

## Pressure switch MDR 4 S



- 3-phase
- Switching capacity 4.0 / 5.5 kW
- Max. cut-out pressure 16 bar
- 3-pole (N.C.)
- Acc. to EN 60947
- 4-way-flange (optional)

Order reference	Type code	ON / OFF Rotary knob	Pressure range P <sub>OFF</sub> in bar	Flange	Weight (in g)	Part No.
MDR 4S/6-EA	MDR-4 DBA AFAA 040A060 XAA XXX	EA	1,5 - 6	1/4"	420	212584
MDR 4S/6-EA	MDR-4 DAA AFAA 040A060 XAA XXX	EA	1,5 - 6	1/2"	420	212591
MDR 4S/6-EA	MDR-4 DOA AFAA 040A060 XAA XXX	EA	1,5 - 6	1/2" + 1/4"	460	212607
MDR 4S/6-EA	MDR-4 DEA AFAA 040A060 XAA XXX	EA	1,5 - 6	F4 1/4"	460	257899
MDR 4S/6-EA	MDR-4 DDA AFAA 040A060 XAA XXX	EA	1,5 - 6	F4 1/2"	460	257905
MDR 4S/6-EA	MDR-4 DFA AFAA 040A060 XAA XXX	EA	1,5 - 6	F4 3/8"	460	257912
MDR 4S/11-EA	MDR-4 GBA AFAA 090A110 XAA XXX	EA	4 - 11	1/4"	420	212614
MDR 4S/11-EA	MDR-4 GAA AFAA 090A110 XAA XXX	EA	4 - 11	1/2"	420	212621
MDR 4S/11-EA	MDR-4 GOA AFAA 095A110 XAA XXX	EA	4 - 11	1/2" + 1/4"	460	212638
MDR 4S/11-EA	MDR-4 GEA AFAA 090A110 XAA XXX	EA	4 - 11	F4 1/4"	460	257929
MDR 4S/11-EA	MDR-4 GDA AFAA 090A110 XAA XXX	EA	4 - 11	F4 1/2"	460	257936
MDR 4S/11-EA	MDR-4 GFA AFAA 090A110 XAA XXX	EA	4 - 11	F4 3/8"	460	257943
MDR 4S/16-EA	MDR-4 HBA AFAA 135A160 XAA XXX	EA	6 - 16	1/4"	420	212645
MDR 4S/16-EA	MDR-4 HAA AFAA 135A160 XAA XXX	EA	6 - 16	1/2"	420	212652
MDR 4S/16-EA	MDR-4 HOA AFAA 135A160 XAA XXX	EA	6 - 16	1/2" + 1/4"	460	212669
MDR 4S/16-EA	MDR-4 HEA AFAA 135A160 XAA XXX	EA	6 - 16	F4 1/4"	460	257950
MDR 4S/16-EA	MDR-4 HDA AFAA 135A160 XAA XXX	EA	6 - 16	F4 1/2"	460	257967
MDR 4S/16-EA	MDR-4 HFA AFAA 135A160 XAA XXX	EA	6 - 16	F4 3/8"	460	257974
MDR 4S/25-EA	MDR-4 IBA AFAA 210A250 XAA XXX	EA	8,5 - 25	1/4"	420	212676
MDR 4S/25-EA	MDR-4 IAA AFAA 210A250 XAA XXX	EA	8,5 - 25	1/2"	420	212683
MDR 4S/25-EA	MDR-4 IOA AFAA 210A250 XAA XXX	EA	8,5 - 25	1/2" + 1/4"	460	212690
MDR 4S/25-EA	MDR-4 IEA AFAA 210A250 XAA XXX	EA	8,5 - 25	F4 1/4"	460	263883
MDR 4S/25-EA	MDR-4 IDA AFAA 210A250 XAA XXX	EA	8,5 - 25	F4 1/2"	460	263890
MDR 4S/25-EA	MDR-4 IFA AFAA 210A250 XAA XXX	EA	8,5 - 25	F4 3/8"	460	263906
MDR 4S/6	MDR-4 DBA BFAA 040A060 XAA XXX	-	1,5 - 6	1/4"	420	220084
MDR 4S/6	MDR-4 DAA BFAA 040A060 XAA XXX	-	1,5 - 6	1/2"	420	220077
MDR 4S/6	MDR-4 DOA BFAA 040A060 XAA XXX	-	1,5 - 6	1/2" + 1/4"	460	220121
MDR 4S/6	MDR-4 DEA BFAA 040A060 XAA XXX	-	1,5 - 6	F4 1/4"	460	257981
MDR 4S/6	MDR-4 DDA BFAA 040A060 XAA XXX	-	1,5 - 6	F4 1/2"	460	257998
MDR 4S/6	MDR-4 DFA BFAA 040A060 XAA XXX	-	1,5 - 6	F4 3/8"	460	258001
MDR 4S/11	MDR-4 GBA BFAA 090A110 XAA XXX	-	4 - 11	1/4"	420	204251
MDR 4S/11	MDR-4 GAA BFAA 090A110 XAA XXX	-	4 - 11	1/2"	420	206194
MDR 4S/11	MDR-4 GOA BFAA 095A110 XAA XXX	-	4 - 11	1/2" + 1/4"	460	227069
MDR 4S/11	MDR-4 GEA BFAA 090A110 XAA XXX	-	4 - 11	F4 1/4"	460	258018
MDR 4S/11	MDR-4 GDA BFAA 090A110 XAA XXX	-	4 - 11	F4 1/2"	460	258025
MDR 4S/11	MDR-4 GFA BFAA 090A110 XAA XXX	-	4 - 11	F4 3/8"	460	258032
MDR 4S/16	MDR-4 HBA BFAA 135A160 XAA XXX	-	6 - 16	1/4"	420	204244
MDR 4S/16	MDR-4 HAA BFAA 135A160 XAA XXX	-	6 - 16	1/2"	420	220107
MDR 4S/16	MDR-4 HOA BFAA 135A160 XAA XXX	-	6 - 16	1/2" + 1/4"	460	227076
MDR 4S/16	MDR-4 HEA BFAA 135A160 XAA XXX	-	6 - 16	F4 1/4"	460	258049
MDR 4S/16	MDR-4 HDA BFAA 135A160 XAA XXX	-	6 - 16	F4 1/2"	460	258056
MDR 4S/16	MDR-4 HFA BFAA 135A160 XAA XXX	-	6 - 16	F4 3/8"	460	258063
MDR 4S/25	MDR-4 IBA BFAA 210A250 XAA XXX	-	8,5 - 25	1/4"	420	227083
MDR 4S/25	MDR-4 IAA BFAA 210A250 XAA XXX	-	8,5 - 25	1/2"	420	227090
MDR 4S/25	MDR-4 IOA BFAA 210A250 XAA XXX	-	8,5 - 25	1/2" + 1/4"	460	221210
MDR 4S/25	MDR-4 IEA BFAA 210A250 XAA XXX	-	8,5 - 25	F4 1/4"	460	263913
MDR 4S/25	MDR-4 IDA BFAA 210A250 XAA XXX	-	8,5 - 25	F4 1/2"	460	263920
MDR 4S/25	MDR-4 IFA BFAA 210A250 XAA XXX	-	8,5 - 25	F4 3/8"	460	263937

