

Pressure switch MDR 11 / 6, Pump version



- Single phase
- Switching capacity 4.0 kW / 4 Hp
- Max. cut-out pressure 6 bar / 87 psi
- Incl. cable glands PG13.5 Z/ZK
- 2-pole (N.C.)
- Steel flange
- Acc. to EN 60947
- UL / CSA-approval optional
- Optional differential adjustment



Steel flange ST-Ü

Order reference	Type code	ON / OFF Rotary knob	Pressure range P _{OFF} in bar	Flange	Weight (in g)	Part No.
MDR 11/6-EA	MDR-11 DSD AAIA 017A030 XHI XXX	EA	2,5 - 6	1/4" ST	300	235712
MDR 11/6-EA	MDR-11 DTD AAIA 017A030 XHI XXX	EA	2,5 - 6	1/4" ST-Ü	320	235729

Cable glands for retrofitting, see accessories!

Pressure switch MDR 11 / 11, Compressor version



- Single phase
- Switching capacity 4.0 kW / 4 HP
- Max. cut-out pressure 11 bar / 160 psi
- Incl. cable glands PG13,5 Z/ZK
- With delayed unloader valve AEV 11 S
- 2-pole (N.C.)
- Acc. to EN 60947
- UL / CSA-approval optional
- Optional differential adjustment

Order reference	Type code	ON / OFF Rotary knob	Pressure range P _{OFF} in bar	Flange	Weight (in g)	Part No.
MDR 11/11-EA	MDR-11 GBA AAIA 060A080 QHI XXX	EA	2,5 - 11	1/4"	300	235736
MDR 11/11-EA	MDR-11 GEA AAIA 060A080 QHI XXX	EA	2,5 - 11	F4 1/4"	320	235743

Unloader valves and cable glands for retrofitting, see accessories!

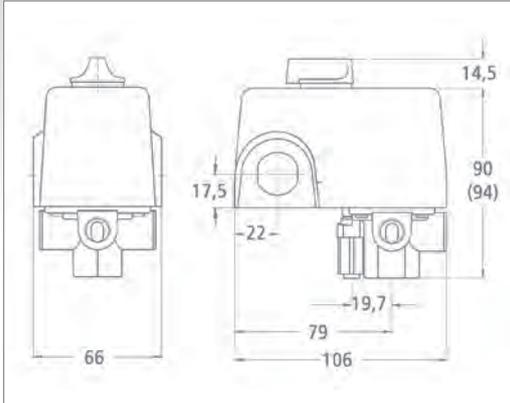
Technical Data MDR 11 acc. to 60947 UL/CSA	
Rated insulation voltage U _i	500 V
Motor switching capacity (AC 3) U _e =240 V (1~)	4,0 kW
Motor switching capacity (UL 508, CSA 22.2) U _e =240 V (1~) / U _e =120 V (1~)	3,0 HP/2,0 HP
Electrical life (UL 508, CSA 22.2) U _e =240 V dc; 2,7A	0,5 HP
Electrical life (AC 3) Cycles	> 1 x 10 ⁵
Mechanical life Cycles	> 5 x 10 ⁵
Max. electrical cycles Cycles/h	120
Max. mechanical cycles Cycles/h	600
Rated operational current I _e (EN 60947) at 240 V AC	20 A
Rated operational current I _e (UL/CSA) at 240 V AC	26 A
Bursting strength P _z	> 35 bar

Technical Data MDR 11 acc. to 60947 UL/CSA	
Permissible medium temperature Air	- 5...+ 80 °C
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 ²
Conductor cross-section 1 rigid cable 1 x / 2 x	2,5 / 2,5 mm ²

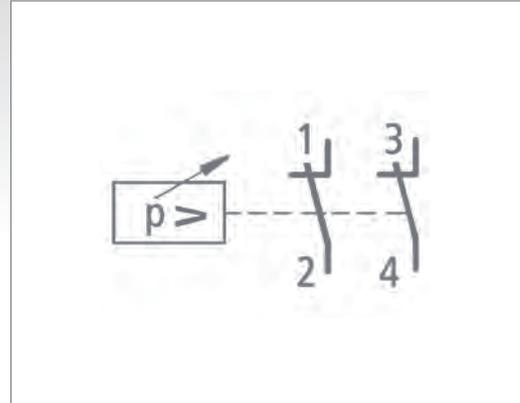
Diaphragm media resistance MDR 11	
Acetylene, Butane, Ethylene glycol, Carbon dioxide, Air, Mineral oils, Water, Distilled water, Sea water, Hydrogen, Water steam	resistant

