



- Resistant to corrosion caused by harsh environmental conditions
- Easy to clean design
- Optional integrated position sensing
- Comprehensive range of accessories

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Standard cylinders CDN, ISO 15552, Clean Design

Key features

Design

- The cylinder series is based on ISO 15552 for standard cylinders
- The standard cylinder CDN 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

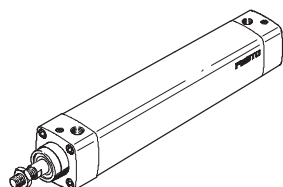
Flexible

- 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

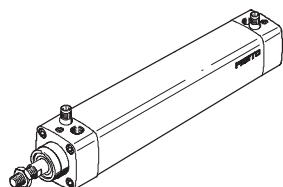
CDN-...

- Ø 32 ... 100 mm
- Without position sensing



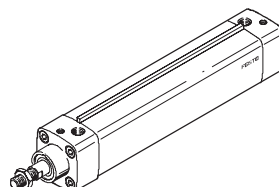
CDN-...-A...-R

- Ø 32 ... 100 mm
- With position sensing integrated in the end positions



CDN-...-A-R

- Ø 32 ... 100 mm
- With sensor mounting rail for external position sensing



Note
A combination of integrated and external position sensing is possible.

Standard cylinders

- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)

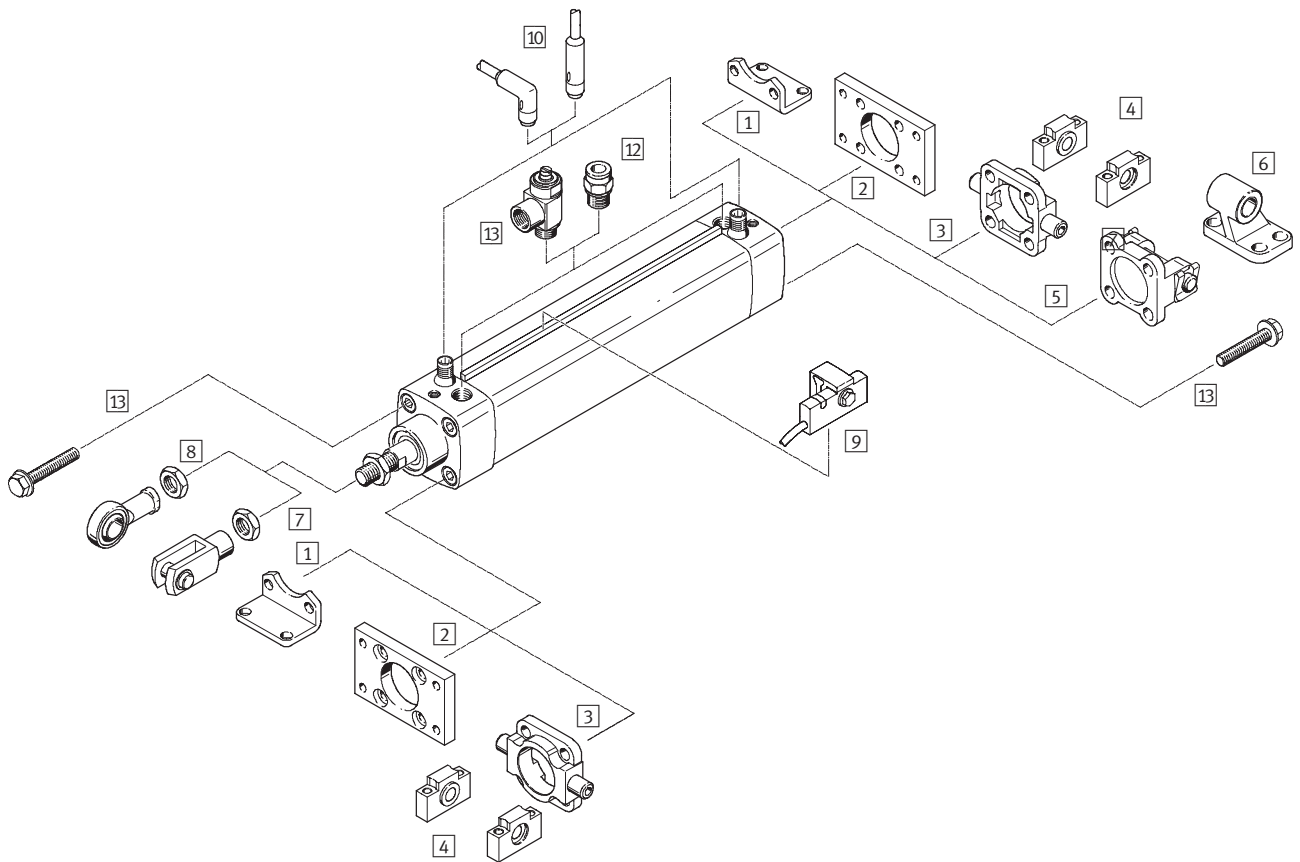


DIN



Standard cylinders CDN, ISO 15552, Clean Design

Peripherals overview



Mounting attachments and accessories		
	Brief description	→ Page
1	Foot mounting CRHNC	1 / 1.2-123
2	Flange mounting CRFNG	1 / 1.2-123
3	Trunnion flange CRZNG	1 / 1.2-124
4	Trunnion supports CRLNZG	1 / 1.2-124
5	Swivel flange SNCB- ... -R3	1 / 1.2-125
6	Clevis foot mounting CRLNG	1 / 1.2-125
7	Rod clevis CRSG	1 / 1.2-129
8	Rod eye CRSGS	1 / 1.2-129
9	Proximity sensor SMT-C1	1 / 1.2-126
10	Cable with socket SIM-K- ... -CDN	1 / 1.2-127
11	One-way flow control valve CRGRLA	1 / 1.2-129
12	Push-in fittings QS-F/QSL-F/CRQS/CRQSL	1 / 1.2-128
13	Blanking screws CR	1 / 1.2-129

