

Pressure switch MDR - F



Control pressure switch MDR - F

Pressure ranges up to 250 bars
Ample wiring room
Simple calibration
High repeatability
1 SPDT
Acc. to EN 60947
Large variety of models

Applications:

**Compressors, pumps, construction machines,
fire-fighting equipment, oil pressure control**

Application

The Condor pressure switch series MDR-F can be universally used and are suitable for:

- Monitoring and controlling the pressure of liquids or gaseous media in pipelines, tanks, vats, pressure vessels and apparatus.
- Tasks in process control, cooling, pneumatics and hydraulics.
- Pressure monitoring of cooling circuits and lubrication systems on various types of machinery.
- Automatic switching of pump and compressor motors for supplying water to dwellings, booster pumps, fire-fighting equipment and on compressed air systems.

Mode of operation:

The pressure of the monitored medium operates against a diaphragm, bellows or a plunger all of which have different media resistance. Switching operation is carried out with the use of a micro switch ensuring flutter-free switching.

When the pressure reaches the upper switching point, the micro switch contacts change position. In normal cases e.g. a connected motor is switched off (up to 550 watts direct or using additional switches like a contactor etc.). Should the pressure fall below the lower switch point, then the micro switch contact returns to its default position and the motor is switched on.

The upper and lower switching points can be set independently using a screw driver. Both switching points can be read off the scale.

Pressure connection, pressure sensing element and electrical connections are all fitted on to a die-cast aluminum base. The sealable transparent, polycarbonate cover protects the scales and switch against environmental effects.

Standard scope of delivery: rubber grommets

MDR-F..H Die-cast aluminum flange

MDR-F..Y Plastic flange (in particular for use in water technology applications)

Besides the standard types with Perbunan diaphragms, the following new types are available:

- **Pressure switch with stainless steel pressure sensing element e.g. for liquid fuels, oils up to 200°C**
etc.
- **High pressure switch with plastic plunger press. sensing element** with stainless steel connection up to 250 bar
- **Pressure switch with manual reset function and die-cast aluminum flange** for oil, water and air etc.
- **Pressure switch with Viton diaphragm and die-cast aluminum flange** for increased media resistance

The MDR-F pressure switch program is being constantly expanded. Along with the VdS approval, the following approvals are being presently processed: Atex, Germanischer Lloyd etc. The VdS version will be available no later than beginning 2008.

Pressure switch MDR - F



Type overview MDR-F .. H (G) suffix G for gold-flashed contacts

Pressure switch with Perbunan diaphragm and die-cast aluminum flange for oil, water and air etc.

Connection: H G 3/8" inner thread DIN ISO 228/I, VDE 0660, IEC 337-1, IEC 553-1

Industrial cage clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2H	MDR-F 2 HAA AAA A 005A015	0.04 ... 1,89 bar	0.07 0.11	0.11 ... 2 bar	252511
MDR-F 2HG	MDR-F 2 HAA ABA A 005A015	0.04 ... 1,89 bar	0.07 0.11	0.11 ... 2 bar	252528
MDR-F 4H	MDR-F 4 HAA AAA A 010A030	0.07 ... 3,75 bar	0.15 0.25	0.22 ... 4 bar	252535
MDR-F 4HG	MDR-F 4 HAA ABA A 010A030	0.07 ... 3,75 bar	0.15 0.25	0.22 ... 4 bar	252542
MDR-F 8H	MDR-F 8 HAA AAA A 020A060	0.2 ... 7,5 bar	0.3 0.5	0.5 ... 8 bar	252559
MDR-F 8HG	MDR-F 8 HAA ABA A 020A060	0.2 ... 7,5 bar	0.3 0.5	0.5 ... 8 bar	252566
MDR-F 10H	MDR-F 10 HAA AAA A 040A050	0.3 ... 9,2 bar	0.4 0.8	0.7 ... 10 bar	252573
MDR-F 10HG	MDR-F 10 HAA ABA A 040A050	0.3 ... 9,2 bar	0.4 0.8	0.7 ... 10 bar	252580
MDR-F 16H	MDR-F 16 HAA AAA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	252597
MDR-F 16HG	MDR-F 16 HAA ABA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	252603
MDR-F 32H	MDR-F 32 HAA AAA A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	252610
MDR-F 32HG	MDR-F 32 HAA ABA A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	252627

