

**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

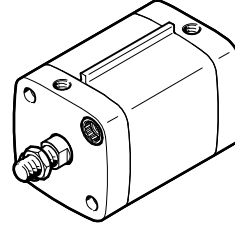
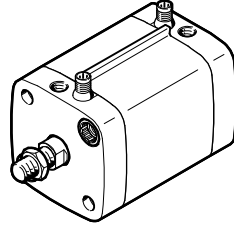
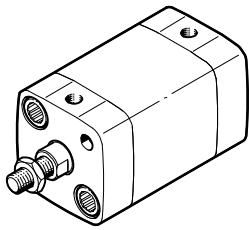
- Ø 32 ... 80 mm
- With position sensing integrated in the end positions

CDC-...-A-R

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

 Note

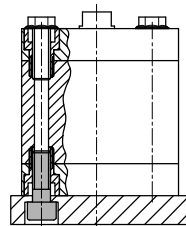
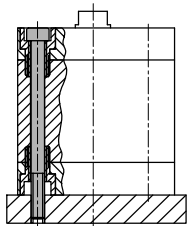
A combination of integrated and external position sensing is possible.



## Mounting options

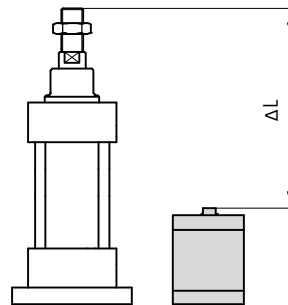
With through screws

Direct mounting



## Size

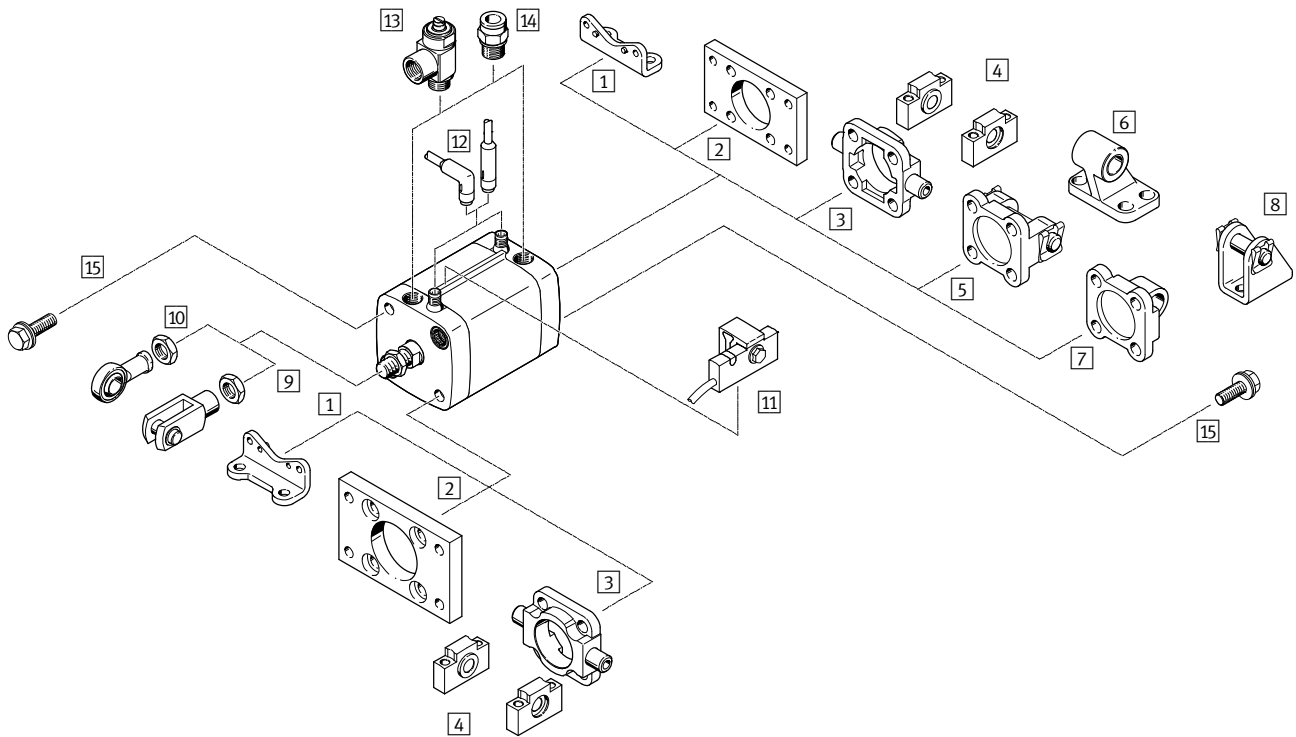
Space savings of up to 50% compared with cylinders to standard ISO 15552



# Compact cylinders CDC, ISO 21287, Clean Design

Peripherals overview

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Mounting attachments and accessories		Description	→ Page/Internet
1	Foot mounting HNA-...-R3	For bearing and end cap	18
2	Flange mounting CRFNG	For bearing or end cap	19
3	Trunnion flange CRZNG	For bearing or end cap in combination with trunnion supports CRLNZG	20
4	Trunnion supports CRLNZG	For trunnion flange CRZNG	20
5	Swivel flange SNCB- ... -R3	For end cap	21
6	Clevis foot mounting CRLNG	For swivel flange SNCB- ... -R3	21
7	Swivel flange SNCL- ... -R3	For end cap	22
8	Clevis foot mounting CRLBN	For swivel flange SNCL- ... -R3	22
9	Rod clevis CRSG	Permits a swivelling movement of the cylinder in one plane	25
10	Rod eye CRSGS	With spherical bearing	25
11	Proximity sensor SMT-C1	For attachment to the sensor mounting rail	23
12	Cable with socket SIM-K- ... -CDN	– For electrical signal transmission and power supply – With food industry approval	23
13	One-way flow control valve CRGRLA	For regulating speed	25
14	Push-in fittings NPQH/NPQH-L/CRQS/CRQSL	For connecting compressed air tubing with standard external diameters	24
15	Blanking screws DAMD-P- ...	For covering unused mounting threads	25

