



## DW-Pressure Wave Switches

### DW50

- Fixed activating pressure
- Fixed valve orifice
- Self-cleaning contacts

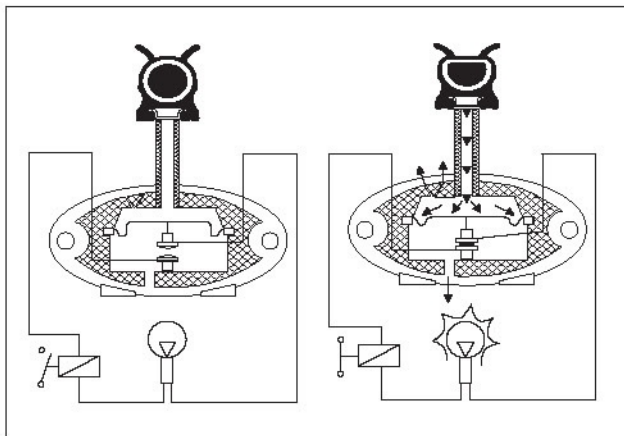
### Pressure Wave Switch

The compressed volume of air inside the rubber profile sensor is transferred via a hose connector to the pressure wave switch. The diaphragm in the switch is deflected by the momentary rise in pressure closing the electrical contact.

### DW50

The DW50 pressure wave switches have:

- A minimum activating pressure of 2 mbar
- Self-cleaning contacts
- A special ventilation channel which provides a valve orifice flow volume of 50 ml/min for the equalisation of atmospheric or temperature fluctuations (e.g. warm-up of air-wave sensor)



### Electrical durability

- depends largely on the contact load and contact pressure
- the self-cleaning of the contacts begins with the contact pressure
- the contact should not be loaded below 24 V / 10 mA

### Technical data

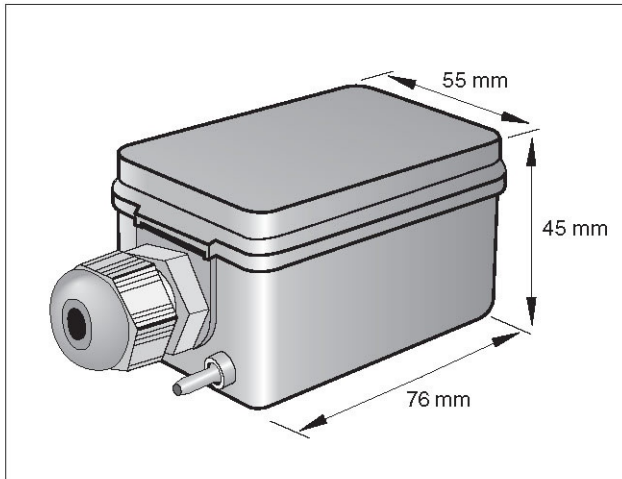
Contact load	Max 0.5 A / 250 VAC (with 5 mbar actuating pressure)
Activating pressure	2 mbar
Contact distance	Approx. 0.3 mm
Flow volume	Approx. 50 ml / min with 2 mbar
Operating life	
- mechanical	100 million switching cycles
- electrical	Min. 50'000 switching cycles (with 250 VA / 0.1 A) Min. 100 million switching cycles (with 24 VDC / 50 mA)
Reaction time	< 10 ms
Membrane material	Silicone
Contact material	Hard silver
Connection	
- electrical	Plug connections or 6.3 mm terminals
- pneumatic	Air hose connection 2/4 mm
Fixing method	Two M3 screws either from top or from front side
Ambient temperature	-20° C to +70° C
Dimension (WxLxH)	25 x 46 x 43 mm
Material	ABS
Colour	Red
Weight	20 g

### Pressure Wave Switch DW50 Mounted in Housing

#### DW50

Pressure wave switch type DW50 mounted in an impact resistant synthetic housing.

- The cover can be removed by turning a screw driver under the lug above the PG-cable gland
- The pressure wave switch can be removed for connection and then replaced in the housing
- Dimensions: 76 x 55 x 45 mm
- Maximum supply voltage 48 VADC

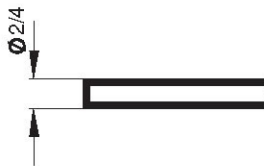


### Technical Data

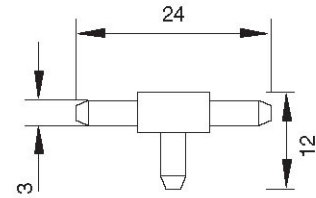
Connection	
- electrical	Cable gland PG11 (dome top)
- pneumatic	Air hose connection 2/4 mm
Ambient temperature	-20°C to +70°C
Housing material	Impact resistant ABS
Fixing method	Two M4 screws
Colour	Light grey
Degree of protection	IP54 (IEC 529)
Weight	65 g

### Pressure Wave Switch Accessories

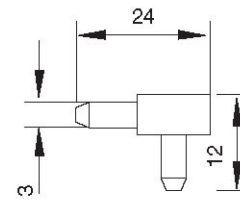
PVC hose	PVC 2 / 4
Diameter	2 / 4 mm
Material	PVC
Colour	Transparent
Weight	15 g/m



T-connector	DWT
Material	PVC
Colour	grey
Weight	1 g

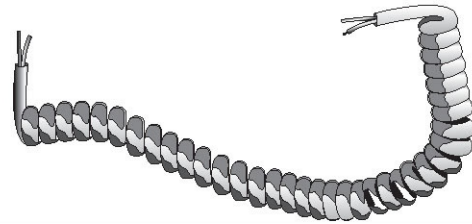


L-connector	DWL
Material	PVC
Colour	grey
Weight	1 g



### Spiral Cable

	SPK-4/2
Length closed	900 mm
Length extended	4000 mm
Cable dimension	5.6 mm
Coiled leads	2 core (black + red)
Conductor area	1.25 mm <sup>2</sup>
Material	PU
Colour	black
Weight	0.3 kg



### Hose Connectors

Straight connector	DWV
Material	Metal
Weight	2 g

