



DWAM1

DWAM, DWAMV, SDBAM

Pressure monitors / pressure limiters

These series are particularly suitable for maximum pressure monitoring in steam and hot-water systems. The pressure switch is "of special construction", with a self monitoring pressure sensor, built in accordance with Pressure Equipment Directive PED 2014/68/EU.



It can be used as a pressure monitor or a pressure limiter for maximum pressure monitoring (systems in accordance with TRBS DIN EN12828) systems in accordance with DIN EN12952-11 and DIN EN12953-9 and is available with or without adjustment.

SIL 2 according IEC 61508-2

Technical data

Pressure connection

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

Switching device

Rugged housing (200) made of seawater resistant die cast aluminium.

Materials

Pressure bellows: Material no. 1.4571
Sensor housing: Material no. 1.4104
Switch housing: GD Al Si 12 according to DIN 1725

Mounting position

Vertically upright and horizontal.

Ambient temperature at switching device
-20 to +70°C.

Medium temperature -20 to +70°C.

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 upper limit at the switching device is 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.

Calibration for maximum pressure switch

The pressure monitors and safety pressure limiting devices are calibrated so that, **under rising pressure**, switching takes place at the defined switching pressure. The reset point under falling pressure is lower by the amount of the switching differential, or, in the case of pressure limiting devices, by the fall in pressure specified in the table. The scale value corresponds to the upper switching point.

Switching differential

See Product Summary.

Contact arrangement

Single pole change over switch.

Switching capacity	250 VAC (ohm)	250 VDC (ohm)	24 VDC (ohm)
Normal	8 A	5 A	0.3 A
			8 A

Sealing P2

Generally available for SDBAM limiters.

Bursting pressure

For all types ≥ 100 bar.
Verified by TÜV test.

Component tested for

Steam Systems according to TRD 604
Hot water Systems according to DIN EN12828
VdTÜV Memorandum "Pressure 100"

Testing basis

Function

Pressure monitor / Pressure limiter

Directing of action

For maximum pressure monitoring only
"Of special construction" (self monitoring sensor with safety diaphragm)

Sensor

Product Summary Maximum pressure monitoring (↑)

(for other pressure ranges see DWR series)

Type	Setting range	Switching differential (Tolerance)	Max. permissible pressure	Dimensioned drawing
Pressure monitors without differential adjustment for max. pressure monitoring*				
page 21 + 22				
DWAM06	0,1...0,6 bar	20 ... 50 mbar	5 bar	
DWAM1	0,2...1,6 bar	20 ... 80 mbar	5 bar	1 + 15
DWAM6	1,2...6 bar	0,1 ... 0,26 bar	10 bar	
DWAM625	1,2...6 bar	0,13 ... 0,31 bar	20 bar	
DWAM16	3...16 bar	0,2 ... 0,6 bar	20 bar	1 + 19
DWAM32	6...32 bar	0,6 ... 1,6 bar	45 bar	
Pressure monitors with differential adjustment for max. pressure monitoring				
DWAMV1	0,2...1,6 bar	0,12...0,6 bar	5 bar	1 + 15
DWAMV6	1,2...6 bar	0,4...1,5 bar	10 bar	
DWAMV16	3...16 bar	0,8...2,5 bar	20 bar	1 + 19
DWAMV32	6...32 bar	2,5...6,0 bar	45 bar	

Pressure limiters for maximum pressure monitoring (with internal interlock)

	Pressure change for unlocking		
	Setting range	Pressure change	Max. permissible pressure
SDBAM1	0,2...1,6 bar	0,12 bar	5 bar
SDBAM2,5	0,4...2,5 bar	0,18 bar	5 bar
SDBAM6	1,2...6 bar	0,42 bar	10 bar
SDBAM625	1,2...6 bar	0,6 bar	20 bar
SDBAM16	3...16 bar	1,1 bar	20 bar
SDBAM32	6...32 bar	3,0 bar	45 bar

* If a downstream external interlock is added, DWAM... pressure monitors can also be used as pressure limiters (see page 24).

- Sealing device P2 is included for SDBAM limiters and can also be retrofitted to pressure monitors on request. See sealing P2.
- DWAM... also available in Ex-i equipment. See DBS series.

Minimum pressure controls

- Minimum pressure monitor: DWR... page 55
- Minimum pressure limiter: DWR...-206 page 56