Industrial screw clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2H	MDR-F 2 HAA SAA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253501
MDR-F 2HG	MDR-F 2 HAA SBA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253518
MDR-F 4H	MDR-F 4 HAA SAA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253525
MDR-F 4HG	MDR-F 4 HAA SBA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253532
MDR-F 8H	MDR-F 8 HAA SAA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253549
MDR-F 8HG	MDR-F 8 HAA SBA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253556
MDR-F 10H	MDR-F 10 HAA SAA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253563
MDR-F 10HG	MDR-F 10 HAA SBA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253570
MDR-F 16H	MDR-F 16 HAA SAA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253587
MDR-F 16HG	MDR-F 16 HAA SBA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253594
MDR-F 32H	MDR-F 32 HAA SAA A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	253600
MDR-F 32HG	MDR-F 32 HAA SBA A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	253617

* lower ...upper end of range

Type overview MDR-F .. Y (G) suffix G for gold-flashed contacts

Pressure switch with Perbunan diaphragm and plastic flange e.g. for demineralized water

Connection: Y G 3/8" inner thread DIN ISO 228/I, VDE 0660, IEC 337-1, IEC 553-1

Industrial cage clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2Y	MDR-F 2 YAA AAA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	252634
MDR-F 2YG	MDR-F 2 YAA ABA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	252641
MDR-F 4Y	MDR-F 4 YAA AAA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	252658
MDR-F 4YG	MDR-F 4 YAA ABA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	252665
MDR-F 8Y	MDR-F 8 YAA AAA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	252672
MDR-F 8YG	MDR-F 8 YAA ABA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	252689
MDR-F 10Y	MDR-F 10 YAA AAA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	252696
MDR-F 10YG	MDR-F 10 YAA ABA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	252702
MDR-F 16Y	MDR-F 16 YAA AAA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	252719
MDR-F 16YG	MDR-F 16 YAA ABA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	252726

Pressure switch MDR - F



Industrial screw clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2Y	MDR-F 2 YAA SAA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253624
MDR-F 2YG	MDR-F 2 YAA SBA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253631
MDR-F 4Y	MDR-F 4 YAA SAA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253648
MDR-F 4YG	MDR-F 4 YAA SBA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253655
MDR-F 8Y	MDR-F 8 YAA SAA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253662
MDR-F 8YG	MDR-F 8 YAA SBA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253679
MDR-F 10Y	MDR-F 10 YAA SAA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253686
MDR-F 10YG	MDR-F 10 YAA SBA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253693
MDR-F 16Y	MDR-F 16 YAA SAA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253709
MDR-F 16YG	MDR-F 16 YAA SBA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253716

* lower ...upper end of range

Type overview MDR-F .. HE (G) suffix G for gold-flashed contacts

Pressure switch with stainless steel press. sensing element e.g. for liquid fuels, oils up to 200°C etc.

Connection: HE G 1/4" inner thread DIN ISO 228/I, VDE 0660, IEC 337-1, IEC 553-1

Industrial cage clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 12HE	MDR-F 12 HEC AAA A 060A070	0.5 ... 11.2 bar	0.5 0.8	1 ... 12 bar	252733
MDR-F 12HEG	MDR-F 12 HEC ABA A 060A070	0.5 ... 11.2 bar	0.5 0.8	1 ... 12 bar	252740
MDR-F 30HE	MDR-F 30 HEC AAA A 160A200	1 ... 26.4 bar	1.8 3.6	2.8 ... 30 bar	252757
MDR-F 30HEG	MDR-F 30 HEC ABA A 160A200	1 ... 26.4 bar	1.8 3.6	2.8 ... 30 bar	252764

Industrial screw clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 12HE	MDR-F 12 HEC SAA A 060A070	0.5 ... 11.2 bar	0.5 0.8	1 ... 12 bar	253723
MDR-F 12HEG	MDR-F 12 HEC SBA A 060A070	0.5 ... 11.2 bar	0.5 0.8	1 ... 12 bar	253730
MDR-F 30HE	MDR-F 30 HEC SAA A 160A200	1 ... 26.4 bar	1.8 3.6	2.8 ... 30 bar	253747
MDR-F 30HEG	MDR-F 30 HEC SBA A 160A200	1 ... 26.4 bar	1.8 3.6	2.8 ... 30 bar	253754

