



Pressure Switch MDR-F..H

Control pressure switch - used for oil, water and air



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Control pressure switch in standard version with die-cast aluminium pressure connector and NBR diaphragm, for use with oil, water, air, etc., fitted with industrial screw clamp, optional accessories are available.

Pressure difference adjustment (standard), also available with gold-plated contacts.



Applications:

Compressed air technology, Water technology, Pumps, Agriculture, Railway technology / vehicles, Construction machinery, Mining & Chemistry, etc.

Features

- › Control pressure switch for AC voltage
- › For compressors / pumps
- › Oil, water and air
- › Pressure difference adjustment (standard)
- › Pressure connection made of die-cast aluminium
- › Gold-plated contacts „G“ (optional)
- › Motor switching capacity 0,55 kW
- › Switching function change-over contact (1-pole)
- › Cut-out pressure ≤ 32 Bar
- › Protection class IP 54, IP 65

Type overview MDR-F..H with pressure connection made of die-cast aluminium

Pressure connection: G 3/8" female thread** made of die-cast aluminium and Perbunan diaphragm, version with industrial screw terminal, suffix „G“ = gold contact

Designation	Type code	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Weight (in g)	Part No.
MDR-F 2H-S	MDR-F 2 HAA SAA A 005A015	0,04 ... 1,89	0,07 0,11	0,11 ... 2	460	253501
MDR-F 2HG-S	MDR-F 2 HAA SBA A 005A015	0,04 ... 1,89	0,07 0,11	0,11 ... 2	460	253518
MDR-F 4H-S	MDR-F 4 HAA SAA A 010A030	0,07 ... 3,75	0,15 0,25	0,22 ... 4	460	253525
MDR-F 4HG-S	MDR-F 4 HAA SBA A 010A030	0,07 ... 3,75	0,15 0,25	0,22 ... 4	460	253532
MDR-F 8H-S	MDR-F 8 HAA SAA A 020A060	0,2 ... 7,5	0,3 0,5	0,5 ... 8	460	253549
MDR-F 8HG-S	MDR-F 8 HAA SBA A 020A060	0,2 ... 7,5	0,3 0,5	0,5 ... 8	460	253556
MDR-F 10H-S	MDR-F 10 HAA SAA A 040A050	0,3 ... 9,2	0,4 0,8	0,7 ... 10	460	253563
MDR-F 10HG-S	MDR-F 10 HAA SBA A 040A050	0,3 ... 9,2	0,4 0,8	0,7 ... 10	460	253570
MDR-F 16H-S	MDR-F 16 HAA SAA A 040A120	0,4 ... 15	0,6 1,0	1 ... 16	460	253587
MDR-F 16HG-S	MDR-F 16 HAA SBA A 040A120	0,4 ... 15	0,6 1,0	1 ... 16	460	253594
MDR-F 32H-S	MDR-F 32 HAA SAA A 100A200	0,8 ... 30	1,2 2,0	2 ... 32	460	253600
MDR-F 32HG-S	MDR-F 32 HAA SBA A 100A200	0,8 ... 30	1,2 2,0	2 ... 32	460	253617

* lower ...upper end of range

** G 1/4" + G 1/2" innerthread - on demand

* am unteren ...oberen Ende des Bereichs

** auf Anfrage G 1/4" + G 1/2" Innengewinde



› Condor pressure switches

Because of the wide range of pressure switch versions, please contact us if you have questions on a special application or have technical requirements. As a manufacturer of pressure switches and controls, we offer a wide range of services, including standard and customer-specific solutions for individual applications.

Accessories

Designation	Description	Weight (in g)	Part No.
Cable glands			
MDR-F M20 M	Cable gland M20 metal, including nut	35	254249
MDR-F M20 K	Cable gland M20 plastic, including nut	18	259503
Throttle			
MDR-F D-32	MDR-F up to 32 bar, Throttle	1	254256
MDR-F D+32	MDR-F up to 32 bar, Throttle	2	254263
Covers			
MDR-F Cover	MDR-F Cover, transparent, Standard	90	254270
MDR-F Cover R	MDR-F Cover with Reset push-button - for manual reset, transparent	115	254287
MDR-F Cover Alu	MDR-F Cover, Aluminium	252	265436
Reset push-button			
MDR-F RT-1	Reset push-button for mounting on cover R	25	254294



