

RP-44



Quality / Technology / Service / Value

BY REPS GLOBAL GROUP

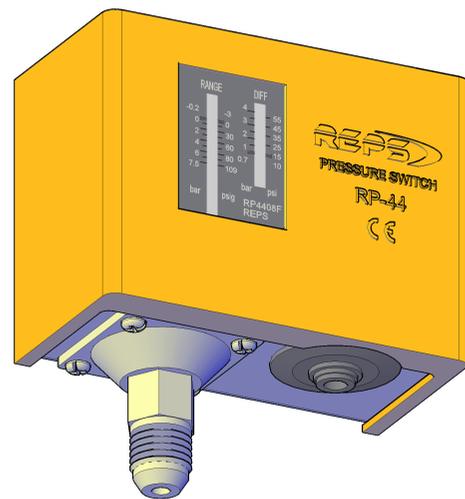
Pressure switch For industrial applications RP44 Series



REPS GLOBAL GROUP data sheet



Pressure switch, model RP-44 (G1/4")



Pressure switch, model RP-4408F (G1/4" Flare)

Features

- Designed for industrial and commercial pressure control systems
- Suitable for liquid and gaseous media
- Equipped with SPDT snap-action switch for accurate and reliable control
- Adjustable differential for precise pressure regulation
- Pressure range: – 0.2 to 42 bar "Factory-set and field-adjustable models available."
- High contact load and ultra-short bounce time
- Optional copper alloy contact system
- IP44 enclosure protection (with top cover and backplate installed)
- Ideal for pump, compressor, and fan control applications
- Compact, durable design for long service life

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Description

The REPS Pressure Switch RP44 Series provides reliable performance in systems requiring precise pressure regulation and protection. It is designed for both liquid and gaseous media, ensuring stable operation in industrial and commercial environments.

Typical applications include starting and stopping pumps, refrigeration compressors, and fans in air-cooled condensers.

The RP44 Series safeguards equipment from low suction pressure and high discharge pressure, maintaining safe and efficient operation. Each unit integrates a single-pole, double-throw (SPDT) switch mechanism that offers consistent operation with minimal contact wear. When equipped with a top cover and backplate, the unit meets IP44 protection standards, making it suitable for harsh environments.

Construction and Features

- Wide adjustable setting range for various operating conditions
- High shock and vibration resistance
- Snap-action electrical contacts minimize chatter, bounce, and wear — ensuring long-term electrical and mechanical reliability.
- Compact design with small dimensions for easy installation and space-saving panel integration
- Front electrical connection for convenient rack mounting and reduced installation space
- Compatible with both Alternating Current (AC) and Direct Current (DC) applications
- Manual trip function enables testing of electrical connections without applying pressure or using tools
- Available in automatic or manual reset versions

Technical Data

Parameter	Specification
Regulation Range	- 0.2 to 42 bar
Fluid Compatibility	Gaseous media, liquids, steam, air
Contact System	SPDT (Single-Pole Double-Throw)
Connection Material	Copper alloy, nickel-plated copper, or stainless steel (customizable)
Contact Material	Moving contact: silver-plated Static contact: solid silver
Cable Entry	Rubber cable gland or screwed cable entry Ø 6–14 mm (Ø 0.24–0.55 in)
Connection Type	G 1/4" Female, 1/4" Flare, NPT 1/4" Female
Enclosure Rating (IP)	IP20 (standard) IP44 (with bracket and cover) IP55 (with protection cover)
Permissible Temperature Range	
Ambient	- 40 to +70 °C (- 40 to +158 °F)
Medium	- 20 to +100 °C (- 4 to +212 °F)
Storage	- 20 to +80 °C (- 4 to +176 °F)
Relative Humidity	<50% r.h. at 40 °C (104 °F) <90% r.h. at 20 °C (68 °F)

Complies with CE standards for industrial control equipment.

Other pressure ranges and connection materials available upon request.

