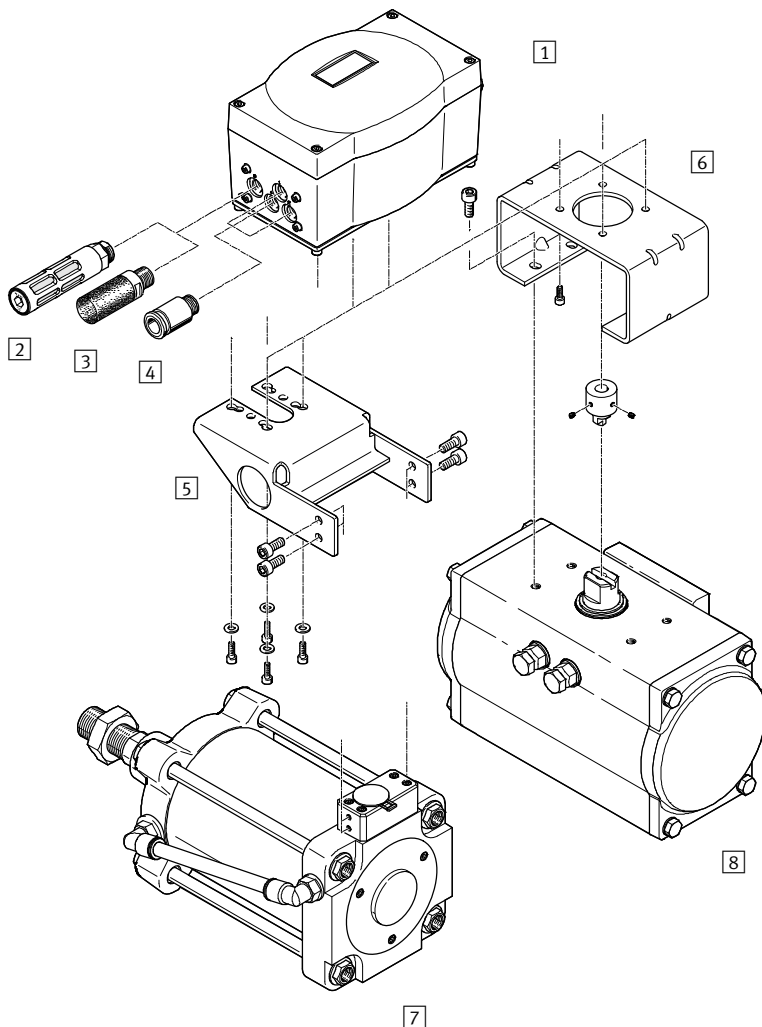


Positioners CMSX, 2nd generation

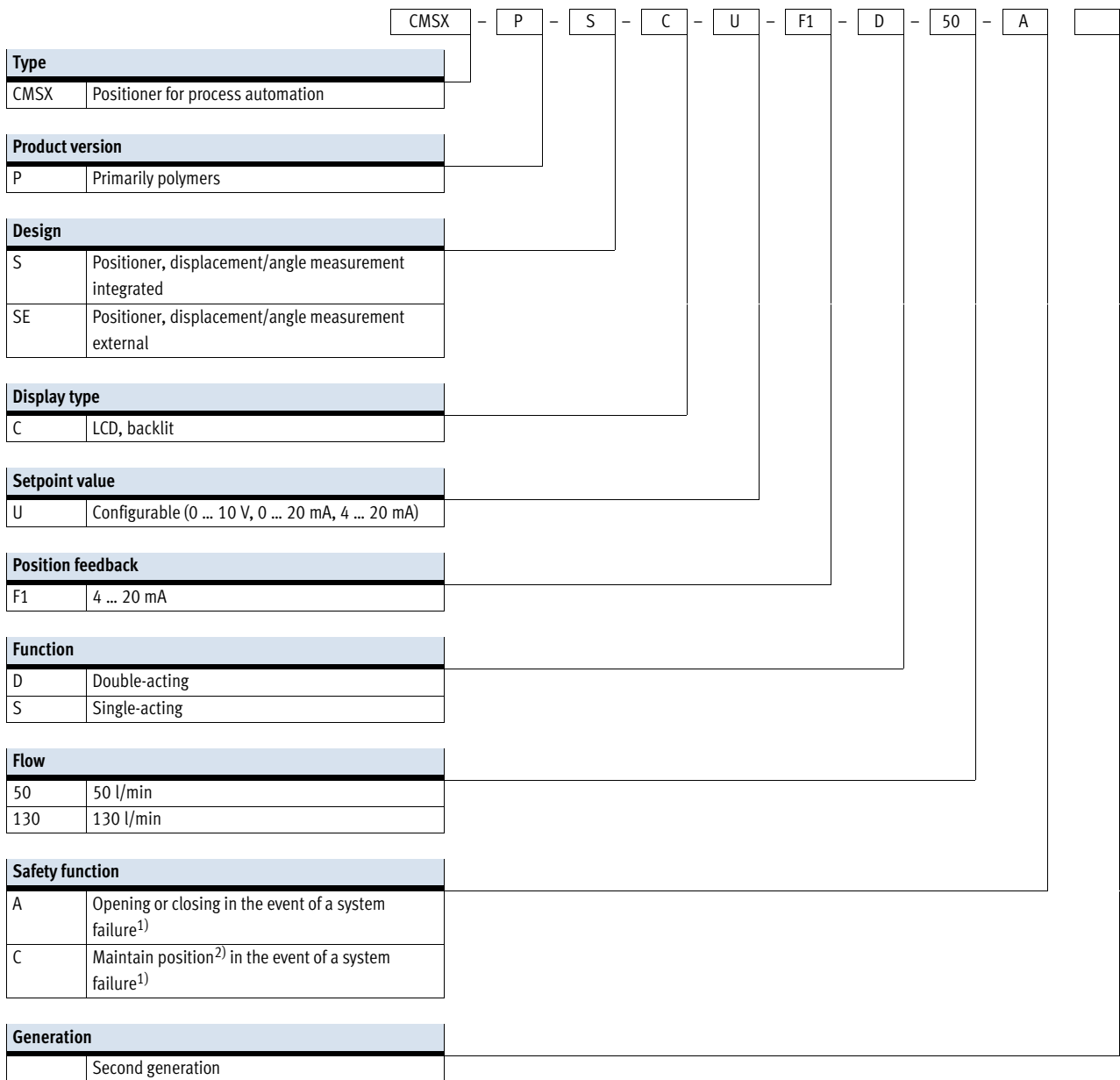
Peripherals overview



Mounting components and accessories		
	Brief description	→ Page/Internet
1	CMSX Positioner For controlling the position of single- and double-acting quarter turn actuators in process automation	6
2	U-Silencer With polymer, male thread	u
3	UC-Silencer For reducing noise at exhaust ports	uc
4	QS Push-in fittings A secure solution for every connection	qs
5	DADG Adapter kit For direct mounting of a positioner on the actuator	dadg
6	DARQ Mounting bridges For connecting positioners/actuators for process automation	18
7	DFPI Linear actuator Actuators for process automation with integrated displacement encoder	dfpi
8	DFPD Quarter turn actuator Actuators for process automation	dfpd

Positioners CMSX, 2nd generation




Type codes

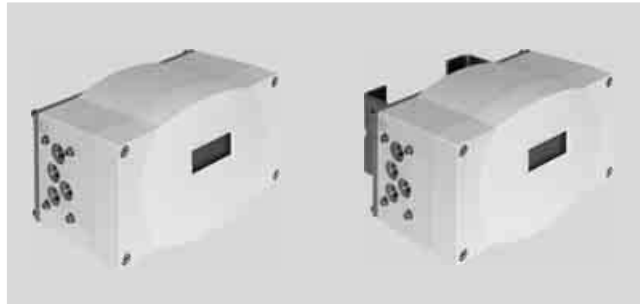


1) Failure of the power supply
 2) Pressurise quarter turn actuator at both ends

Positioners CMSX, 2nd generation

Technical data

-  Voltage
21.6 ... 26.4 V DC
-  Temperature range
-5 ... +60 °C
-  Flow rate
50 ... 130 l/min



