time	[ms]	≤ 0.5
Max. output current	[mA]	200
Max. switching capacity DC	[W]	6
Voltage drop	[V]	< 1.8
Inductive protective circuit	Adapted to MZ, MY, ME coils	
Residual current	[mA]	< 0.1
Output, further data		
Protection against short circuit	Pulsed	
Protection against overloading	Yes	
Electronic components		
Operating voltage range	[V DC]	10 ... 30
Residual ripple	[%]	10
Protection against polarity reversal	For all electrical connections	
Electromechanical components		
Electrical connection	Cable, 3-wire	
Connection direction	In-line	
Cable length	[m]	2.5 5.0
Cable sheath colour	Grey	
Cable type	Lif1 2Y33Y	
Information on cable sheath materials	Thermoplastic polyolefin elastomer	
Wire ends	Wire end sleeve	

Compact cylinders CDC, ISO 21287, Clean Design

Accessories

FESTO

Technical data	
Mechanical components	
Type of mounting	Clamped
Tightening torque [Nm]	1.2
Mounting position	Any
Product weight [g]	60
Housing colour	Black
Information on housing materials	Polypropylene, high-alloy stainless steel, wrought aluminium alloy, thermoplastic polyurethane elastomer
Display/operation	
Switching status display	Yellow LED
Immissions/emissions	
Ambient temperature with flexible cable installation [°C]	−20 ... +70
Degree of protection	IP65, IP67 to IEC 60529
Corrosion resistance class CRC ¹⁾	3

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.

Ordering data		
Cable length [m]	Part No.	Type
2.5	540 431	SMT-C1-PS-24V-2,5-OE
5.0	540 432	SMT-C1-PS-24V-5,0-OE

Compact cylinders CDC, ISO 21287, Clean Design

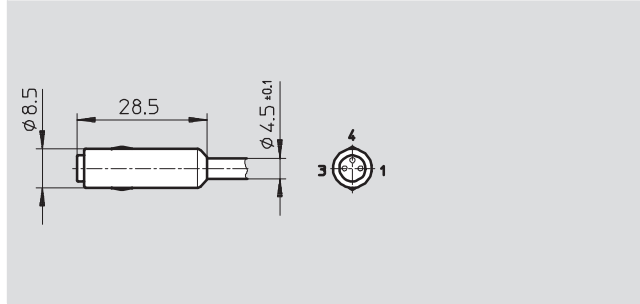
Accessories

FESTO

Plug socket with cable

SIM-K-GD- ... -CDN

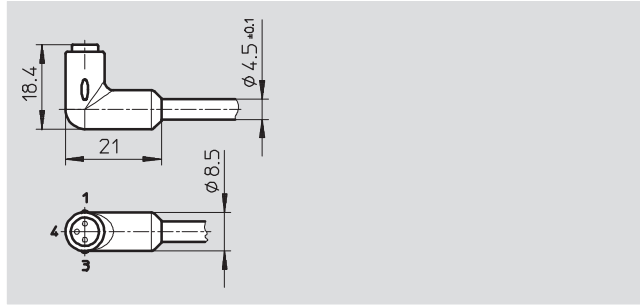
Material: Polyurethane,
suitable for foodstuffs, resistant
to cleaning and disinfecting agents
to DIN 11483



Plug socket with cable

SIM-K-WD- ... -CDN

Material: Polyurethane,
suitable for foodstuffs, resistant
to cleaning and disinfecting agents
to DIN 11483



Technical data			
		SIM-K-...-2,5-CDN	SIM-K-...-5-CDN
Electrical connection		Clip-on plug socket, straight or angled, 3-pin	
Operating voltage range	AC	[V]	≤45
	DC	[V]	≤70
Acceptable current load		[A]	2.8
Cable length		[m]	2.5 5
Cable composition		[mm ²]	3x 0.25
Wire ends		Tin-plated	
Degree of protection		IP65/IP67/IP69	

Operating and environmental conditions			
Cable installation		Fixed	Flexible
Ambient temperature		[°C]	-30 ... +70 -5 ... +70

Ordering data			
Cable length		Part No.	Type
[m]			
Connection direction		In-line	Lateral
2.5		525 259	SIM-K-GD-2,5-CDN
5		525 260	SIM-K-GD-5-CDN
		525 261	SIM-K-WD-2,5-CDN
		525 262	SIM-K-WD-5-CDN

Compact cylinders CDC, ISO 21287, Clean Design

Accessories

FESTO

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

- 1) With sealing ring
 2) With PTFE coating
 3) Packaging unit quantity

Ordering data – Push-in L-fittings					Technical data → Internet: quick star			
	Connection		Material	Weight [g]	Part No.	Type	PU ³⁾	
	Thread	Tubing O.D.						
With external hex								
	M5	4	Brass, nickel-plated and chrome-plated	10.1	533 849	QSL-F-M5-4 ¹⁾	10	
		6		14.7	533 850	QSL-F-M5-6 ¹⁾	10	
	G½	4		17.6	193 418	QSL-F-G½-4 ¹⁾	10	
		6		16	193 419	QSL-F-G½-6 ¹⁾	10	
		8		20	193 420	QSL-F-G½-8 ¹⁾	10	
	M5	4	Stainless steel	13	162 870	CRQSL-M5-4 ¹⁾	1	
		6		19	162 871	CRQSL-M5-6 ¹⁾	1	
	R½	6		20	162 872	CRQSL-½-6 ²⁾	1	
		8		27	162 873	CRQSL-½-8 ²⁾	1	

- 1) With sealing ring
 2) With PTFE coating
 3) Packaging unit quantity

Ordering data – Plastic tubing, standard O.D.		Technical data → Internet: tubing	
		Type	
	Good resistance to chemicals and hydrolysis	PLN	
	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: cgrla		
	Connection		Material	Weight [g]	Part No.	Type
	Thread	For push-in fitting				
	M5	CRQS/CRQSL/CRQST,	Electrolytically polished special steel casting	14	161 403	CRGRLA-M5-B
	G1/8	Quick Star		44	161 404	CRGRLA-1/8-B

Compact cylinders CDC, ISO 21287, Clean Design

Accessories

FESTO

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

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.

2) With sealing ring

3) Packaging unit quantity

Ordering data – Corrosion and acid-resistant piston rod attachments				Technical data → Internet: crsg			
Designation	For Ø	Part No.	Type	Designation	For Ø	Part No.	Type
Rod eye CRSGS				Rod clevis CRSG			
	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		50, 63	13 570	CRSG-M12x1,25
	80	195 584	CRSGS-M16x1,5		80	13 571	CRSG-M16x1,5