Electrical Ratings

Rated Amps (A) / Rated Voltage (V)	125 VAC	250 VAC	24 VDC
Full Load	20 A	10 A	8 A
Locked Rotor	72 A	72 A	64 A
Operating Temperature	-20 °C ~ +110 °C	-20 °C ~ +110 °C	-20 °C ~ +110 °C

Note: Locked Rotor current values apply to motor-starting applications.

Setting range

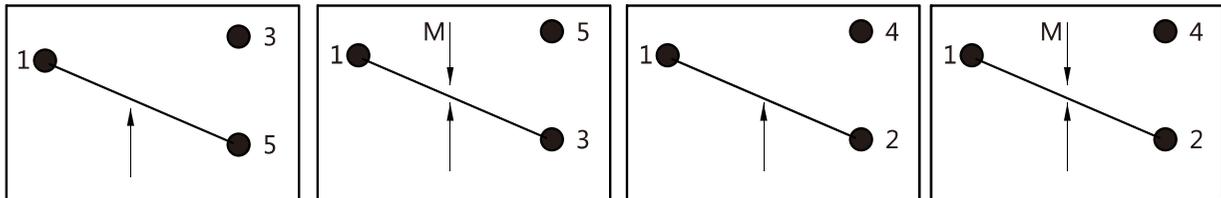
Model	Adjustable range ^{(1),(4)}		Differential ⁽²⁾		Factory setting		Max ⁽³⁾ working pressure (Bar)
	(Bar)		(Bar)		(Bar)		
	Min.	Max.	Min.	Max.	OFF	ON	
RP4402	-0.5	2	0.2	0.7	1	0.5	16.5
RP4403	-0.5	3	0.35	1.5	2	1	16.5
RP4406	-0.5	6	0.6	4	3	2	16.5
RP4406M	-0.5	6	Reset Differential ≤ 1bar		3	Manual Reset	16.5
RP4408	-0.2	7.5	0.7	4	3	2	20
RP4408F	-0.2	7.5	0.7	4	3	2	20
RP4410	1	10	1	3	6	5	16.5
RP4414	2	14	1	4	10	8	20
RP4416	3	16	1	4	10	8	35
RP4420	5	20	2	5	16	13	35
RP4430	8	30	Fixed at 3 to 5		20	15~17	35
RP4430M	8	30	Reset Differential ≤ 4bar		20	Manual Reset	35
RP4430D	5	30	3	10	20	15	35
RP4432	8	32	2	6	20	17	35
RP4442	8	30	4	10	30	25	46.5

Technical Notes

- (1) In the absence of customer specifications, the switch point is preset on falling pressure to the midpoint of the range (i.e., 50% of span + minimum range value).
- (2) The values indicate the maximum achievable limits of switch differential.
- (3) Maximum working pressure refers to the pressure that the sensing element can withstand without permanent deformation. The instrument may require recalibration afterward.
- (4) The set and reset points of the switch must not exceed the specified upper and lower range limits.

Note: All data is subject to change without notice as part of product improvement

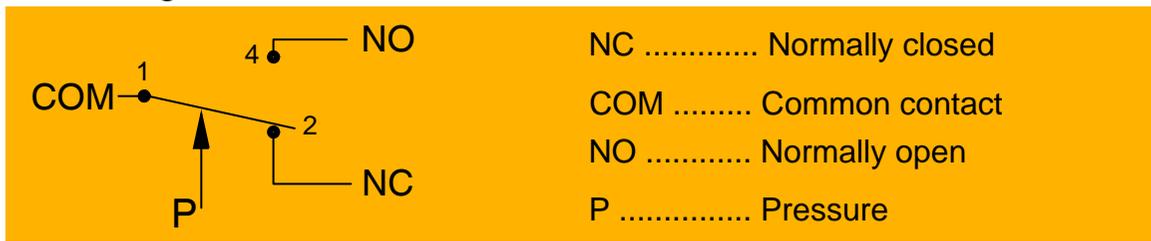
Contact Function



The arrow indicates the direction of increasing pressure, while "M" denotes a manual reset.