Unloader valves and cable glands for retrofitting, see accessories!

## Pressure switch MDR 4 SD



- 3-phase
- Switching capacity 4.0 / 5.5 kW
- Max. cut-out pressure 11 bar
- With scale and transparent cover
- 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 4 SD/6	MDR-4 DAA BFDA 040A060 XAA XXX	-	1,5 - 6	1/2"	420	212737
MDR 4 SD/6	MDR-4 DBA BFDA 040A060 XAA XXX	-	1,5 - 6	1/4"	420	212744
MDR 4 SD/11	MDR-4 GAA BFDA 090A110 XAA XXX	-	4 - 11	1/2"	420	212751
MDR 4 SD/11	MDR-4 GBA BFDA 090A110 XAA XXX	-	4 - 11	1/4"	420	212768

Unloader valves and cable glands for retrofitting, see accessories!

## Pressure switch MDR 4 SU



- 3-phase
- Switching capacity 2.5 / 4.0 kW
- Max. cut-out pressure 16 bar
- With reversed function
- 3-pole (N.O.)
- 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 4 SU/6	MDR-4 DAA BFCA 040A060 XAA XXX	-	1,5 - 6	1/2"	420	212706
MDR 4 SU/11	MDR-4 GAA BFCA 090A110 XAA XXX	-	4 - 11	1/2"	420	212713
MDR 4 SU/16	MDR-4 HAA BFCA 090A110 XAA XXX	-	6 - 16	1/2"	420	212720

Unloader valves and cable glands for retrofitting, see accessories!

Technical Data MDR 4 S / MDR 4 SD 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~)	5,5 kW
Electrical life (AC 3) $U_e=240$ V (3~)	$> 1 \times 10^5$
Mechanical life Cycles	$> 5 \times 10^5$
Max. electrical cycles Cycles/h	120

Technical Data MDR 4 SU acc. to EN 60947	
Rated insulation voltage $U_i$	500 V
Motor switching capacity (AC 3) $U_e=240$ V (1~)	1,5 kW
Motor switching capacity (AC 3) $U_e=230$ V (3~)	2,5 kW
Motor switching capacity (AC 3) $U_e=400$ 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	12 A
Bursting strength $P_z$	$> 35$ bar

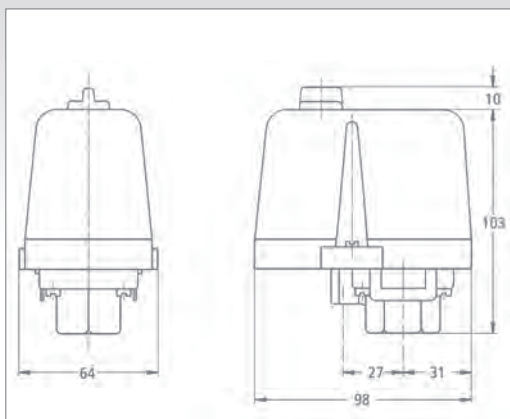
Technical Data MDR 4 S / MDR 4 SD acc. to EN 60947	
Max. mechanical cycles Cycles/h	600
Rated operational current $I_e$ at 400 V AC/500 VAC 3	16 A / 9 A
Bursting strength $P_z$	$> 35$ bar
Permissible medium temperature Air	- 5...+ 80 °C
Permissible medium temperature Water	+ 80 °C
Degree of Protection acc. to EN 60529	IP 44
Conductor cross-section 1 ... fine stranded cable 1 x / 2 x	2,5 / 2,5mm <sup>2</sup>
Conductor cross-section 1 ... rigid cable 1 x / 2 x	2,5 / 2,5mm <sup>2</sup>

Technical Data MDR 4 SU acc. to EN 60947	
Permissible medium temperature Air	- 5...+ 80 °C
Permissible medium temperature Water	+ 80 °C
Degree of Protection acc. to EN 60529	IP 44
Conductor cross-section 1 ... fine stranded cable 1 x / 2 x	2,5 / 2,5mm <sup>2</sup>
Conductor cross-section 1 ... rigid cable 1 x / 2 x	2,5 / 2,5mm <sup>2</sup>

Diaphragm media resistance MDR 4	
Air, Water	resistant

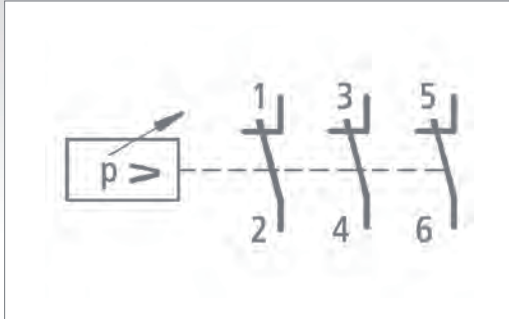
A detailed overview of diaphragm media resistance for all pressure switches can be found on page 22..

