Control pressure switch MDR - P

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- Compact pressure switch
- Fixed pressure settings
- High repeatability
- Customer-specific configuration
- 1 SPDT
- Acc. to EN 60947
- Degree of Protection IP 65

Primarily for mass production

The CONDOR MDR-P control pressure switch can be universally used. Due to compact design, standardized electrical plug-and-socket connection and high IP protection, this switch is a suitable application for mass productions.

The MDR-P is provided with change-over contacts (SPDT) and is suitable for monitoring and controlling the pressure of liquids or gaseous media.

The cutin and cut-out pressure settings are set at our factory according the customer's requirements. A subsequent change of the pressure settings is not provided, but is possible by removing the cover flap.

Technical data MDR P acc. to EN 60947	
Rated operating current I_e AC 1 U_e=240 V (1~)	10 A
Rated operating current I_e AC 15 U_e=240 V (1~)	4 A
Rated operating current I_e DC 13 U_e=240 V (1~)	0,1 A
Permissible motor rating 1~ 230 V	0,55 kW
Mechanical life (AC 15) Cycles	> 1 x 10^6
Mechanical life Cycles	> 1 x 10^6
Max. electrical cycles Cycles/h	600
Max. mechanical cycles Cycles/h	600
Bursting strength Pz	> 60 bar

Technical data MDR P acc. to EN 60947	
Vibration resistance:	4 g (bei 10 bis 1000 Hz)
Temperature range:	- 25 C°** bis + 70 C°
Protection acc. to EN 60529	IP 65

Media resistance MDR-P	
Acetylene, Gasoline, Butane, Diesel, Natural gas, Petroleum, Ethylene glycol, Glycerol, Fuel oil, Urine, Carbon dioxide, Carbonic acid, Air, Mineral oils, Vegetable oil, Propane, Silicon oil, Nitrogen, Synthetic oils, Water, Distilled water, Hydrogen, Sea water, Steam	resistant

A detailed overview of diaphragm media resistance for all pressure switches can be found on page 22. further medias on request
** lower temperatures on request

MDR-P

Because the MDR-P was essentially conceived for our product line by the customer, there should be no need to adjust the pressure settings after manufacture.
For the pressure switch to be configured in the factory, the start-up and shutdown pressures are required.

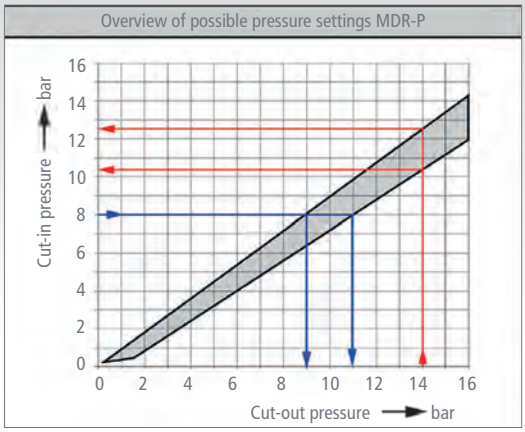
The switching points can be established in two ways, according to the following diagram:

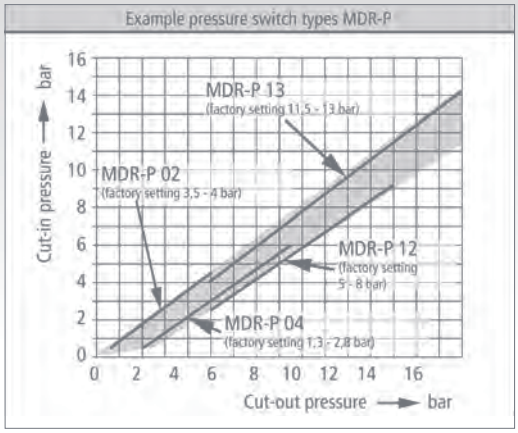
1. Calculation of the possible shutdown pressure with a stated start-up pressure (blue line)

For example, with a start-up pressure of 8 bar, a horizontal line will be plotted in the pressure diagram at the level of the start-up pressure.
All shutdown pressures in the diagram located on this line, which can be calculated with a vertical line on the coordinates axis, can then be configured. In this case you can select shutdown pressures between 9 and 11 bar.

2. Calculation of the possible start-up pressure with a stated shutdown pressure (red line)

For example, with a shutdown pressure of 14 bar, a vertical line will be plotted in the pressure diagram at the level of the shutdown pressure.
All start-up pressures in the diagram located on this line, which can be calculated with a horizontal line on the coordinates axis, can then be configured.
In this case you can select start-up pressures between 10.4 and 12.5 bar.





