

ELETTROTEC:

the one and only answer to any control requirements

Established in 1977, ELETTROTEC S.r.l. for over than twenty-five years has been developing and manufacturing Control Devices for Fluids trying to find always innovative solutions and components able to outfit at best machines and production systems and give a single answer to any requirements in pressure, vacuum, temperature, level and flow monitoring.

Since our beginning in the field of measurement and control, we have designed reliable, cost effective, high quality standard products that have increasingly achieved widespread success in many different sectors of application, e.g. automation, food & beverage, packaging systems, chemical and pharmaceutical industry, hydraulics, pneumatics, agricultural and earthwork machinery, hospital and medical equipment, lubrication plants, environment protection, lifting systems, automotive and fire prevention.

Huge investments in R&D, the amplification of the reference market areas and the innate longing to improve have recently led ELETTROTEC to step up into the developing of innovative solutions, in order to come up with the new market demand of an always most accurate monitoring of processes and systems. Besides a wide range of standard products –

pressure and vacuum switches, liquid level switches, flow indicators and switches, temperature switches, level sensors, pressure transmitters, digital indicators – constantly updated and improved, ELETTROTEC can also offer specific custom solutions, especially designed to meet particular actual requirements in applications where we already have a twenty-five year experience. Moreover, to give a comprehensive idea of the ELETTROTEC manufacturing range, it has to be also mentioned the excellent series of accessories, e.g. protection caps and connectors, among which stands out in particular the new DIN plug with transparent housing and red/green LED designed to suit and fit even competitors' products.

Since established, ELETTROTEC has been supplying both important OEMs and end-users in Europe, Far East, United States and Australia, also fortified by the prestigious UNI EN ISO 9001:2000 certification and by many other specific product approvals (RINA, Lloyd's Register, Germanischer Lloyd, ATEX, GOST, CE) that prove our company to be a qualified international manufacturer able to suit the most various and demanding technological requirements.

ELETTROTEC: more than 25-years of great and constant care to grow, improve and be always at the top of success.



R & D

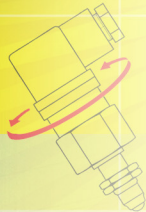


product approvals



QS-Management

- Flow indicators
- Flow switches
- Float level switches
- Pressure switches
- Vacuum switches
- Temperature switches
- Level sensors
- Programmable digital indicators
- Electronic pressure transmitters and switches
- Protection caps
- Connectors



www.elettrotec.com



R & D



product approvals



QS-Management

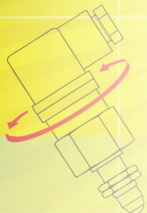


QS-MANAGEMENT and PRODUCTS APPROVALS

UNI EN ISO 9001:2000

- ISO 9001:2000
- IQNet
- IMQ
- ATEX
- EExd IIC T6
- Registro Italiano Navale
- Germanischer Lloyd
- LR
- GOST (Russia)

www.elettrotec.com



R & D

Research & Development of new products have always had a very important part in the Elettrotec company strategy. Invest on R&D means to Elettrotec constantly improve, evolve and grant continuous competitiveness to the production.

Any steps of designing, testing and inspecting a product take totally place inside the company, in accordance with the severe procedures established by the UNI EN ISO 9001:2000 quality system certification and using specific Elettrotec-owned equipment.

Every product prototype is carefully inspected according to strict criteria of electromagnetic and environmental compatibility and to specific tests relative to various product certification approvals.

A climatic chamber, load electric benches, process simulators, equipment to measure physical magnitude on computer data acquisition system based on an Elettrotec-owned software and specific checkout stands for calibration and tests are used to assure the best quality standard possible.

The final manufacturing of any Elettrotec product is the result both of experience and careful inspections and therefore a real guarantee of Elettrotec reliable tradition.

TRADE REFERENCES

New Holland	(Earthwork machinery)	FINI	(Air Compressors)
MCF		CECCATO	(Air Compressors)
(Mitsubishi Caterpillar Fofklifts)	(Earthwork machinery)	Sab-Wabco Group	(Railroad Applications)
Manitou	(Earthwork machinery)	DB Deutsch Bahn	(Railroad Applications)
Dulevo International	(Cleaning Machinery)	Parker Hannifin Group	(Hydraulics & Pneumatics)
Schmidt compact system	(Cleaning Machinery)	AVS Group	(Pneumatics)
Marini Fayat Group	(Machinery for road-building)	Metal Work Group	(Pneumatics)
Fiat Hitachi	(Excavators)	SMC	(Pneumatics)
FAI Komatsu Industries	(Excavators)	Festo	(Pneumatics)
OTIS	(Elevators)	Camozzi	(Pneumatics)
CEAM	(Elevators)	Angst + Pfister	(Automation)
UCC Group	(Filtration)	ASA Hydraulik	(Heat Exchangers)
Donaldson	(Filtration)	Oiltech Group	(Heat Exchangers)
Bosch	(Hydraulics)	Costante Sesino	(Heat Exchangers)
HERION	(Pneumatics)	Berger Vogel	(Lubrication Systems)
KONI	(Hydraulic Suspensions)		
ABAC	(Air Compressors)		