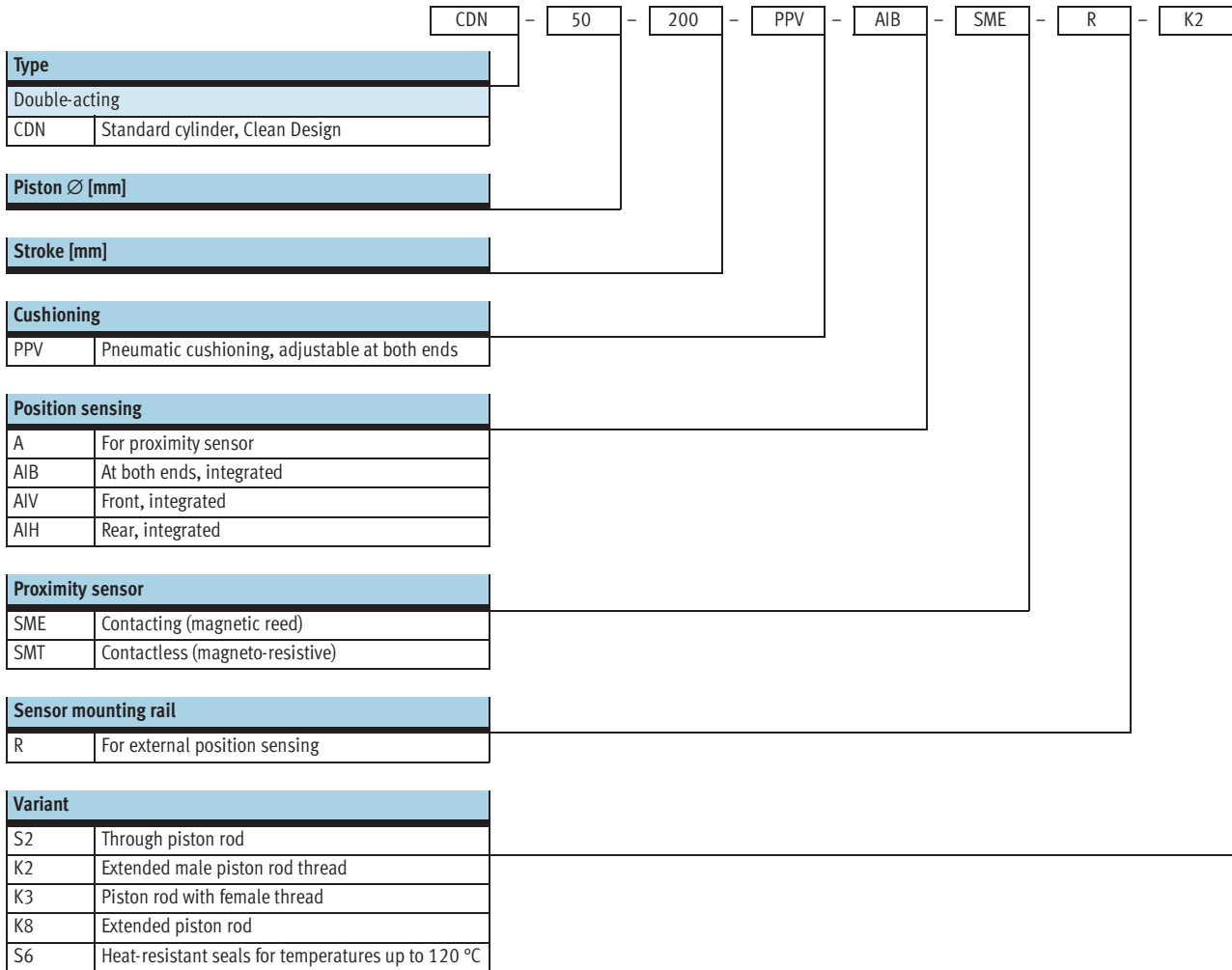
Standard cylinders CDN, ISO 15552, Clean Design

Type codes



ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

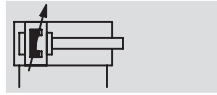


Standard cylinders CDN, ISO 15552, Clean Design



Technical data

Function



⌀ - Diameter
32 ... 100 mm

— | — Stroke length
10 ... 2,000 mm

www.festo.com/en/Spare_parts_service

Wearing parts kits
➔ 1 / 1.2-119

Variants



S2



K2



K3

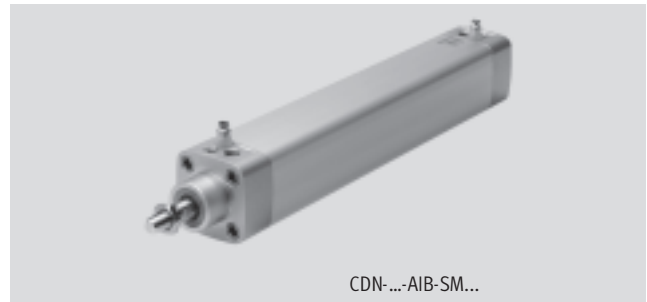


K8



S6

The variant S6 is not suitable for direct contact with food products because of the seals and the grease used.



CDN-...AIB-SM...

- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)



ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

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General technical data							
Piston ⌀		32	40	50	63	80	100
Pneumatic connection		G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{1}{2}$
Piston rod thread		M10x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5	M20x1.5
Design		Piston					
		Piston rod					
		Cylinder barrel					
Cushioning		Pneumatic cushioning, adjustable at both ends					
Cushioning length	[mm]	20	20	22	22	32	32
Position sensing	A	For proximity sensor					
	AIB	At both ends, integrated					
	AIV	Front, integrated					
	AIH	Rear, integrated					
Type of mounting		With female thread					
		Via accessories					
Mounting position		Any					

Operating and environmental conditions	
Operating medium	Filtered compressed air, lubricated or unlubricated
Operating pressure	[bar] 0.6 ... 12
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

Standard cylinders CDN, ISO 15552, Clean Design

Technical data



Forces [N] and impact energy [J]						
Piston Ø	32	40	50	63	80	100
Theoretical force at 6 bar, advancing	483	754	1,178	1,870	3,016	4,712
Theoretical force at 6 bar, retracting	415	633	990	1,682	2,721	4,418
Max. impact energy at the end positions		0.4	0.7	1.0	1.3	1.6
	S6	0.2	0.35	0.5	0.65	0.8

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

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

- - Note

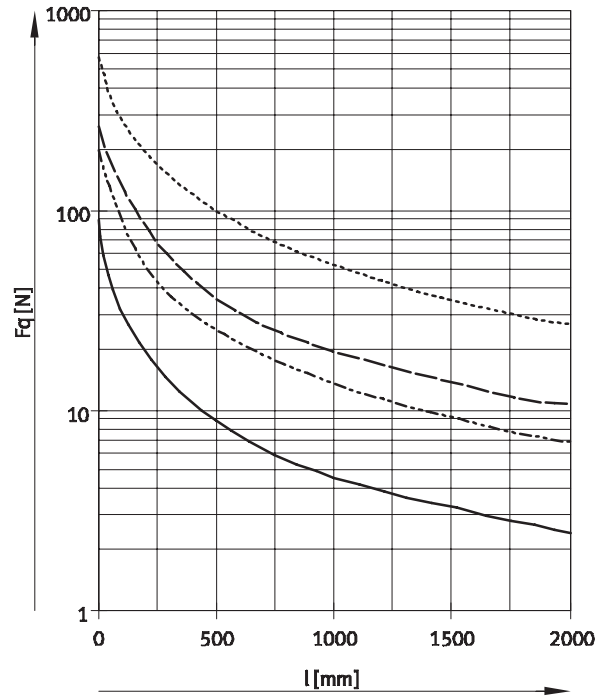
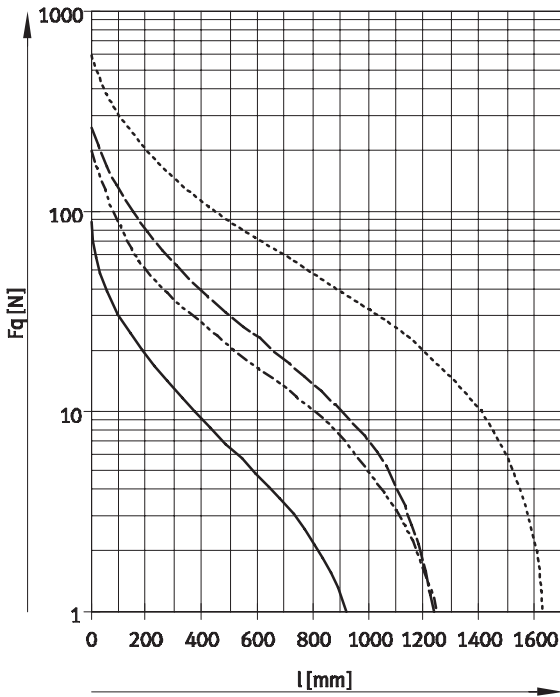
This data represents the maximum values that can be achieved. Values fluctuate in practice relative to the size of the effective load. Allowance

must also be made for the limits of the cushioning capacity of the drive and the permissible impact energy.

Max. lateral force Fq as a function of stroke length l

Horizontal mounting

Vertical mounting



- Ø 32
- - - - - Ø 40
- · - · - · Ø 50, 63
- · · · · Ø 80, 100

Standard cylinders CDN, ISO 15552, Clean Design

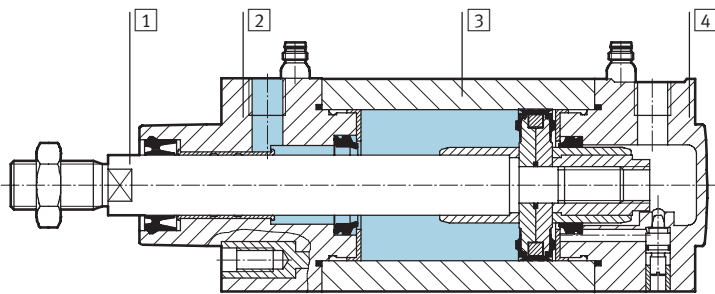
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Technical data

Weights [g]						
Piston Ø	32	40	50	63	80	100
Basic version						
Product weight with 0 mm stroke	600	920	1,530	2,140	3,151	4,820
Additional weight per 10 mm stroke	33	42	65	70	137	158
Moving load with 0 mm stroke						
Product weight with 0 mm stroke	130	250	450	510	1,131	1,544
Additional load per 10 mm stroke	9	16	25	25	137	158
S2 – Through piston rod						
Product weight with 0 mm stroke	715	1,130	1,920	2,570	3,613	5,389
Additional weight per 10 mm stroke	42	58	90	95	175	196
Moving load with 0 mm stroke						
Product weight with 0 mm stroke	210	420	780	860	1,392	1,872
Additional load per 10 mm stroke	18	32	50	50	76	76