# Compact cylinders CDC, ISO 21287, Clean Design

Type codes

CDC - 32 - 50 - A - P - AIB - 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
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**Position sensing**

A	For proximity sensor
AIB	At both ends, integrated
AIV	Front, integrated
AIH	Rear, integrated

**Proximity sensor**

SME	Contacting (magnetic reed)
SMT	Contactless (magneto-resistive)

**Sensor mounting rail**

R	For external position sensing (only with Ø $\geq$ 2 ... 80 mm)
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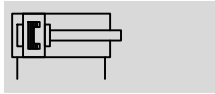
**Variant**

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

Function

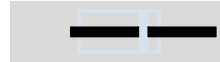


- - Diameter  
20 ... 80 mm

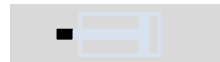
- - Stroke length  
1 ... 500 mm

- - [www.festo.com](http://www.festo.com)

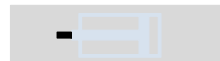
Variants



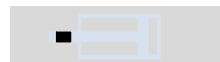
S2



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	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]						
Note on operating/pilot medium	Operation with lubricated medium possible (in which case lubricated operation will always be required)						
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					
Suitability for use in the food industry <sup>2)</sup>	As per manufacturer's declaration						
Corrosion resistance class CRC <sup>3)</sup>	3						

1) Note operating range of proximity sensors

2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → User documentation.

3) Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

# 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	1178	1870	3016
S2	141	247	415	686	1057	1750	2827
Theoretical force at 6 bar, retracting	141	247	415	686	1057	1750	2827
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

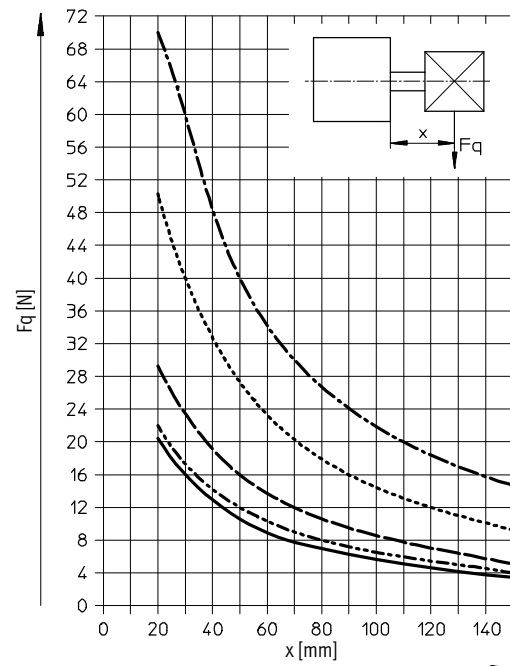
Permissible impact velocity: 
$$v_{perm.} = \sqrt{\frac{2 \times E_{perm.}}{m_{dead} + m_{load}}}$$

$v_{perm.}$  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 Fq as a function of projection X



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

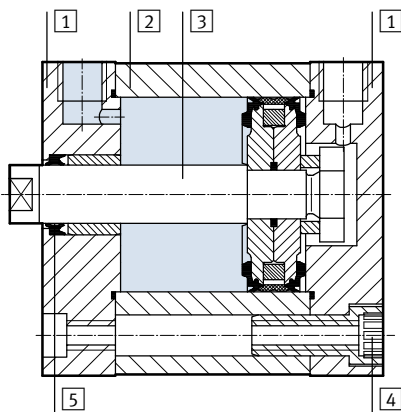
# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

Weights [g]							
Piston $\varnothing$	20	25	32	40	50	63	80
<b>Basic version</b>							
Product weight with 0 mm stroke	133	170	277	377	567	790	1475
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	1507
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	TPE-U (PUR) media sealing (modified for resistance to hydrolysis and cleaning agents)	FPM
- Note on materials	Free of copper and PTFE	
-	-	Contains PWIS (paint-wetting impairment substances)