* lower ...upper end of range

Type overview MDR-F .. HH (G) suffix G for gold-flashed contacts

High pressure switch with plastic plunger press. sensing element with stainless steel connection up to 250 bar

Connection HH 3/8" inner thread DIN ISO 228/I, VDE 0660, IEC 337-1, IEC 553-1

Industrial cage clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 60HH	MDR-F 60 HHC AAA A 200A400	4 ... 52 bar	4 8	8 ... 60 bar	252771
MDR-F 60HHG	MDR-F 60 HHC ABA A 200A400	4 ... 52 bar	4 8	8 ... 60 bar	252788
MDR-F 120HH	MDR-F 120 HHC AAA A 200A800	8 ... 104 bar	8 16	16 ... 120 bar	252795
MDR-F 120HHG	MDR-F 120 HHC ABA A 200A800	8 ... 104 bar	8 16	16 ... 120 bar	252804
MDR-F 250HH	MDR-F 250 HHC AAA A 100F200	14 ... 226 bar	12 24	26 ... 250 bar	252818
MDR-F 250HHG	MDR-F 250 HHC ABA A 100F200	14 ... 226 bar	12 24	26 ... 250 bar	252825

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Industrial screw clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 60HH	MDR-F 60 HHC SAA A 200A400	4 ... 52 bar	4 8	8 ... 60 bar	253761
MDR-F 60HHG	MDR-F 60 HHC SBA A 200A400	4 ... 52 bar	4 8	8 ... 60 bar	253778
MDR-F 120HH	MDR-F 120 HHC SAA A 200A800	8 ... 104 bar	8 16	16 ... 120 bar	253785
MDR-F 120HHG	MDR-F 120 HHC SBA A 200A800	8 ... 104 bar	8 16	16 ... 120 bar	253792
MDR-F 250HH	MDR-F 250 HHC SAA A 100F200	14 ... 226 bar	12 24	26 ... 250 bar	253808
MDR-F 250HHG	MDR-F 250 HHC SBA A 100F200	14 ... 226 bar	12 24	26 ... 250 bar	253815

* lower ...upper end of range

Type overview MDR-F .. Reset function (Hmin / Hmax and Htro)

Pressure switch with reset function and die-cast aluminum flange for oil, water and air etc.

Connection: H G 3/8" inner thread DIN ISO 228/I, VDE 0660, IEC 337-1, IEC 553-1

MDR-F .. Hmax (SPDT with manual reset max.)

When pressure rises above the upper setting value, contact 11-12 opens and contact 11-14 closes and latches. When the pressure falls below the upper setting value, the contact can be released with the manual reset button.

MDR-F .. Hmin (SPDT with manual reset min.)

After pressure rises above the lower setting value, the function is activated by pressing the manual reset button. When the pressure falls, contact 11-12 closes and opens contact 11-14 when reaching the lower cut-in value. Since the upper switching point (cut-out pressure) of the reset pressure switch must lie above the maximum cut-out pressure of the apparatus, the switching state remains until the manual reset button is pressed again.

MDR-F .. Htro (SPDT with manual reset as run-dry protection)

The manual reset button must be held when the pressure rises beyond the switching point to be monitored or pressed once at the current pressure. When the pressure falls, contact 11-12 closes and opens contact 11-14 when the monitored pressure point is reached. When the pressure rises above the adjusted value, contact 11-12 opens and closes contact 11-14 again automatically.

Industrial cage clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2Hmax	MDR-F 2 HAA AAH A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253075
MDR-F 4Hmax	MDR-F 4 HAA AAH A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253082
MDR-F 8Hmax	MDR-F 8 HAA AAH A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253099
MDR-F 10Hmax	MDR-F 10 HAA AAH A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253105
MDR-F 16Hmax	MDR-F 16 HAA AAH A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253112
MDR-F 32Hmax	MDR-F 32 HAA AAH A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	253129
MDR-F 2Hmin	MDR-F 2 HAA AAL A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253136
MDR-F 4Hmin	MDR-F 4 HAA AAL A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253143
MDR-F 8Hmin	MDR-F 8 HAA AAL A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253150
MDR-F 10Hmin	MDR-F 10 HAA AAL A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253167
MDR-F 16Hmin	MDR-F 16 HAA AAL A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253174
MDR-F 32Hmin	MDR-F 32 HAA AAL A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	253181
MDR-F 2Htro	MDR-F 2 HAA AAG A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253433
MDR-F 4Htro	MDR-F 4 HAA AAG A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253440
MDR-F 8Htro	MDR-F 8 HAA AAG A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253457
MDR-F 10Htro	MDR-F 10 HAA AAG A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253464
MDR-F 16Htro	MDR-F 16 HAA AAG A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253471
MDR-F 32Htro	MDR-F 32 HAA AAG A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	253488