## Dimensions MDR 4

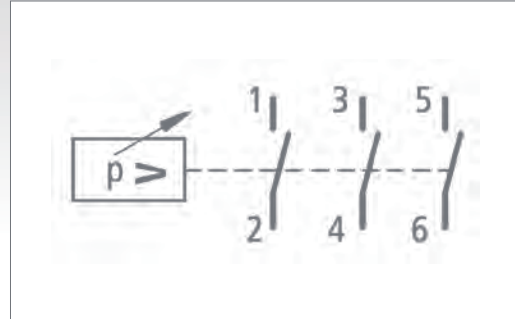


Pressure switch MDR 4

## Circuit Diagrams MDR 4



MDR 4 S MDR 4 SD



MDR 4 SU

## Accessories MDR 4

Order reference	Description	Weight (in g)	Part No
<b>Unloader valves</b>			
EV 4	With screw connection for 6 mm plastic or copper discharge tubes	25	201601
EV 4S <sup>1)2)</sup>	With quick-connect for 6 mm plastic discharge tubes	25	201625
EV 4W <sup>1)</sup>	90° with screw connection for 6 mm plastic or discharge copper tubes	15	255055
EV 4Wi <sup>1)</sup>	90° with screw connection for 1/4" mm plastic or discharge copper tubes	15	255062
EV 4WS <sup>1)2)</sup>	90° with quick-connect for 6 mm plastic discharge tubes	15	201656
<b>Delayed unloader valves</b>			
AEV 4	With screw connection for 6 mm plastic or copper discharge tubes	25	201663
AEV 4S <sup>1)2)</sup>	With quick-connect for 6 mm plastic discharge tubes	25	201687
AEV 4W <sup>1)</sup>	90° with screw connection for 6 mm plastic or copper discharge tubes	15	201694
AEV 4Wi <sup>1)</sup>	90° with screw connection for 1/4" mm plastic or copper discharge tubes	15	255079
AEV 4WS <sup>1)2)</sup>	90° with quick-connect for 6 mm plastic discharge tubes	15	255086
<b>Cable glands</b>			
WN	Grommet	6	200888
PG 11 G	Conduits for mounting of cable glands (Inner thread)	6	200895
PG 11 V	Cable gland complete	12	200901
PG 11 Z	With strain relief	12	200925
PG 11 ZK	With strain relief and cable support	12	200918
PG 13,5 G	Conduits for mounting of cable glands (Inner thread)	6	200963
PG 13,5 V	Cable gland complete	12	200932
PG 13,5 Z	With strain relief	12	200956
PG 13,5 ZK	With strain relief and cable support	12	200949
MW 4	Mounting bracket for MDR 4 and MDR 43	65	230021
<b>Cover</b>			
H4 (Cover MDR 4S)	Cover without rotary knob (Neutral version, without marking)	70	229469
H4S+EA (Cover MDR 4S+EA)	Cover with rotary knob for manual On/Off (Neutral version, without marking)	70	229476
H4SD (Cover MDR 4SD)	Cover without rotary knob for MDR 4 SD (transparent)	70	229483

1) up to ≤16 bar, 2) only for pneumatic tubes with outside tolerances according to e. g. Festo PAN 6x1mm

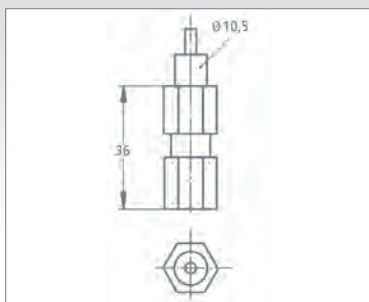
## Unloader valves / Delayed unloader valves



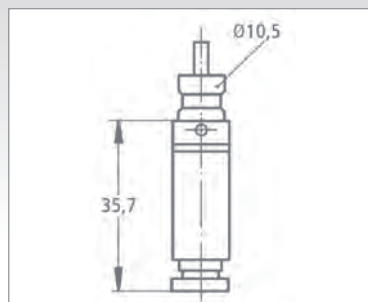
## Wall-mounting bracket / Cable glands MDR 4



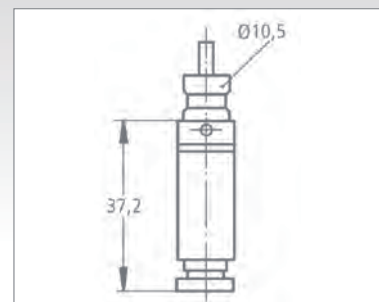
## Dimensions, Accessories MDR 4



EV 4

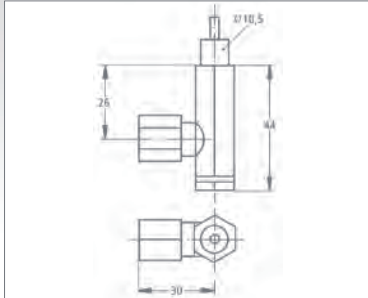


EV 4S

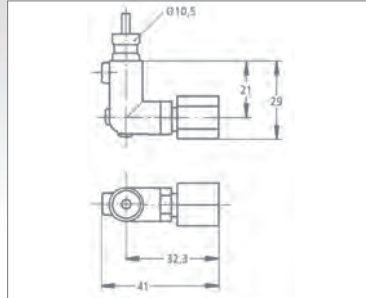


AEV 4S

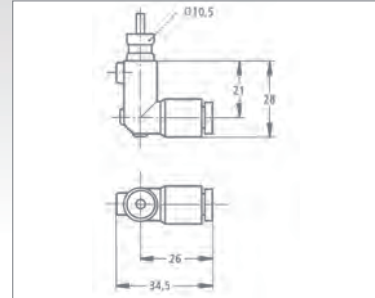
## Dimensions, Accessories MDR 4



EV 4



EV 4S



AEV 4S

## Pressure Diagrams MDR 4

