

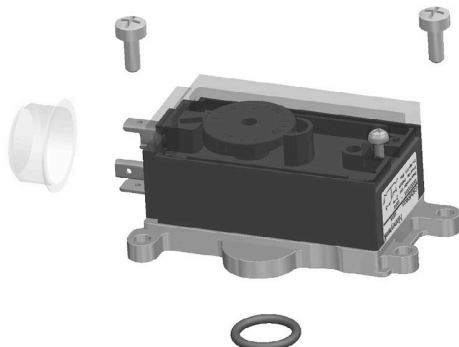


C60VR40xxx

C60VRT40xxx

GAS PRESSURE SWITCH FOR VR400, VRB, V4730
AND V4734 COMBINATION GAS CONTROLS

INSTRUCTION SHEET



SPECIFICATION

Material

Diaphragm: NBR
Housing: PBT glass fiber reinforced
Bottom: AISi 12
Contacts: AgNi

Dimensions

See fig. 2

Ambient temperature

-15 ... 60 °C (+5 ... 140 °F).

Maximum test pressure

2 bar (29 psig), < 15 min.

Maximum operating pressure

See table 1.

Terminals

Conform DIN 43650

Electrical connection

AMP fast on 6.3 x 0.8 mm
Din plug conform DIN 43650

Enclosure

IP 00

Accessories

Cable plug (conform DIN 43650): 45.900.429-050

APPLICATION

The gas pressure switch C60VR(T)40xxx functions as a minimum inlet gas pressure supervision with a safe start interlock. In combination with VR400, VRB, V4730 or V4734 gas control an SPDT contact is operated as a part of a safe start check circuit. Burner will not be allowed to operate unless the gas inlet pressure is above the set point.

DESCRIPTION

The gas pressure switch C60VR(T)40xxx is designed to be fitted directly on the body of a VR400, VRB, V4730 or V4734 combination gas control by means of two mounting screws and an O-ring.

Tabel 1 Models gas pressure switch C60VR(T)40xxx.

Type	Approved	Range mbar		Hysteresis		Pmax		Electrical rating resistive duty*	Switch type	Contact Resistance initial
		mbar	Inch wc	mbar	Inch wc	mbar	Inch wc			
C60VR40040	CE	5 - 40	2 - 16	1.5 ... 2.5	0.6 - 1	600	8.5	24 ... 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VRT40040	UL	5 - 40	2 - 16	1.5 ... 2.5	0.6 - 1	600	8.5	24 ... 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VR40110	CE	30 - 110	12 - 44	4 ... 12	1.6 - 4.8	600	8.5	24 ... 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VRT40110	UL	30 - 110	12 - 44	4 ... 12	1.6 - 4.8	600	8.5	24 ... 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VR40300	CE	100 - 300	40 - 12-	15 ... 30	6 - 12	600	8.5	24 ... 250 Vac, 5(0.5)A	SPDT	<80mΩ
C60VRT40300	UL	100 - 300	40 - 12-	15 ... 30	6 - 12	600	8.5	24 ... 250 Vac, 5(0.5)A	SPDT	<80mΩ

* Values between brackets (...) valid for $\cos \varphi = 0.6$.

INSTALLATION, ADJUSTMENTS AND FINAL CHECKOUT

▲ WARNING

Improper installation, adjustment, modification, operation or maintenance could lead to injury or damage. All adjustments must be made by a qualified technician.

IMPORTANT

Be sure the product is suitable for your application, otherwise consult Honeywell application engineers. Installer must be a trained experienced service man. Turn off gas supply before starting installation. Disconnect power supply to prevent electrical shock and/or equipment damage. Do not turn sealed adjustment screw. Adjustments should be made by qualified persons only.

Mounting (See fig. 3., 4., 5. and 6.)