General technical data	
Pneumatic connection	G $\frac{1}{8}$
Conforms to standard	VDI/VDE 3845 (NAMUR)
Cable connector	M20x1.5
Type of mounting	On flange to ISO 5211, via accessories
Type of process valve characteristic curves	Freely adjustable over 21 support points Linear, equal percentage (1:25, 1:33, 1:50)
Leakproof characteristics	Automatic Adjustable
Control range adaptation	Adjustable
Alarm for exceeding limit value	No
Active direction	Adjustable Rising, falling
UV resistance	Yes
Display type	Backlit LCD
Setting options	Via display and keys
Size of the dead zone	[%] 0.5 ... 10
Product weight	[g] 970

Electrical data	
Protection against short circuit	Yes
Protection against incorrect polarity	For operating voltage connections For setpoint value
Operating voltage range DC	[V] 21.6 ... 26.4
Setpoint value	[V] 0 ... 10 [mA] 0 ... 20 [mA] 4 ... 20
Max. output current	[mA] 500
Max. load resistance of current output	[ohms] 500
Max. current consumption	[A] 1
Idle current	[mA] 90 ... 300
Switching level	[V] Signal 0 \leq 5 [V] Signal 1 \geq 10

Positioners CMSX, 2nd generation

Technical data

Operating and environmental conditions		
Operating pressure	[bar]	3 ... 8
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium		Lubricated operation not possible
Ambient temperature	[°C]	-5 ... 60
Temperature of medium	[°C]	-5 ... 60
Storage temperature	[°C]	-20 ... 60
Corrosion resistance class CRC ¹⁾		2
CE marking (see declaration of conformity)		To EU EMC Directive
Approval certificate		C-Tick
Protection class		IP65

1) Corrosion resistance class 2 according to Festo standard 940070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with the surrounding industrial environment or media such as coolants or lubricating agents.

Materials	
Housing	PC
Threaded coupling	High-alloy stainless steel
Adapter plate	Aluminium
Plate	Aluminium
Seals	NBR
Cable connection	PA
Note on materials	Contains paint-wetting impairment substances
	RoHS compliant