MDR-F M20 M



MDR-F M20 K



MDR-F D-32



MDR-F D+32



MDR-F Cover



MDR-F Cover R



MDR-F Cover, Alu



MDR-F RT-1

Technical data according to EN 60947

Designation	MDR-F..H
Short description	Standard version with die-cast aluminium pressure connector
Medium *1	Air, Water, Oil
Voltage type	Alternating current (AC) – single-phase
Type	Electro-mechanical
Rated frequency	50 Hz / 60 Hz
Permissible motor rating 1~ 230 V	0,55 kW
Permissible motor rating 1~ 30 V	12 VA
Version MDR-F (G) - gold-flashed contact	
Motor switching capacity (UL 508, CSA 22.2) U_e=125 VAC	0,5 HP
Motor switching capacity (UL 508, CSA 22.2) U_e=250 VAC	0,5 HP
Motor switching capacity (UL 508, CSA 22.2) U_e 125 - 250 VAC - Version MDR-F (G) - gold-flashed contact	0,5 HP
Motor switching capacity (AC 15)	Cycles
Mechanical life	Cycles
Max. electrical cycles	Cycles/h
Max. mechanical cycles	Cycles/h
Repeatability	<2% FS
Rated operational current I_e AC 1 U _e =240 V (1~)	10 A
Rated operational current I_e AC 15 U _e =240 V (1~)	4 A
Rated operational current I_e DC 13 U _e =240 V (1~)	0,1 A
Rated operational current I_e U _e =30 V (1~) Version MDR-F (G) - gold flashed contact	400 mA
Rated operational current I_e (UL 508, CSA 22.2) U _e =250 VAC Version MDR-F (G) - gold flashed contact	10 A
Rated operational current I_e (UL 508, CSA 22.2) U _e =12 VDC Version MDR-F (G) - gold flashed contact	6 A
Bursting strength P_z / bar	4 x max. cut-out pressure
Vibration resistance	4 g (at 10 to 1000 Hz)
Perm. media temperature	+ 70°C
Degree of protection acc. DIN 40 050/IEC 529 with rubber grommets	IP 54
Degree of protection acc. DIN 40 050/IEC 529 with cable glands M20	IP 65
Umgebungstemperaturbereich	- 20 °C .. + 70 °C

	MDR-F..H
Cross-sections	
Cage clamp (without cable and sleeve)	1,5 mm ²
Cross sections	
Screw clamp	2,5 mm ²
Voltage (U)	≤ 250 V
Contact function	1 change-over contact
Golded-plated contacts	optional
Pressure adjustment / Pressure difference adjustment	standard
Pressure range (bar)	≤ 32 bar
Vacuum range	no
Pressure coupling	G3/8" female thread (main pressure coupling 3/8", pressure connector material = die-cast aluminium + NBR diaphragm) G1/2" female thread (main pressure coupling G1/2", pressure connector material = die-cast aluminium + NBR diaphragm) G1/4" female thread (main pressure coupling G1/4", pressure connector material = die-cast aluminium + NBR diaphragm) 1/4" NPT female thread (main pressure coupling 1/4", pressure connector material = die-cast aluminium + NBR diaphragm)
Overload relay	not possible
Cable entry gland	with 1 x WN (sealing grommet) (accessory M20)
Relief valve	no EV or AEV possible

Attention: Please, regard the MDR-F instructions enclosing the pressure switch for the max. operating pressure and the max. inspection pressure.

Media Resistance

MEDIA RESISTANCE: A detailed selection chart of the media resistance of all pressure switches can be found on our website. Please