- Mounting position arbitrary, but preferably with horizontal or vertical diaphragm – with clear view to the scale disk.
- The housing must not touch its surrounding walls – minimum distance 25 mm (1 inch).
- Remove concerning pressure tap plug from the gas valve body.
- Position the gas pressure switch with O-ring.
- Place the mounting screws and tighten with a torque of 2.5 Nm.

CAUTION

Do not turn mounting screw more tightly than specified above because of possible damage.

▲ WIRING

▲ WARNING

Wiring must comply with local codes and the National electrical codes. To prevent the possibility of property damage turn off electrical power, depressurize installation, vent fluid to a safe area before servicing. Avoid locations where terminals can be exposed to splashes of water.

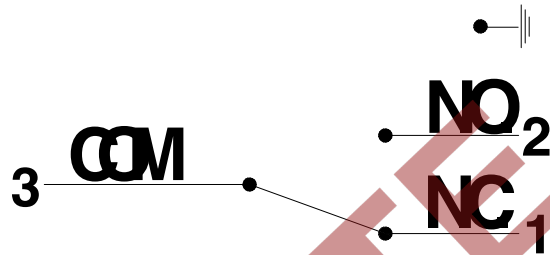


Figure 1 Terminal Connection.

Lead colors

- 1 = normally closed (NC) = bleu
- 2 = normally open (NO) = red
- 3 = common (COM) = black
- 4 = ground = yellow/green

ADJUSTING THE REQUIRED SWITCHING PRESSURE

The set switching pressure is obtained: with ambient temperature 0 °C to 60 °C (32 °F to 140 °F) with increasing pressure.

- With vertical diaphragm: No deviation from the set pressure.
- With horizontal diaphragm (male connection side upside): the switching pressure is approximately -0.2 mbar (-0.08 inch wc) less than reading.
- With horizontal diaphragm (male connection side downside): the switching pressure is approximately +0.2 mbar (+0.08 inch wc) higher than reading.

Adjustment

- Remove cover.
- Turn adjustment knob to the appropriate pressure setting.
- Mount cover.

Checkout

Before leaving, set appliance in operation and observe through a complete cycle to ensure that burner system components function correctly.

▲ WARNING

Tightness test after installation

- Spray all pipe connections and gaskets with a good quality gas leak detection spray.
- Start the appliance and check for bubbles. If a leak is found in a pipe connection, remake the joint. A gasket leak can usually be stopped by tightening the mounting screws, otherwise, replace the gas valve.