PRESSURE SWITCHES

PME
PMN
PMM
MS/PS
PSM / PSP
PSM...B/PSP...CE
PSM/PSP...AM
PMC/PPC/PPCF/PMC...PPC...P
PML / PPL
PSK
CUSTOMIZED EXECUTIONS

VACUUM SWITCHES

VCE
VCN2
VCM1
VS
VSM
VMC

SWITCHES FOR PNEUMATIC

APPLICATIONS

MSA/VSA
PSA

BIMETALLIC TEMPERATURE SWITCHES WITH FIXED SET-POINT

TB-TBM
TBP - TBS

TBF
NTB - NTBM
NTBC
EBT
EBC
CUSTOMIZED EXECUTIONS

FLOAT LEVEL SWITCHES

LEM5 – LEM6
LEM7
LM1/2 A - FA – TA
LMM1 A - FA – TA
LM1/2 FPA – TPA
LMM1 FPA – TPA
LM1/2 CA – CFA – CTA – CSA
LMM1 CA - CFA – CTA - CSA
LM1/2 CFPA – CTPA
LMM1 CFPA – CTPA
LMA1/2 FA - FIA
LMM1A1 FA - FIA
LM1/2 FIA – TIA
LMM1 FIA – TIA
LM1/2 PTIA
LMM1 PTIA
LM1/2 GSA – GA – GTA
LMM1 GSA – GA – GTA
LM1/2 GSIA – GIA – GTIA
LMM1 GSIA – GIA – GTIA
LM3/4 GSA – GA – GTA
LM3/4 GSIA – GIA – GTIA

LM1/2 GPA – GSPA – GTPA
LMM1 GPA – GSPA - GTPA
LM3/4 GSPA – GSP – GTPA

FLOAT LEVEL SWITCHES

EXPLOSION-PROOF EXECUTION - Ex HAZARDOUS AREAS

LM1 / 2 CTA – GTA EP
LMM1 CTA – GTA EP
LM1 / 2 TIA – GTIA EP
LMM1 TIA – GTIA EP
LM3 / 4 GTA – GTIA EP

ASSEMBLY KIT

LM1/2 P – PF – B – BF - TB
LM1/2 PI – BFI

CONTINUOUS LEVEL SENSORS

SLM1/2 FA – TA CVS1
SL1/2 M3 FA – TA
SL1/2 FA – TA CVS1/CVS2
SL1/2 F3A – T3A
SL1/2 FIA – TIA . . . CVS1/CVS2
SL1/2 F3IA – T3IA