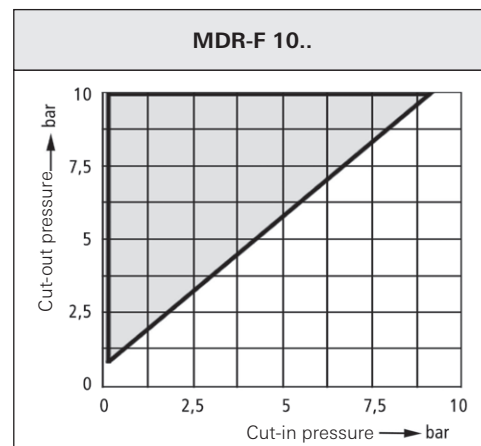
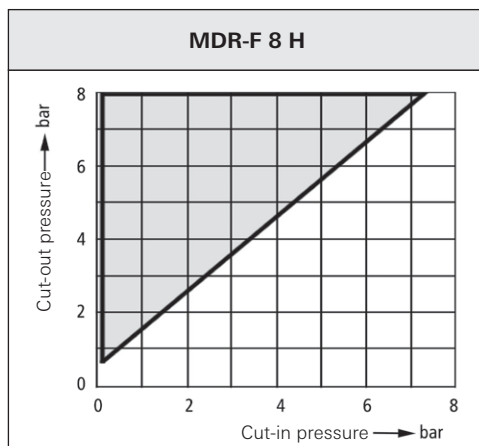
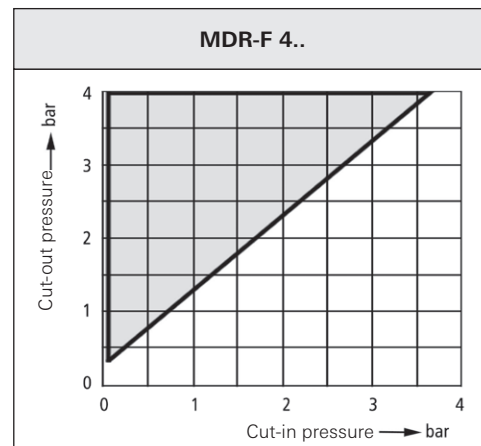
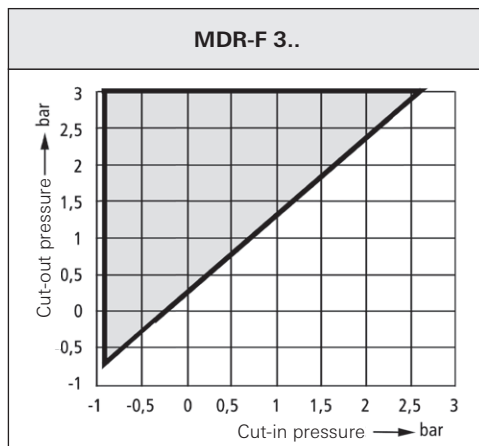
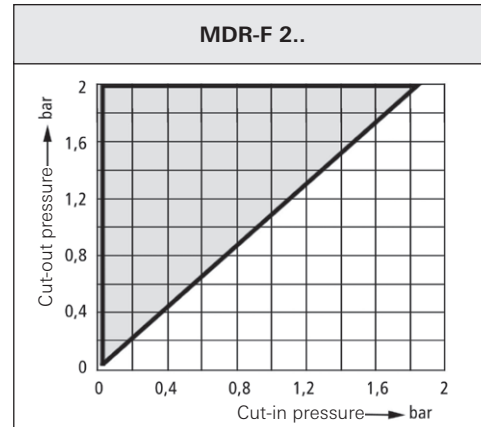
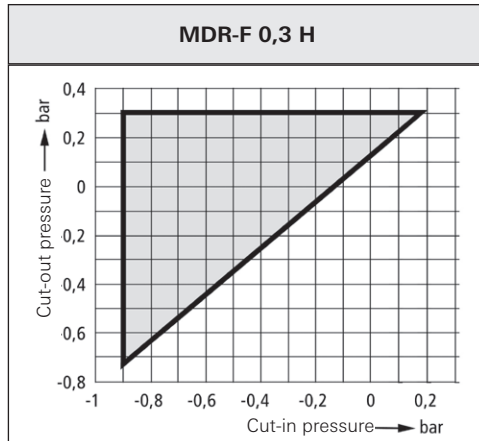
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Pressure switch settings

