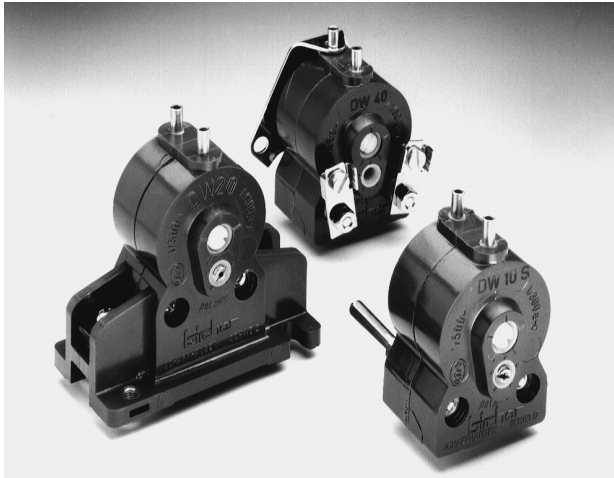


Pressure Wave Switches



Series D1

- Adjustable Sensitivity
- Well-proven Technology

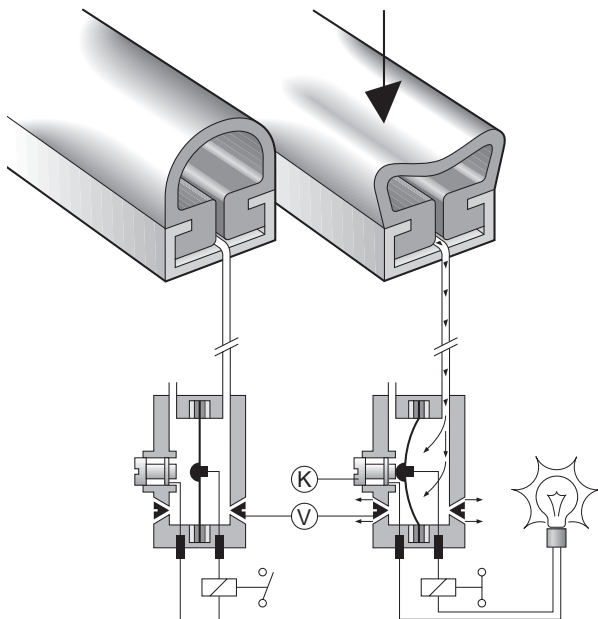
Pressure Wave Switch

The compressed volume of air inside the signal sensor is transferred via a connecting hose to the pressure wave switch. The diaphragm in the switch is deflected by the rise in pressure thus closing (or opening) the electrical contact.

Series D1

The D1 series pressure wave switches are:

- available in 5 different versions



Switching Possibilities

Converting the function to one of the four possible methods is accomplished by:

- exchanging the connecting hose
- regulation of the contact screw

	Pressure closes	Pressure opens	Suction closes	Suction opens
Neutral position				
Operating position				

Electrical Durability

- is dependent largely on the contact loading.
- for pressures <3mbar it is recommended that contact protection relays (DWR) are installed



The contact should not be loaded below 24V/20mA

Length of Connections

The optimal length of hose between the signal sensor and the switch should

- not exceed a length of 10 metres.
- The internal diameter should be 2mm and the outside diameter at least 4mm.

Factory settings

Activating Pressure

The airwave switches are adjusted to an activating pressure of 2mbar, pressure closes.

Valve Orifice

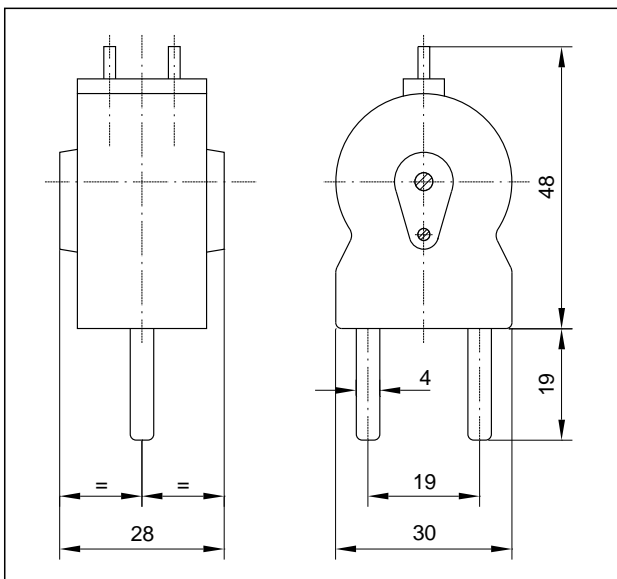
An equalisation of atmospheric or temperature fluctuations is provided by a valve orifice for our profiles (up to 3500 cm³).