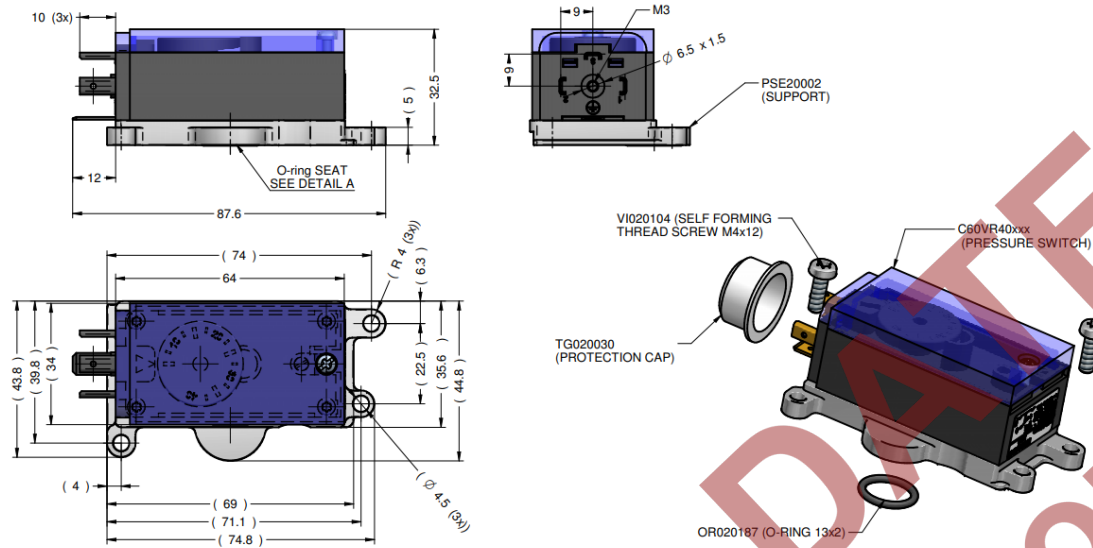


Figure 2 Dimensions C60VR(T)xxx

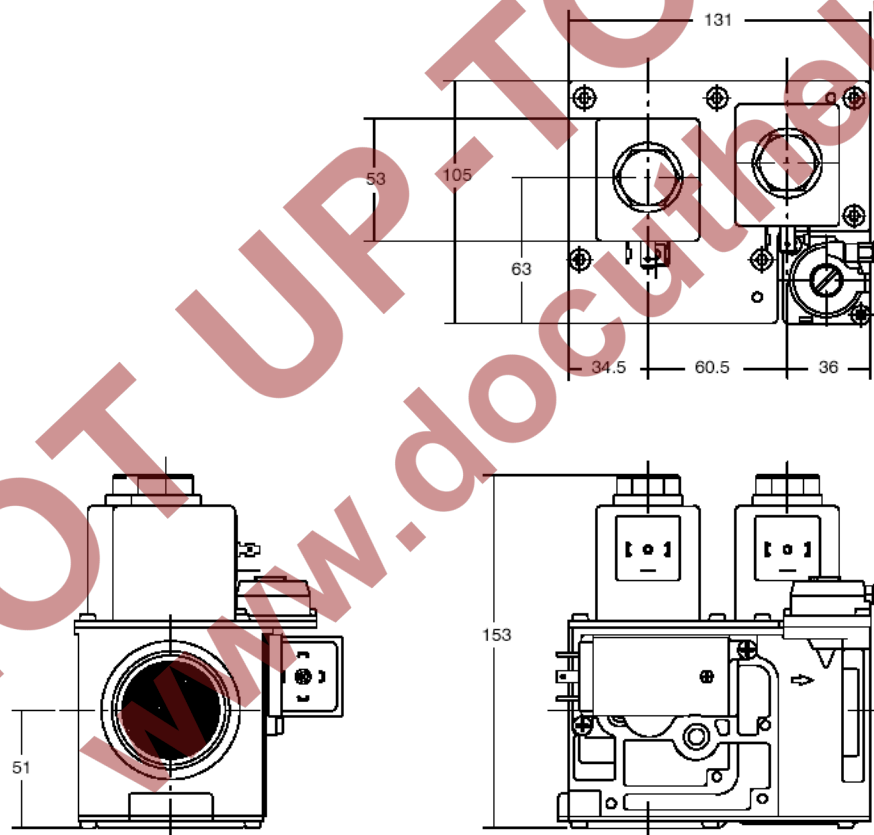


Figure 3 VRB15/VRB20/VRB25 series with gas pressure switch.