* lower ...upper end of range

Pressure switch MDR - F



Industrial screw clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2Hmax	MDR-F 2 HAA SAH A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	254065
MDR-F 4Hmax	MDR-F 4 HAA SAH A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	254072
MDR-F 8Hmax	MDR-F 8 HAA SAH A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	254089
MDR-F 10Hmax	MDR-F 10 HAA SAH A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	254096
MDR-F 16Hmax	MDR-F 16 HAA SAH A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	254102
MDR-F 32Hmax	MDR-F 32 HAA SAH A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	254119
MDR-F 2Hmin	MDR-F 2 HAA SAL A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	254126
MDR-F 4Hmin	MDR-F 4 HAA SAL A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	254133
MDR-F 8Hmin	MDR-F 8 HAA SAL A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	254140
MDR-F 10Hmin	MDR-F 10 HAA SAL A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	254157
MDR-F 16Hmin	MDR-F 16 HAA SAL A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	254164
MDR-F 32Hmin	MDR-F 32 HAA SAL A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	254171
MDR-F 2Htro	MDR-F 2 HAA SAG A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	254188
MDR-F 4Htro	MDR-F 4 HAA SAG A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	254195
MDR-F 8Htro	MDR-F 8 HAA SAG A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	254201
MDR-F 10Htro	MDR-F 10 HAA SAG A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	254218
MDR-F 16Htro	MDR-F 16 HAA SAG A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	254225
MDR-F 32Htro	MDR-F 32 HAA SAG A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	254232

* lower ...upper end of range

Additional MDR-F pressure switch versions .. Reset function are available on request (e.g. as stainless steel bellows version, with gold-flashed contacts, as high pressure switch etc.).

Type overview MDR-F .. HV

Pressure switch with Viton diaphragm and die-cast aluminum flange for enhanced media resistance

Connection: H G 3/8" inner thread DIN ISO 228/I, VDE 0660, IEC 337-1, IEC 553-1

Industrial cage clamp style					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2HV	MDR-F 2 HAV AAA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	252894
MDR-F 4HV	MDR-F 4 HAV AAA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	252900
MDR-F 8HV	MDR-F 8 HAV AAA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	252917
MDR-F10 HV	MDR-F 10 HAV AAA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	252924
MDR-F 16HV	MDR-F 16 HAV AAA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	252931
MDR-F 32HV	MDR-F 32 HAV AAA A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	252948

Industrial screw clamp version					
Order reference	Matchcode	Adjustable cut-in pressure (bar)	Smallest pressure diff. (bar)*	Adjustable cut-out pressure (bar)	Part No.
MDR-F 2HV	MDR-F 2 HAV SAA A 005A015	0.04 ... 1.89 bar	0.07 0.11	0.11 ... 2 bar	253884
MDR-F 4HV	MDR-F 4 HAV SAA A 010A030	0.07 ... 3.75 bar	0.15 0.25	0.22 ... 4 bar	253891
MDR-F 8HV	MDR-F 8 HAV SAA A 020A060	0.2 ... 7.5 bar	0.3 0.5	0.5 ... 8 bar	253907
MDR-F10 HV	MDR-F 10 HAV SAA A 040A050	0.3 ... 9.2 bar	0.4 0.8	0.7 ... 10 bar	253914
MDR-F 16HV	MDR-F 16 HAV SAA A 040A120	0.4 ... 15 bar	0.6 1.0	1 ... 16 bar	253921
MDR-F 32HV	MDR-F 32 HAV SAA A 100A200	0.8 ... 30 bar	1.2 2.0	2 ... 32 bar	253938

* lower ...upper end of range

Additional pressure switch versions MDR-F .. HV are available on request (e.g. as manual reset pressure switches, with gold-flashed contacts, with plastic flange etc.).