Changes in factory settings are possible in certain cases.

Model Selection of D1 Series

DW10

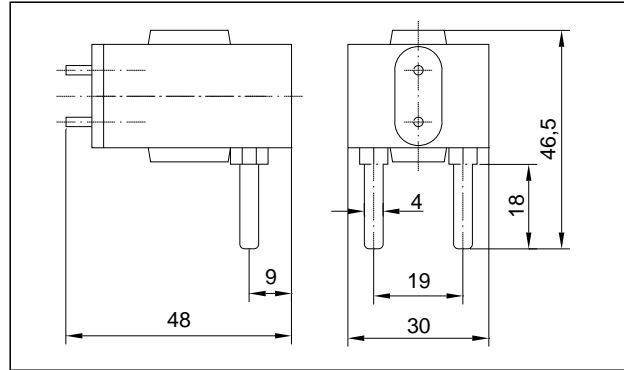
Plug type DW-Switch connection at the bottom



DW10

DW10s

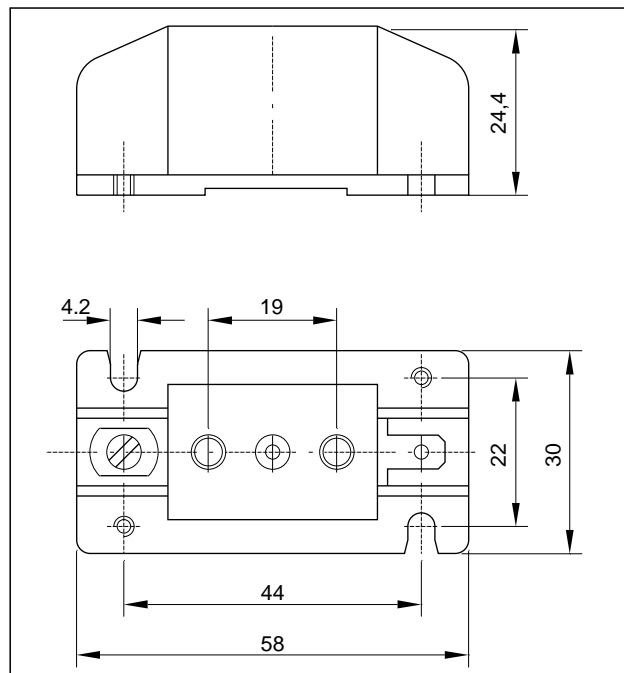
Plug type DW-Switch connection on the side



DW10s

DW SO

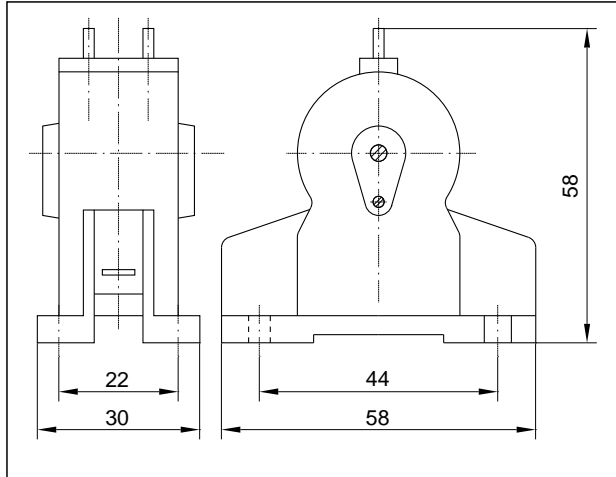
Socket for DW10/DW10s. Easily accessible screwed terminals with connection possibility for tabs 6.3mm.