Materials

Sectional view



Standard cylinder	Basic version	S6
1 Piston rod	High-alloy steel	
2 Bearing cap	Anodised aluminium	
3 Cylinder barrel	Anodised aluminium	
4 End cap	Die-cast aluminium	
– Seals	Polyurethane, nitrile rubber	Fluorocarbon rubber
– Note on materials	Free of copper and PTFE	

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

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Standard cylinders CDN, ISO 15552, Clean Design

Technical data



ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

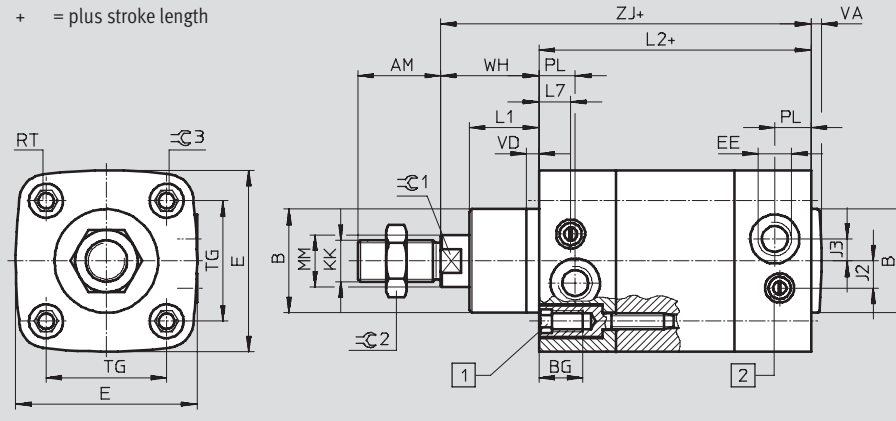
1.2

Dimensions

Download CAD data → www.festo.com/en/engineering

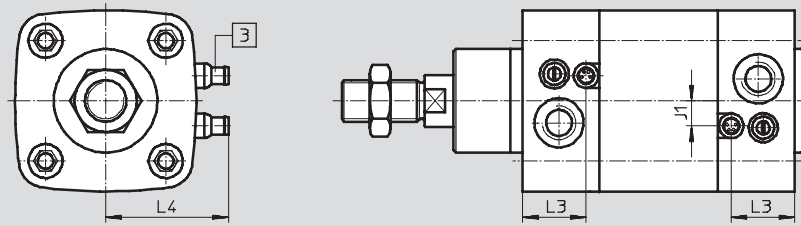
Basic version

+ = plus stroke length



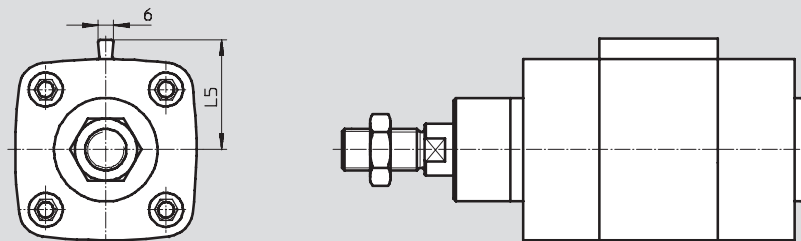
- 1 Socket head screw with female thread for mounting attachments
- 2 Regulating screw for adjustable end-position cushioning

With position sensing integrated in the end positions



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

With sensor mounting rail for external position sensing



∅ [mm]	AM	B ∅ d11	BG min.	E	EE	J1	J2	J3	KK	L1	L2	L3	L4 ±2
32	22	30	16	50	G $\frac{1}{8}$	6	6	5.5	M10x1.25	18	94 ±0.4	23.2	35
40	24	35	16	58	G $\frac{1}{4}$	8.5	8.4	6.5	M12x1.25	21	105 ±0.4	28.2	39
50	32	40	17	70	G $\frac{3}{4}$	9	9	8.5	M16x1.5	28	106 ±0.4	28.2	45
63	32	45	17	81	G $\frac{3}{8}$	14	14	11	M16x1.5	28.5	121 ±0.4	35.7	50
80	40	45	17	100	G $\frac{3}{8}$	21.5	14.5	8	M20x1.5	34.5	128 ±0.8	30.6	60
100	40	55	17	120	G $\frac{1}{2}$	22	16	17.5	M20x1.5	38	138 ±1	33.5	70

∅ [mm]	L5	L7	MM ∅	PL	RT	TG	PI	VD	WH ±1.4	ZJ	∅C1	∅C2	∅C3
32	30	10.5	12	17	M6	32.5	4	5	26	120	10	17	6
40	34	16	16	22	M6	38	4	5	30	135	13	19	6
50	40	12	20	20	M8	46.5	4	5	37	143	17	24	8
63	45.5	17.5	20	26	M8	56.5	4	5	37	158	17	24	8
80	55	15.4	25	16.4	M10	72	4	5	46	174	22	30	6
100	65	15.8	25	19	M10	89	4	5	51	189	22	30	6

Standard cylinders CDN, ISO 15552, Clean Design

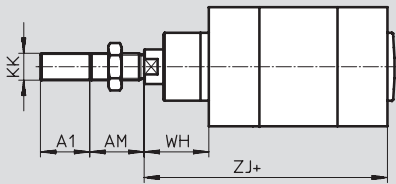
Technical data



Dimensions – Variants

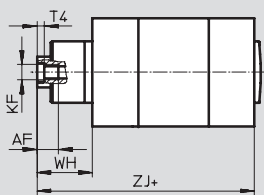
Download CAD data → www.festo.com/en/engineering

K2 – Extended male piston rod thread



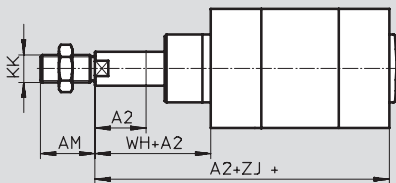
+ = plus stroke length

K3 – Piston rod with female thread



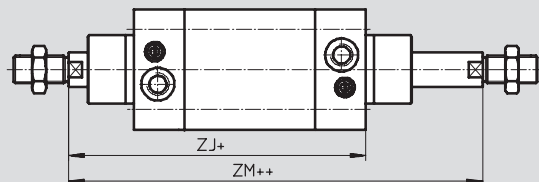
+ = plus stroke length

K8 – Extended piston rod



+ = plus stroke length

S2 – Through piston rod



+ = plus stroke length

++ = plus 2 stroke lengths

∅	AF	AM	A1	A2	KF	KK	T4	WH	ZJ	ZM
[mm]			max.	max.				±1.4		
32	12	22	35	500	M6	M10x1.25	2.6	26	120	146.6
40	12	24	35		M8	M12x1.25	3.3	30	135	165.3
50	16	32	70		M10	M16x1.5	4.7	37	143	180.3
63	16	32	70		M10	M16x1.5	4.7	37	158	195.9
80	20	40	70		M12	M20x1.5	6.1	46	174	222
100	20	40	70		M12	M20x1.5	6.1	51	189	240

Ordering data – Wearing parts kits

Piston ∅ [mm]	Part No.	Type	Piston ∅ [mm]	Part No.	Type
32	397 440	CDN-32-...-PPV-A ¹⁾	63	397 443	CDN-63-...-PPV-A ¹⁾
40	397 441	CDN-40-...-PPV-A ¹⁾	80	397 444	CDN-80-...-PPV-A ¹⁾
50	397 442	CDN-50-...-PPV-A ¹⁾	100	397 445	CDN-100-...-PPV-A ¹⁾

1) Assembly grease included in scope of delivery

Standard cylinders CDN, ISO 15552, 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 conjunction 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		
Sensing 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 ¹⁾		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


Standard cylinders CDN, ISO 15552, 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 conjunction 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	
Sensing 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 ¹⁾	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

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)
1.2

Standard cylinders CDN, ISO 15552, Clean Design

Ordering data – Modular products



ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

M Mandatory data					O Options							
Module No.	Function	Piston ∅	Stroke	Cushioning	Position sensing	Proximity sensor	Sensor mounting rail	Type of piston rod	Male thread extended	Female thread	Piston rod extended	Temperature resistant
193 660	CDN	32	10 ...	PPV	A	SME	R	S2	...K2	K3	...K8	S6
193 661		40	2,000		AIB	SMT						
193 662		50			AIV							
193 663		63			AIH							
193 664		80										
193 665		100										
Order example												
193 663	CDN	- 63	- 900	- PPV	- AIV	- SME	-	-	- 30K2	-	-	-

Ordering table										
Size	32	40	50	63	80	100	Condi- tions	Code	Enter code	
M Module No.	193 660	193 661	193 662	193 663	193 664	193 665				
Function	Standard cylinder, double-acting, based on ISO 15552 (Clean Design)								CDN	CDN
Piston ∅ [mm]	32	40	50	63	80	100		-...		
Stroke [mm]	10 ... 2,000								-...	
Cushioning	Pneumatic cushioning adjustable at both ends								-PPV	-PPV
O Position sensing	For proximity sensor							1	-A	
	At both ends, integrated							2	-AIB	
	Front, integrated							2	-AIV	
	Rear, integrated							2	-AIH	
Proximity sensor	SME (contacting)							3	-SME	
	SMT (contactless)							3	-SMT	
Sensor mounting rail	Sensor mounting rail for external position sensing							4	-R	
Type of piston rod	Through piston rod								-S2	
Male thread extended [mm]	Extended male piston rod thread			1 ... 35			1 ... 70		-...K2	
Female thread	Piston rod with female thread							5	-K3	
	(M6)	(M8)	(M10)	(M12)						
Piston rod extended [mm]	Extended piston rod at front								-...K8	
Temperature resistant	Heat-resistant seals max. 120 °C							6	-S6	

- 1 A Only with sensor rail R
- 2 AIB, AIV, AIH Only with proximity sensors SME or SMT
- 3 SME, SMT Only with position sensing AIB, AIV or AIH
- 4 R Only with position sensing A, AIB, AIV or AIH
- 5 K3 Not with male thread extended K2
- 6 S6 Not with position sensing A, AIB, AIV or AIH

Transfer order code

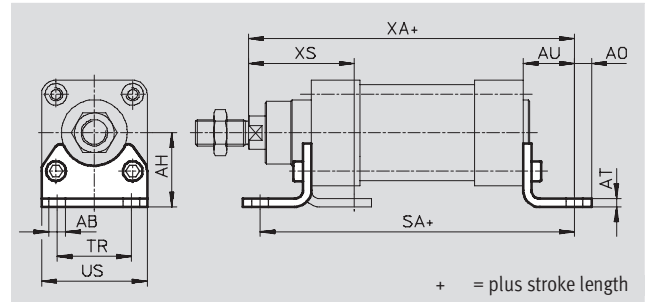
Standard cylinders CDN, ISO 15552, Clean Design



Accessories

Foot mounting CRHNC

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

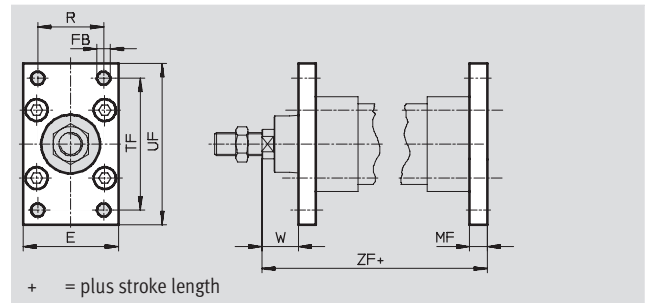
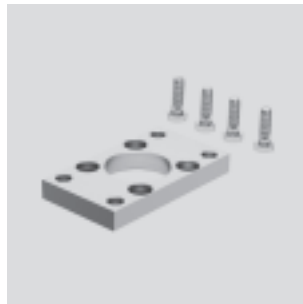


Dimensions and ordering data														
For \varnothing	AB	AH	AO	AT	AU	SA	TR	US	XA	XS	CRC ¹⁾	Weight	Part No.	Type
[mm]	\varnothing											[g]		
32	7	32	6.5	4	24	142	32	45	144.7	45.7	4	135	176 937	CRHNC-32
40	10	36	9	4	28	160.8	36	54	163.6	53.8	4	180	176 938	CRHNC-40
50	10	45	9.5	5	31	167.9	45	64	175	63.1	4	325	176 939	CRHNC-50
63	10	50	12.5	5	32	184.9	50	75	191.5	64.6	4	405	176 940	CRHNC-63
80	12	63	15	6	41	209.9	63	93	215.5	81.6	4	820	176 941	CRHNC-80
100	14.5	71	17.5	6	41	220.1	75	110	229.6	85.5	4	1,000	176 942	CRHNC-100

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

Flange mounting CRFNG

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



Dimensions and ordering data												
For \varnothing	E	FB	MF	R	TF	UF	W	ZF	CRC ¹⁾	Weight	Part No.	Type
[mm]		\varnothing								[g]		
32	45	7	10	32	64	80	16	130	4	240	161 846	CRFNG-32
40	54	9	10	36	72	90	20	145	4	300	161 847	CRFNG-40
50	65	9	12	45	90	110	25	155	4	550	161 848	CRFNG-50
63	75	9	12	50	100	120	25	170	4	710	161 849	CRFNG-63
80	93	12	16	63	126	150	30	190	4	1,680	161 850	CRFNG-80
100	110	14	16	75	150	175	35	205	4	2,450	161 851	CRFNG-100

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

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

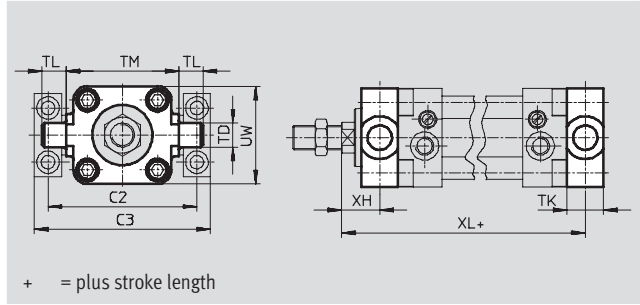
Standard cylinders CDN, ISO 1552, Clean Design

Accessories



Trunnion flange CRZNG

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

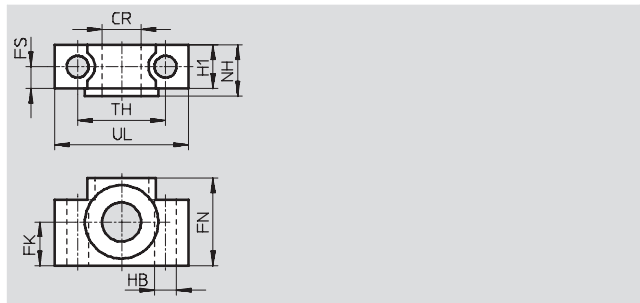
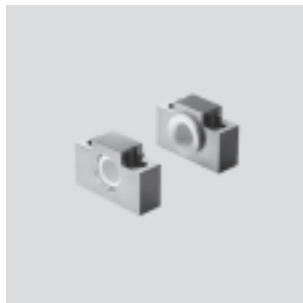


Dimensions and ordering data													
For \varnothing	C2	C3	TD \varnothing e9	TK	TL	TM	UW	XH	XL	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]													
32	71	86	12	16	12	50	50	18	128	4	150	161 852	CRZNG-32
40	87	105	16	20	16	63	55	20	145	4	260	161 853	CRZNG-40
50	99	117	16	24	16	75	65	25	155	4	430	161 854	CRZNG-50
63	116	136	20	24	20	90	75	25	170	4	640	161 855	CRZNG-63
80	136	156	20	28	20	110	100	32	188	4	1,300	161 856	CRZNG-80
100	164	189	25	38	25	132	120	32	208	4	2,400	161 857	CRZNG-100

1) Corrosion resistance class 4 to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. 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 \varnothing	CR	FK \varnothing	FN	FS	H1	HB \varnothing	NH	TH ± 0.2	UL	CRC ¹⁾	Weight [g]	Part No.	Type
[mm]	D11	± 0.1				H13							
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
100	25	25	50	16	24.5	14	28.5	50	75	4	740	161 877	CRLNZG-100

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

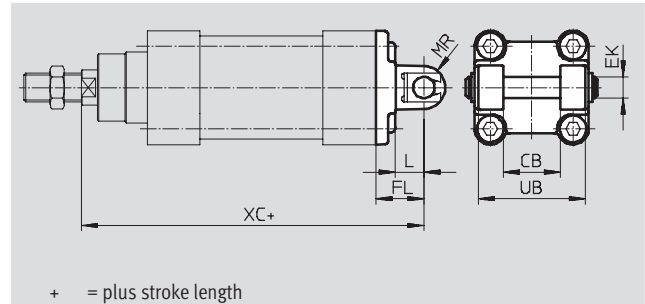
Standard cylinders CDN, ISO 15552, Clean Design



