Adjustable vacuum switches VCM...-VCN... - Subminiature

Adjusting range from 200 ÷ 900 mbar

USE

Our adjustable membrane vacuum switches, subminiature series, model VCM…-VCN…. have been designed to be used to check and signal the vacuum status in chemical, pharmaceutical, industrial, pneumatic, hydraulic and food plants. By means of a sensitive separator in NBR, Viton or Silicone any motion, provided by a change in the status of vacuum, is transmitted to the electric contacts, that can be either normally open NO or normally closed NC (when no signal is received) according to the requirements of the electric circuit to be checked. It is important to know that these electric contacts are of a slow motion type and therefore, the power supply must be limited to max 0.5A resistive and 0.2A inductive. For higher loads a protection relay is recommended. Vacuum switches are designed with steel or stainless steel hexagonal body, a retainer with faston connection terminals, springs to balance and adjust the vacuum to be checked, silver electric contacts, adjustment screw and a sensitive diaphragm. To set the vacuum switch at the value to be checked, a small screwdriver must be used to operate the V adjusting screw. With model VCM, it is necessary to remove before the fastening bush (B) of CAP3, paying attention not to affect the spring and the correct working of the vacuum switch. By operating the V adjusting screw clockwise, the intervention value of the vacuum switch is reduced to the lowest value in the down scale (200 mbar). It is advisable both to install the device far from vibration and heat sources, in order to avoid to alter the set point value and consequently its repeatability, and to protect the electric contacts from dirt and moisture using the protection CAP1 or CAP10 for VCN model and CAP3 for VCM one.

On request, vacuum switches set at the required value are supplied.

VACUUM SWITCHES MATERIAL FOR STANDARD EXECUTION

"F" Contact holder	Nylon 6,6
Protection cap	black NBR
Membrane	NBR
Ch24 Body	Tropicalized steel
Electric contact	Silver plated copper at 3 µ

TECHNICAL DATA FOR STANDARD EXECUTION

Maximum voltage	48 V
Current	0.5A (resistive) 0,2A (inductive)
Working temperature	-5° +60 °C
Protection	IP 00
Protection with CAP10	IP 54
Protection with CAP1	IP 54
Protection with CAP3	IP 65
Max. No. of strokes at 25 °C	200/1" with NBR membrane
Mechanical life	10^6 cycles
Stiffness test	1500V - 10 mA - 10"
Tightening torque	max. 5 Kgm.

ORDERING CODE

VCM1…	Vacuum switch with clamp + earth contact
VCN2…	Vacuum switch with faston 6.3 x 0.8
A	NO contact (without vacuum)
C	NC contact (without vacuum)
T400	Set point adjustment rising at -400 mbar
T400D	Set point adjustment falling at -400 mbar

Special membrane (on request)

V	Viton membrane (-5 °C +90 °C)
S	Silicone membrane (-30 °C +120 °C)
NT	HNBR special membrane (-40 °C+140°C)
E	EPDN membrane (-20 °C+120 °C)

Available threads (C)

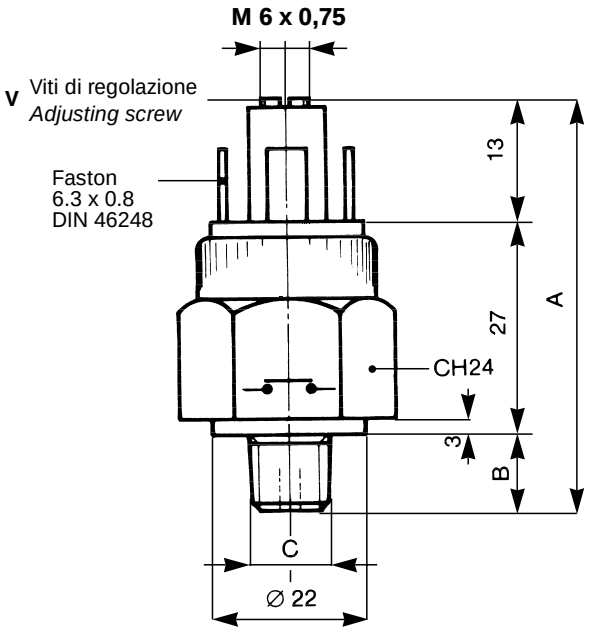
-	G 1/8K taper thread standard
14K	G 1/4K taper thread

Special execution (on request)