# Compact cylinders CDC, ISO 21287, Clean Design

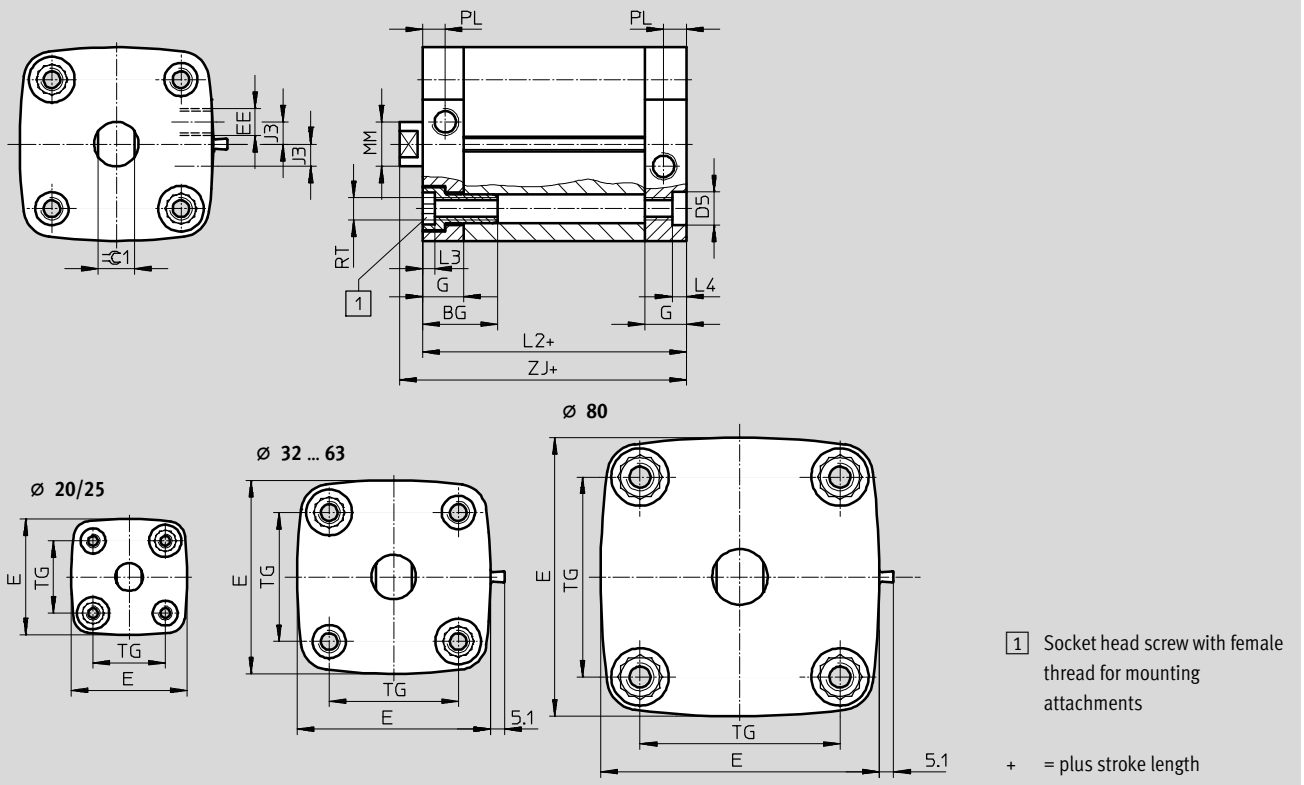
Technical data

FESTO

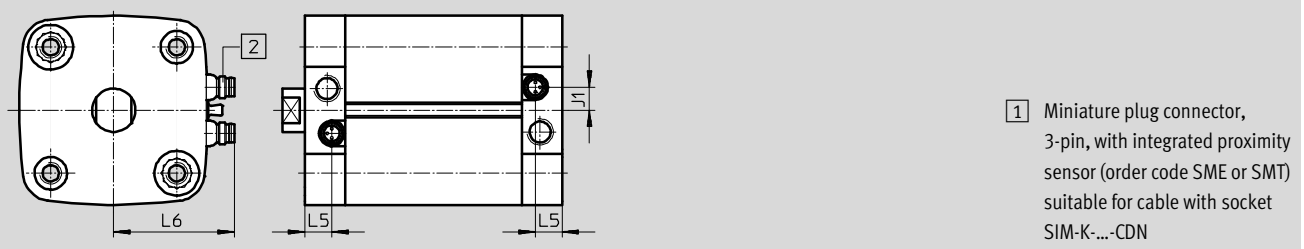
## Dimensions

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

∅ [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	69.7	8.5				49			
63		81.3	12				54			
80		-	100.4	15	8	-				

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

∅ [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

+ = plus stroke length

S2 – Through piston rod

++ = plus 2 stroke lengths

K2 – Extended male piston rod thread

+ = plus stroke length

∅	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								53.2	63.1
63	20	22	M10	M12x1.25	4.7	8.2	57.2	66.9	
80							63	73.5	
	1 ... 30		28	M12	M16x1.5	6.1	9		

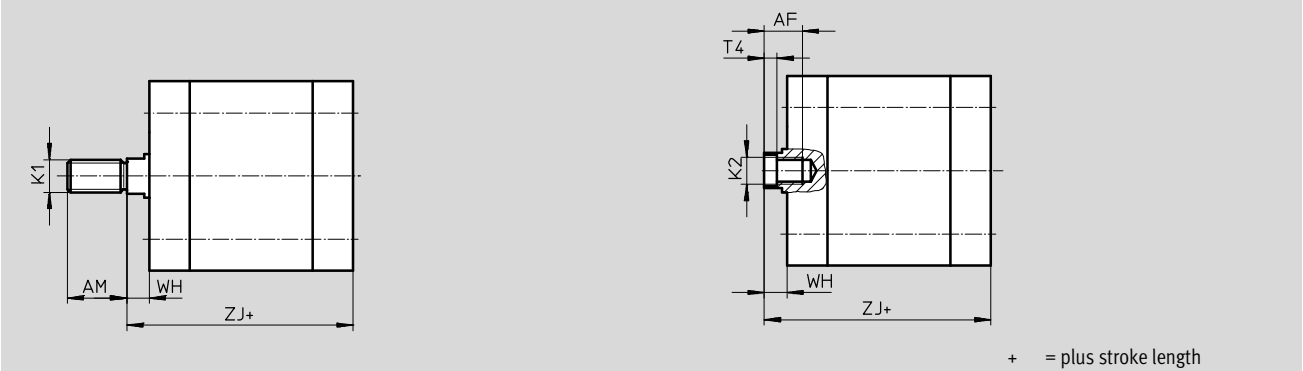
# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

