

Control pressure switch FF 142



Control pressure switch FF 142

- Pressure ranges up to 40 bar
- Ample wiring room
- Simple calibration
- 2 SPDT's
- Acc. to EN 60947
- Rigid enclosure
- Degree of Protection IP 55
- Scale with bar and psi values

Applications

The FF 142 Series is a pressure switch which has been standardized in a wide variety of industrial, commercial and sea-going applications to monitor or control the pressure of liquid or gaseous media:

- Pipelines
- Containers
- Pressure vessels
- Apparatus
- Process technology
- Pneumatics and hydraulics
- Refrigeration and heating plants
- Lubrication systems
- Pump motors for water supply to dwellings

Function description

Turning the setting knob Pmax. changes both the upper and the lower switch points. By turning the differential spindle Dp only, the lower switch point is adjusted, while the upper setting remains unchanged.

Construction

The standard FF 142 series are fitted in insulation enclosures, made of ABS. Large clear scales ease exact adjustment of upper switch point and switching differential. They are marked both in bar and in psi units. Scales are connected to the frame of the device and remain in place, when the cover is removed. Ample wiring room simplifies wiring.

Type overview

FF 142-.. DAH

with Perbunan diaphragm, standard enclosure, suitable for oil, water, air etc.

Order reference	Upper switch pt. adjustable	Pressure diff. adjustable	Lower switch pt. adjustable	Max. pressure (bar)	Standard setting (bar)	Part No.
FF 142-6 DAH	0.2 ... 1.5	0.12 ... 0.5	0.1	5	0,8 / 1	260356
FF 142-8 DAH	1 ... 8	0.4 ... 2.4	0.1	10,5	4 / 5	260363
FF 142-9 DAH	2 ... 21	0.8 ... 6	0.1	25	10 / 12	260370

Type overview

FF 142-.. AAC

Pressure switch with stainless steel bellows, standard enclosure
Suitable for ammonia and other aggressive media

Order reference	Upper switch pt. adjustable	Pressure diff. adjustable	Lower switch pt. adjustable	max. pressure (bar)	Standard setting (bar)	Part No.
FF 142-3 AAC	-0.4 ... 8	0,6 ... 3	-1	25	2 / 4	260387
FF 142-5 AAC	2 ... 22	2 ... 9	0.1	30	12 / 16	260394
FF 142-10 AAC	5 ... 40	2 ... 10	0.1	50	21 / 25	260400

Control pressure switch FF 142



Control pressure switch FFg 142

Pressure ranges up to 40 bar
Ample wiring room
Simple calibration
2 SPDT's
Acc. to EN 60947
Die-cast aluminum enclosure
Degree of protection IP 55
Scale with bar and psi values

Type overview

FFg 142-.. DAH

with Perbunan diaphragm, silumin (die-cast aluminum) enclosure, suitable for oil, water, air etc.

Order reference	Upper switch pt. adjustable	Pressure diff. adjustable	Lower switch pt. adjustable	Max. pressure (bar)	Standard setting (bar)	Part No.
FFg 142-6 DAH	0.2 ... 1.5	0.12 ... 0,5	0.1	5	0,8 / 1	260417
FFg 142-8 DAH	1 ... 8	0.4 ... 2.4	0.1	10.5	4 / 5	260424
FFg 142-9 DAH	2 ... 21	0.8 ... 6	0.1	25	10 / 12	260431

Type overview

FFg 142-.. AAC

Pressure switch with stainless steel bellows, silumin enclosure
Suitable for ammonia and other aggressive media

Order reference	Upper switch pt. adjustable	Pressure diff. adjustable	Lower switch pt. adjustable	Max. pressure (bar)	Standard setting (bar)	Part No.
FFg 142-3 AAC	-0.4 ... 8	0.6 ... 3	-1	25	2 / 4	260448
FFg 142-5 AAC	2 ... 22	2 ... 9	0.1	30	12 / 16	260455
FFg 142-10 AAC	5 ... 40	2 ... 10	0.1	50	21 / 25	260462