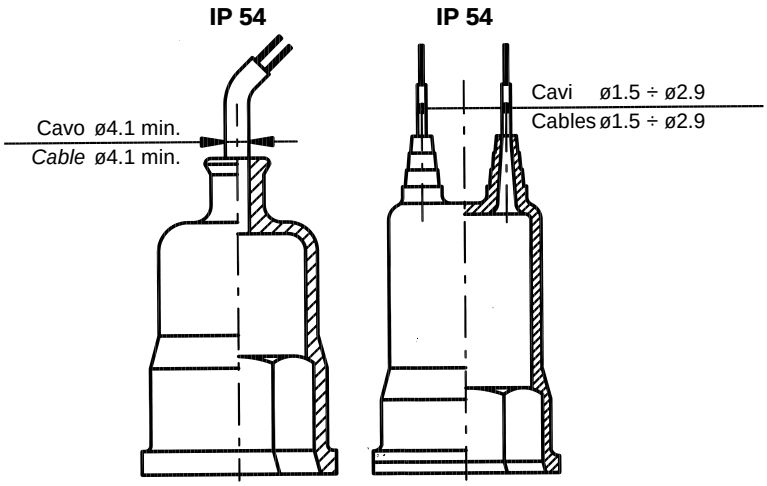
G	Gold plated at 3 micron contacts for low current
I	Execution with hexagonal body stainless steel AISI 303
P	Pocan contact holder temp. -40 °C+140 °C

IN COMPLIANCE WITH CE 89/336 STANDARDS EMC No. 147E/96 FOR VCN..., EMC N° 148/96 FOR VCM REPORT

TYPE VCN2



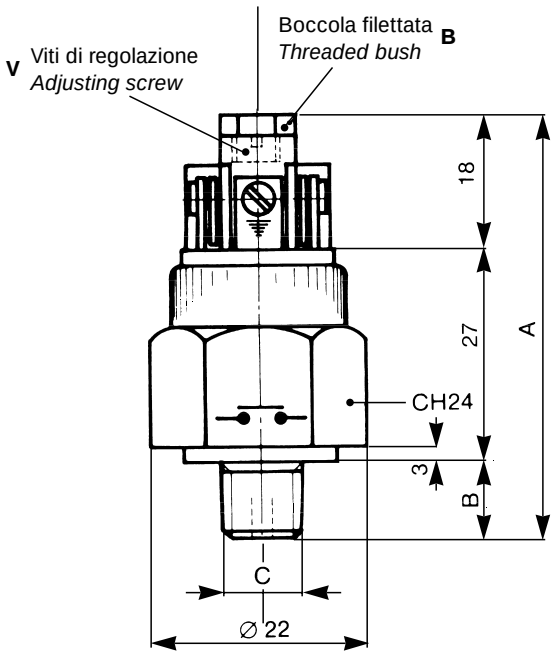
CAPPUCCIO DI PROTEZIONE
PROTECTION CAPS



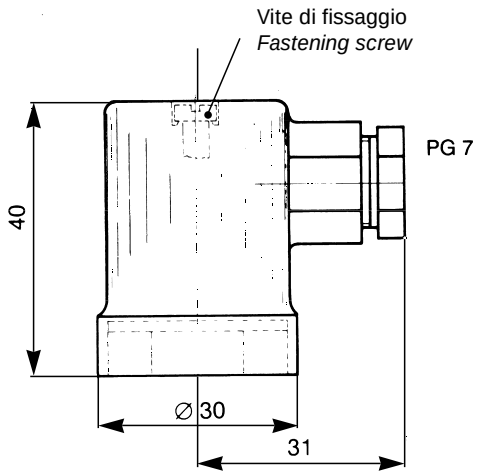
COD. 31060
Tipo **CAP1**
Type

COD. 31013
Tipo **CAP10**
Type

TYPE VCM1



CAPPUCCIO DI PROTEZIONE
PROTECTION CAP



COD. 31015
Tipo **CAP3**
Type

Campo di lavoro (mBar) *Adjusting range (mBar)*	Max. pres. statica support. (Bar) *Max static pressure (Bar)*	Contatto NA *NO contact* Normalmente aperto *Normally open*		Contatto NC *NC contact* Normalmente chiuso *Normally closed*		A	B	C *Gas*	Tolleranza di intervento in (mBar a 25 °C) *Tolerance mbar at 25 °C*	Differenziale fisso a 25 °C (mBar) *Fixed hysteresis at 25 °C in mbar*	Esecuzione membrana (Materiale) *Membrane execution (Material)*	Corpo *Body*	Peso (gr) *Weight Gr.*
		CODICE *Code*	SIGLA *Type VCN…VCM*	CODICE *Code*	SIGLA *Type VCN…VCM*								
200 ÷ 900	20	31720	VCN2A	31730	VCN2C	49	10	G 1/8K	± 50	20	NBR	Acciaio tropicalizzato *Tropicalized steel*	60
		31721	VCN2A14K	31731	VCN2C14K	51	12	G 1/4K					67
	20	31700	VCM1A	31710	VCM1C	55	10	G 1/8K					67
		31701	VCM1A14K	31711	VCM1Cl14K	57	12	G 1/4K					77
200 ÷ 900	20	31727	VCN2Al	31737	VCN2Cl	49	10	G 1/8K	± 50	20	NBR	Acciaio inox AISI 303 *Stainless steel AISI 303*	60
		31728	VCN2Al14K	31738	VCN2Cl14K	51	12	G 1/4K					67
	20	31707	VCM2Al	31717	VCM1Cl	55	10	G 1/8K					67
		31708	VCM1Al14K	31718	VCM1Cl14K	57	12	G 1/4K					77