



DCM25

## DCM/DNM

### Pressure switches and pressure monitors for overpressure

This universal pressure switch can be used in general mechanical engineering and the printing machine industry, as well as in pneumatics and hydraulics.

SIL 2 according IEC 61508-2



#### 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 die cast aluminium GD Al Si 12.

##### Protection class

IP 54, in vertical position.

##### Pressure sensor materials

DNM025...DCM63 Metal bellows: 1.4571  
Sensor housing: 1.4104  
DCM025 – DCM 1 Metal bellows: Cu Sensor housing: Cu + Ms  
DCM4016/ Diaphragm: Perbunan  
DCM4025 Sensor housing: 1.4301  
DCM1000 Diaphragm: Perbunan Sensor housing: Brass

##### Mounting position

Vertically upright and horizontal. DCM4016 and 4025 vertically upright.

##### Ambient temp. at switching device

-25...+70 °C, except: DCM4016, 4025, 1000: -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). 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 screw driver.

##### Switching differential

Not adjustable with DCM and types. Adjustable from outside with DCMV types. For values see Product Summary.

##### Contact arrangement

Single pole change over switch.

Switching capacity	250 VAC		250 VDC	
	(ohm)	(ind)	(ohm)	(ohm)
Normal	8 A	5 A	0.3 A	8 A

Type	Setting range	Switching differential (mean values)	Max. permissible pressure	Materials in-contact with medium	Dimensioned drawing
<b>Switching differential not adjustable</b>					<b>page 21 + 22</b>
DCM4016	1...16 mbar	2 mbar	1 bar	Perbunan	1 + 11
DCM4025	4...25 mbar	2 mbar	1 bar	+ 1.4301	
DCM1000	10...100 mbar	12 mbar	10 bar	Perbunan + MS	1 + 10
DCM025	0.04...0.25 bar	0.03 bar	6 bar	Cu + Ms	
DCM06	0.1...0,6 bar	0.04 bar	6 bar	Cu + Ms	1 + 14
DCM1	0.2...1,6 bar	0.04 bar	6 bar	Cu + Ms	
DNM025	0.04...0.25 bar	0.03 bar	6 bar		1 + 15
DCM506	15...60 mbar	10 mbar	12 bar		1 + 12
DCM3	0.2...2.5 bar	0.1 bar	16 bar	Sensor housing	1 + 18
DCM6	0.5...6 bar	0.15 bar	16 bar		
DCM625	0.5...6 bar	0.25 bar	25 bar	1.4104	1 + 17
DCM10	1...10 bar	0.3 bar	25 bar	+	
DCM16	3...16 bar	0.5 bar	25 bar	Pressure bellow	
DCM25	4...25 bar	1.0 bar	60 bar	1.4571	1 + 16
DCM40	8...40 bar	1.3 bar	60 bar		
DCM63	16...63 bar	2.0 bar	130 bar		

#### Switching differential adjustable

DCMV025	0.04...0.25 bar	0.03...0.4 bar	6 bar		
DCMV06	0.1...0.6 bar	0.04...0.5 bar	6 bar	Cu + Ms	1 + 14
DCMV1	0.2...1.6 bar	0.07...0.55 bar	6 bar		
DCMV3	0.2...2.5 bar	0.15...1.5 bar	16 bar	Sensor housing	1 + 18
DCMV6	0.5...6 bar	0.25...2.0 bar	16 bar		
DCMV625	0.5...6 bar	0.25...2.0 bar	25 bar	1.4104	1 + 17
DCMV10	1...10 bar	0.5...2.8 bar	25 bar	+	
DCMV16	3...16 bar	0.7...3.5 bar	25 bar	Pressure bellow	
DCMV25	4...25 bar	1.3...6.0 bar	60 bar	1.4571	1 + 16
DCMV40	8...40 bar	2.6...6.6 bar	60 bar		
DCMV63	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 page 26 – 28.

#### 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 23, 1. Calibration at lower switching point).

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