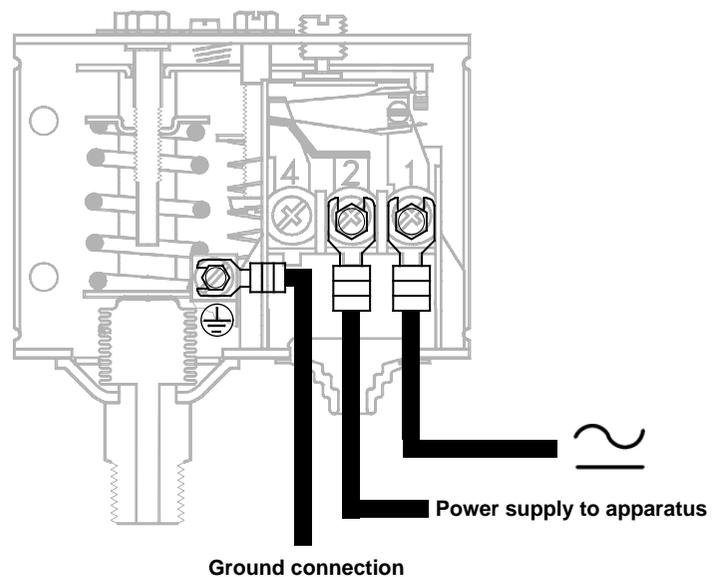
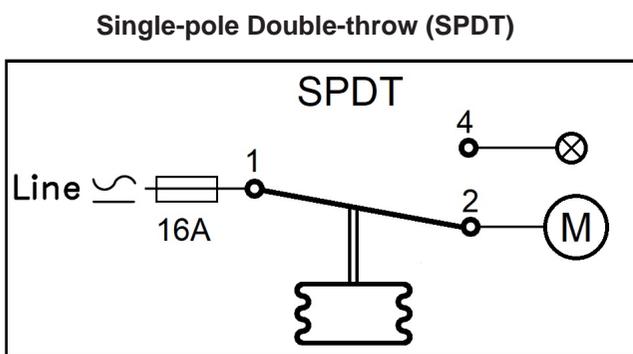
Switch Contact (NC / NO / COM)

1 x change-over / SPDT ³⁾



³⁾ Single-pole double-throw (SPDT)

Terminal assignment (Normal pressure / Decreased pressure)



Contact system and application

NORMAL PRESSURE:

Terminals 1 & 2 are in contact, supplying power to the apparatus.

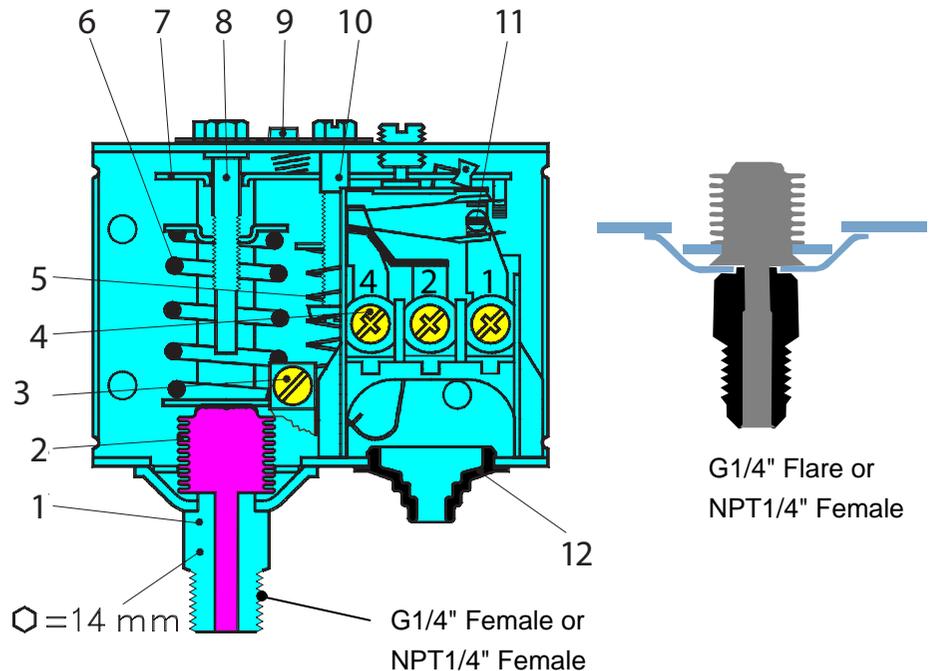
DECREASED PRESSURE:

Terminals 1 and 2 break contact, while terminals 1 and 4 establish contact.

