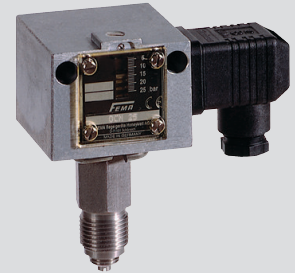


DCM 025

DCM pressure switches and pressure monitors

for overpressure, for non-aggressive liquid and gaseous media



DCM 25

Technical data

Pressure connection

External thread G 1/2 (pressure gauge connection) according to DIN 16 288 and internal thread G 1/4 according to ISO 228 Part 1.

Switching device

Robust housing (200) made of seawater-resistant diecast aluminium GD Al Si 12.

Degree of protection

IP 54, in vertical position.

Pressure sensor materials

DCM 3...DCM 63 Metal bellows: 1.4571
Sensor housing: 1.4104
DCM 025 – DCM 1 Metal bellows: Cu Sensor housing: Cu + Ms
DCM 4016/ Diaphragm: Perbunan
DCM 4025 Sensor housing: 1.4301
DCM 1000 Diaphragm: Perbunan Sensor housing: Brass

Mounting position

Vertically upright and horizontal. DCM 4016 and 4025 vertically upright.

Ambient temp. at switching device

–25...+70 °C, except: DCM 4016, 4025, 1000: –15...+60 °C
For EEx-d versions: –15...+60 °C

Max. medium temperature

The maximum medium temperature at the pressure sensor must not exceed the permitted ambient temperature at the switching device. Temperatures may reach 85°C for short periods (not EEx-d). Higher medium temperatures are possible provided the above limit values for the switching device are ensured by suitable measures (e.g. siphon).

Mounting

Directly on the pressure line (pressure gauge-connection) or on a flat surface with two 4 mm Ø screws.

Switching pressure

Adjustable from outside with screwdriver.

Switching differential

Not adjustable with DCM and Ex-DCM types. Adjustable from outside with DCM-203 types. For values see Product Summary.

Contact arrangement

Single-pole changeover switch.

Switching capacity	250 VAC		250 VDC	
	(ohm)	(ind)	(ohm)	(ohm)
Normal	8 A	5 A	0.3 A	8 A
EEx-d	3 A	2 A	0.03 A	3 A

Type	Setting range	Switching differential (mean values)	Max. permissible pressure	Materials in-contact with medium	Dimensioned drawing
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Switching differential not adjustable

DCM 4016	1...16 mbar	2 mbar	1 bar	Perbunan	1 + 11
DCM 4025	4...25 mbar	2 mbar	1 bar	+ 1.4301	
DCM 1000	10...100 mbar	12 mbar	10 bar	Perbunan + MS	1 + 10
DCM 025	0.04...0.25 bar	0.03 bar	6 bar		
DCM 06	0.1...0.6 bar	0.04 bar	6 bar	Cu + Ms	1 + 14
DCM 1	0.2...1.6 bar	0.04 bar	6 bar		
DCM 506	15...60 mbar	10 mbar	12 bar		1 + 12
DCM 3	0.2...2.5 bar	0.1 bar	16 bar		1 + 18
DCM 6	0.5...6 bar	0.15 bar	16 bar		
DCM 625	0.5...6 bar	0.25 bar	25 bar		
DCM 10	1...10 bar	0.3 bar	25 bar	1.4104	1 + 17
DCM 16	3...16 bar	0.5 bar	25 bar	+	
DCM 25	4...25 bar	1.0 bar	60 bar	1.4571	1 + 16
DCM 40	8...40 bar	1.3 bar	60 bar		
DCM 63	16...63 bar	2.0 bar	130 bar		

Switching differential adjustable

DCM 025-203	0.04...0.25 bar	0.03...0.4 bar	6 bar		
DCM 06-203	0.1...0.6 bar	0.04...0.5 bar	6 bar	Cu + Ms	1 + 14
DCM 1-203	0.2...1.6 bar	0.07...0.55 bar	6 bar		
DCM 3-203	0.2...2.5 bar	0.15...1.5 bar	16 bar		1 + 18
DCM 6-203	0.5...6 bar	0.25...2.0 bar	16 bar		
DCM 10-203	1...10 bar	0.5...2.8 bar	25 bar		1 + 17
DCM 16-203	3...16 bar	0.7...3.5 bar	25 bar	1.4104	
DCM 25-203	4...25 bar	1.3...6.0 bar	60 bar	+	
DCM 40-203	8...40 bar	2.6...6.6 bar	60 bar	1.4571	1 + 16
DCM 63-203	16...63 bar	3.0...10 bar	130 bar		

For smaller pressure ranges see also VCM, DGM, HCD and DPS sheets.

For additional functions refer to ZF data sheet.

Ex version, (housing 700), explosion protection EEx-d

Ex-DCM 4016	1...16 mbar	2 mbar	1 bar	Perbunan	3 + 11
Ex-DCM 4025	4...25 mbar	2 mbar	1 bar	Perbunan	3 + 11

For other Ex-devices, see type series VCM, DNM, DNS, DDCM, DWR, DGM described below.

Calibration

The **DCM** series is calibrated for falling pressure. This means that the adjustable switching pressure on the scale corresponds to the switching point at falling pressure. The reset point is higher by the amount of the switching differential. (See also page 30, 1. Calibration at lower switching point).



Degree of protection:
IP 54