

Compact cylinders CDC, ISO 21287, Clean Design



# Compact cylinders CDC, ISO 21287, Clean Design

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 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

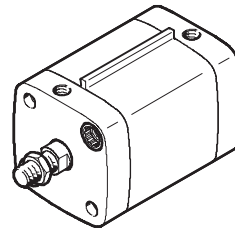
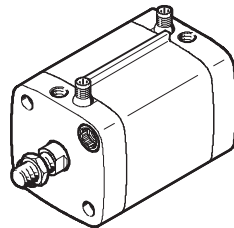
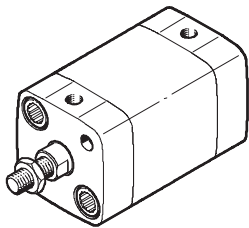
CDC-...-A-R

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



Note

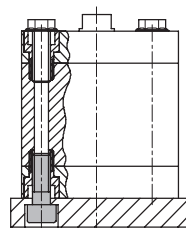
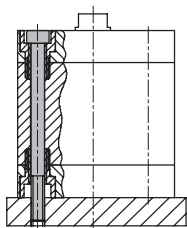
A combination of integrated and external position sensing is possible.



### Mounting options

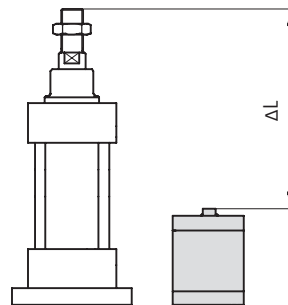
With through screws

Direct mounting



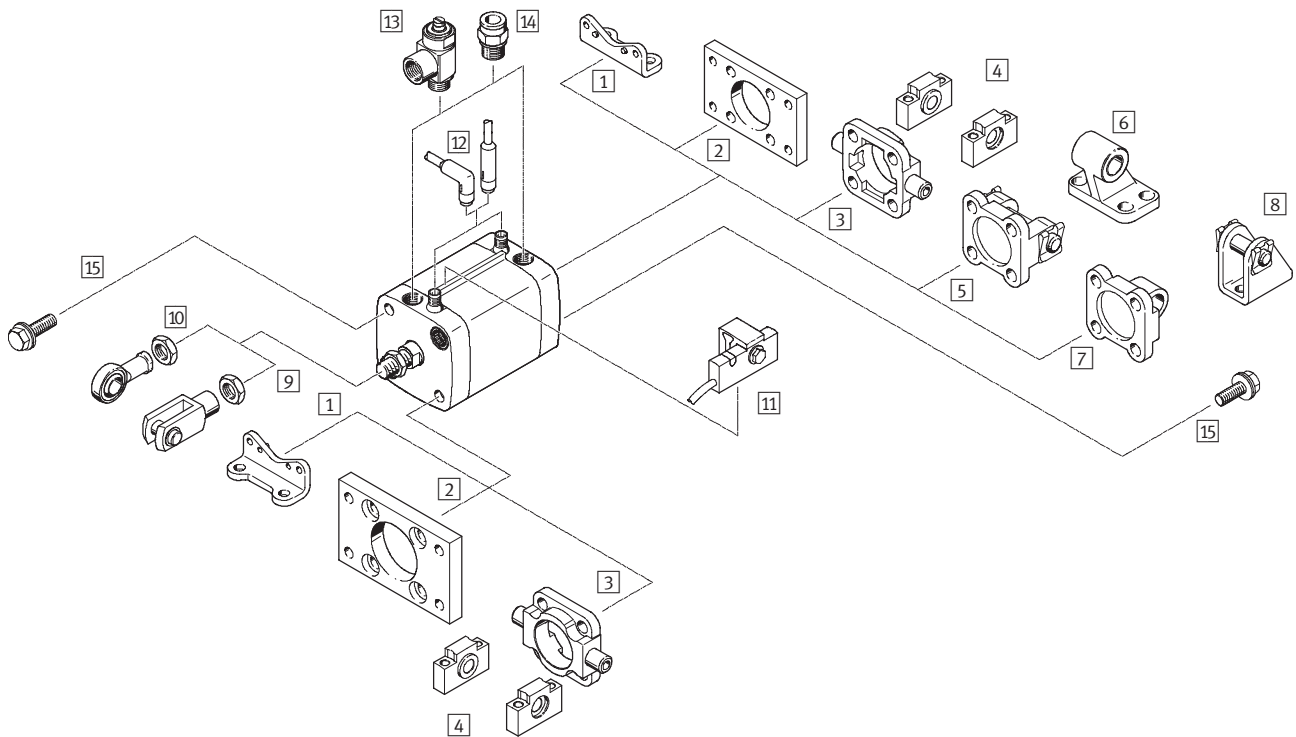
### Size

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



# Compact cylinders CDC, ISO 21287, Clean Design

Peripherals overview



Mounting attachments and accessories		
	Brief description	→ Page/Internet
1	Foot mounting HNA- ...-R3	20
2	Flange mounting CRFNG	20
3	Trunnion flange CRZNG	21
4	Trunnion supports CRLNZG	21
5	Swivel flange SNCB- ...-R3	22
6	Clevis foot mounting CRLNG	22
7	Swivel flange SNCL- ...-R3	23
8	Clevis foot mounting CRLBN	23
9	Rod clevis CRSG	28
10	Rod eye CRSGS	28
11	Proximity sensor SMT-C1	24
12	Cable with socket SIM-K- ...-CDN	26
13	One-way flow control valve CRGRLA	27
14	Push-in fittings QS-F/QL-F/CRQS/CRQL	27
15	Blanking screws DAMD-P- ...	28