Technical Data FF 142 / FFg 142

Technical Data FF 142 / FFg 142 acc. to EN 60947	
Rated operational current I _e AC 1 U _e =230 V (1~)	16 A
Rated operational current I _e AC 15 U _e =230 V (1~)	6 A
Rated operational current I _e DC 13 U _e = 230 V DC	0,1 A

Technical Data FF 142 / FFg 142 acc. to EN 60947	
Rated operational current I _e AC 1 U _e =400 V (3~)	10 A
Rated operational current I _e AC 15 U _e =400 V (3~)	4 A

Technical Data enclosure FF 142	
Protection Acc. to DIN 40050/IEC 529	IP 55
Resistance of vibration 0 up to 1000 Hz	4 g
Ambient temperature range	-50° C...+70° C
Ambient temperature range With perbunan diaphragm	-30° C...+70° C
Contacts	2 SPDT's
Weight Approx.	ca. 0,8 kg

Technical Data enclosure FFg 142	
Protection Acc. to DIN 40050/IEC 529	IP 65
Vibration resistance 0 up to 1000 Hz	4 g
Ambient temperature range	-50° C...+70° C
Ambient temperature range With perbunan diaphragm	-30° C...+70° C
Contacts	2 SPDT's
Weight Approx.	ca. 1.2 kg

Control pressure switch FF 142

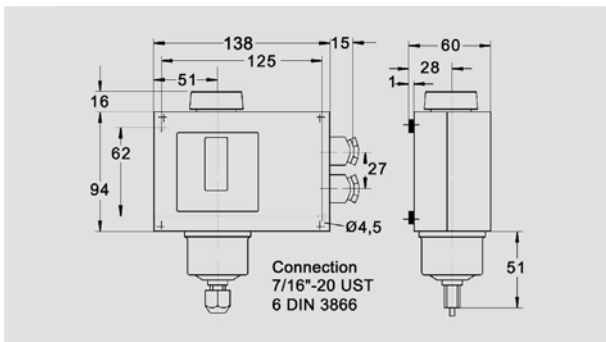


Diaphragm media resistance FF 142 / FFg 142 Perbunan diaphragm	
Acetylene, Gasoline, Butane, Diesel, Natural gas, Petroleum, Ethylene glycol, Glycerol, Fuel oil, Urine, Carbon dioxide, Carbonic acid, Air, Mineral oils, Vegetable oil, Propane, Silicon oil, Nitrogen, Synthetic oils, Water, Distilled water, Hydrogen, Sea water, Steam	resistance

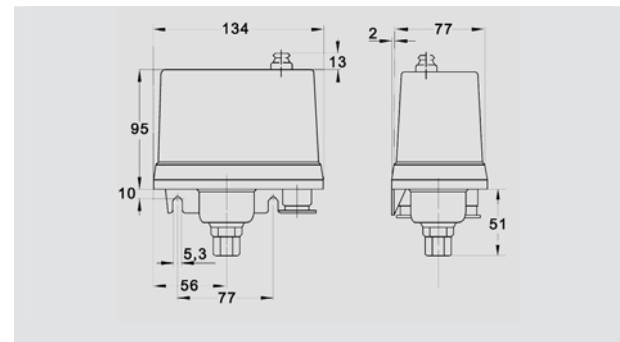
Diaphragm media resistance FF 142 / FFg 142 Stainless steel bellows	
Acetone, Ammonia, Acetylene, Gasoline, Benzene, Butane, Butyl acetate, Butyl alcohol, Diesel, Dimethylbenzene, Natural gas, Petroleum, Ethylene glycol, Ethyl acetate, Glycerol, Fuel oil, Carbon dioxide, Carbonic acid, Cooling liquid, Air, Methyl chloride, Mineral oils, Ozone, Perchloroethylene, Vegetable oil, Phenolic acid, Propane, Oxygen, Sulfur dioxide, Nitrogen, Synthetic oils, Toluene, Trichlorethene, Water, Distilled water, Hydrogen, Sea water, Steam	resistance

A detailed overview of diaphragm media resistance for all pressure switches can be found on page 2.11.