DW SO

DW20s/DW20sd

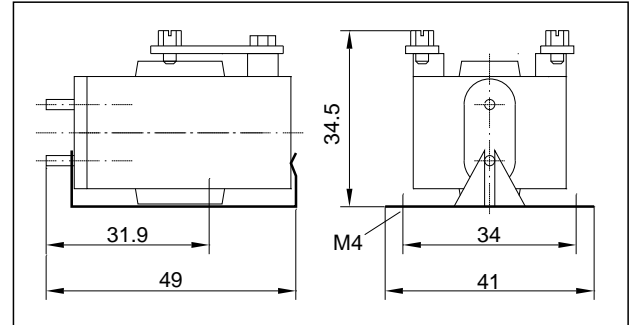
DW-Switch with screw connections. Easily accessible screwed terminals and connection possibility for tabs 6.3mm.



DW20s

DW40/DW40d

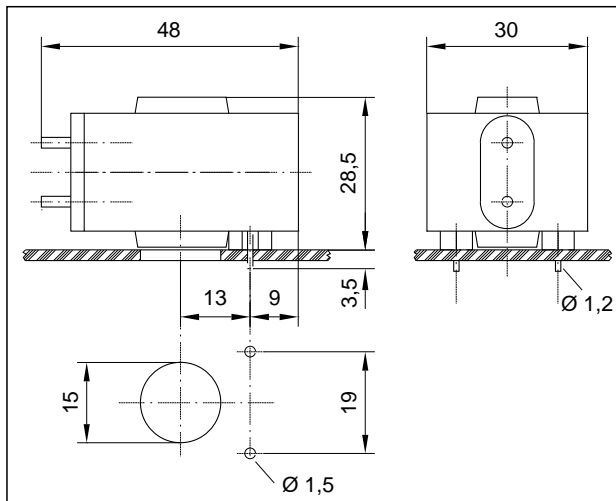
DW-Switch with plug connections or 6.3mm terminals and clampable assembly strap.



DW40/DW40d

DW30/DW30d

DW-Switch with 2 soldering pins $\text{\O}1.2\text{mm}$ for circuit board mounting. To allow adjustment the board must have drilled holes as shown.



DW30

Sealed Version

- the valve orifice on these versions is sealed tight, therefore there is no equalisation of atmospheric or temperature fluctuations.

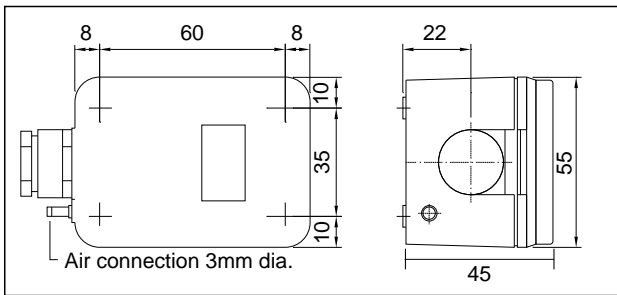
Pressure Wave Switch Series D1 Mounted in Housing

DWKG 11

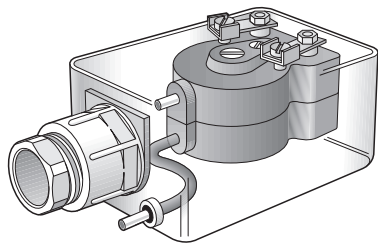
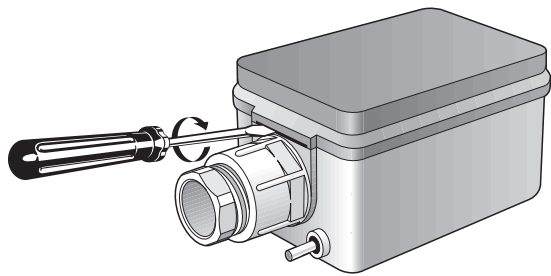
Pressure Wave Switch Type DW40 or DW40d mounted in an impact resistant synthetic housing.

- The cover can be removed by turning a screwdriver under the lug above the PG-cable gland
- The pressure wave switch can be removed for connection and then replaced in the housing.