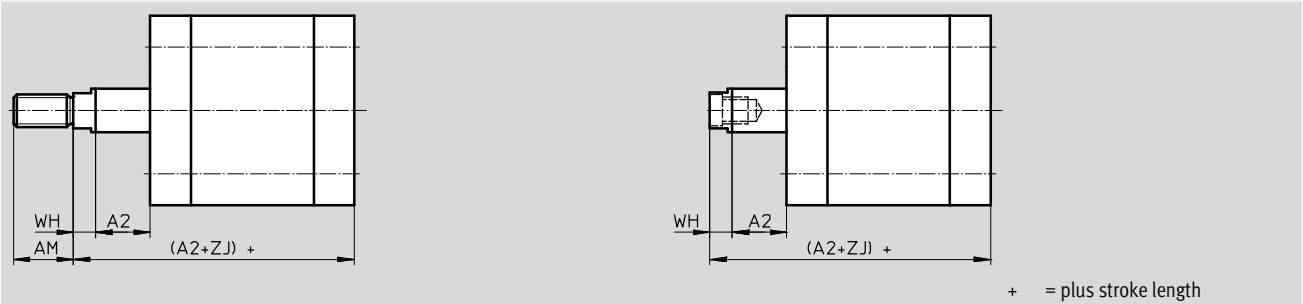
## Dimensions – Variants

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

### K5 – Special thread on piston rod



### K8 – Extended piston rod

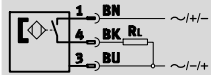


∅	AF	A2	AM	K1	K2	T4	WH	ZJ
[mm]	min.		-0.5				+1	+1
20	14	1 ... 300	16	M10, M10x1.25	M5	2.6	5.7	42.7
25								44.7
32	16	1 ... 400	19	M10, M12	M6	3.3	6.2	50.2
40								51.2
50	20		22	M12, M12	M8	4.7	8.2	53.2
63								57.2
80		1 ... 500	28	M16, M20	M10	6.1	9	63

# 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	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

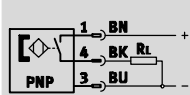
Technical data		
Mechanical components		
Tightening torque	[Nm]	0.3
Mounting position		Any
Product weight	[g]	2.7
Information on housing materials		Polyamide, epoxy resin, nickel-plated brass
Display/operation		
Switching status display		Yellow LED
Immissions/emissions		
Degree of protection		IP65, IP67 to EN 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 CRC 3 to Festo standard FN 940070  
 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

# 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	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	[mA]	< 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 EN 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

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 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

# 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
543305	CDC 20	1 ... 50 A	P -
543306	25	I	A
543307	32		AIB
543308	40		AIV
543309	50		AIH
543310	63		
543311	80		
<b>Order example</b>			
<b>543306</b>	<b>CDC - 25</b>	<b>- 225</b>	<b>- A - P</b>

**Ordering table**

Size	20	25	32	40	50	63	80	Condi- tions	Code	Enter code	
<b>M</b> Module No.	<b>543305</b>	<b>543306</b>	<b>543307</b>	<b>543308</b>	<b>543309</b>	<b>543310</b>	<b>543311</b>				
Function	Standard cylinder, double-acting, based on ISO 21287 (Clean Design)								<b>CDC</b>	CDC	
Piston Ø [mm]	20	25	32	40	50	63	80		-...		
Stroke [mm]	1 ... 300		1 ... 400				1 ... 500			-...	
Piston rod thread	Male thread									<b>-A</b>	
	Female thread								<b>1</b>	<b>-I</b>	
Cushioning	Flexible cushioning rings/pads at both ends									<b>-P</b>	-P
Position sensing	Without position sensing		-	-	-	-	-				
	-		For proximity sensor						<b>-A</b>		
	-		At both ends, integrated					<b>2</b>	<b>-AIB</b>		
	-		Front, integrated					<b>2</b>	<b>-AIV</b>		
	-		Rear, integrated					<b>2</b>	<b>-AIH</b>		

**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



→ **0 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							-...K2		
	1 ... 20		1 ... 30							
Piston rod with special thread	Male thread	M10x1.25	M10	M12	M16		-"..."K5			
	Female thread	M10	M12	M16	M20					
Piston rod extended [mm]	Extended piston rod							-...K8		
	1 ... 300		1 ... 400			1 ... 500	6			
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**

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

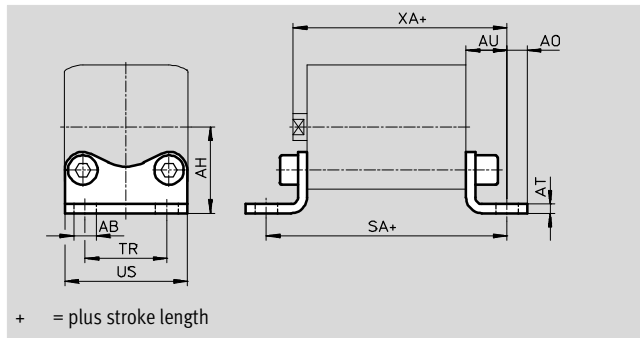
# Compact cylinders CDC, ISO 21287, Clean Design



Accessories

## Foot mounting HNA-...-R3

Material:  
Steel with protective coating  
Free of copper and PTFE  
RoHS-compliant



Dimensions and ordering data							
For $\varnothing$	AB	AH	AO	AT	AU	SA	TR
[mm]	$\varnothing$ H14	JS14		$\pm 0.5$	$\pm 0.2$		$\pm 0.2$
20	7	27	6.25	4	16	69	22
25		29				71	26
32		33.5				76	32
40	10	38	9	5	18	81	36
50		45	8		21	87	45
63		50	91		50		
80	12	63	10.5	6	26	106	63