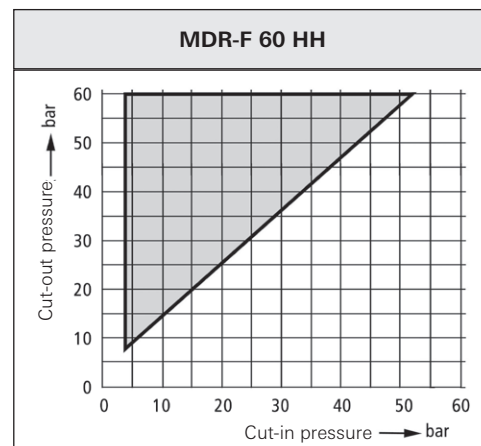
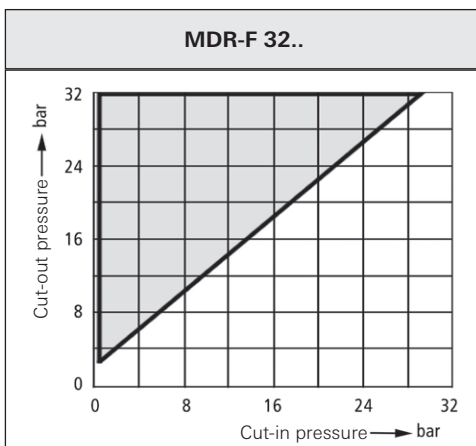
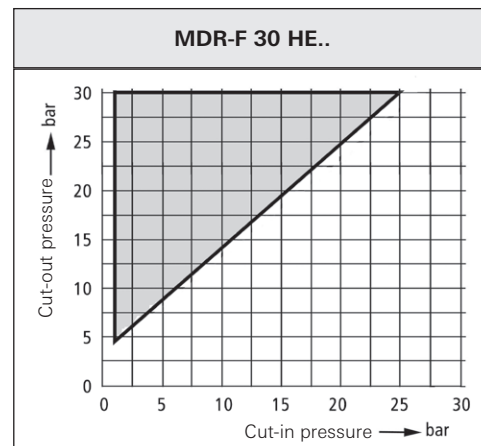
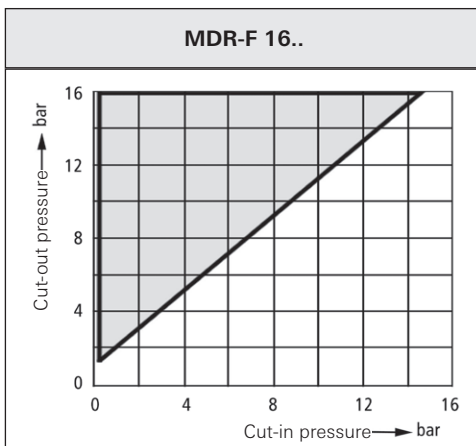
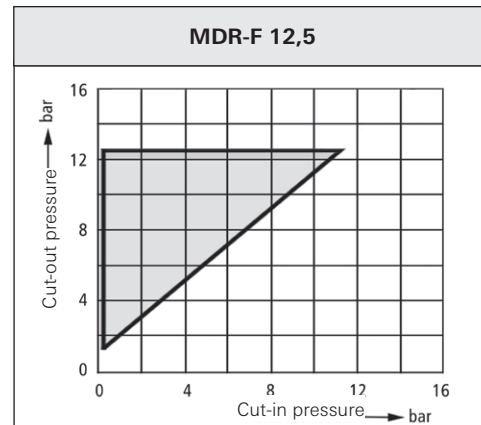
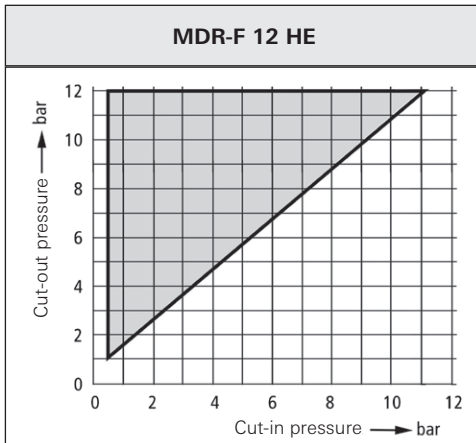
The pressure switch MDR-F..H is fitted as standard with the possibility for pressure difference adjustment. Two adjusting screws (P1 and P2) permit switching point and hysteresis to be adjusted, whereby the cut-out pressure is adjusted with screw P1. Pressure difference and thereby the cut-in point is adjusted with screw P2. By selecting a pair of values for cut-in and cut-out pressures, an intersection point is

determined in the diagram. If the point lies within the shaded area, this pair of values can be adjusted on the pressure switch. If the point lies outside the shaded area, this pair of values cannot be adjusted on the pressure switch. .