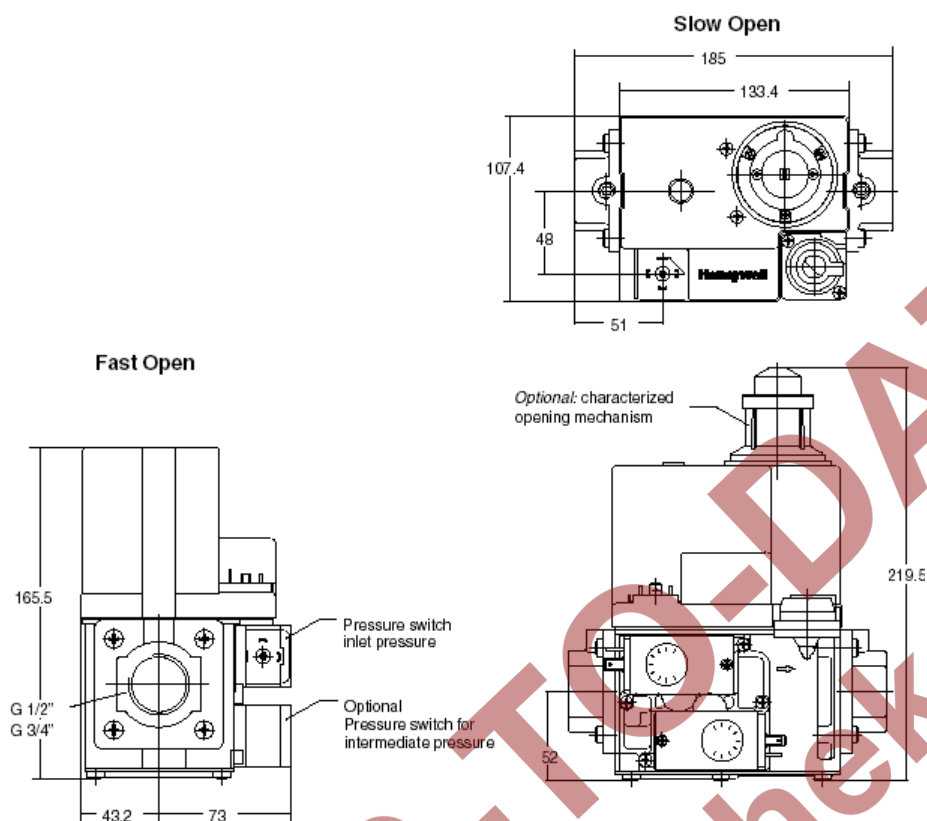


Figure 4 VR415/VR420, VR815/VR820 and V4730 (1/2" and 3/4") series with gas pressure switch.

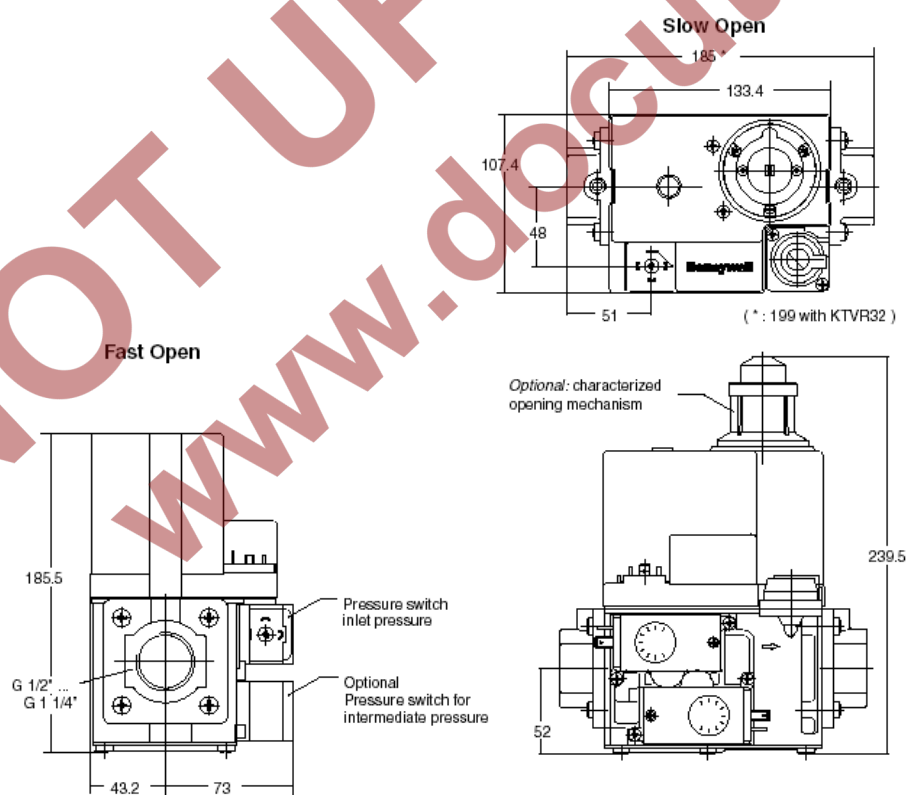


Figure 5 VR425/VR432, VR825/VR832 and V4730 (1" and 1 1/4") series with gas pressure switch.