For $\varnothing$	US	XA	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]	-0.5			[g]		
20	34.5	59	3	84	537254	HNA-20-R3
25	38.5	61	3	90	537255	HNA-25-R3
32	46	66	3	123	537256	HNA-32-R3
40	54	69	3	157	537257	HNA-40-R3
50	64	74	3	278	537258	HNA-50-R3
63	75	78	3	328	537259	HNA-63-R3
80	63	89	3	634	537260	HNA-80-R3

1) Corrosion resistance class CRC 3 to Festo standard FN 940070  
High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

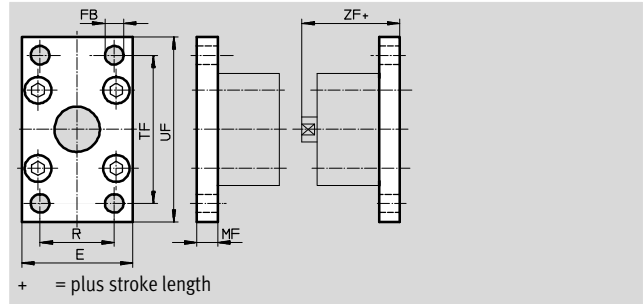
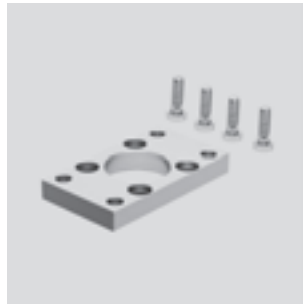
- Note  
Screws with special lengths are required to fit the sizes  $\varnothing$  80 mm  
→ 25

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

## Flange mounting CRFNG


Material:  
High-alloy steel  
Free of copper and PTFE



Dimensions and ordering data						
For $\varnothing$	E	FB	MF	R	TF	UF
[mm]		$\varnothing$ H13				
32	45	7	10	32	64	80
40	54	9	10	36	72	90
50	65	9	12	45	90	110
63	75	9	12	50	100	120
80	93	12	16	63	126	150

Dimensions and ordering data					
For $\varnothing$	ZF	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]			[g]		
32	54	4	220	161846	CRFNG-32
40	55	4	291	161847	CRFNG-40
50	57	4	526	161848	CRFNG-50
63	61	4	680	161849	CRFNG-63
80	70	4	1508	161850	CRFNG-80

1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

 Note  
Screws with special lengths are required to fit the sizes  $\varnothing$  80 mm  
→ 25

# Compact cylinders CDC, ISO 21287, Clean Design

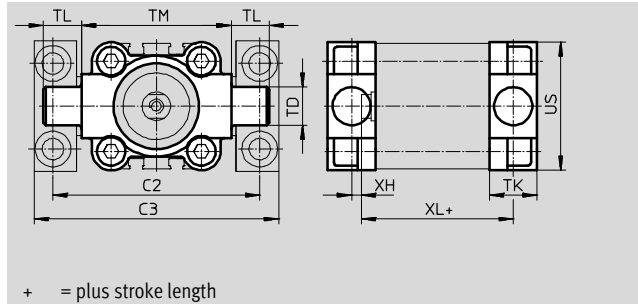


Accessories

## Trunnion flange CRZNG

Material:

CRZNG: Electrolytically polished special steel casting  
Free of copper and PTFE  
RoHS-compliant



Dimensions and ordering data													
For $\varnothing$	C2	C3	TD	TK	TL	TM	US	XH	XL	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]			$\varnothing$ e9										
32	71	86	12	16	12	50	45	2	52	4	150	<b>161852</b>	<b>CRZNG-32</b>
40	87	105	16	20	16	63	54	4	55	4	285	<b>161853</b>	<b>CRZNG-40</b>
50	99	117	16	24	16	75	64	4	57	4	473	<b>161854</b>	<b>CRZNG-50</b>
63	116	136	20	24	20	90	75	4	61	4	687	<b>161855</b>	<b>CRZNG-63</b>
80	136	156	20	28	20	110	93	5	81	4	1296	<b>161856</b>	<b>CRZNG-80</b>

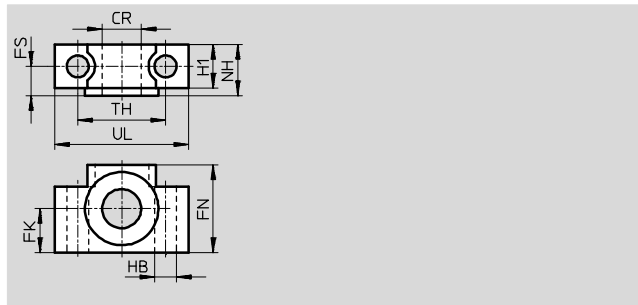
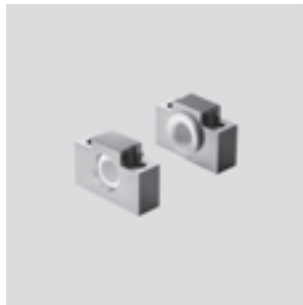
1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

- - Note  
Screws with special lengths are required to fit the sizes  $\varnothing$  80 mm  
→ 25

## Trunnion supports CRLNZG

Material:

High-alloy steel  
Free of copper and PTFE  
RoHS-compliant



Dimensions and ordering data													
For $\varnothing$	CR	FK	FN	FS	H1	HB	NH	TH	UL	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]	$\varnothing$ D11	$\varnothing$ $\pm 0.1$				$\varnothing$ H13		$\pm 0.2$			[g]		
32	12	15	30	10.5	15	6.6	18	32	46	4	205	<b>161874</b>	<b>CRLNZG-32</b>
40, 50	16	18	36	12	18	9	21	36	55	4	323	<b>161875</b>	<b>CRLNZG-40/50</b>
63, 80	20	20	40	13	20	11	23	42	65	4	435	<b>161876</b>	<b>CRLNZG-63/80</b>

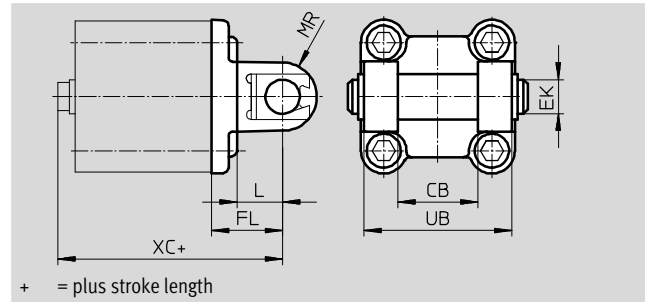
1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

# 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 and PTFE  
RoHS-compliant



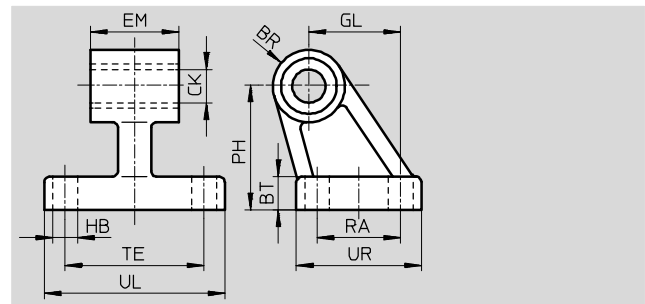
Dimensions and ordering data											
For $\varnothing$	CB	EK $\varnothing$	FL $\pm 0.2$	L	MR	UB h14	XC	CRC <sup>1)</sup>	Weight [g]	Part No.	Type
[mm]	H14	e8									
32	26	10	22	13	8.5	45	72	3	100	176944	SNCB-32-R3
40	28	12	25	16	12	52	76	3	151	176945	SNCB-40-R3
50	32	12	27	16	12	60	80	3	228	176946	SNCB-50-R3
63	40	16	32	21	16	70	89	3	371	176947	SNCB-63-R3
80	50	16	36	22	16	90	99	3	632	176948	SNCB-80-R3

1) Corrosion resistance class CRC 3 to Festo standard FN 940070  
High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

- Note  
Screws with special lengths are required to fit the sizes  $\varnothing$  80 mm  
➔ 25

## Clevis foot CRLNG

Material:  
High-alloy steel  
Free of copper and PTFE



Dimensions and ordering data															
For $\varnothing$	BR	BT	CK $\varnothing$	EM	GL	HB $\varnothing$	PH	RA	TE	UL	UR	CRC <sup>1)</sup>	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	161840	CRLNG-32
40	11	10	12	27.8	24	6.6	36	22	41	54	35	4	161	161841	CRLNG-40
50	12	12	12	31.8	33	9	45	30	50	65	45	4	281	161842	CRLNG-50
63	15	12	16	39.8	37	9	50	35	52	67	50	4	370	161843	CRLNG-63
80	15	14	16	49.8	47	11	63	40	66	86	60	4	562	161844	CRLNG-80

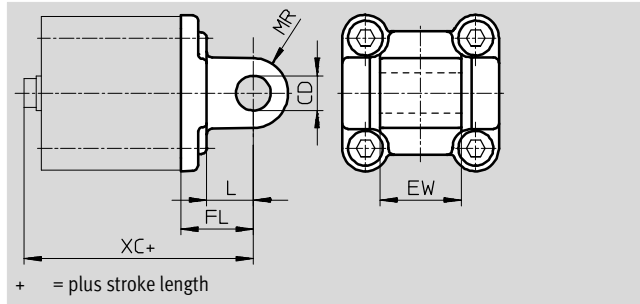
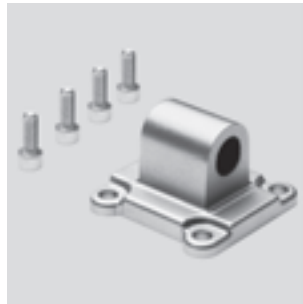
1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (➔ also FN 940082) using appropriate media.

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

## Swivel flange SNCL-...-R3

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

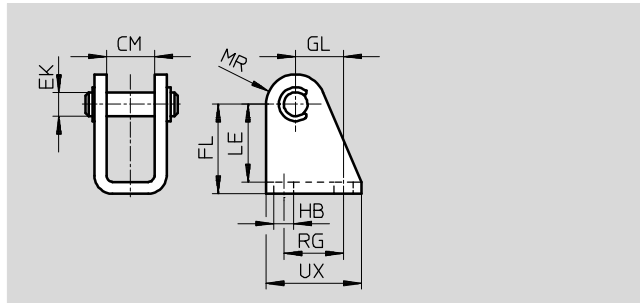
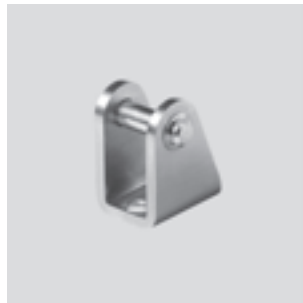


Dimensions and ordering data											
For $\varnothing$	CD	EW	FL	L	MR	XC	CRC <sup>1)</sup>	Weight	Part No.	Type	
[mm]	$\varnothing$ H9	h12	$\pm 0.2$					[g]			
20	8	16	20	14	8	63	3	38	537796	SNCL-20-R3	
25						65	3	41	537797	SNCL-25-R3	

1) Corrosion resistance class CRC 3 to Festo standard FN 940070  
 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

## Clevis foot CRLBN, stainless steel

Material:  
 High-alloy steel  
 Free of copper and PTFE

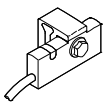




Dimensions and ordering data													
For $\varnothing$	CM	EK	FL	GL	HB	LE	MR	RG	UX	CRC <sup>1)</sup>	Weight	Part No.	Type
[mm]		$\varnothing$									[g]		
20/25	16.1	8	30 +0.4/-0.2	16	6.6	26	10	20	32	4	82	161863	CRLBN-20/25


1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
 Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.


# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

Ordering data – Proximity sensors for T-slot, magneto-resistive						Technical data → Internet: smt
	Type of mounting	Switching output	Electrical connection	Cable length [m]	Part No.	Type
N/O contact						
	Is mounted on the mounting rail	PNP	Cable, 3-wire	5.0	<b>571339</b>	<b>SMT-C1-PS-24V-K-5,0-OE</b>
			Plug M8x1, 3-pin	0.3	<b>571342</b>	<b>SMT-C1-PS-24V-K-0,3-M8D</b>
			Plug M12x1, 3-pin	0.3	<b>571341</b>	<b>SMT-C1-PS-24V-K-0,3-M12</b>

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	<b>541333</b>	<b>NEBU-M8G3-K-2.5-LE3</b>	
			5	<b>541334</b>	<b>NEBU-M8G3-K-5-LE3</b>	
	Straight socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	<b>541363</b>	<b>NEBU-M12G5-K-2.5-LE3</b>	
			5	<b>541364</b>	<b>NEBU-M12G5-K-5-LE3</b>	
	Angled socket, M8x1, 3-pin	Cable, open end, 3-wire	2.5	<b>541338</b>	<b>NEBU-M8W3-K-2.5-LE3</b>	
			5	<b>541341</b>	<b>NEBU-M8W3-K-5-LE3</b>	
	Angled socket, M12x1, 5-pin	Cable, open end, 3-wire	2.5	<b>541367</b>	<b>NEBU-M12W5-K-2.5-LE3</b>	
			5	<b>541370</b>	<b>NEBU-M12W5-K-5-LE3</b>	




Ordering data – Connecting cables for integrated proximity sensor						Technical data → Internet: sim
	Electrical connection, left	Electrical connection, right	Cable length [m]	Part No.	Type	
	Angled socket, clip, 3-pin	Cable, open end, 3-wire	5	<b>525262</b>	<b>SIM-K-WD-5-CDN</b>	

 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

FESTO

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	–	578334	NPQH-D-M5-Q4-P10	10
		6		–	578335	NPQH-D-M5-Q6-P10	
	G1/8	4		6.1	578338	NPQH-D-G18-Q4-P10	
		6		9	578339	NPQH-D-G18-Q6-P10	
		8		11.4	578340	NPQH-D-G18-Q8-P10	
	M5	4	Stainless steel	6	162860	CRQS-M5-4 <sup>1)</sup>	1
		6		8.4	162861	CRQS-M5-6 <sup>1)</sup>	
	R1/8	6		9.9	162862	CRQS-1/8-6 <sup>2)</sup>	
		8		12	162863	CRQS-1/8-8 <sup>2)</sup>	
<b>With internal hex</b>							
	M5	4	Brass, nickel-plated and chrome-plated	4.6	578370	NPQH-DK-M5-Q4-P10	10
		6		8.6	578371	NPQH-DK-M5-Q6-P10	
	G1/8	4		–	578374	NPQH-DK-G18-Q4-P10	
		6		–	578375	NPQH-DK-G18-Q6-P10	
		8		–	578376	NPQH-DK-G18-Q8-P10	

- 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	8.8	578276	NPQH-L-M5-Q4-P10	10
		6		11.9	578277	NPQH-L-M5-Q6-P10	
	G1/8	4		15.7	578280	NPQH-L-G18-Q4-P10	
		6		18.5	578281	NPQH-L-G18-Q6-P10	
		8		22	578282	NPQH-L-G18-Q8-P10	
	M5	4	Stainless steel	12	162870	CRQSL-M5-4 <sup>1)</sup>	1
		6		18	162871	CRQSL-M5-6 <sup>1)</sup>	
	R1/8	6		19	162872	CRQSL-1/8-6 <sup>2)</sup>	
		8		26	162873	CRQSL-1/8-8 <sup>2)</sup>	


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




# Compact cylinders CDC, ISO 21287, Clean Design



Accessories


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: crgla		
	Connection		Material	Weight [g]	Part No.	Type
	Thread	For push-in fitting				
	M5	CRQS/CRQSL/CRQST,	Electrolytically polished special steel casting	10,2	161403	CRGRLA-M5-B
	G1/8	Quick Star		37,8		

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	543714	DAMD-P-M5-10-R1 <sup>2)</sup>	4
	32, 40			9	543715	DAMD-P-M6-12-R1 <sup>2)</sup>	
	50, 63			17.5	543716	DAMD-P-M8-16-R1 <sup>2)</sup>	
	80			30	543717	DAMD-P-M10-16-R1 <sup>2)</sup>	

- 1) Corrosion resistance class CRC 3 to Festo standard FN 940070  
High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.
- 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	195581	CRSGS-M8		20, 25	13568	CRSG-M8
	32, 40	195582	CRSGS-M10x1,25		32, 40	13569	CRSG-M10x1,25
	50, 63	195583	CRSGS-M12x1,25		50, 63	13570	CRSG-M12x1,25
	80	195584	CRSGS-M16x1,5		80	13571	CRSG-M16x1,5

Ordering data – Screws				Technical data → Internet: crsg	
Designation	For Ø	For accessories	Part No.	Type	PU <sup>1)</sup>
	80	HNA-R3, SNCB-R3	372622	DIN912-M10X30-A4-70	1
		CRFNG	8028230	DIN912-M10X30-A4-70	
		CRZNG	744814	DIN912-M10X40-A4-70	

- 1) Packaging unit quantity

## Product Range and Company Overview

### A Complete Suite and Company Overview

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 & drivers



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



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

### Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 16,000 employees in 60 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.

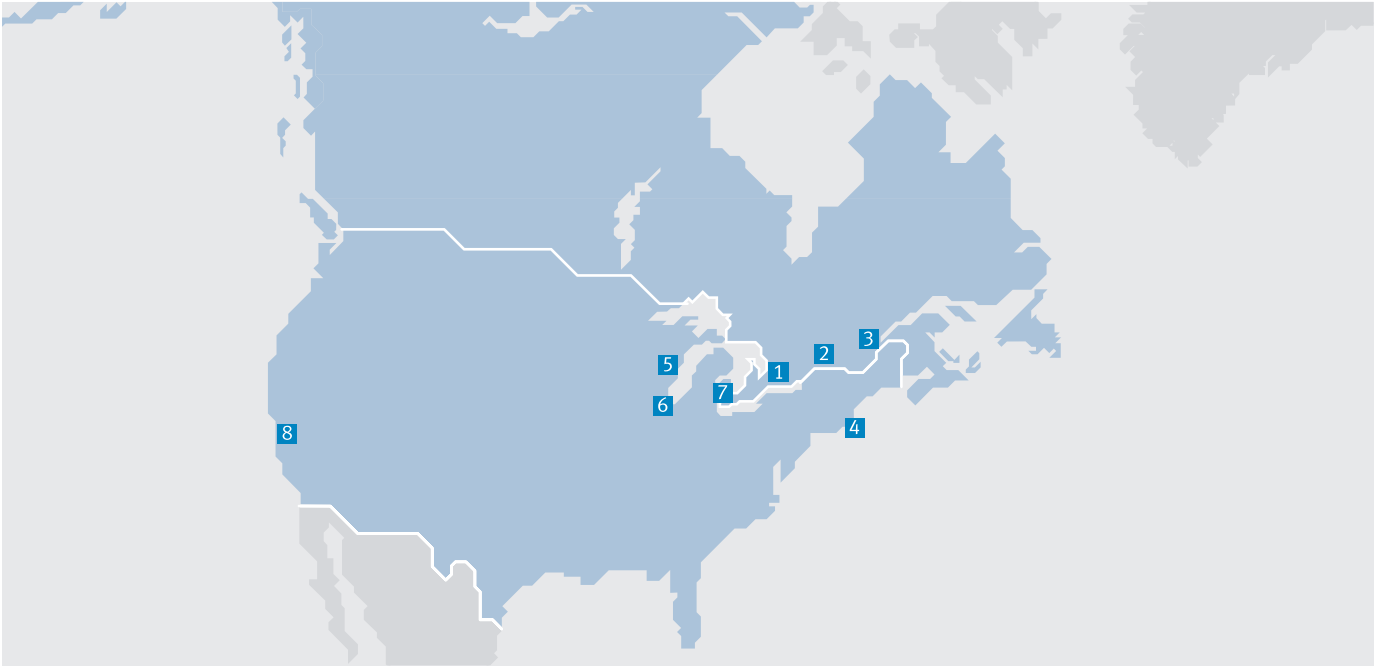


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# Festo North America



**1 Festo Canada  
Headquarters  
Festo Inc.**  
5300 Explorer Drive  
Mississauga, ON  
L4W 5G4

**2 Montréal**  
5600, Trans-Canada  
Pointe-Claire, QC  
H9R 1B6

**3 Québec City**  
2930, rue Watt#117  
Québec, QC  
G1X 4G3



**4 Festo United States  
Headquarters  
Festo Corporation**  
395 Moreland Road  
Hauppauge, NY  
11788

**5 Appleton**  
North 922 Tower View Drive, Suite N  
Greenville, WI  
54942

**7 Detroit**  
1441 West Long Lake Road  
Troy, MI  
48098

**6 Chicago**  
85 W Algonquin - Suite 340  
Arlington Heights, IL  
60005

**8 Silicon Valley**  
4935 Southfront Road, Suite F  
Livermore, CA  
94550

## Festo Regional Contact Center

### Canadian Customers

Commercial Support:  
Tel: 1 877 GO FESTO (1 877 463 3786)  
Fax: 1 877 FX FESTO (1 877 393 3786)  
Email: festo.canada@ca.festo.com

### Technical Support:

Tel: 1 866 GO FESTO (1 866 463 3786)  
Fax: 1 877 FX FESTO (1 877 393 3786)  
Email: technical.support@ca.festo.com

### USA Customers

Commercial Support:  
Tel: 1 800 99 FESTO (1 800 993 3786)  
Fax: 1 800 96 FESTO (1 800 963 3786)  
Email: customer.service@us.festo.com

### Technical Support:

Tel: 1 866 GO FESTO (1 866 463 3786)  
Fax: 1 800 96 FESTO (1 800 963 3786)  
Email: product.support@us.festo.com