

## Pressure switch MDR 5



- 3-phase
- Switching capacity 5.5 kW
- Available with overload relay
- Max. cut-out pressure 45 bar
- 3-pole (N.C.)
- Acc. to EN 60947

Order reference	Type code	ON / OFF Rotary knob	Pressure range P <sub>OFF</sub> in bar	Flange	Weight (in g)	Part No.
MDR 5/5	MDR-5 CAA BAAA 015A030 XXX XXX	-	1,5 - 5	1/2"	820	212850
MDR 5/5-K	MDR-5 CAA AAAA 015A030 XXX XXX	K*	1,5 - 5	1/2"	860	212867
MDR 5/5	MDR-5 COA BAAA 015A030 XXX XXX	-	1,5 - 5	1/2" + 1/4"	860	212874
MDR 5/5-K	MDR-5 COA AAAA 015A030 XXX XXX	K*	1,5 - 5	1/2" + 1/4"	900	212881
MDR 5/8	MDR-5 EAA BAAA 070A080 XXX XXX	-	2 - 8	1/2"	820	212898
MDR 5/8-K	MDR-5 EAA AAAA 070A080 XXX XXX	K*	2 - 8	1/2"	860	212904
MDR 5/8	MDR-5 EOA BAAA 070A080 XXX XXX	-	2 - 8	1/2" + 1/4"	860	212911
MDR 5/8-K	MDR-5 EOA AAAA 070A080 XXX XXX	K*	2 - 8	1/2" + 1/4"	900	212928
MDR 5/11	MDR 5 GAA BAAA 090A110 XXX XXX	-	2 - 11	1/2"	820	212935
MDR 5/11-K	MDR-5 GAA AAAA 090A110 XXX XXX	K*	2 - 11	1/2"	860	212942
MDR 5/11	MDR-5 GOA BAAA 090A110 XXX XXX	-	2 - 11	1/2" + 1/4"	860	212959
MDR 5/11-K	MDR-5 GOA AAAA 090A110 XXX XXX	K*	2 - 11	1/2" + 1/4"	900	212966
MDR 5/16	MDR-5 HAA BAAA 130A160 XXX XXX	-	2,5 - 16	1/2"	820	212973
MDR 5/16-K	MDR-5 HAA AAAA 130A160 XXX XXX	K*	2,5 - 16	1/2"	860	212980
MDR 5/16	MDR 5 HOA BAAA 130A160 XXX XXX	-	2,5 - 16	1/2" + 1/4"	860	212997
MDR 5/16-K	MDR-5 HOA AAAA 130A160 XXX XXX	K*	2,5 - 16	1/2" + 1/4"	900	213000
MDR 5/45	MDR-5 KAA BAAA 300 A400 XXX XXX	-	13 - 45	1/2"	820	256182
MDR 5/45-K	MDR-5 KAA AAAA 300 A400 XXX XXX	K*	13 - 45	1/2"	860	258513

\*For these switches, a thermal, 3-pole overload relay has to be ordered separately, the ON/OFF mechanism will only work with an additional relay  
Unloader valves and cable glands for retrofitting, see accessories!

## Special execution IP 65



- Applications: e.g. pump shafts
- 3-phase
- Switching capacity 5.5 kW
- Max. cut-out pressure 16 bar
- Incl. cable glands PG 16/13,5 ZK
- 3-pole (N.C.)
- Acc. to EN 60947
- Degree of protection IP 65

Order reference	Type code	ON / OFF Rotary knob	Pressure range P <sub>OFF</sub> in bar	Flange	Weight (in g)	Part No.
MDR 5/5	MDR-5 CAA BAAA 015A030 XNN XXZ	-	1,5 - 5	1/2"	783	258469
MDR 5/8	MDR-5 EAA BAAA 070A080 XNN XXZ	-	2 - 8	1/2"	783	258476
MDR 5/11	MDR 5 GAA BAAA 090A110 XNN XXZ	-	2 - 11	1/2"	783	258483
MDR 5/16	MDR-5 HAA BAAA 130A160 XNN XXZ	-	2,5 - 16	1/2"	783	258490

# Pressure switch MDR 5

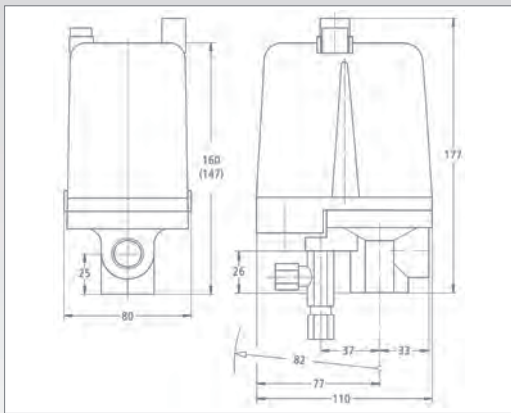
Technical Data MDR 5 acc. to EN 60947	
Rated insulation voltage $U_i$	500 V
Motor switching capacity (AC 3) $U_e=240$ V (1~)	2,5 kW
Motor switching capacity (AC 3) $U_e=230$ V (3~)	4,0 kW
Motor switching capacity (AC 3) $U_e=400$ V (3~)	5,5 kW
Motor switching capacity (AC 3) $U_e=500$ V (3~)	4,0 kW
Electrical life (AC 3) Cycles	$> 1 \times 10^5$
Mechanical life Cycles	$> 5 \times 10^5$
Max. electrical cycles Cycles/h	120
Max. mechanical cycles Cycles/h	600
Rated operational current $I_e$ at 400 V AC 3 / 500 V AC 3	16 A / 12 A

Technical Data MDR 5 acc. to EN 60947	
Bursting strength $P_z$	up to 16 bar up to 45 bar
Permissible medium temperature Air	- 5...+ 80 °C
Permissible medium temperature Water	+ 80 °C
Degree of Protection acc. to EN 60529	IP 54 / IP 65
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	4 / 4 mm <sup>2</sup>

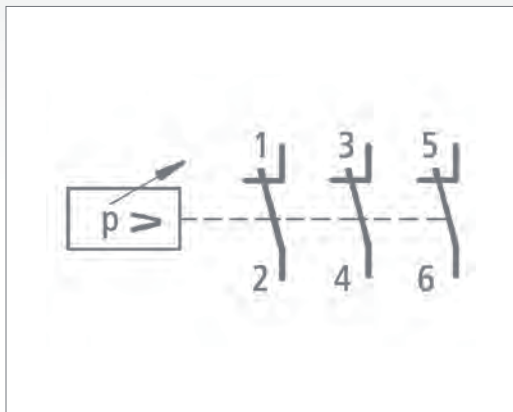
Diaphragm media resistance MDR 5	
Acetylene, Gasoline, Butane, Diesel, Natural gas, Petroleum, Ethylene glycol, Glycerol, Fuel oil, Urine, Carbon dioxide, Carbonic acid, Air, Mineral oils, Vegetable oil, Propane, Silicon oil, Nitrogen, Synthetic oils, Water, Distilled water, Hydrogen, Sea water, Water steam	resistant