Pressure switch MDR - F



Technical data MDR-F

Technical data MDR-F standard version	
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
Permissible motor rating 1~ 230 V	0.55 kW

Technical data MDR-F	
Vibration resistance 10 up to 1000 Hz	4 g
Degree of protection acc. to DIN 40 050/IEC 529 With rubber grommets	IP 54
Degree of protection acc. to DIN 40 050/IEC 529 With cable glands M20	IP 65
Ambient temperature range	- 20 °C .. + 70 °C
Cross-sections Cage clamp (without cable end sleeve)	1.5 mm ²
Cross-sections Screw clamp	2.5 mm ²

Technical data MDR-F..(G) – gold-flashed contact	
Rated operational current I _e U _e =30 V (1~)	400 mA
Permissible motor rating 1~ 30 V	12 VA

Technical data MDR-F	
Perm. media temperature:	
MDR-F..H / HH	+ 70 °C
MDR-F..HV	+ 130 °C
MDR-F..HE	+ 200 °C
MDR-F..Y	+ 50 °C
Repeatability	<2% FS

Media resistance MDR-F..

Media resistance MDR-F..H / MDR-F..Y Perbunan diaphragm	
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, Steam	resistant

Media resistance MDR-F..HV Viton diaphragm	
Acetylene, Ammonia-25%, Gasoline, Benzene, Butane, Chlorine, Diesel, Dimethylbenzene, Natural gas, Petroleum, Vinegar-25%, Ethylene glycol, Glycerol, Fuel oil, Urine, Carbon dioxide, Carbonic acid, Cooling liquid, Air, Methyl chloride, Mineral oils, Ozone, Perchloroethylene, Vegetable oil, Propane, Oxygen, Silicon oil, Nitrogen, Toluene, Trichlorethene, Water, Distilled water, Hydrogen, Sea water, Water steam	resistant

Media resistance MDR-F..HH Polyacetal (High pressure version)	
Acetylene, Gasoline, Butane, Diesel, Natural gas, Petroleum, Ethylene glycol, Glycerol, Fuel oil, Carbon dioxide, Carbonic acid, Air, Propane, Nitrogen, Water, Distilled water, Hydrogen, Sea water	resistant

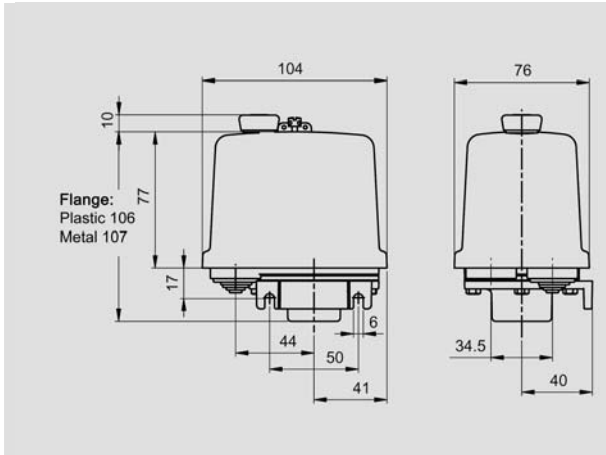
Media resistance MDR-F..HE Stainless steel bellows	
Acetone, Acetylene, Ammonia-100%, Gasoline, Benzene, Butane, Butyl acetate, Butyl alcohol, Diesel, Dimethylbenzene, Natural gas, Petroleum, Ethylene glycol, Ethyl acetate, Glycerol, Fuel oil, Carbon dioxide, Carbonic acid, Cooling liquid, Air, Methyl chloride, Mineral oils, Ozone, Perchloroethylene, Vegetable oil, Phenolic acid, Propane, Oxygen, Protective gas, Sulphur dioxide, Nitrogen, Synthetic oils, Toluene, Trichlorethene, 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 2.11