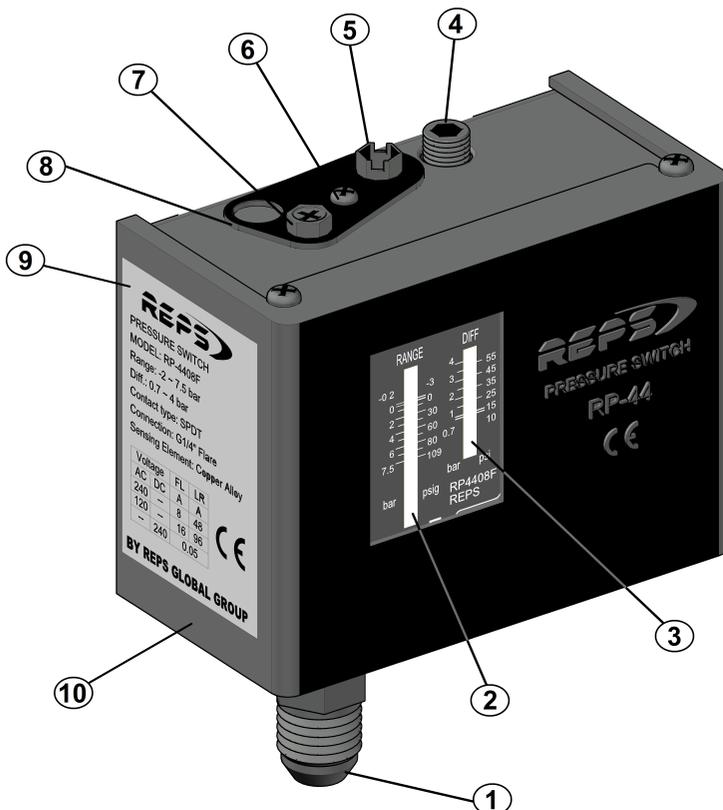
Electrical connection:
Rubber grommet for cables
Ø 6 ... 14 mm [Ø 0.24 ... 0.55 in]

Pressure switch section

1. Pressure connector
2. Bellows
3. Earth terminal
4. Connection terminals
5. Differential spring
6. Main spring
7. Main arm
8. Setting spindle
9. Locking screw
10. Differential setting spindle
11. Contact system
12. Cable entry