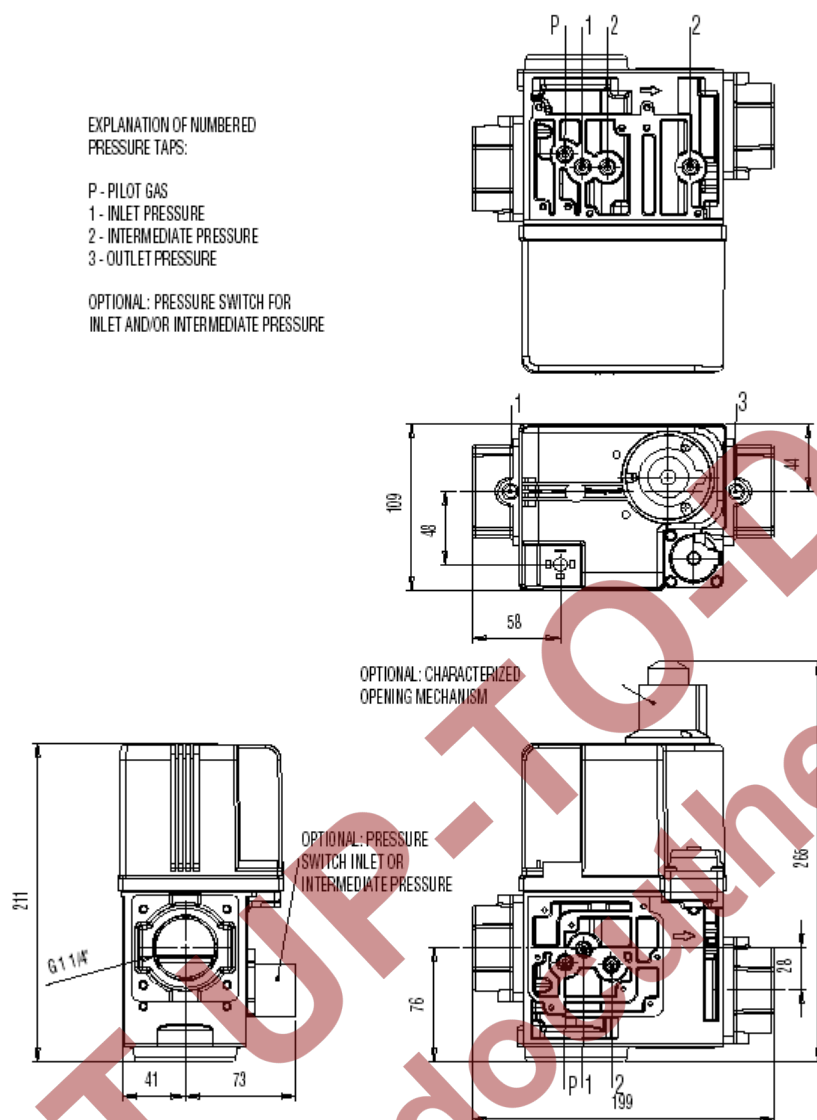


Figure 6 VR434, VR834 and V4734 series with gas pressure switch

Honeywell

Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Särl, Switzerland by its Authorized Representative:

Automation and Control Solutions
Combustion Controls Europe
Honeywell BV
Phileas Foggstraat 7
7821 AJ Emmen
The Netherlands
Tel.: +31 (-)591 695911
Fax: +31 (-) 591 695200
<http://europe.hbc.honeywell.com>