Type Overview MDR-P

Pressure Switch with NBR diaphragm, 1 SPST, 10-piece packing unit
Pressure connection: G 1/4" outer thread brass, connection configuration according to DIN

Order reference	Adjustable cut-in pressure (bar)	Pressure difference (bar)*	Adjustable cut-out pressure (bar)	Factory setting (bar)	Weight in g pro 10 Stück	Article number
MDR-P 02	0,2…4,5	0,3 … 0,5	0,5…5	3,5 - 4,0	1050	270027
MDR-P 04	0,5…6	1,5 … 2,5	2…8,5	1,3 - 2,8	1050	270034
MDR-P 12	2,5…9,2	2,5 … 3,8	5…13	5,0 - 8,0	1050	270041
MDR-P 13	4…14,2	1,0 … 1,8	5…16	11,5 - 13	1050	270058

* lower …upper end of range

Sample order:

MDR-P
Cut-in pressure setting 1.3 bar
Cut-out pressure setting 2.8 bar
Plug connector according to DIN

or also known as:
Article No. 270034

Further diaphragm materials and changers with gold contacts available upon request. An available alternative for a DIN plug connection is a special variation (see next page).

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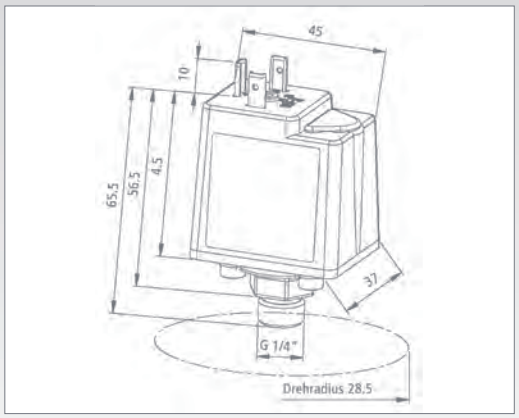
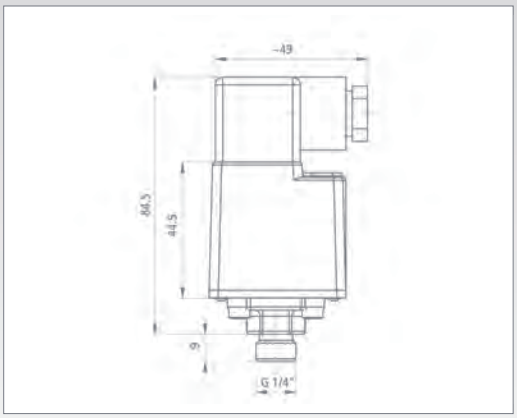
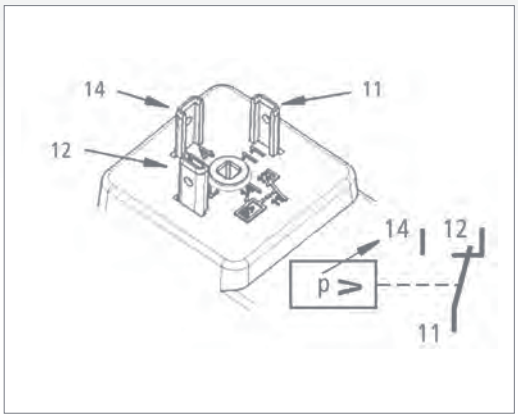
Dimensions / Circuit diagram MDR-P / Configuration of the contacts



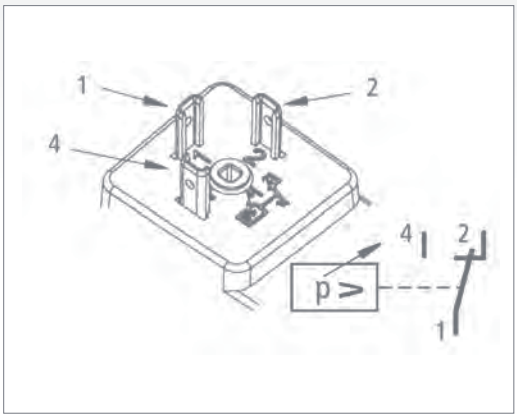
Pressure switch MDR-P



Pressure switch MDR-P



Standard version MDR-P



Special version MDR-P

Accessories MDR-P

Order reference	Description	Weight (in g)	Part No.
	Connection		
MDR-P LD	MDR-P cable socket, 10 pieces (DIN EN 175301-803)	220 g	263951

MDR-P cable socket