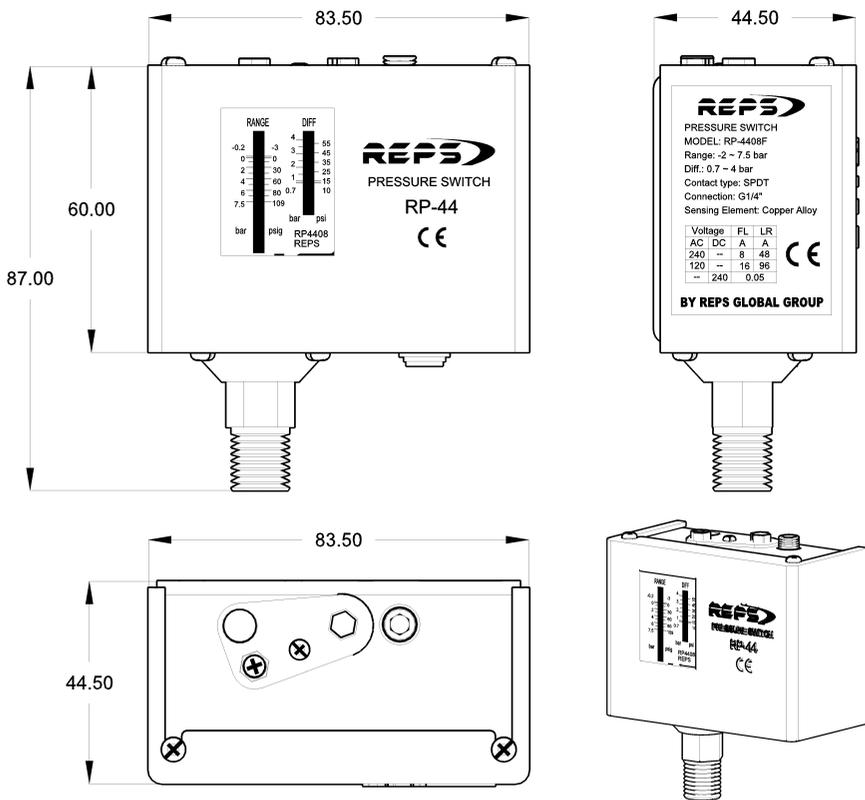


Overview



- 1) Process connection
- 2) Display range set point
- 3) Display differential set point
- 4) Forbidden to twist
- 5) Differential adjustment screw
- 6) Lock plate screw
- 7) Range adjustment screw
- 8) Lock plate
- 9) Specification label
- 10) ABS plastic cover

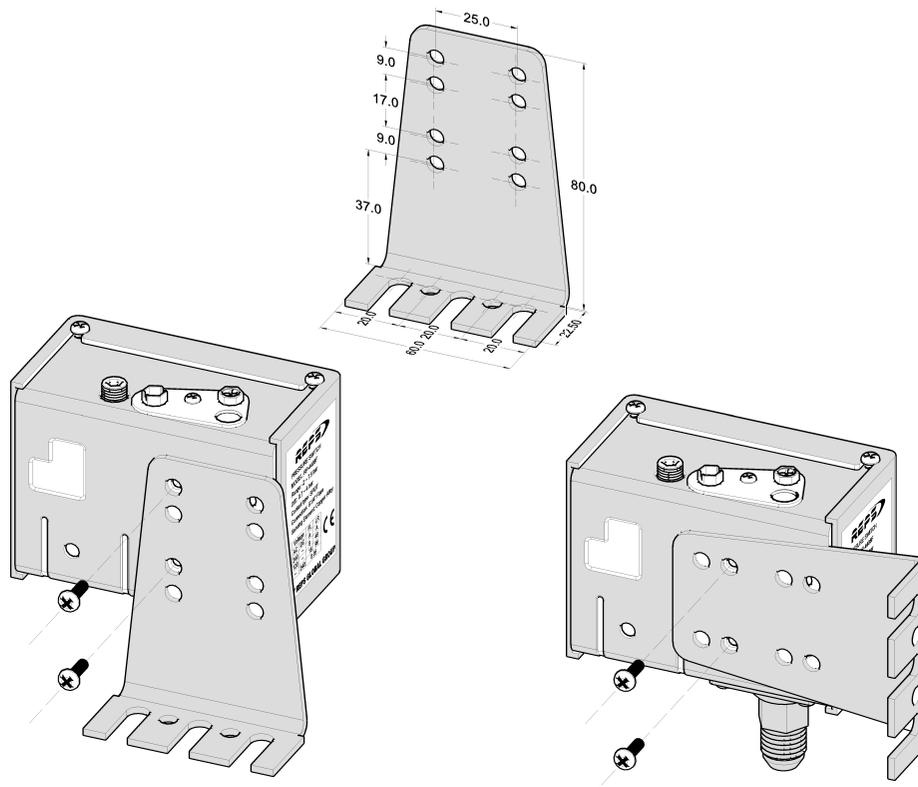
Dimensions



Ingress protection:

The ingress protection: IP30
 The ingress protection rating is valid only if all rear mounting holes are covered or if the instrument is panel-mounted on a flat surface.

Mounting bracket



**PRESSURE SWITCH FOR
WATER PUMP, AIR COMPRESSOR
AND REFRIGERATION SYSTEMS
RP- 44 Series**



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