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

Dimensions / Circuit Diagrams MDR 11



Pressure switch MDR 11



Accessories MDR 11

Order reference	Description	Weight (in g)	Part No.
Unloader valves			
EV 1 S*	with quick-connect 6 mm for plastic unloader valves	25	226765
EV 1 WSi	90° unloader valve with quick-connect for 1/4" plastic tubes, quick-connect can be rotated 360°	25	247593
Delayed unloader valves			
AEV 1 S*	with quick-connect 6 mm for plastic unloader valves	25	217541
Cable glands			
WN	Grommets	6	201243
PG 13,5 Z-21	With strain relief	12	201021
PG 13,5 ZK-21	With strain relief and cable support	12	201038
Differential pressure adjustment			
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 6x1mm

Unloader valves / Delayed unloader valves



EV 1S

EV 1WSi

AEV 1S

Cable glands MDR 11



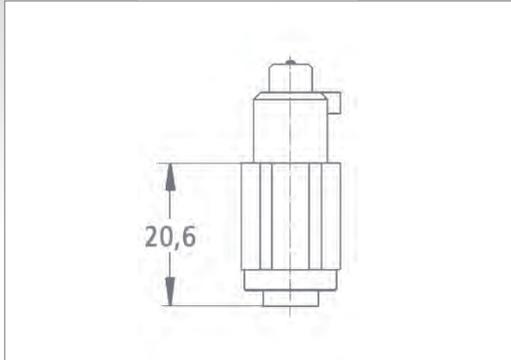
WN

PG 13,5 Z-21

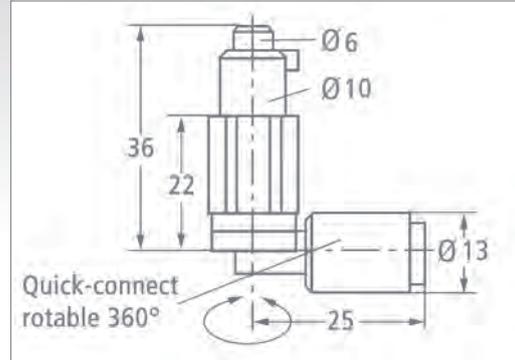
PG 13,5 ZK-21

High performance Pressure switches

Dimensions, Accessories MDR 11

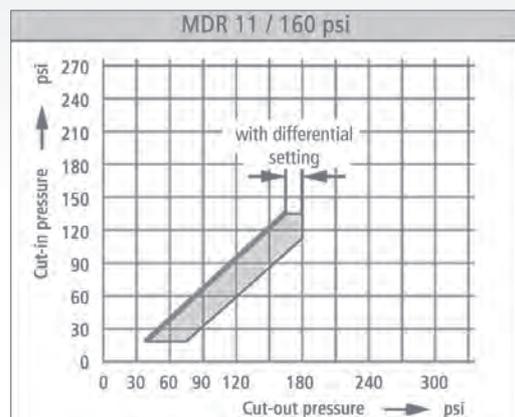
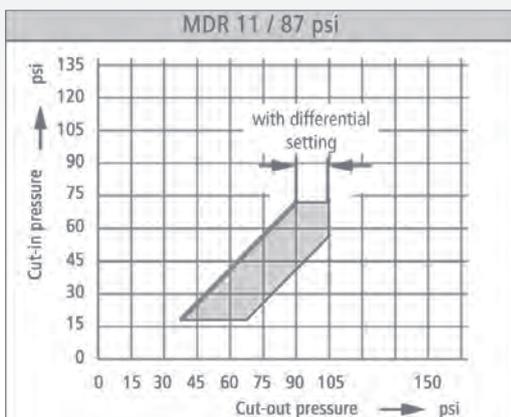
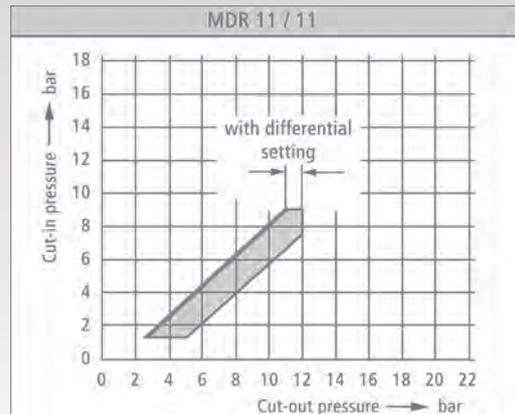
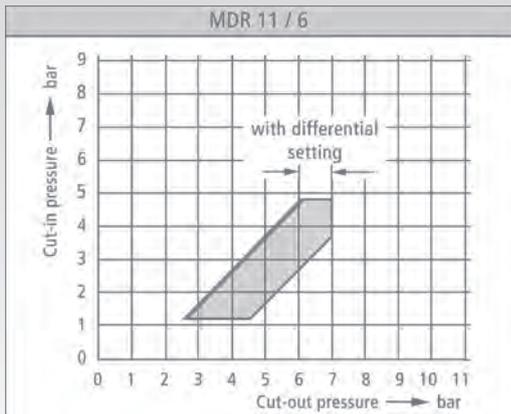


EV 1S / AEV 1S



EV 1WSi

Pressure Diagrams MDR 11



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.