Dimensions FF 142 / FFg 142



Control pressure switch **FF 142**



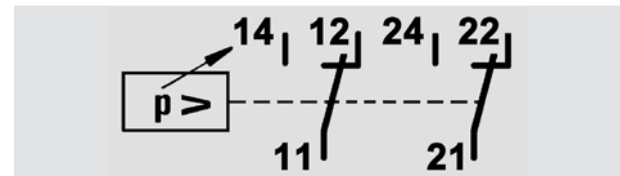
Control pressure switch **FFg 142**

Connection terminals FF 142 / FFg 142



Pressure switch **FF 142 / FFg 142**

Circuit Diagrams FF 142 / FFg 142

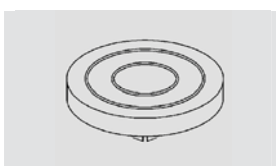


Pressure switch **FF 142 / FFg 142**

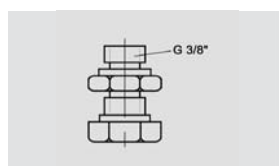
Accessories Control pressure switch FF 142 / FFg 142

Order reference	Description	Weight in g	Part No
H 124-88	Blanking plugs and knobs Plug 142	4	260806
	Cable glands		
R-AD 6	Ermeto-steel connector, for Ø 6 mm steel tube	100	260813
R-AD 10-FN 43	Ermeto- steel connector, for Ø 10 mm steel tube	100	260820
H 124-114	Gauge steel fitting Stahl, G 3/4" - G 1/2"	180	260837
H 124g-127	Mounting plate	115	260844

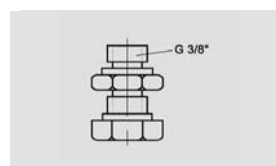
Accessories Dimensions FF 142 / FFg 142



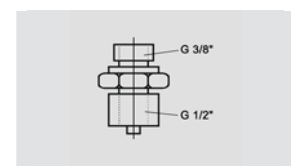
Blanking plug 142
H 124-88



Ermeto-cable gland
R-AD 6



Ermeto-cable gland
R-AD 10-FN 43

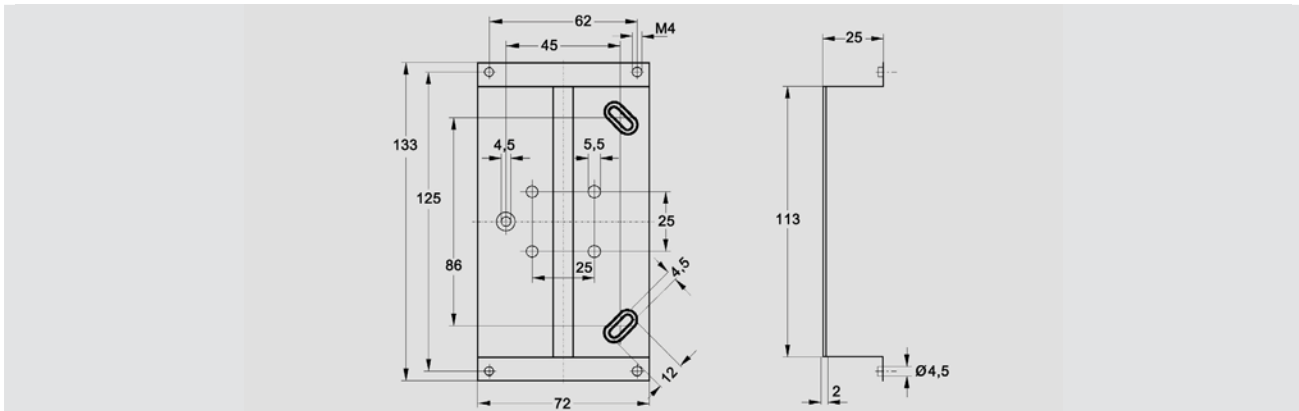


Gauge fitting
H 124-114

Control pressure switch FF 142



Accessories Dimensions FF 142 / FFg 142



Mounting plate H 124g-127

Pressure Diagrams FF 142 / FFg 142