# Compact cylinders CDC, ISO 21287, Clean Design

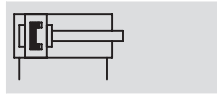
Type codes

		CDC	-	32	-	50	-	A	-	P	-	AIB	-	SME	-	R	-	K2	
<b>Type</b>																			
Double-acting																			
CDC	Compact cylinder, Clean Design																		
<b>Piston Ø [mm]</b>																			
<b>Stroke [mm]</b>																			
<b>Piston rod thread</b>																			
A	Male thread																		
I	Female thread																		
<b>Cushioning</b>																			
P	Flexible cushioning rings/pads at both ends																		
<b>Position sensing</b>																			
A	For proximity sensor																		
AIB	At both ends, integrated																		
AIV	Front, integrated																		
AIH	Rear, integrated																		
<b>Proximity sensor</b>																			
SME	Contacting (magnetic reed)																		
SMT	Contactless (magneto-resistive)																		
<b>Sensor mounting rail</b>																			
R	For external position sensing (only with Ø 32 ... 80 mm)																		
<b>Variant</b>																			
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

**Function**



-  - Diameter  
20 ... 80 mm

-  - Stroke length  
1 ... 500 mm

-  - [www.festo.com](http://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	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$
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					
	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 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 <sup>1)</sup>	[°C]	-20 ... +80					
	S6 [°C]	0 ... +120					
Corrosion resistance class CRC <sup>2)</sup>	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

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	3,016
	S2	141	247	415	686	1,057	2,827
Theoretical force at 6 bar, retracting		141	247	415	686	1,057	2,827
Max. impact energy at the end positions		0.2	0.3	0.4	0.7	1	1.8
	S6	0.1	0.15	0.2	0.35	0.5	0.9

Permissible impact velocity:

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

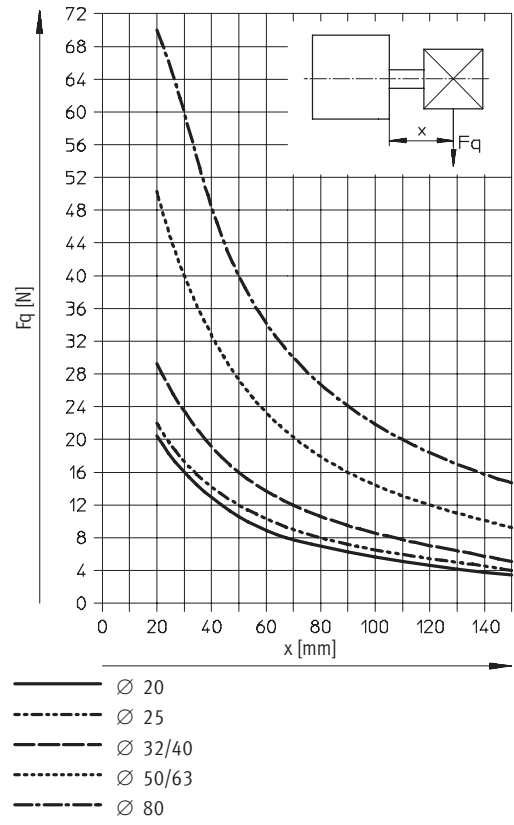
- $v_{perm.}$  Permissible impact velocity
- $E_{perm.}$  Max. impact energy
- $m_{dead}$  Moving load (drive)
- $m_{load}$  Moving work load

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

Maximum permissible load:

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

## Max. lateral force $F_q$ as a function of projection $x$



# Compact cylinders CDC, ISO 21287, Clean Design

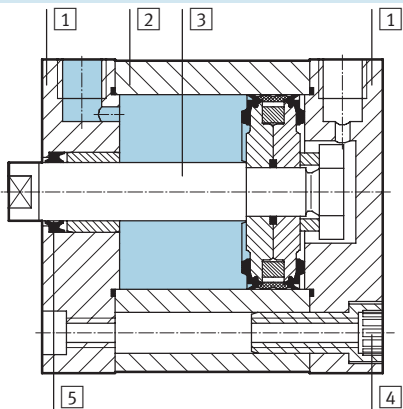
Technical data

**FESTO**

Weights [g]							
Piston Ø	20	25	32	40	50	63	80
<b>Basic version</b>							
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
<b>S2 – Through piston rod</b>							
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	