CONTINUOUS LEVEL SENSORS

EXPLOSION-PROOF EXECUTION - Ex HAZARDOUS AREAS

SL1/2 TA CVS3 EP
SL1/2 TIA CVS3 EP

CONTINUOUS LEVEL MONITORING SYSTEM

EASYLEVEL

ELECTRO-OPTIC LIQUID LEVEL SENSORS

SEL

FLOW INDICATORS AND SWITCHES

IF...V
IF...VE – IF...V2E
IF...E – IF...DE
IFE – IF2E

PRESSURE TRANSMITTERS AND ELECTRONIC PRESSURE SWITCHES

E619
EPS01
EPT1000

DIGITAL INDICATORS

E3000
IVD5- IVD6-IVD8-IVD9-IVD10
IVD12
IVD13
ETR121/ETR141



MOST POPULAR APPLICATIONS PRESSURE SWITCHES

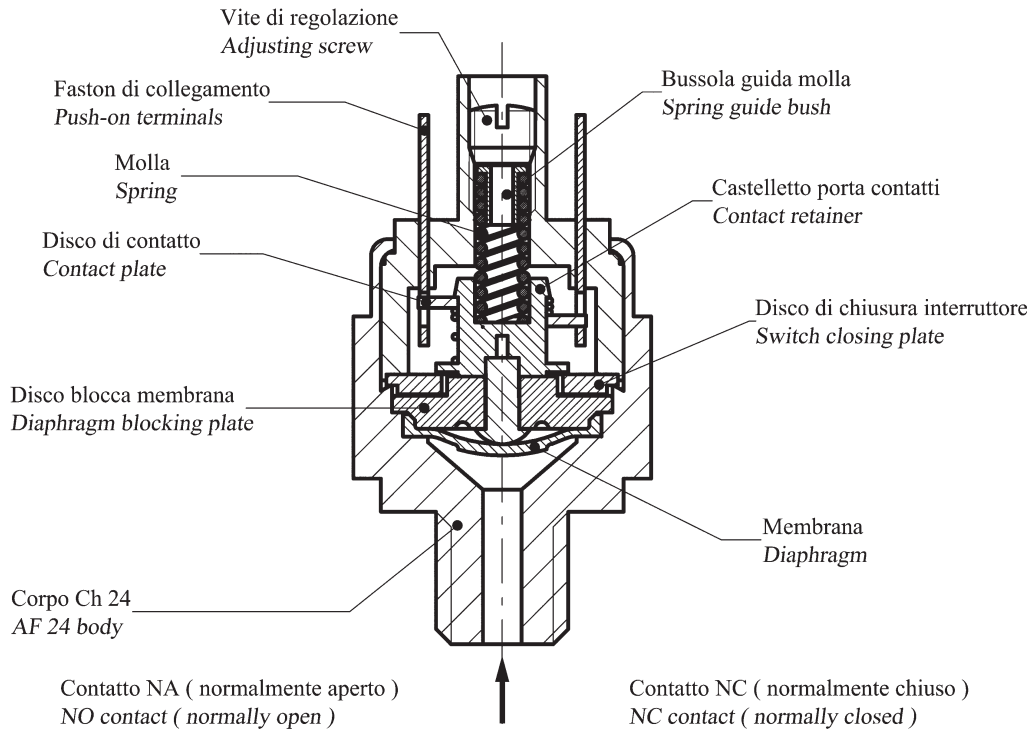
- INDUSTRIAL AUTOMATION
- PNEUMATICS
- HYDRAULICS
- LUBRICATION SYSTEMS
- AGRICULTURAL MACHINES
- BRAKING SYSTEMS
(hydraulic and pneumatic)
- COFFEE MACHINES
- MEDICAL EQUIPMENT
- GAS DISTRIBUTION SYSTEMS
(hospital application)
- DRINK DISPENSERS
(wine – beer)
- FILTERING
- EARTHWORK MACHINERY
- WIND ENERGY SYSTEMS/WIND TURBINES
- MACHINE TOOLS
- BUILDING MACHINERY and EQUIPMENT



R & D



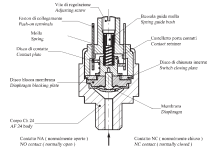
PME



PMN



Protections Caps

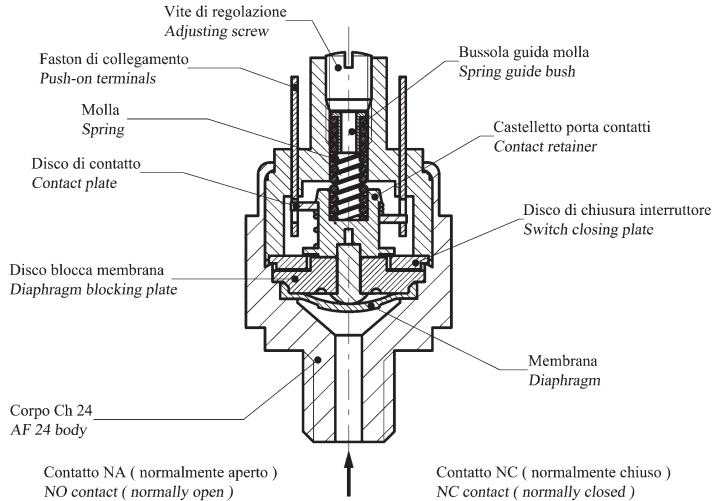


- Adjustment ranges 0.1 to 300 bar
- 6.3x0.8 push-on terminals
- Body in brass, tropicalized steel 303 or 316 stainless steel
- Diaphragm or gasket in NBR Viton, EPDM, HNBR, Neoprene, Silicone