Positioners CMSX, 2nd generation

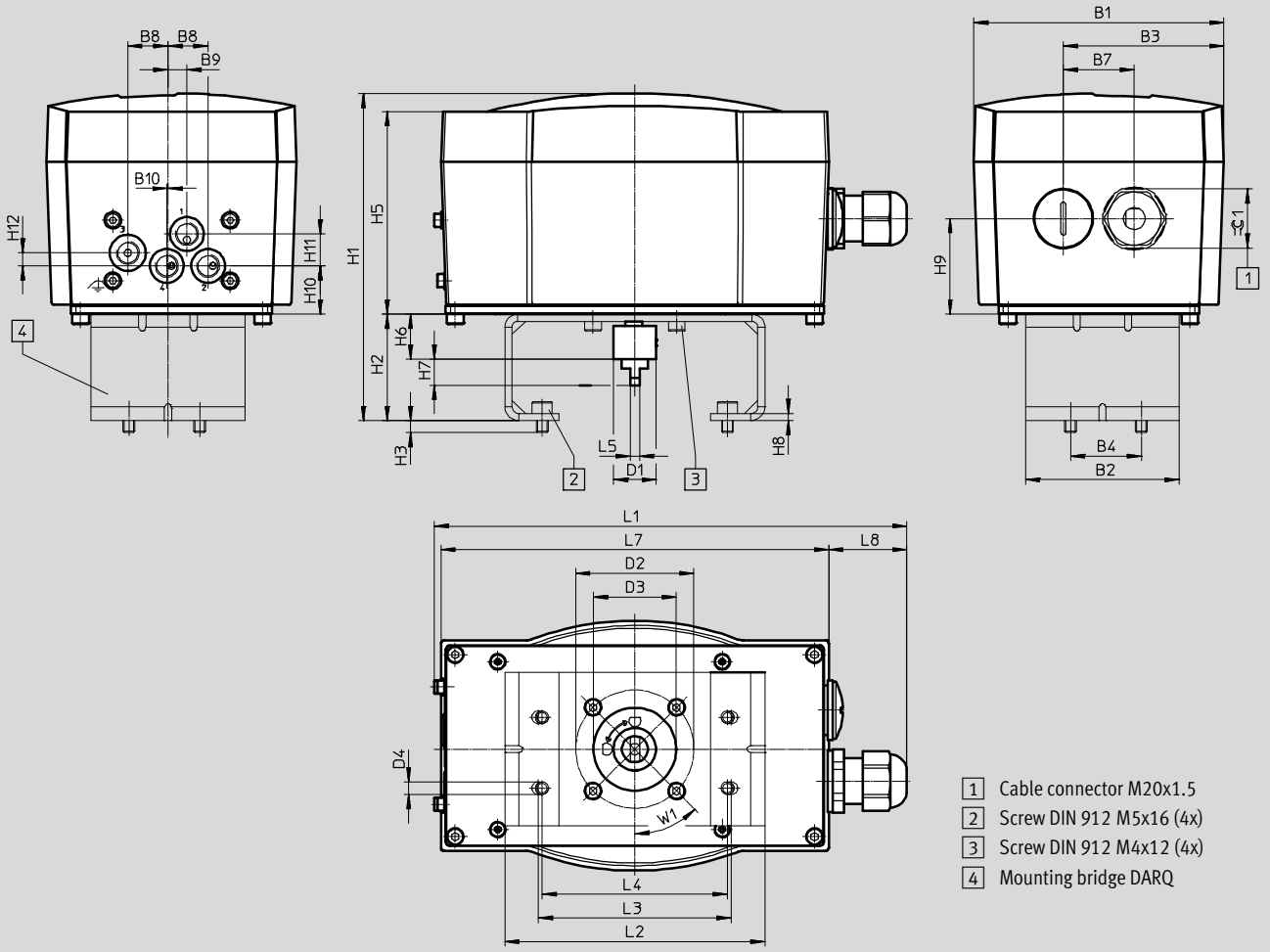
Technical data



Dimensions

[Download CAD data](#) →

Displacement/angle measurement integrated



- 1 Cable connector M20x1.5
- 2 Screw DIN 912 M5x16 (4x)
- 3 Screw DIN 912 M4x12 (4x)
- 4 Mounting bridge DARQ

Type	B1	B2	B3	B4	B7	B8	B9	B10	D1	D2	D3	D4	H3	H5
CMSX-P-S-C-U-F1-D-130-...	105.8	65	67.9	30	30	17	8	0.5	18	50	35	5.4	5	85.8
CMSX-P-S-C-U-F1-D-50-...														
CMSX-P-S-C-U-F1-S-50-...														
CMSX-P-S-C-U-F1-S-130-...														

Type	H6	H7	H8	H9	H10	H11	H12	L1	L5	L7	L8	W1	∠ 1
CMSX-P-S-C-U-F1-D-130-...	19	11	3	40.5	20.5	13.5	5.5	200	4	164	32.5	45°	25
CMSX-P-S-C-U-F1-D-50-...													
CMSX-P-S-C-U-F1-S-50-...													
CMSX-P-S-C-U-F1-S-130-...													