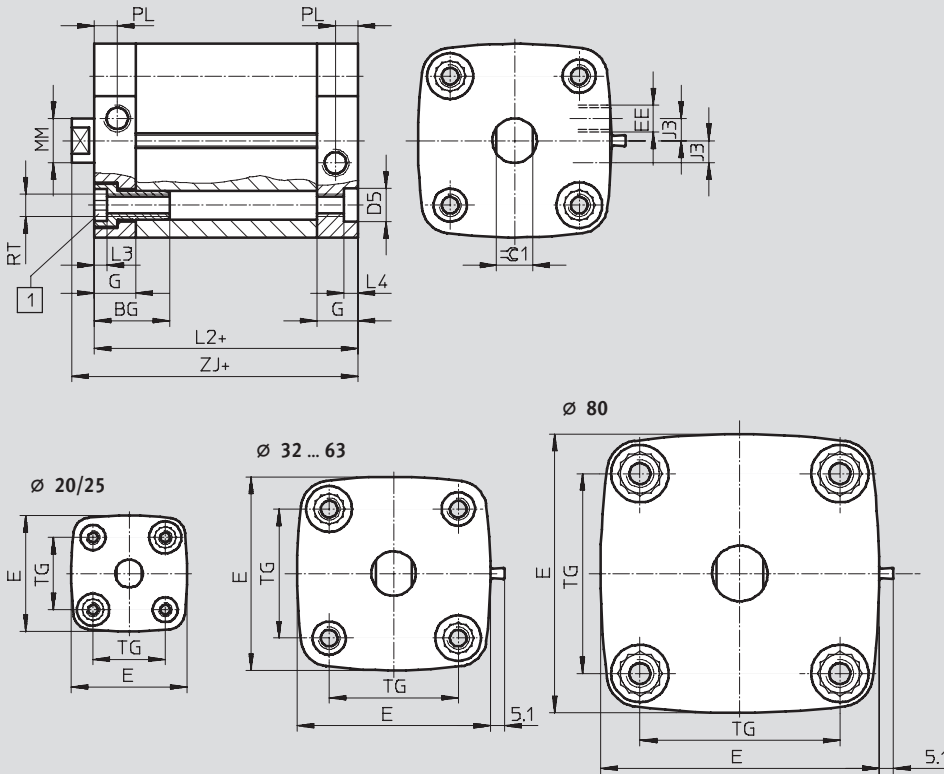
# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

## Dimensions

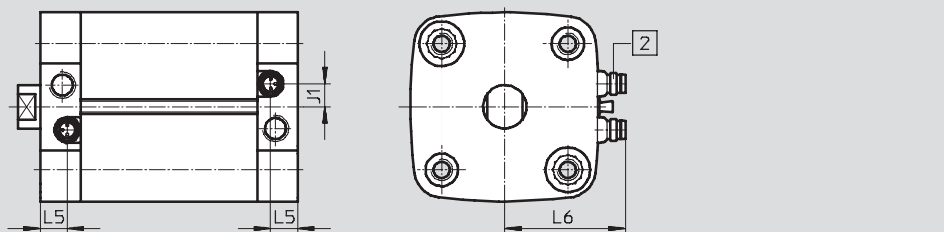
Download CAD data → [www.festo.com](http://www.festo.com)

### Basic version



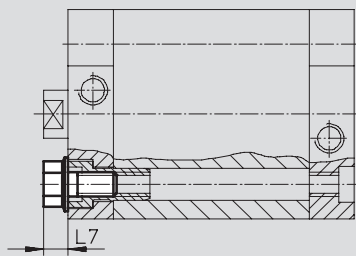
- 1 Socket head screw with female thread for mounting attachments
- + = plus stroke length

### With position sensing integrated in the end positions



- 1 Miniature plug connector, 3-pin, with integrated proximity sensor (order code SME or SMT) suitable for cable with socket SIM-K...-CDN

### Projection of blanking screw





# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

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

∅ [mm]	L5	L6 ±2	L7	MM ∅ h8	PL ±0.1	RT	TG	ZJ +1	≈G1 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:

∅ [mm]	20	25	32	40	50	63	80
Max. stroke length	50		100				150

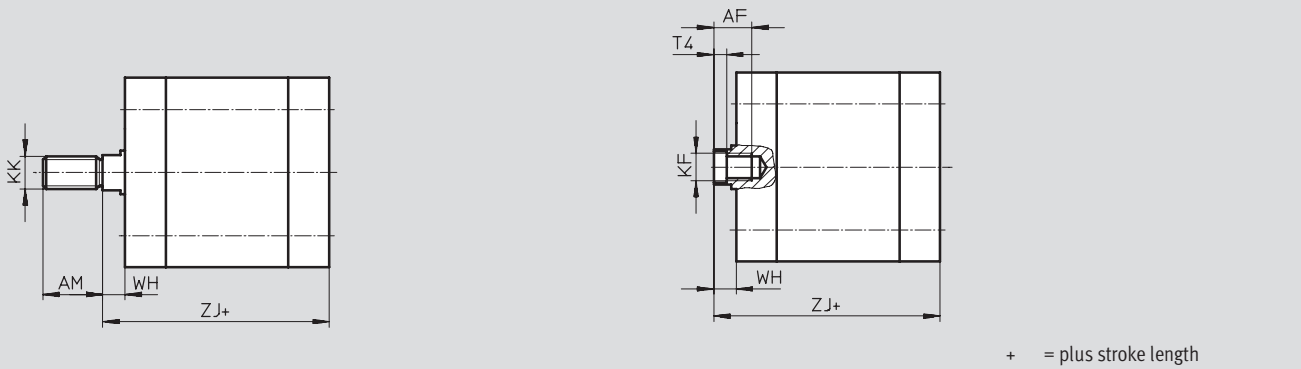
# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