Dimensions: 76x55x45



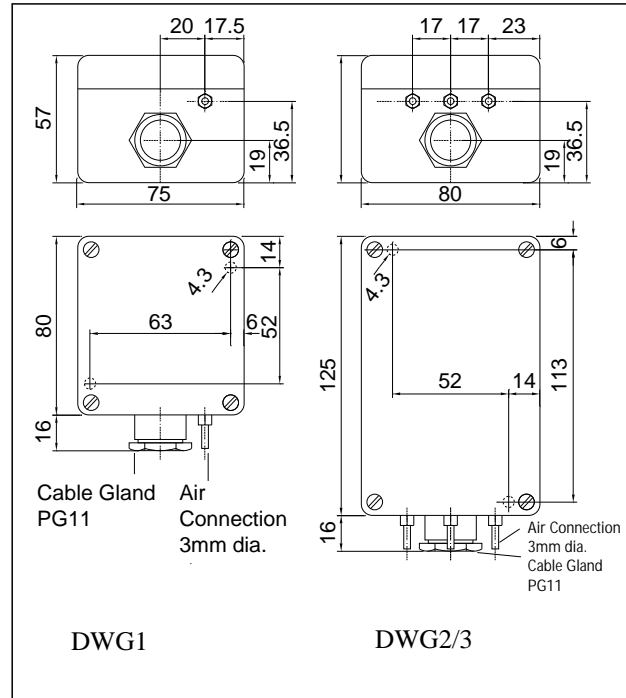
DWKG11



DWG 1,2 and 3

1,2 or 3 Pressure Wave Switches Type DW40 mounted in a light alloy housing

- suitable for applications in the open air or in damp rooms
- the electrical wires can be connected directly through a PG-cable gland



DWG1

DWG2/3

Technical Data D1

Actuating Pressure	2mbar (factory setting)
Contact Load	max.0.5A/250VAC (with 10mbar contact pressure)
Switching Speed	max. 10/sec
Pressure or Suction	max.150mbar
Operating Life	
– mechanical	min. 50x10E6 switching cycles
– electrical	min. 50000 switching cycles (0.1A/250VAC)
Ambient Temperature	-20°C to +70°C
Contact Material	Hard silver

Technical Data DWGK 11

Housing	Impact resistant plastic ABS
Fixing Method	Two M4 screws
Colour	Grey
Connection	
- Electrical	Cable gland PG 11
- Air	Nipple 3mm dia.
Degree of Protection	IP54 (IEC 529)
Weight	85g (45g empty)

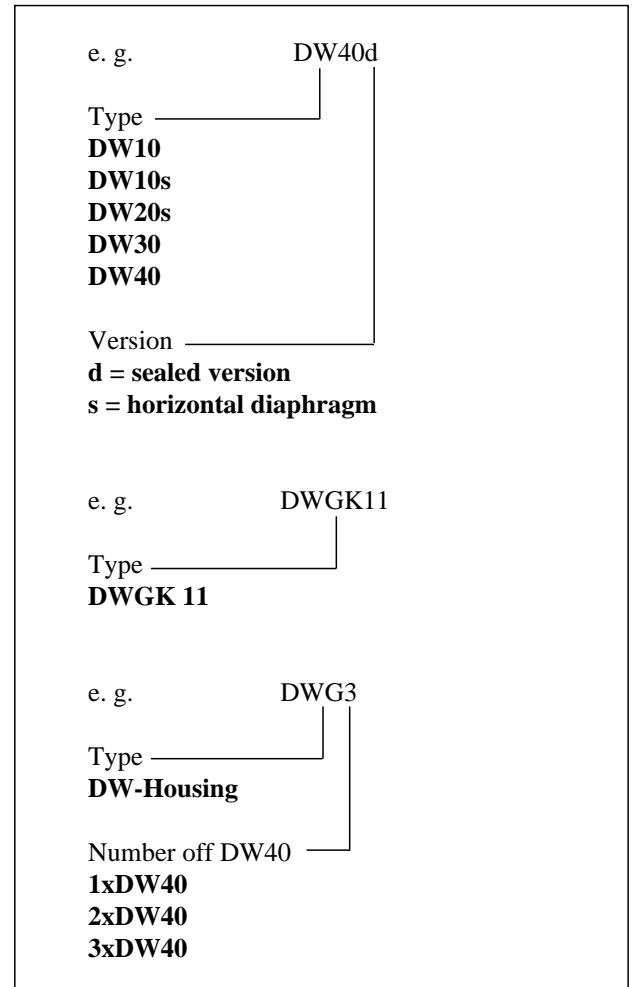
Technical Data DWG1/2/3

Type	DWG 1	DWG 2	DWG 3
Number Off DW40 or DW40d	1	2	3
Dimensions Width mm	75	80	80
Length mm	80	125	125
Height mm	57	57	57
Fixing Method	Two M4 screws		
Weight g	560	780	870
Material	Aluminium		
Colour	Grey		
Degree of Protection	IP54 (IEC529)		
Electrical Connection	Cable gland PG 11		