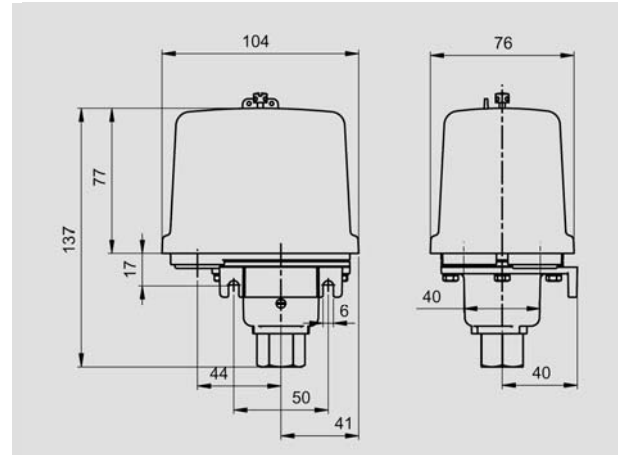
Pressure switch MDR - F



Dimensions MDR - F

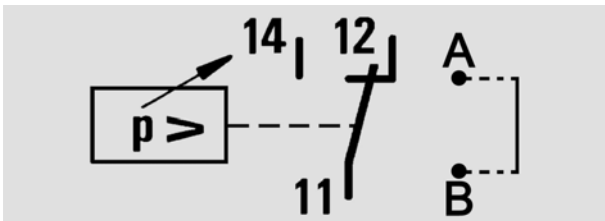


Pressure switch **MDR – F..H / Y / HV**



Pressure switch **MDR – F.. HH / HE**

Circuit diagram MDR-F



For special applications e.g. VdS, individual circuits are possible due to the use of integrated PCB's (as default, contacts A and B are bridged)

Accessories MDR - F

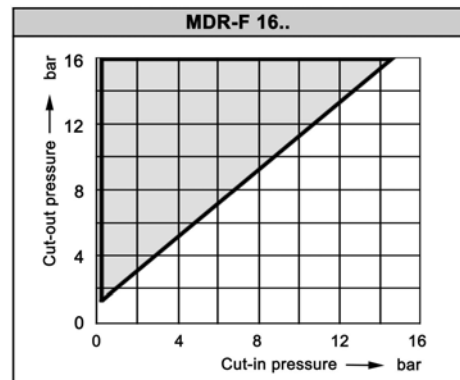
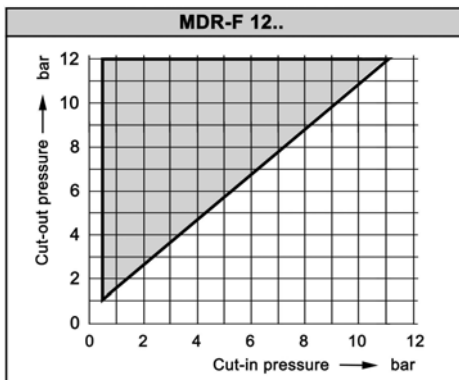
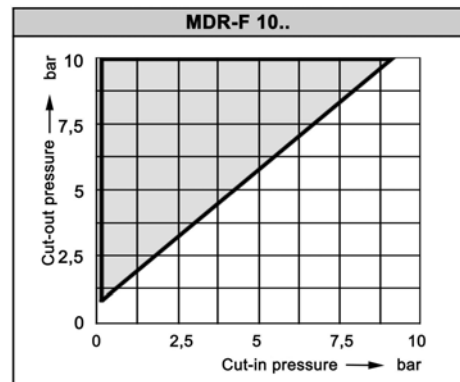
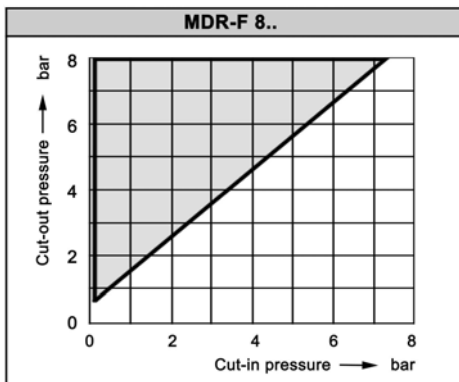
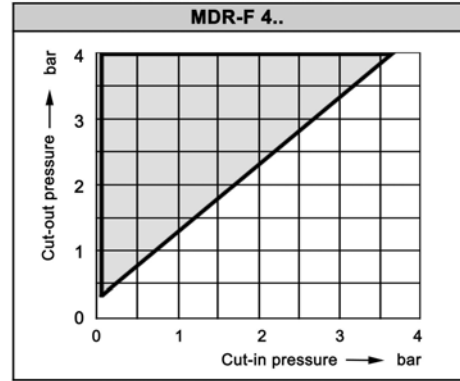
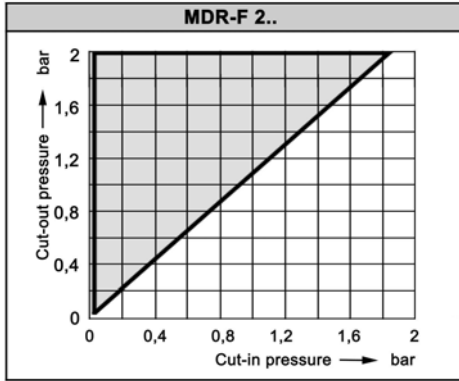
Order reference	Description	Weight in g	Part No.
MDR-F M20	Cable glands Cable gland M20	35	254249
MDR-F D-32	Throttle MDR-F up to 32 bar	1	254256
MDR-F D+32	MDR-F as of 32 bar	2	254263
MDR-F Cover	Covers MDR-F Cover, transparent, Standard	90	254270
MDR-F Cover R	MDR-F Cover, transparent, for manual reset	90	254287
MDR-F RT-1	Reset push-button Reset push-buttons for mounting on cover R	25	254294