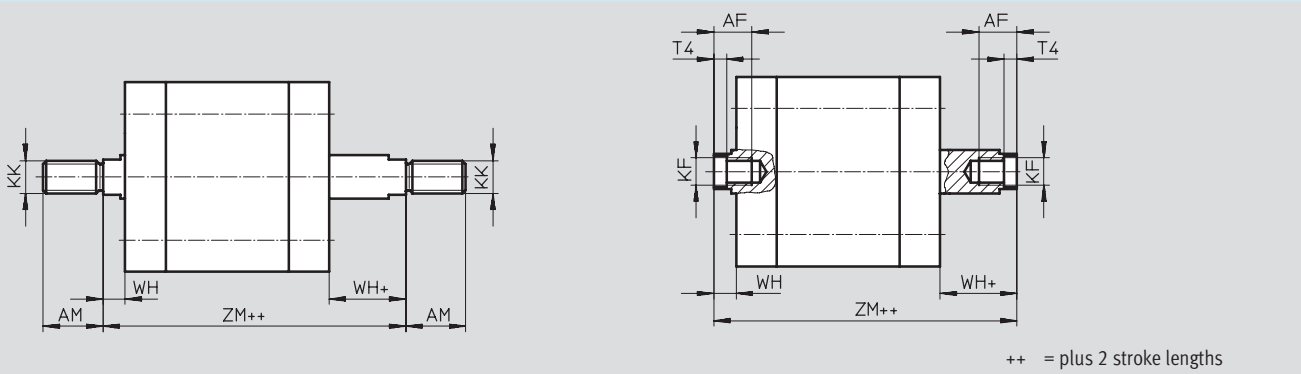
**Dimensions – Variants**

Download CAD data → [www.festo.com](http://www.festo.com)

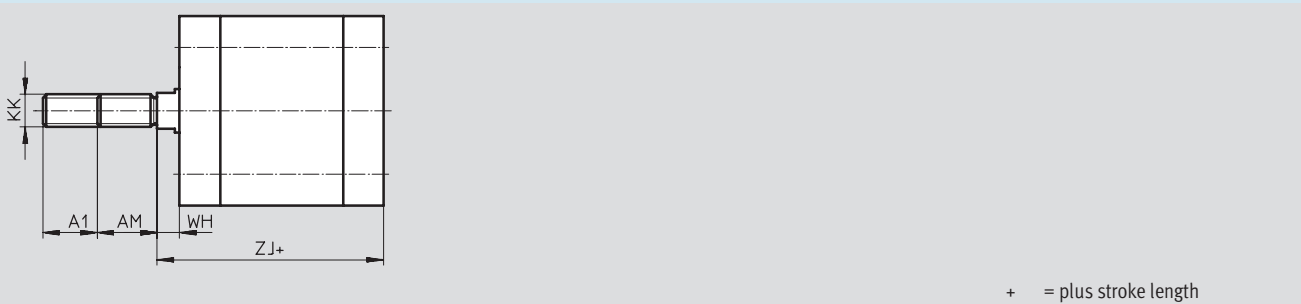
Basic version



S2 – Through piston rod



K2 – Extended male piston rod thread



∅	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
63	57.2	66.9							
80	1 ... 30		28	M12	M16x1.5	6.1	9	63	73.5

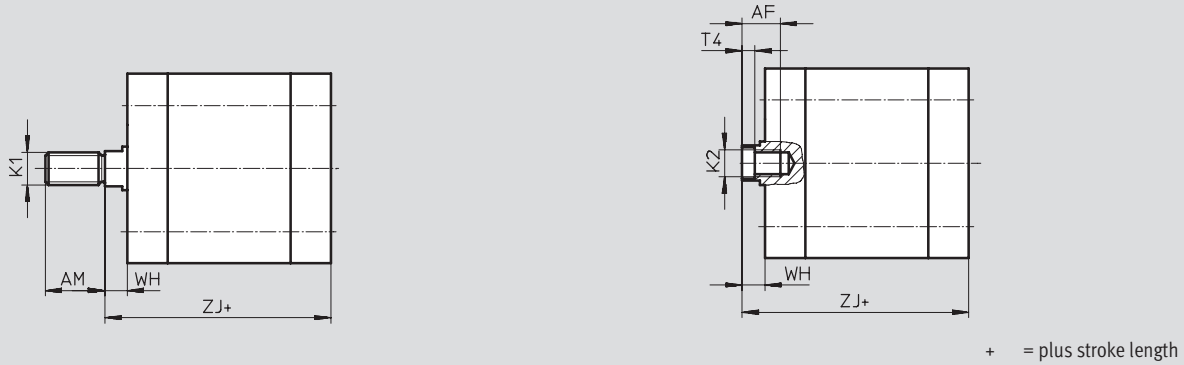
# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

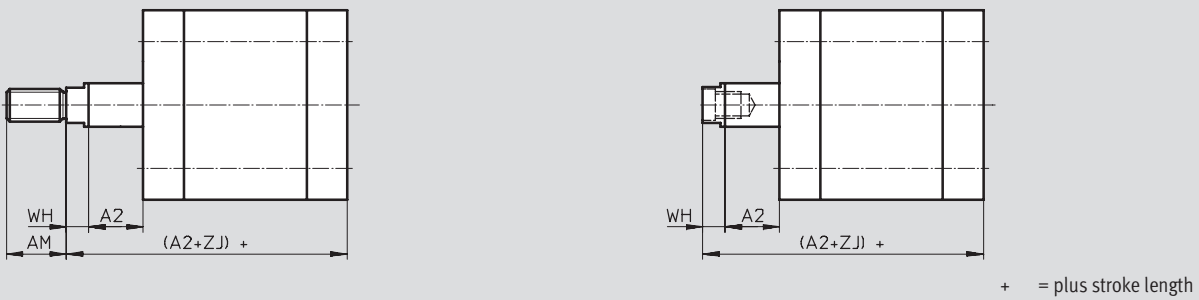
## Dimensions – Variants

Download CAD data → [www.festo.com](http://www.festo.com)

