

## Pressure switch MDR 1 / 6, Pump version



- Single phase
- Switching capacity 4.0 kW
- Max. cut-out pressure 6 bar
- Incl. s PG 11 Z/ZK
- 2-pole (N.C.)
- Steel flange
- Acc. to EN 60947
- Optional differential adjustment

Order reference	Type code	ON / OFF Rotary knob	Pressure range P <sub>OFF</sub> in bar	Flange	Weight (in g)	Part No.
MDR 1/6	MDR-1 DSD BAEA 017A030 XDE XXX	-	2,5 - 6	1/4" ST	220	212119
MDR 1/6	MDR-1 DTD BAEA 017A030 XDE XXX	-	2,5 - 6	1/4" ST-Ü	220	212126

## Pressure switch MDR 1 / 11, Compressor version



- Single phase
- Switching capacity 4.0 kW
- Max. cut-out pressure 11 bar
- Incl. cable glands PG 11 Z/ZK and unloader valve AEV 1 S
- 2-pole (N.C.)
- Acc. to EN 60947
- Optional differential adjustment

Order reference	Type code	ON / OFF Rotary knob	Pressure range P <sub>OFF</sub> in bar	Flange	Weight (in g)	Part No.
MDR1/11-EA	MDR-1 GBA AAEA 060A080 QDE XXX	EA	2,5 - 11	1/4"	220	212133
MDR1/11-EA	MDR-1 GEA AAEA 060A080 QDE XXX	EA	2,5 - 11	F4 1/4"	220	212140
MDR1/11-EA	MDR-1 GFA AAEA 060A080 QDE XXX	EA	2,5 - 11	F4 3/8"	220	212157
MDR1/11	MDR-1 GBA BAEA 060A080 QDE XXX	-	2,5 - 11	1/4"	220	216049
MDR1/11	MDR-1 GEA BAEA 060A080 QDE XXX	-	2,5 - 11	F4 1/4"	220	216025
MDR1/11	MDR-1 GFA BAEA 060A080 QDE XXX	-	2,5 - 11	F4 3/8"	220	216063

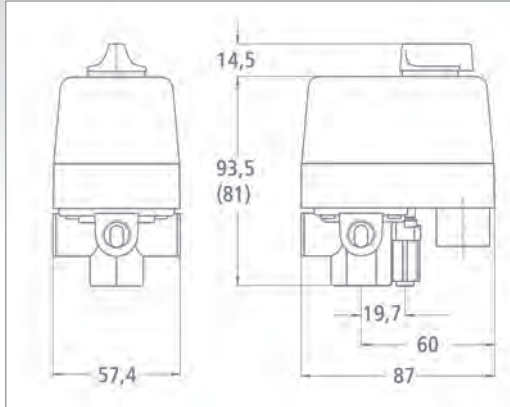
Technical Data MDR 1	
Rated insulation voltage U <sub>i</sub>	500 V
Motor switching capacity (AC 3) U <sub>e</sub> =240 V (1~)	4,0 kW
Electrical life (AC 3) Cycles	> 1 x 10 <sup>5</sup>
Mechanical life Cycles	> 5 x 10 <sup>5</sup>
Max. electrical cycles Cycles/h	120
Max. mechanical cycles Cycles/h	600
Rated operational current I <sub>e</sub> at 240 V AC	20 A
Bursting strength P <sub>z</sub>	> 35 bar
Permissible medium temperature Air	- 5...+ 80 °C

Technical Data MDR 1 acc. to 60947 UL/CSA	
Permissible medium temperature Water	+ 70 °C
Degree of Protection acc. to EN 60529	IP 44
Conductor cross-section 1 .. fine stranded cable 1 x / 2 x	2,5 / 2,5 mm <sup>2</sup>
Conductor cross-section 1 rigid cable 1 x / 2 x	2,5 / 2,5 mm <sup>2</sup>

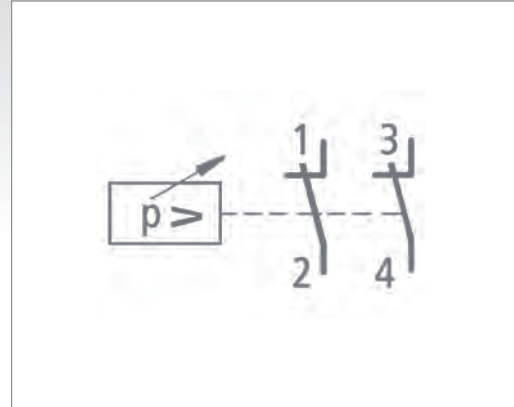
Diaphragm media resistance MDR 1	
Acetylene, Butane, Ethylene glycol, Carbon dioxide, Air, Mineral oils, Water, Distilled water, Sea water, Hydrogen, Water steam	resistant

A detailed overview of diaphragm media resistance for all pressure switches can be found on page 22.

## Dimensions / Circuit Diagrams MDR 1



Pressure switch MDR-1



## Accessories MDR 1

Order reference	Description	Weight (in g)	Part No
	<b>Unloader valves</b>		
EV 15*	with quick-connect 6 mm for plastic unloader valves	25	226765
	<b>Delayed unloader valves</b>		
AEV 15*	with quick-connect 6 mm for plastic unloader valves	25	217541
	<b>Cable glands</b>		
WN	Grommet	6	200888
PG 11 G	Conduits for mounting of cable glands (inner thread)	6	255024
PG 11 Z		12	255031
PG 11 ZK	With strain relief and cable support	12	255048
	<b>Cover</b>		
H1 (Cover MDR 1)	Cover without On/Off lever (Neutral version, without marking)	40	230700
H1-EA (Cover MDR 1 + EA)	Cover with On/Off lever for manual On/Off (Neutral version, without marking)	40	227366
Cover MDR 1 + EA + lever	Conversion kit H1 to cover H1-EA	40	230717
	<b>Differential adjustment</b>		
MDR-1 Differential kit	Kit for setting cut-in and differential pressures (10 pcs.)	20	230618

\*only for pneumatic tubes with outside tolerances according to e. g. Festo PAN 6x1 mm

## Unloader valves / Delayed unloader valves

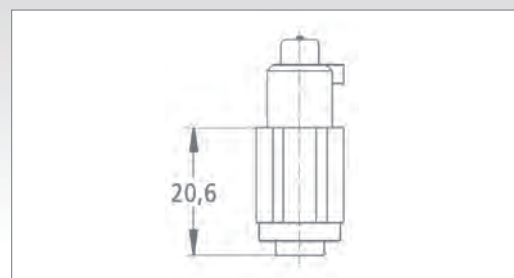
## Dimensions unloader valves



EV 15

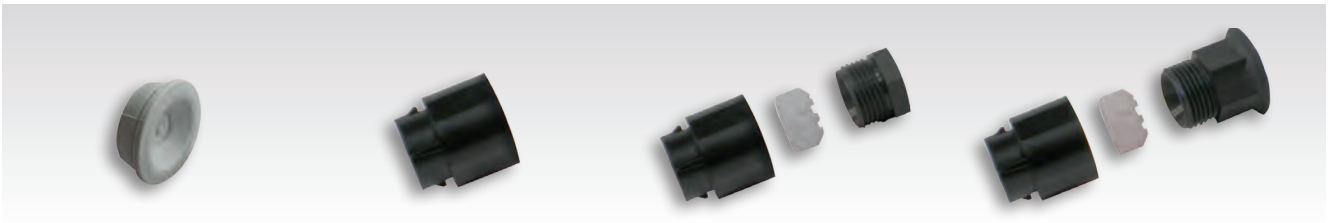


AEV 15



EV 15 / AEV 15

## Cable glands MDR 1



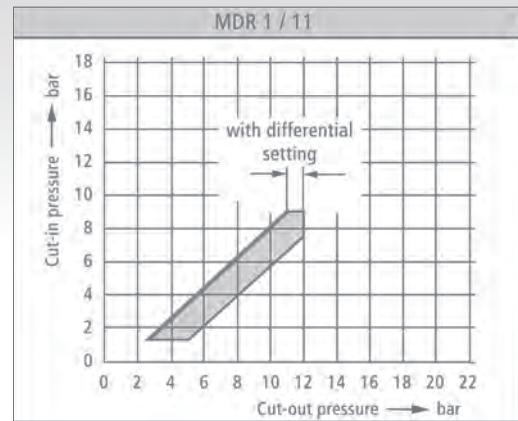
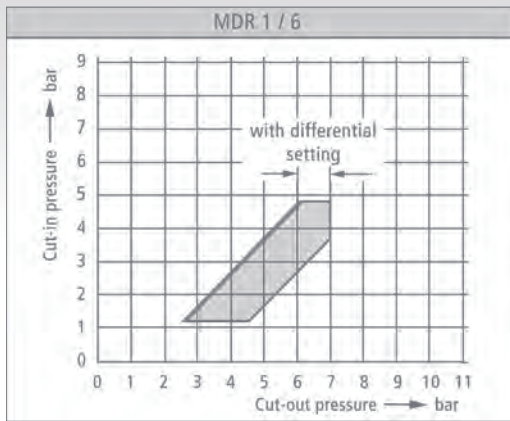
WN

PG 11 G

PG 11 Z

PG 11 ZK

## Pressure Diagrams MDR 1



### Explanation

#### Devices without differential pressure adjustment

After selecting the cut-in pressure, the cut-out pressure can be read from the pressure diagram. If only the cut-out pressure is known, the cut-in pressure to be set can also be determined from the diagram.

#### Example: MDR 1/6 without differential pressure adjustment

For a preselected cut-in pressure of 4 bar, the cut-out pressure is 5 bar. If, for example, the cut-out pressure is to be 4 bar, a cut-in pressure of approx. 2.7 bar has to be set.

#### Devices with differential pressure adjustment

An intersecting point is determined in the diagram by selecting a pair of cut-in and cut-out pressure values. If this point lies within the shaded area, this pair of values can be set on the pressure switch. If this point lies outside the shaded area, these values cannot be set.

#### Example: MDR 1/11 with differential pressure adjustment

With a preselected cut-in pressure of 4 bar, the cut-out pressure can be determined and set between 5.4 and 8 bar using the differential pressure adjustment.