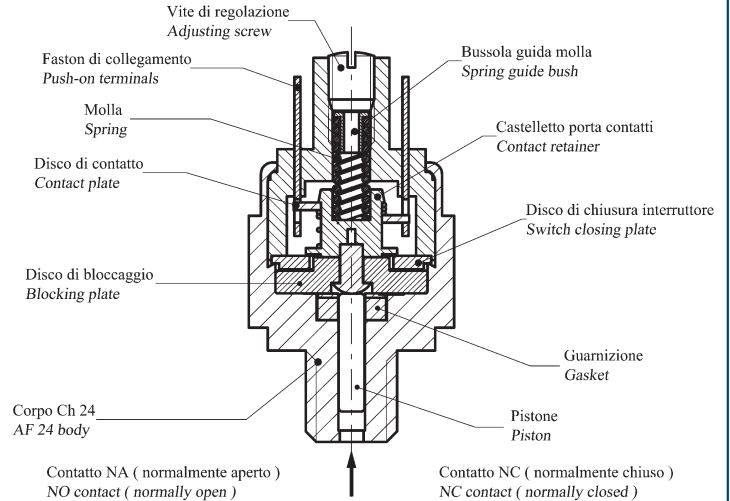
- 1/8" BSPT – 1/4" BSPT – M10x1 (taper) – 1/8NPT thread connections
- Temperature range –25°C to +140°C (according to diaphragm/gasket material)
- NO/NC contacts rated at 0.5(0.2)A/48Vac
- IP54 protection with CAP1 or CAP10.

PMN

Esecuzione a membrana *Diaphragm execution*



Esecuzione a pistone *Piston execution*

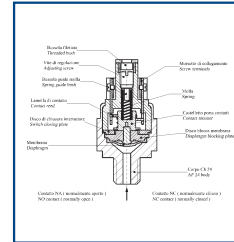


PRESSURE SWITCHES

PMM



Protections Caps

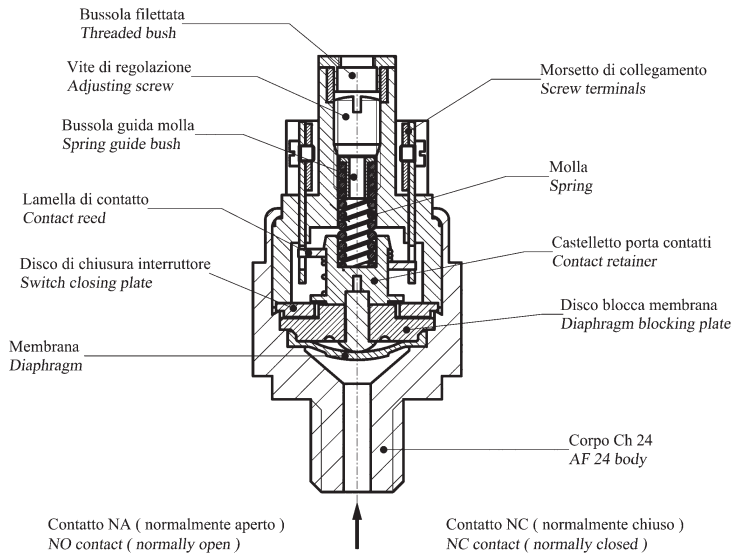


- Adjustment range 0.1 to 300 bar
- Screw connection terminals
- Body in brass, tropicalized steel, 303 or 316 stainless steel
- Diaphragm or gasket in NBR, Viton, EPDM, HNBR, Neoprene, Silicone
- 1/8" BSPT – 1/4" BSPT – M10x1 (taper) – 1/8NPT thread connections

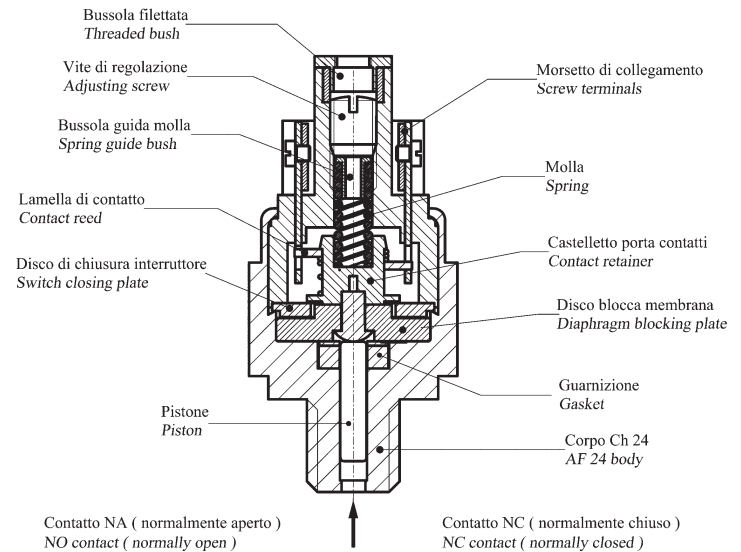
- Temperature range -25°C to $+140^{\circ}\text{C}$ (according to diaphragm/gasket material)
- NO/NC contacts rated at $0.5(0.2)\text{A}/48\text{Vac}$
- IP65 protection with CAP3.