### K5 – Special thread on piston rod



### K8 – Extended piston rod



∅	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 ... 400	22	M12, M12	M8	4.7	8.2	53.2
63								57.2
80								1 ... 500

# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

**Proximity sensor  
magnetic reed**  
(order code SME)

**Material:**  
Housing: Polyamide, epoxy resin,  
nickel-plated brass  
Plug contacts: Gold-plated brass  
Free of copper and PTFE

 **Note**

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



Design	
Constructional design	Integrated
Switching element function	N/O contact
Switch output	Contacting, bipolar
Switching status display	Yellow LED

Technical data – N/O contact		
Measuring principle	Magnetic reed	
Electrical connection	Plug, M8x1, 3-pin	
Operating voltage range	[V DC]	12 ... 30
	[V AC]	12 ... 30
Max. output current	[mA]	500
Max. switching capacity	[W]	10
Voltage drop	[V]	< 2
Residual current	[mA]	0
Switch-on time	[ms]	0.5
Switch-off time	[ms]	0.5
Reproducibility of switching point	[mm]	±0.1
Protection against short circuit		No
Protection against overloading		No
Protection against polarity reversal		No
Product weight	[g]	2.7
Protection class		IP65, IP67
		IP69K only in combination with SIM-K-...-CDN

Operating and environmental conditions		
Ambient temperature	[°C]	-20 ... +60
Corrosion resistance class CRC <sup>1)</sup>		3
CE mark (see declaration of conformity)		In accordance with EU EMC directive

1) 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

**Proximity sensor  
magneto-resistive**  
(order code SMT)

Material:

Housing: Polyamide, epoxy resin,  
nickel-plated brass

Plug contacts: Gold-plated brass

Free of copper and PTFE

 Note

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



Design	
Constructional design	Integrated
Switching element function	N/O contact
Switch output	Contacting, bipolar
Switching status display	Yellow LED

Technical data – N/O contact	
Measuring principle	Magneto-resistive
Electrical connection	Plug, M8x1, 3-pin
Operating voltage range	[V DC] 5 ... 30
Max. output current	[mA] 100
Max. switching capacity	[W] 3
Voltage drop	[V] < 2
Residual current	[µA] 10
Switch-on time	[ms] 0.5
Switch-off time	[ms] 0.5
Reproducibility of switching point	[mm] ±0.1
Protection against short circuit	Yes
Protection against overloading	Yes
Protection against polarity reversal	Yes
Product weight	[g] 2.7
Protection class	IP65, IP67
	IP69K only in combination with SIM-K-...-CDN

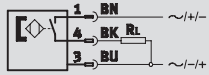
Operating and environmental conditions	
Ambient temperature	[°C] –20 ... +60
Corrosion resistance class CRC <sup>1)</sup>	3
CE mark (see declaration of conformity)	In accordance with EU EMC directive

1) 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

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	DIN 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

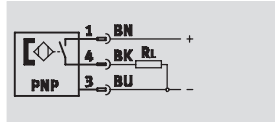
Technical data	
Mechanical components	
Tightening torque	[Nm] 0.3
Mounting position	Any
Product weight	[g] 2.7
Information on housing materials	Polyamide, epoxy resin, nickel-plated brass
Display/operation	
Switching status display	Yellow LED
Immissions/emissions	
Degree of protection	IP65, IP67 to IEC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

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	DIN 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

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 IEC 60529
	IP69K, to DIN 40050 Part 9
	Only in conjunction with plug socket with cable SIM-K...-CDN
Corrosion resistance class CRC <sup>1)</sup>	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

M Mandatory data →						
Module No.	Function		Stroke		Cushioning	
	Piston Ø		Piston rod thread		Position sensing	
543 305	CDC	20	1 ... 500	A	P	-
543 306		25		I		A
543 307		32				AIB
543 308		40				AIV
543 309		50				AIH
543 310		63				
543 311		80				
<b>Order example</b>						
543 306	CDC	- 25	- 225	- A	- P	

Ordering table											
Size	20	25	32	40	50	63	80	Condi- tions	Code	Enter code	
M Module No.	543 305	543 306	543 307	543 308	543 309	543 310	543 311				
Function	Standard cylinder, double-acting, based on ISO 21287 (Clean Design)								CDC	CDC	
Piston Ø [mm]	20	25	32	40	50	63	80		-...		
Stroke [mm]	1 ... 300		1 ... 400				1 ... 500			-...	
Piston rod thread	Male thread									-A	
	Female thread								[1]	-I	
Cushioning	Flexible cushioning rings/pads at both ends									-P	-P
Position sensing	Without position sensing		-	-	-	-	-				
	-		For proximity sensor							-A	
	-		At both ends, integrated						[2]	-AIB	
	-		Front, integrated						[2]	-AIV	
-		Rear, integrated						[2]	-AIH		

