DWR625

DWR

Pressure monitors

Especially suitable as a pressure monitor or pressure limiter for fuel gases (DVGW Worksheet G 260) and liquid fuels (e.g. fuel oil), as well as for steam systems according to TRD 604 and hot-water systems to DIN EN12828, systems in accordance to DIN EN12952-11 and DIN EN12953-9. The DWR is used to monitor maximum and minimum pressures. This pressure switch is "of special construction" and has been tested with 2 million operating cycles. TÜV and DVGW tests exists.

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 (for gas applications internal thread permissible only up to 4 bar).

Switching device
Rugged housing (200) made of seawater-resistant diecast aluminium.

Materials
Pressure bellows: Material no. 1.4571
Sensor housing: Material no. 1.4104 Switch housing: GD Al Si 12 (DIN 1725)

Mounting position
Vertically upright and horizontal.

Ambient temperature at switching device
–25 to +70°C,
Medium temperature –25 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 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.

Calibration
The DWR series is calibrated for rising pressure. This means that the adjustable switching pressure on the scale corresponds to the switching point at rising pressure. The reset point is lower by the amount of the switching differential. (See also page 27, 2. Calibration at upper switching point). In version ...-203 the switching differential is adjustable. The basic calibration is maintained.

Bursting pressure
For all types ≥ 100 bar, verified by TÜV test.

Switching differential For values see Product Summary.

Contact arrangement Single pole changeover switch.

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

Protection class IP 54 according to DIN 40 050

Component tested for	
Steam	Systems according to TRBS
Hot water	Systems according to DIN EN12828
Fuel gases	DVGW Worksheet G 260
Pressure tank	DIN EN764-7
Function	Pressure monitor or pressure limiter (with external interlock)
Direction of action	**For maximum and minimum pressure monitoring (DWFS, SDBFS)**
Sensor	**"of special construction"** by testing with 2 million cycles.

Product Summary

Type	Setting range	Switching differential (mean values)	Maximum working pressure	Dimensioned drawing
Pressure monitors without differential adjustment				**p. 25 + 26**
DWR06	0.1…0.6 bar	0.04 bar	6 bar	1 + 15
DWR1	0.2…1.6 bar	0.06 bar		
DWR3	0.2…2.5 bar	0.1 bar	16 bar	1 + 18
DWR6	0.5…6 bar	0.2 bar		
DWR625	0.5…6 bar	0.25 bar	25 bar	1 + 17
DWR16	3…16 bar	0.5 bar		
DWR25	4…25 bar	1.0 bar	63 bar	1 + 16
DWR40	8…40 bar	1.3 bar		
Switching differential adjustable				
DWR06–203	0.1…0.6 bar	0.08…0.5 bar	6 bar	1 + 15
DWR1–203	0.2…1.6 bar	0.15…0.6 bar		
DWR3–203	0.2…2.5 bar	0.17…1.2 bar	16 bar	1 + 18
DWR6–203	0.5…6 bar	0.3…1.4 bar		
DWR625–203	0.5…6 bar	0.4…2.5 bar	25 bar	1 + 17
DWR16–203	3…16 bar	0.75…3.15 bar		
DWR25–203	4…25 bar	1.3…6.0 bar	63 bar	1 + 16
DWR40–203	8…40 bar	2.3…6.6 bar		

Ex-DWR
see page 69

DWR625-205

DWR

Pressure limiters

Especially suitable as a pressure limiter for fuel gases (DVGW Worksheet G 260) and liquid fuels (e.g. fuel oil), as well as for steam systems according to TRBS and hot-water systems to DIN EN12828, systems in accordance to DIN EN12952-11 and DIN EN12953-9.

The DWR-205/-206 is used to limit maximum and minimum pressures and has an internal interlock.

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 (for gas applications internal thread permissible only up to 4 bar).

Switching device
Rugged housing (200) made of seawater-resistant diecast aluminium.

Materials
Pressure bellows: Material no. 1.4571
Sensor housing: Material no. 1.4104
Switch housing: GD Al Si 12 (DIN 1725)

Mounting position Vertically upright and horizontal.

Ambient temperature at switching device
–25…+70°C

Medium temperature –25…+70°C.
The 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.

Calibration
The **DWR-205** series is calibrated for rising pressure. This means that the adjustable switching pressure on the scale corresponds to the switching point at rising pressure. The reset point is lower by the amount of the switching differential. (See also page 17, 2. Calibration at upper switching point). The **DWR-206** 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 17, 1. Calibration at lower switching point).

Bursting pressure For all types ≥ 100 bar, verified by TÜV test.

Switching differential For values see Product Summary.

Contact arrangement Single pole changeover switch.

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

Protection class IP 54 according to DIN 40 050

Sealing P2
On request (can be fitted later).

Component tested for	**Steam**	System according to TRBS
	Hot water	System according to DIN EN12828
	Fuel gases	DVGW Worksheet G 260
	Pressure tank	DIN EN764-7
Function	Pressure limiter (with internal interlock)	
Direction of action	**For maximum and minimum pressure monitoring (SDBFS)**	
Sensor	**"Of special construction"** by testing with 2 million cycles.	

Important: When selecting the limiter, it is necessary to decide whether the device is to be used for maximum or minimum pressure monitoring. The direction of action cannot be reversed at the pressure limiter.

Product Summary

Type	Setting range	Switching differential (mean values)	Maximum working pressure	Dimensioned drawing
Maximum pressure limiters				**page 25 + 26**
DWR06–205	0.1…0.6 bar	0.06 bar	6 bar	1 + 15
DWR1–205	0.2…1.6 bar	0.09 bar		
DWR3–205	0.2…2.5 bar	0.20 bar	16 bar	1 + 18
DWR6–205	0.5…6 bar	0.30 bar		
DWR625–205	0.5…6 bar	0.50 bar	25 bar	1 + 17
DWR16–205	3…16 bar	0.70 bar		
DWR25–205	4…25 bar	1.4 bar	63 bar	1 + 16
DWR40–205	8…40 bar	2.3 bar		
Minimum pressure limiters				
DWR06–206	0.1…0.6 bar	0.06 bar	6 bar	1 + 15
DWR1–206	0.2…1.6 bar	0.09 bar		
DWR3–206	0.2…2.5 bar	0.20 bar	16 bar	1 + 18
DWR6–206	0.5…6 bar	0.30 bar		
DWR625–206	0.5…6 bar	0.50 bar	25 bar	1 + 17
DWR16–206	3…16 bar	0.70 bar		
DWR25–206	4…25 bar	1.4 bar	63 bar	1 + 16
DWR40–206	8…40 bar	2.3 bar		

* Maximum working pressure and dimensions as for type series DWR. Pressure monitors DWR… (page 59) can also be used as maximum pressure and minimum pressure limiters with external interlock. You will find other maximum pressure limiters with safety sensor, type series SDBAM…, on page 53. Types DWAM… can also be used with external interlock as maximum pressure limiters.

FEMA by Honeywell

CE TÜV tested DIN Geprüft DVGW TÜV Protection Class: IP 54