Positioners CMSX, 2nd generation

Technical data

Positioner	Mounting bridge	H1	H2	L2	L3	L4
CMSX-P-S-C-U-F1-D-130-...	DARQ-K-P-A1-F05-20-R1	138.5	45	110	81.6	78.4
	DARQ-K-P-A1-F05-30-R1	148.5	55			
	DARQ-K-P-A2-F05-30-R1			160	131.6	128.4
	DARQ-K-P-A2-F05-50-R1	168.5	75			
CMSX-P-S-C-U-F1-D-50-...	DARQ-K-P-A1-F05-20-R1	138.5	45	110	81.6	78.4
	DARQ-K-P-A1-F05-30-R1	148.5	55			
	DARQ-K-P-A2-F05-30-R1			160	131.6	128.4
	DARQ-K-P-A2-F05-50-R1	168.5	75			
CMSX-P-S-C-U-F1-S-50-...	DARQ-K-P-A1-F05-20-R1	138.5	45	110	81.6	78.4
	DARQ-K-P-A1-F05-30-R1	148.5	55			
	DARQ-K-P-A2-F05-30-R1			160	131.6	128.4
	DARQ-K-P-A2-F05-50-R1	168.5	75			
CMSX-P-S-C-U-F1-S-130-...	DARQ-K-P-A1-F05-20-R1	138.5	45	110	81.6	78.4
	DARQ-K-P-A1-F05-30-R1	148.5	55			
	DARQ-K-P-A2-F05-30-R1			160	131.6	128.4
	DARQ-K-P-A2-F05-50-R1	168.5	75			