[1] I Not with extended male thread K2

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

Transfer order code

CDC -  -  -  - P

# Compact cylinders CDC, ISO 21287, Clean Design

Ordering data – Modular products

Options								
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		
-		- <b>S2</b> -		- <b>20K2</b> -		- <b>"M10"K5</b> - <b>75K8</b> -		- <b>S6</b>

Ordering table											
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	M12	M16					-"...K5	
		M10	M12	M16	M20						
Piston rod extended [mm]	Female thread	M5	M6	M8	M10						
		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		

- 3 **SME** Only with position sensing AIB, AIV, AIH  
Minimum stroke 15 mm
- 4 **SMT** Only with position sensing AIB, AIV, AIH  
Minimum stroke 10 mm

- 5 **R** Must be selected with size 32, 40, 50, 63, 80
- 6 **K8** The sum of the stroke length and piston rod extension must not exceed the maximum permissible stroke length
- 7 **S6** Not with position sensing AIB, AIV, AIH

Transfer order code

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

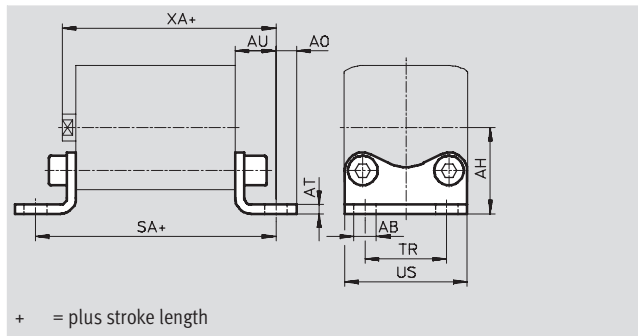
# Compact cylinders CDC, ISO 21287, Clean Design



Accessories

## Foot mounting HNA-...-R3

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

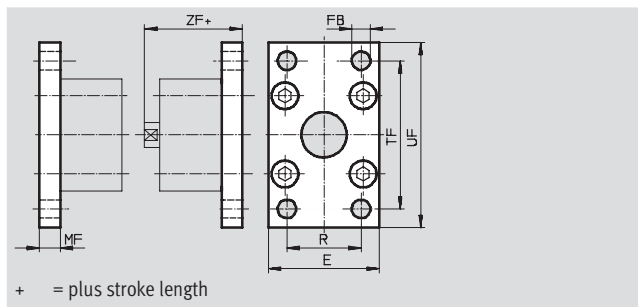
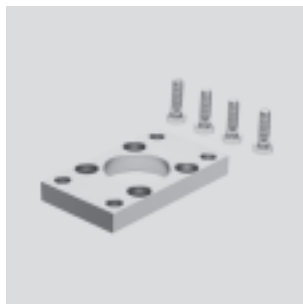


Dimensions and ordering data													
For $\varnothing$	AB $\varnothing$	AH	A0	AT	AU	SA	TR	US	XA	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]	H14	JS14		$\pm 0.5$	$\pm 0.2$		$\pm 0.2$	$-0.5$			[g]		
20	7	27	6.25	4	16	69	22	34.5	59	3	50	537 254	HNA-20-R3
25		29				71	26	38.5	61	3	55	537 255	HNA-25-R3
32		33.5	7			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 $\varnothing$	E	FB $\varnothing$	MF	R	TF	UF	ZF	CRC <sup>1)</sup>	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

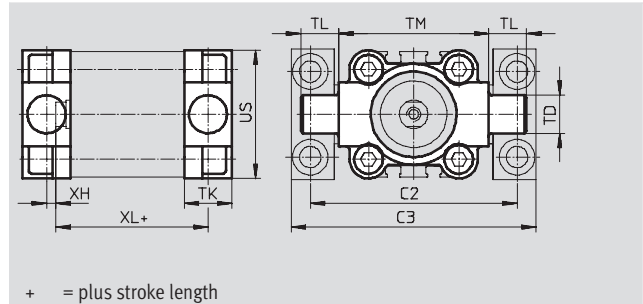
1) Corrosion resistance class 4 according to Festo standard 940 070  
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

## Trunnion flange CRZNG

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

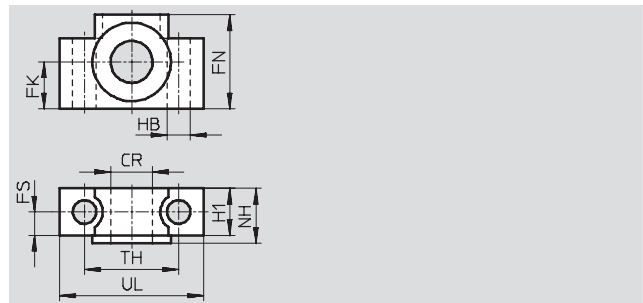
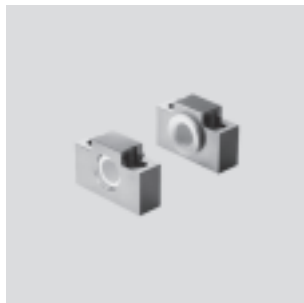


Dimensions and ordering data													
For Ø	C2	C3	TD	TK	TL	TM	US	XH	XL	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]			Ø e9										
32	71	86	12	16	12	50	45	2	52	4	150	161 852	CRZNG-32
40	87	105	16	20	16	63	54	4	55	4	260	161 853	CRZNG-40
50	99	117	16	24	16	75	64	4	57	4	430	161 854	CRZNG-50
63	116	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	FK	FN	FS	H1	HB	NH	TH	UL	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]	Ø D11	Ø ±0.1				Ø 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

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.