Accessories

Swivel flange SNCB- ... R3

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

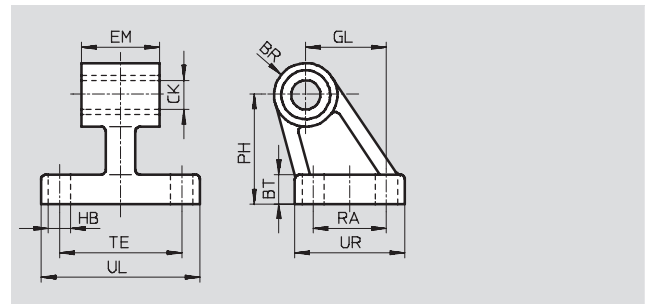


Dimensions and ordering data											
For \varnothing	CB	EK	FL	L	MR	UB	XC	CRC ¹⁾	Weight	Part No.	Type
[mm]	H14	\varnothing e8	± 0.2			h14			[g]		
32	26	10	22	13	8.5	45	142.7	3	100	176 944	SNCB-32-R3
40	28	12	25	16	12	52	160.6	3	150	176 945	SNCB-40-R3
50	32	12	27	16	12	60	171	3	225	176 946	SNCB-50-R3
63	40	16	32	21	16	70	191.5	3	365	176 947	SNCB-63-R3
80	50	16	36	22	16	90	210.5	3	610	176 948	SNCB-80-R3
100	60	20	41	27	20	110	229.6	3	925	176 949	SNCB-100-R3

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

Clevis foot mounting 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 ¹⁾	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
100	19	15	20	59.8	55	11	71	50	76	96	70	4	935	161 845	CRLNG-100

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

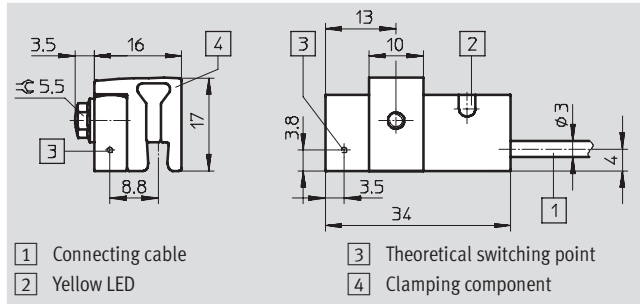
Standard cylinders CDN, ISO 15552, Clean Design

Accessories



Proximity sensor SMT-C1

Material:
Aluminium, high-alloy steel, stainless,
polypropylene, polyurethane
Free of copper, PTFE and silicone,
halogen-free



Design	
Constructional design	Block-shaped
Type of mounting	Clamped
Connection direction	In-line
Switching status display	Yellow LED

Technical data – PNP, N/O contact	
Sensing principle	Inductive
Method of measurement	Absolute
Electrical connection	Cable, 3-wire
Cable length	[m] 5.0
Operating voltage range	[V DC] 10 ... 30
Max. output current	[mA] 200
Max. switching capacity DC	[W] 6.0
Voltage drop	[V] < 1.8
Residual current	[mA] < 0.1
Switch-on time	[ms] ≤ 0.5
Switch-off time	[ms] ≤ 0.5
Hysteresis	[mm] ≤ 2.0
Protection against short circuit	Yes
Protection against polarity reversal	For all electrical connections
Inductive protective circuit	Adapted to MZ, MY, ME coils
Protection against overloading	Yes
Product weight	[g] 60
Protection class	IP65, IP67
Conforms to	DIN EN 60 947-5-2

Operating and environmental conditions		
Cable installation	Fixed	Flexible
Ambient temperature	[°C] -20 ... +70	-20 ... +70
Corrosion resistance class CRC ¹⁾	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

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

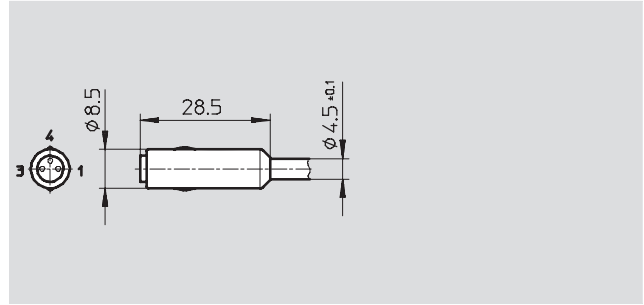
Standard cylinders CDN, ISO 15552, Clean Design



Accessories

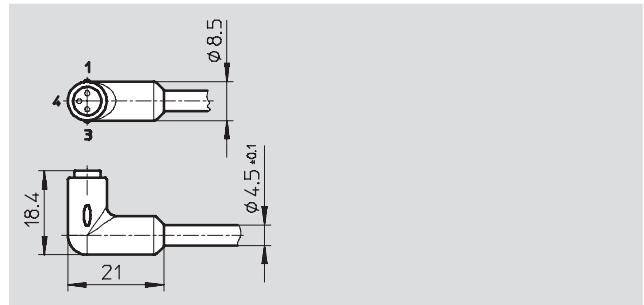
Cable with socket SIM-K-GD- ... -CDN

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



Cable with socket SIM-K-WD- ... -CDN

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



ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

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	
Current-carrying capacity		[A]	2.8	
Cable length		[m]	2.5	5
Cable composition		[mm ²]	3x 0.25	
Cable ends	Tinned			
Protection class	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			
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




Standard cylinders CDN, ISO 15552, Clean Design

FESTO


Accessories

ISO standard cylinders
ISO 15552 (ISO 6431 and VDMA 24562)