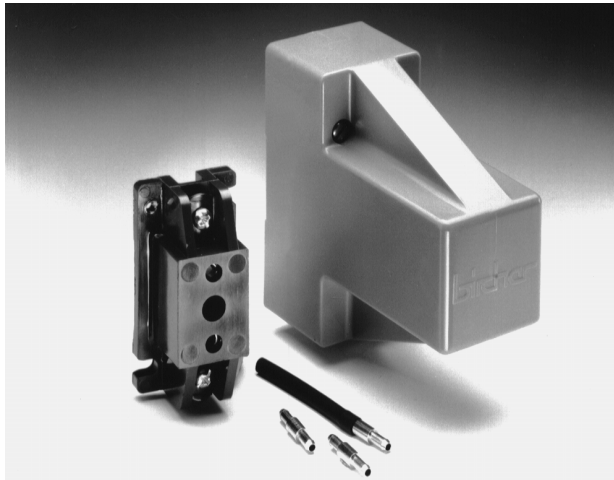


The contact should be loaded with a minimum of 24V/20mA

Order Information



Accessories for Pressure Wave Systems



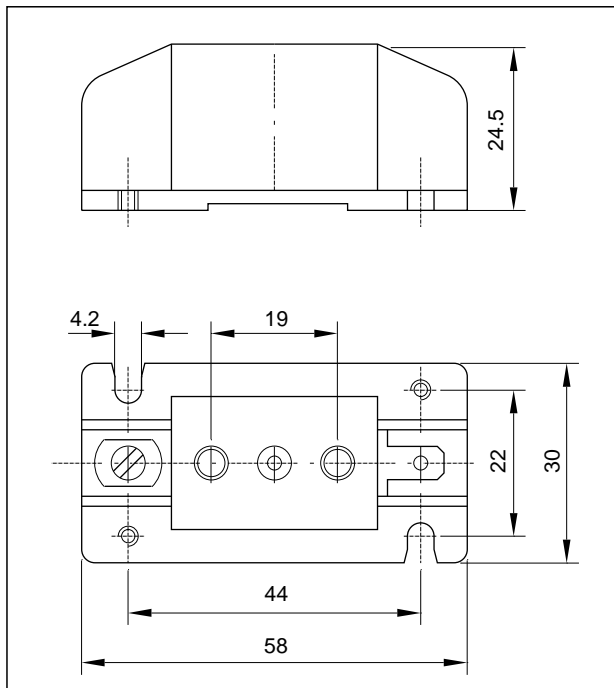
DWSO-Plug Socket DWH-Cover DW-Tube Fittings

- Space-saving Assembly
- AMP Faston-plug

DWSO-Plug Socket

- space-saving and productive assembly of DW 10 and DW 10s
- spring mounted plug socket.
- easy accessible connecting terminals
- possible connection of tabs 6.3mm

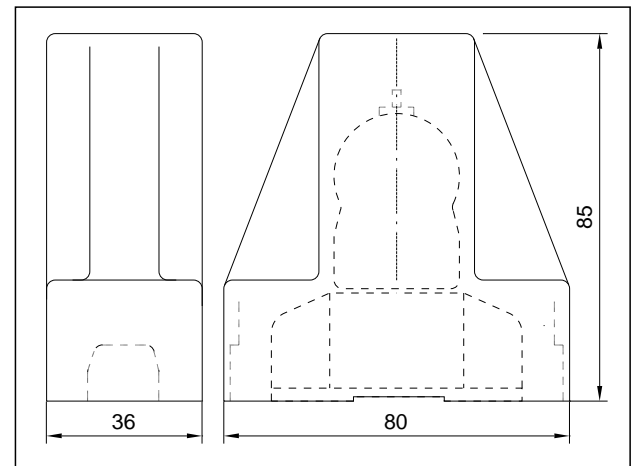
Dimension Sheet



DWH-Cover

- protection against accidental contact and protection of the DW-Switch
- can be used for DW 10 with DWSO, DW20s
- the electrical supply cable can be on one or both sides

Dimension Sheet



Order Information

e. g. DWSO
DW-Plug Socket _____

e. g. DWH
DW-Cover _____

DW-Tube Fittings