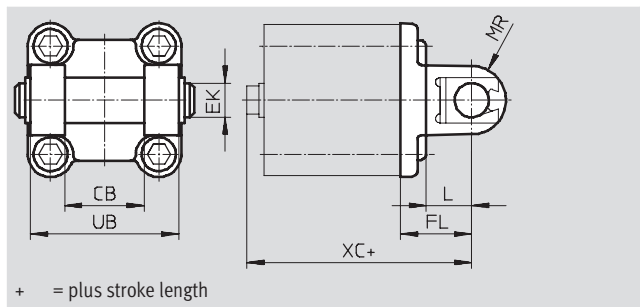
# Compact cylinders CDC, ISO 21287, Clean Design



Accessories

## Swivel flange SNCB-...-R3

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

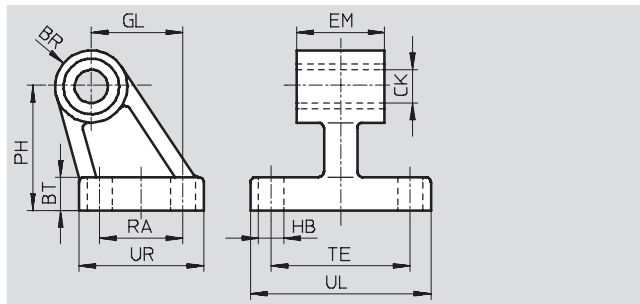


Dimensions and ordering data											
For $\varnothing$	CB	EK	FL	L	MR	UB	XC	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]	H14	$\varnothing$ e8	$\pm 0.2$			h14			[g]		
32	26	10	22	13	8.5	45	72	3	100	176 944	SNCB-32-R3
40	28	12	25	16	12	52	76	3	150	176 945	SNCB-40-R3
50	32	12	27	16	12	60	80	3	225	176 946	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

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 $\varnothing$	BR	BT	CK	EM	GL	HB	PH	RA	TE	UL	UR	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]			$\varnothing$ D11	-0.4		$\varnothing$ 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

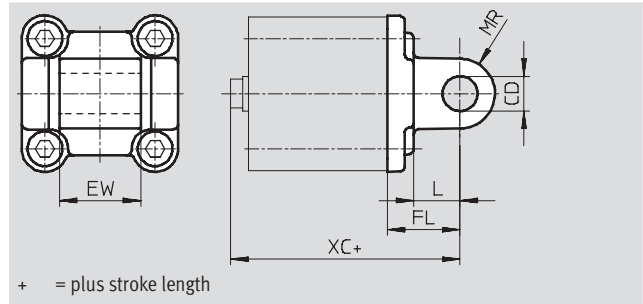
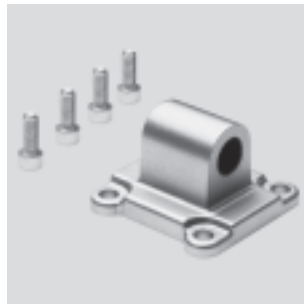
1) Corrosion resistance class 4 according to Festo standard 940 070  
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

## Swivel flange SNCL-...-R3

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

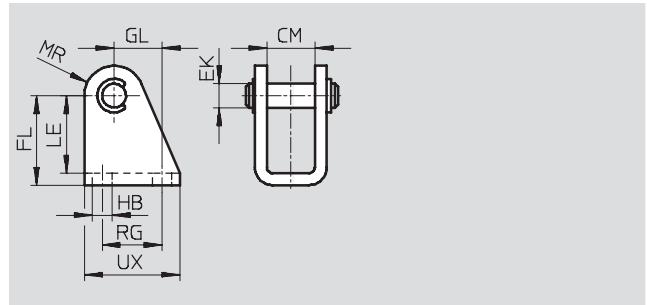


Dimensions and ordering data											
For $\varnothing$	CD	EW	FL	L	MR	XC	CRC <sup>1)</sup>	Weight	Part No.	Type	
[mm]	$\varnothing$ H9	h12	$\pm 0.2$					[g]			
20	8	16	20	14	8	63	3	40	537 796	SNCL-20-R3	
25						65	3	45	537 797	SNCL-25-R3	

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 $\varnothing$	CM	EK	FL	GL	HB	LE	MR	RG	UX	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]		$\varnothing$									[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

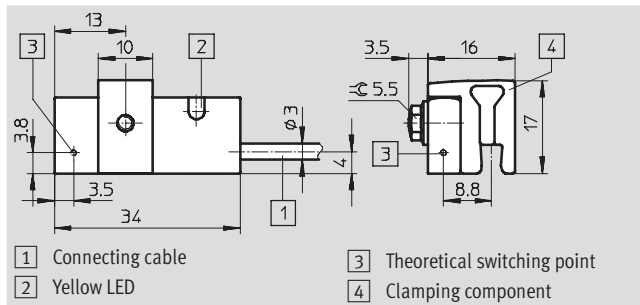
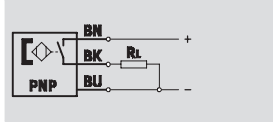
1) Corrosion resistance class 4 according to Festo standard 940 070  
 Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

# Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Accessories

## Proximity sensor SMT-C1



Technical data		
General information		
Design	Block-shaped	
Based on standard	DIN 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	Lif12Y33Y	
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 <sup>1)</sup>	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.

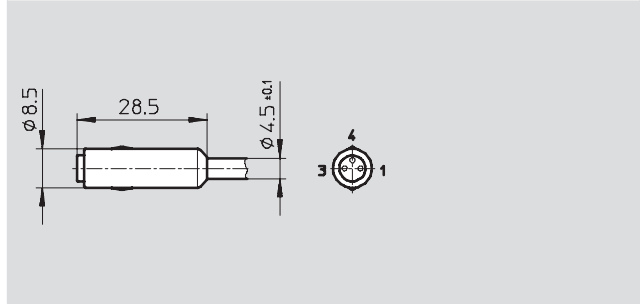
Ordering data		
Cable length [m]	Part No.	Type
2.5	540 431	SMT-C1-PS-24V-2,5-OE
5.0	540 432	SMT-C1-PS-24V-5,0-OE

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

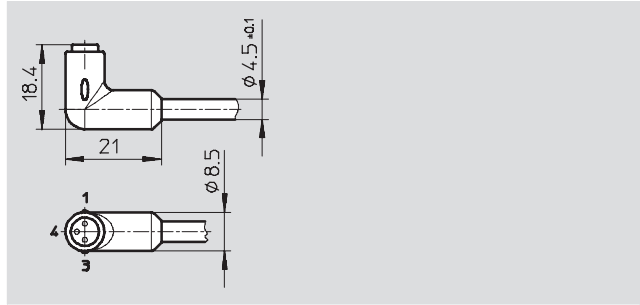
## Plug socket with cable SIM-K-GD- ... -CDN

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 <sup>2</sup> ]	3x 0.25	
Wire ends	Tin-plated			
Degree of protection	IP65/IP67/IP69			




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

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



# Compact cylinders CDC, ISO 21287, Clean Design

FESTO


Accessories


Ordering data – Push-in fittings				Technical data → Internet: quick star			
	Connection		Material	Weight [g]	Part No.	Type	PU <sup>3)</sup>
	Thread	Tubing O.D.					
<b>With external hex</b>							
	M5	4	Brass, nickel-plated and chrome-plated	6.1	533 844	QS-F-M5-4 <sup>1)</sup>	10
		6		9.3	533 845	QS-F-M5-6 <sup>1)</sup>	10
	G1/8	4		8	193 408	QS-F-G1/8-4 <sup>1)</sup>	10
		6		12	193 409	QS-F-G1/8-6 <sup>1)</sup>	10
		8		14	193 410	QS-F-G1/8-8 <sup>1)</sup>	10
	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>	1
	R1/8	6		9.9	162 862	CRQS-1/8-6 <sup>2)</sup>	1
		8		13	162 863	CRQS-1/8-8 <sup>2)</sup>	1
<b>With internal hex</b>							
	M5	4	Brass, nickel-plated and chrome-plated	6	533 924	QS-F-M5-4-1 <sup>1)</sup>	10
		6		9	537 014	QS-F-M5-6-1 <sup>1)</sup>	10
	G1/8	4		8.6	533 927	QS-F-G1/8-4-1 <sup>1)</sup>	10
		6		13.4	533 928	QS-F-G1/8-6-1 <sup>1)</sup>	10
		8		13.1	533 929	QS-F-G1/8-8-1 <sup>1)</sup>	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 <sup>3)</sup>
	Thread	Tubing O.D.					
<b>With external hex</b>							
	M5	4	Brass, nickel-plated and chrome-plated	10.1	533 849	QSL-F-M5-4 <sup>1)</sup>	10
		6		14.7	533 850	QSL-F-M5-6 <sup>1)</sup>	10
	G1/8	4		17.6	193 418	QSL-F-G1/8-4 <sup>1)</sup>	10
		6		16	193 419	QSL-F-G1/8-6 <sup>1)</sup>	10
		8		20	193 420	QSL-F-G1/8-8 <sup>1)</sup>	10
	M5	4	Stainless steel	13	162 870	CRQSL-M5-4 <sup>1)</sup>	1
		6		19	162 871	CRQSL-M5-6 <sup>1)</sup>	1
	R1/8	6		20	162 872	CRQSL-1/8-6 <sup>2)</sup>	1
		8		27	162 873	CRQSL-1/8-8 <sup>2)</sup>	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: crgrla			
	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

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

- 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	<b>195 581</b>	<b>CRSGS-M8</b>		20, 25	<b>13 568</b>	<b>CRSG-M8</b>
	32, 40	<b>195 582</b>	<b>CRSGS-M10x1,25</b>		32, 40	<b>13 569</b>	<b>CRSG-M10x1,25</b>
	50, 63	<b>195 583</b>	<b>CRSGS-M12x1,25</b>		50, 63	<b>13 570</b>	<b>CRSG-M12x1,25</b>
	80	<b>195 584</b>	<b>CRSGS-M16x1,5</b>		80	<b>13 571</b>	<b>CRSG-M16x1,5</b>