Additional accessories (e.g. pressure connectors) on demand

Pressure switch MDR - F



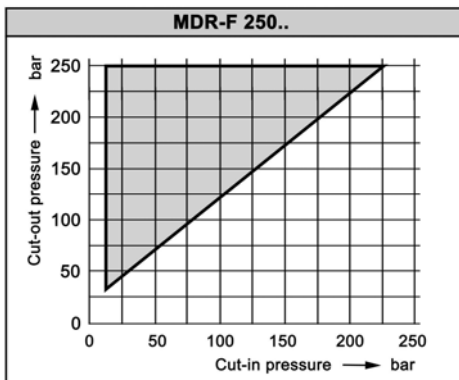
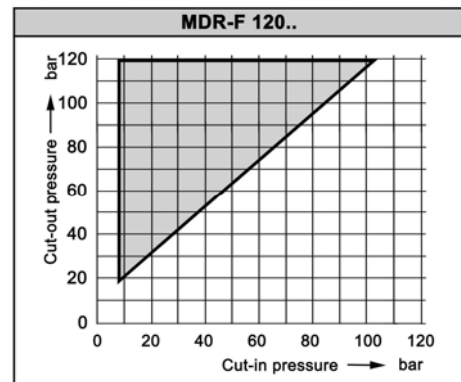
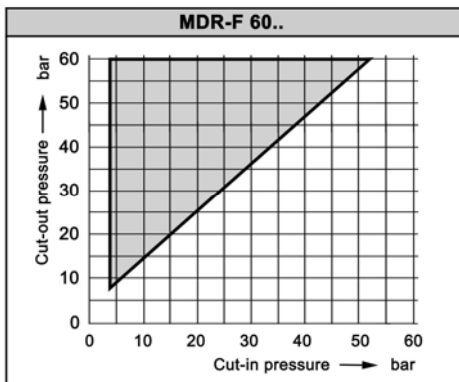
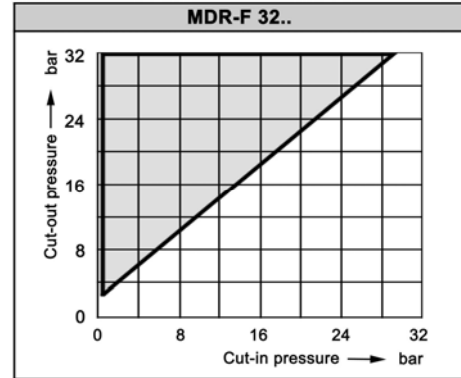
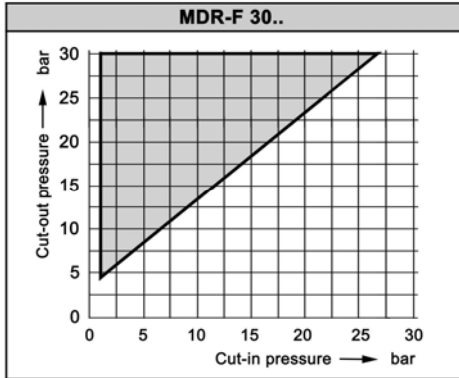
Pressure diagrams MDR-F



Pressure switch MDR - F



Pressure diagrams MDR-F



Pressure