Positioners CMSX, 2nd generation

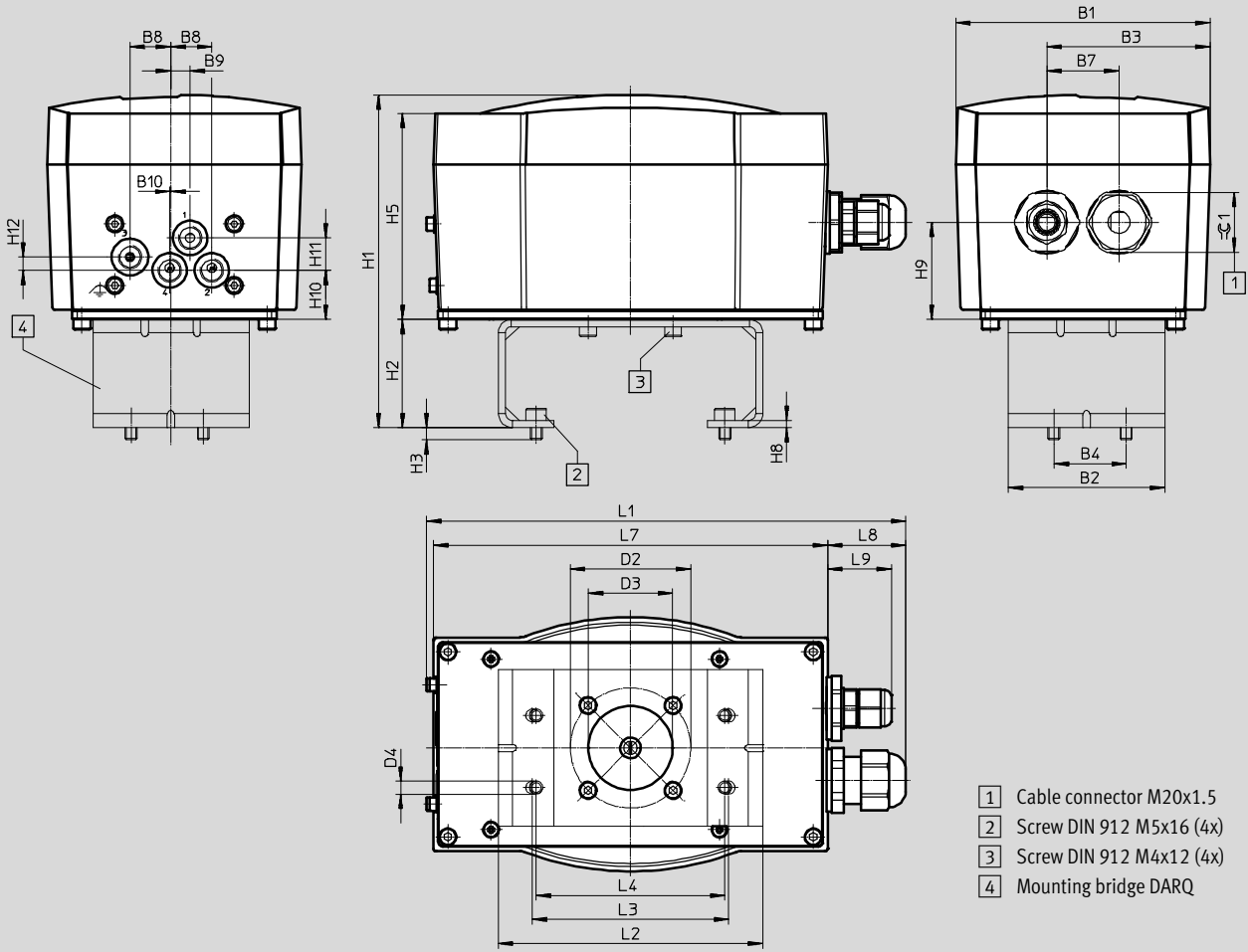
Technical data



Dimensions

[Download CAD data](#) →

Displacement/angle measurement external



- 1 Cable connector M20x1.5
- 2 Screw DIN 912 M5x16 (4x)
- 3 Screw DIN 912 M4x12 (4x)
- 4 Mounting bridge DARQ

Type	B1	B2	B3	B4	B7	B8	B9	B10	D2	D3	D4	H3
CMSX-P-S-A1-C-U-F1-D-...	105.8	65	67.9	30	30	17	8	0.5	50	35	5.4	5

Type	H5	H8	H9	H10	H11	H12	L1	L7	L8	L9	⌀1
CMSX-P-S-A1-C-U-F1-D-...	85.8	3	40.5	20.5	13.5	5.5	200	164	32.5	25.6	25


Positioner	Mounting bridge	H1	H2	L2	L3	L4
CMSX-P-S-A1-C-U-F1-D-...	DARQ-K-P-A1-F05-20-R1	138.5	45	110	81.6	78.4
	DARQ-K-P-A1-F05-30-R1	148.5	55			
	DARQ-K-P-A2-F05-30-R1	168.5	75	160	131.6	128.4
	DARQ-K-P-A2-F05-50-R1					





Positioners CMSX, 2nd generation

Technical data

★ Core product range

Ordering data					
Positioner		Standard nominal flow rate [l/min]	Sensing range in degrees [deg]	Part No.	Type
	Can be set to open or close in the event of a system failure	50	0 ... 100	★ 3929313	CMSX-P-S-C-U-F1-D-50-A
		50		★ 3929370	CMSX-P-S-C-U-F1-S-50-A
		130	–	★ 3929539	CMSX-P-SE-C-U-F1-D-130-A

Ordering data					
Positioner		Standard nominal flow rate [l/min]	Sensing range in degrees [deg]	Part No.	Type
	Can be set to open or close in the event of a system failure	130	0 ... 100	3929312	CMSX-P-S-C-U-F1-D-130-A
				3929369	CMSX-P-S-C-U-F1-S-130-A
	Maintain position in the event of a system failure	130	–	3929540	CMSX-P-SE-C-U-F1-D-130-C
			0 ... 100	3929314	CMSX-P-S-C-U-F1-D-130-C
		50		3929315	CMSX-P-S-C-U-F1-D-50-C

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock