

# Pressure switch MDR 1

## Pressure switch MDR 1 / 6, Pump version



- Single phase
- Switching capacity 4.0 kW
- Max. cut-out pressure 6 bar
- Incl. § PG 11 Z/ZK
- 2-pole (N.C.)
- Steel flange
- Acc. to EN 60947
- Differential adjustment
- Flange = steel (Ü = with screw connection)



Steel flange ST-Ü

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	G 1/4" ST	220	212119
<b>MDR 1/6</b>	<b>MDR-1 DTD BAEA 017A030 XDE XXX</b>	<b>-</b>	<b>2,5 - 6</b>	<b>G 1/4" ST-Ü</b>	<b>220</b>	<b>212126</b>

High performance  
Pressure switches

## 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
- Differential adjustment

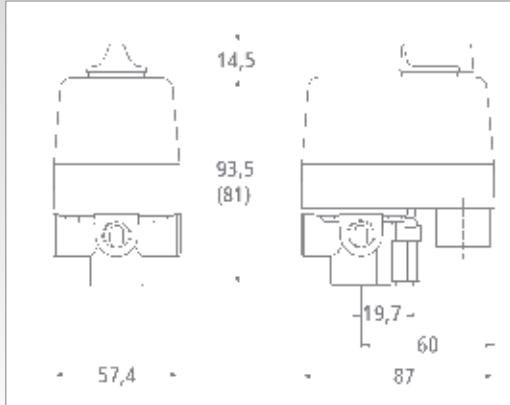
Order reference	Type code	ON / OFF Rotary knob	Pressure range P <sub>OFF</sub> in bar	Flange	Weight (in g)	Part No.
MDR1/11-EA	MDR-1 GBA AAEA 060A080 QDE XXX	EA	2,5 - 11	G 1/4" Alu	220	212133
MDR1/11-EA	MDR-1 GEA AAEA 060A080 QDE XXX	EA	2,5 - 11	F4 1/4" Alu	220	212140
MDR1/11-EA	MDR-1 GFA AAEA 060A080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

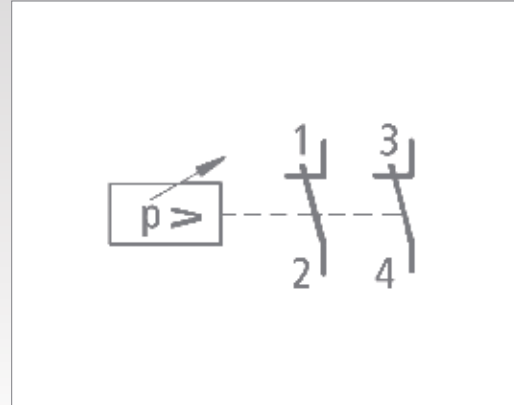
Technical Data MDR 1 acc. to 60947 UL/CSA	
Permissible medium temperature Water	+ 70 °C
Degree of Protection acc. to EN 60529	IP 44
Conductor cross-section 1 .. fine stranded cable 1 x / 2 x	2,5 / 2,5 mm <sup>2</sup>
Conductor cross-section 1 rigid cable 1 x / 2 x	2,5 / 2,5 mm <sup>2</sup>

Diaphragm media resistance MDR 1	
A detailed overview of diaphragm media resistance for all pressure switches can be found on page 22. Please read the information carefully.	

## 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

\*only for pneumatic tubes with outside tolerances according to e. g. Festo PAN 6x1mm

## Unloader valves / Delayed unloader valves

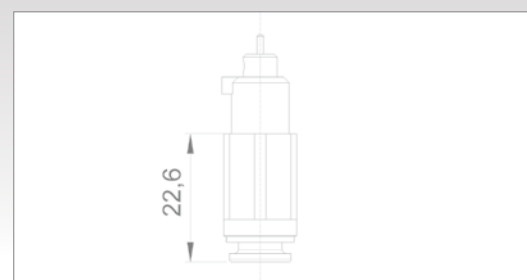
## Dimensions unloader valves



EV 15



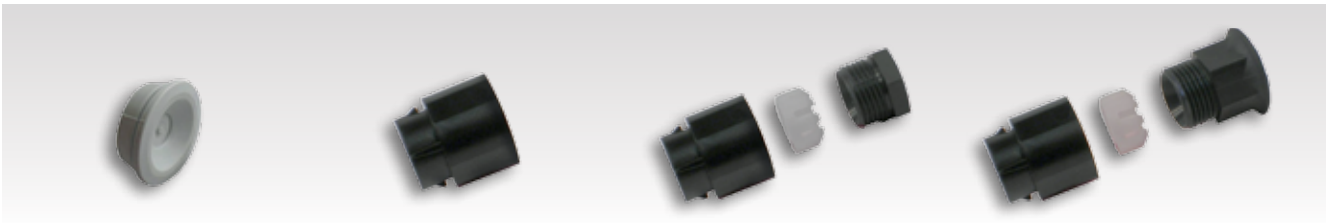
AEV 15



EV 15 / AEV 15

\*\* Other valve types available on request!

## Cable glands MDR 1



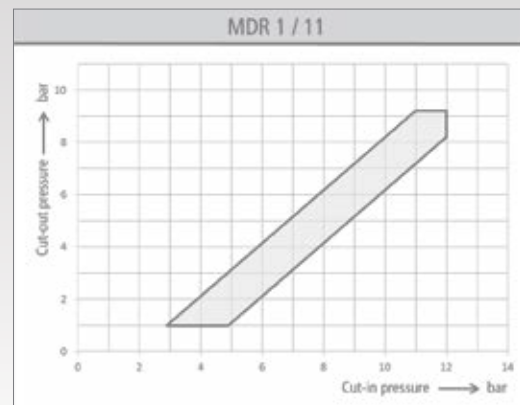
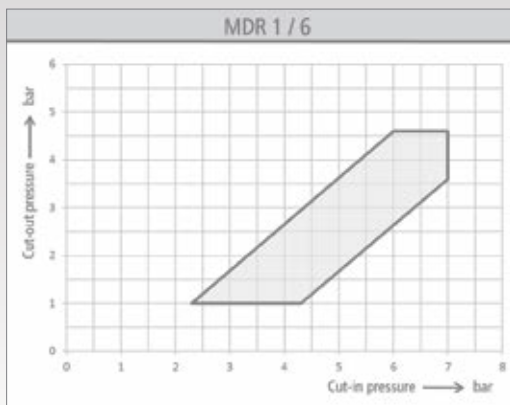
WN

PG 11 G

PG 11 Z

PG 11 ZK

## Pressure Diagrams MDR 1



### Explanation

#### 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.

## Accessories Hourmeter kit MDR 1



### Description

The MDR 1 can be equipped or retrofitted with an operating hourmeter to monitor the pump and compressor running time.

The hourmeter is available as a kit and can be attached to the cover in 4 different positions, each offset at an angle of 90°. This ensures optimum readability.

The kit consists of an operating hourmeter for either 230 V supplied and a perforated MDR 1 cover with or without ON/OFF lever.

Order reference	Description	Voltage	Packing (units)	Part No.
H1 - B 230	Hourmeter and Cover for MDR-1	230 V / 50 Hz	1	279297
H1-EA - B 230	Hourmeter and Cover for MDR-1+EA	230 V / 50 Hz	1	279303

can be used at 60 Hz with higher engine speed