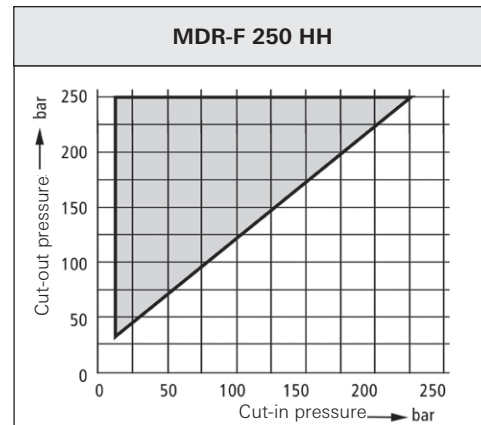
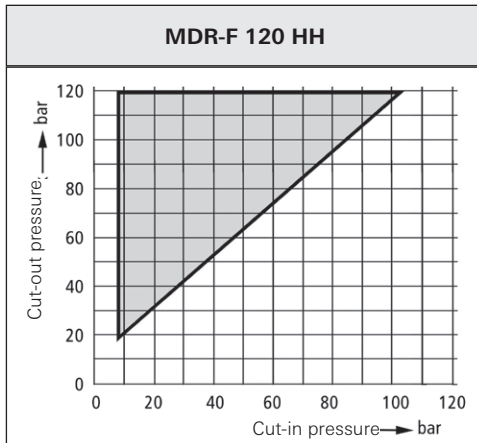
Pressure diagrams MDR-F



Pressure diagrams MDR-F

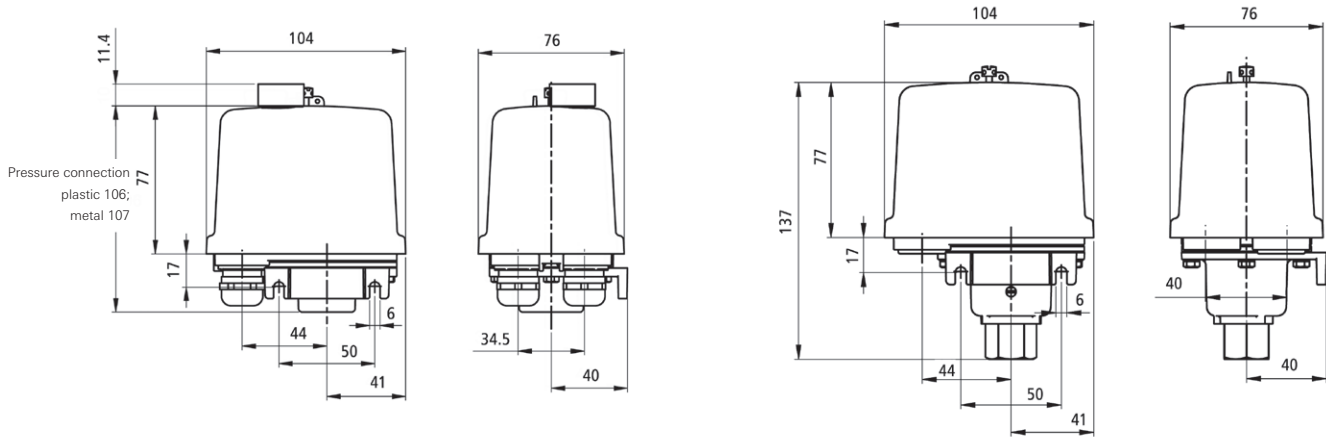


Pressure diagrams MDR-F



Note: All pressure diagrams do not apply to the „DPDT“ version and not for „NO / NC“. If needed, upon request.

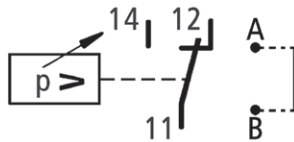
Dimensions



Pressure switch MDR-F..H / ..Y/..HV

MDR-F..HH / ..HE

Circuit diagram



Pressure switch MDR-F



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FOLGEN SIE UNS