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

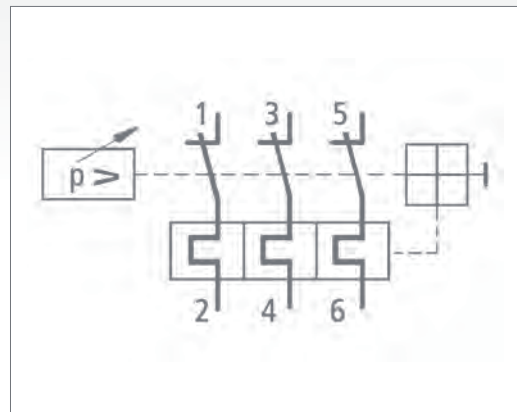
## Dimensions MDR 5



Pressure switch MDR-5



MDR 5



MDR 5K - R5

High performance  
Pressure switches

## Accessories MDR 5

Order reference	Description	Weight (in g)	Part No.
<b>Unloader valves</b>			
EV 5	With screw connection for 6 mm plastic or copper discharge tubes, screw connection for vent port	30	201878
EV 5i	With screw connection for 1/4" plastic or copper discharge tubes	30	201885
EV 5E	With screw connection for 6 mm plastic or copper discharge tubes	25	201892
EV 5Ei	With screw connection for 1/4" plastic or copper discharge tubes	25	201908
<b>Delayed unloader valves</b>			
AEV 5	With screw connection for 6 mm plastic or copper discharge tubes	25	201939
AEV 5i	With screw connection for 1/4" plastic or copper discharge tubes	25	201946
<b>Cable glands</b>			
WN M20	Grommet	6	269496
VS-M20	Screw plug M20		269502
M20 Z	With strain relief, clamping range 6-12 mm	12	269533
M20 ZK	With strain relief and cable support, clamping range 6-12 mm	12	269540
M20 L	With strain relief, clamping range 10-14 mm	12	269519
M20 LK	With strain relief and cable support, clamping range 10-14 mm	12	269526
MW 5	Mounting bracket	120	230045
<b>Cover</b>			
H5 (Cover MDR 5)	Cover without push-buttons	130	230052
H5-K (Cover MDR 5+K)	Cover with On/Off push-buttons (Only functions together with the thermal R5 overload relay)	150	217527
<b>Thermal, 3-pole overload relay</b>			
R 5/1,5	0,86 - 1,50 A	150	202028
R 5/2,45	1,50 - 2,45 A	150	202035
R 5/4,2	2,40 - 4,20 A	150	202042
R 5/7,0	4,00 - 7,00 A	150	202059
R 5/10,3	6,10 - 10,3 A	150	202066
R 5/14,0	9,00 - 14,0 A	150	202073
R 5/18,0	11,0 - 18,0 A	150	202080

## Unloader valves / Delayed unloader valves



EV 5, EV 5i



EV 5E / EV 5Ei



AEV 5 / AEV 5i

## Cable glands MDR 5



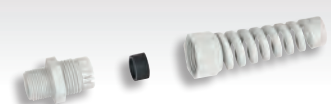
WN-M 20



VS - M 20



M 20 Z / M 20 L



M 20 ZK / M 20 LK

## Accessories, Miscellaneous MDR 5



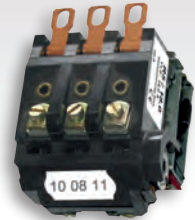
MW 5



H5



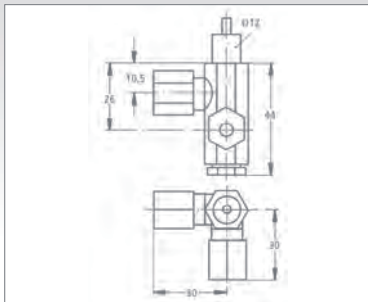
H5-K



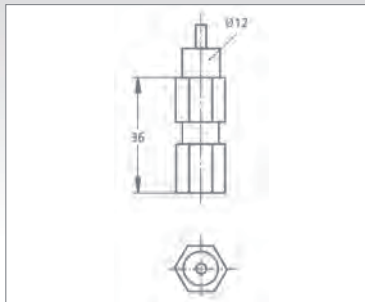
R 5/..

High performance  
Pressure switches

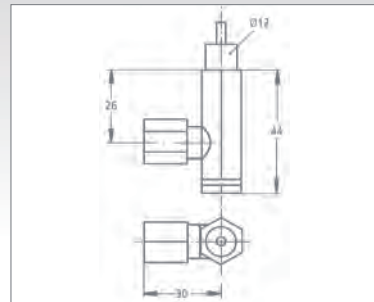
## Dimensions, Accessories



EV 4

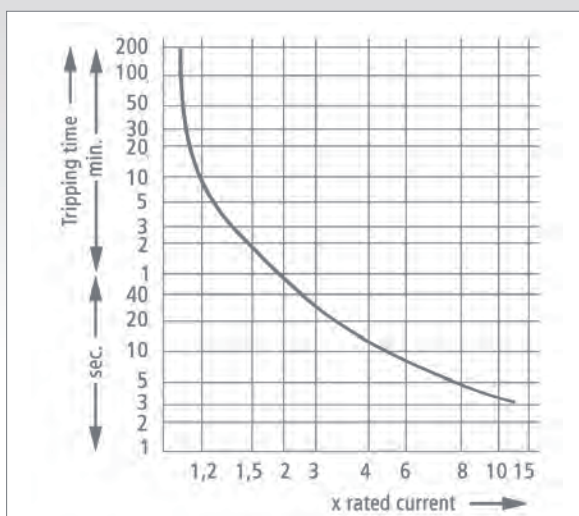


EV 4S



AEV 4S

## Tripping curves R5 (average)



## Pressure Diagrams MDR 5