1.2

Ordering data – Push-in fittings					Technical data → Volume 3				
	Connection		Material	Weight [g]	Part No.	Type	PU ³⁾		
	Thread	Tubing O.D.							
With external hex									
	G1/8	4	Brass, nickel- and chrome-plated	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		
	G1/4	6		16	193 411	QS-F-G1/4-6 ¹⁾	10		
		8		16	193 412	QS-F-G1/4-8 ¹⁾	10		
		10		22	193 413	QS-F-G1/4-10 ¹⁾	10		
	G3/8	8		20	193 414	QS-F-G3/8-8 ¹⁾	10		
		10		30	193 415	QS-F-G3/8-10 ¹⁾	10		
		12		38	193 487	QS-F-G3/8-12 ¹⁾	10		
	G1/2	10		42	193 416	QS-F-G1/2-10 ¹⁾	10		
		12		46	193 417	QS-F-G1/2-12 ¹⁾	10		
	With external hex								
	R1/8	6	Stainless steel	9.9	162 862	CRQS-1/8-6 ²⁾	1		
		8		13	162 863	CRQS-1/8-8 ²⁾	1		
	R1/4	8		18	162 864	CRQS-1/4-8 ²⁾	1		
		10		22	162 865	CRQS-1/4-10 ²⁾	1		
	R3/8	10		29	162 866	CRQS-3/8-10 ²⁾	1		
		12		38	162 867	CRQS-3/8-12 ²⁾	1		
	R1/2	12		55	162 868	CRQS-1/2-12 ²⁾	1		
		16		59	162 869	CRQS-1/2-16 ²⁾	1		
	With internal hex								
		G1/8		4	Brass, nickel- and chrome-plated	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		
G1/4		8	14.6	533 930		QS-F-G1/4-8-1 ¹⁾	10		
		10	21	533 931		QS-F-G1/4-10-1 ¹⁾	10		
G3/8		12	34.3	533 932		QS-F-G3/8-12-1 ¹⁾	10		

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


Ordering data – Push-in L-fittings					Technical data → Volume 3		
	Connection		Material	Weight [g]	Part No.	Type	PU ³⁾
	Thread	Tubing O.D.					
With external hex							
	G1/8	4	Brass, nickel- and chrome-plated	17.6	193 418	QSL-F-G1/8-4 ¹⁾	10
		6		16	193 419	QSL-F-G1/8-6 ¹⁾	10
		8		20	193 420	QSL-F-G1/8-8 ¹⁾	10
	G1/4	6		24.5	193 421	QSL-F-G1/4-6 ¹⁾	10
		8		24	193 422	QSL-F-G1/4-8 ¹⁾	10
		10		34.6	193 423	QSL-F-G1/4-10 ¹⁾	10
		12		49	533 853	QSL-F-G1/4-12 ¹⁾	10
	G3/8	8		34.2	193 424	QSL-F-G3/8-8 ¹⁾	10
		10		36.6	193 425	QSL-F-G3/8-10 ¹⁾	10
		12		51.1	197 486	QSL-F-G3/8-12 ¹⁾	10
	G1/2	10		66	193 426	QSL-F-G1/2-10 ¹⁾	10
		12		70	193 427	QSL-F-G1/2-12 ¹⁾	10

- 1) With sealing ring
- 3) Packaging unit quantity


Standard cylinders CDN, ISO 15552, Clean Design





Accessories

Ordering data – Push-in L-fittings						Technical data → Volume 3	
	Connection		Material	Weight [g]	Part No.	Type	PU ³⁾
	Thread	Tubing O.D.					
With external hex							
	R1/8	6	Stainless steel	20	162 872	CRQSL-1/8-6 ²⁾	1
		8		27	162 873	CRQSL-1/8-8 ²⁾	1
	R1/4	8		31	162 874	CRQSL-1/4-8 ²⁾	1
		10		46	162 875	CRQSL-1/4-10 ²⁾	1
	R3/8	10		52	162 876	CRQSL-3/8-10 ²⁾	1
		12		69	162 877	CRQSL-3/8-12 ²⁾	1
	R1/2	12		89	162 878	CRQSL-1/2-12 ²⁾	1
		16		105	162 879	CRQSL-1/2-16 ²⁾	1



- 2) With PTFE coating
- 3) Packaging unit quantity

Ordering data – Plastic tubings, standard O.D.		Technical data → Volume 3
		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 → Volume 2	
	Connection		Material	Weight [g]	Part No.	Type
	Thread	For push-in fitting				
	G1/8	CRQS/CRQSL/CRQST,	Electrolytically polished stainless steel casting	44	161 404	CRGRLA-1/8-B
	G1/4	Quick Star		83	161 405	CRGRLA-1/4-B
	G3/8			150	161 406	CRGRLA-3/8-B
	G1/2			315	161 407	CRGRLA-1/2-B

Ordering data – Blanking screws, corrosion-resistant							
	For Ø	Material	CRC ¹⁾	Weight [g]	Part No.	Type	PU ³⁾
	32, 40	High-alloy steel	3	3	650 120	CR-M6x12-DIN6921-A2-70	4
	50, 63		3	6	650 121	CR-M8x16-DIN6921-A2-70	4
	80, 100		3	13	650 122	CR-M10x16-DIN6921-A2-70	4

- 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

Ordering data – Corrosion and acid resistant piston rod attachments						Technical data → 1 / 10.3-5	
	For Ø	Part No.	Type				
				For Ø	Part No.	Type	
Rod eye CRSGS				Rod clevis CRSG			
	32	195 582	CRSGS-M10x1,25		32	13 569	CRSG-M10x1,25
	40	195 583	CRSGS-M12x1,25		40	13 570	CRSG-M12x1,25
	50, 63	195 584	CRSGS-M16x1,5		50, 63	13 571	CRSG-M16x1,5
	80, 100	195 585	CRSGS-M20x1,5		80, 100	13 572	CRSG-M20x1,5