PMM

Esecuzione a membrana *Diaphragm execution*



Esecuzione a pistone *Piston execution*

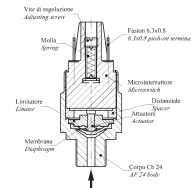


PRESSURE SWITCHES

MS/PS



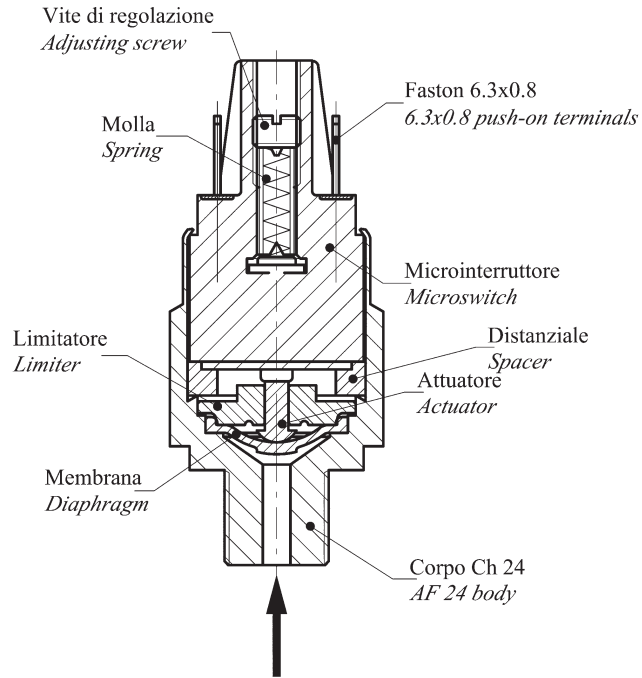
Protections Caps



- Adjustment ranges 0.2 to 300 bar
- Push-on terminals 6.3x0.8
- N/O, N/C or SPDT contacts rated at 6(2)A/250Vac.
- 1/8" BSP and 1/4" BSP standard threads – other connections on request
- Body in brass, tropicalized steel body, 303 or 316 stainless steel
- HNBR diaphragm/gasket standard – other materials on request
- Temperature range -25°C to $+140^{\circ}\text{C}$
- IP54 protection with CAP16 and IP65 protection with CAP13.

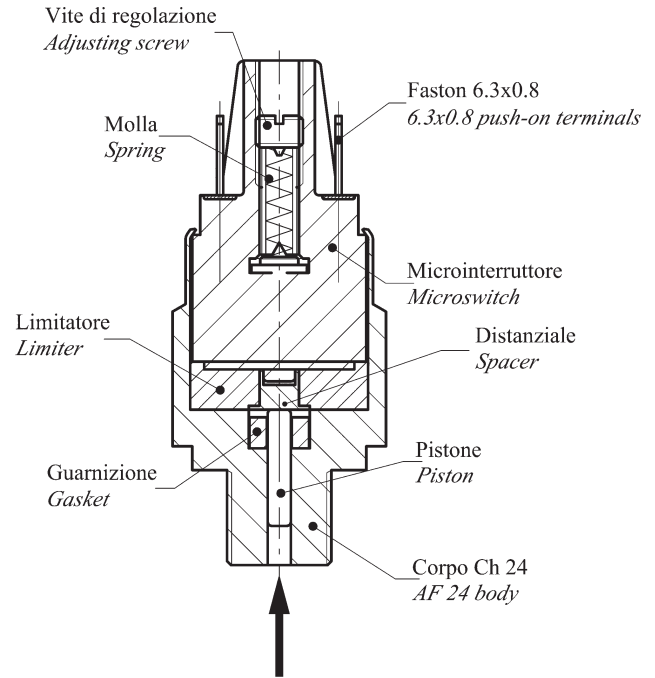
MS

Esecuzione a membrana
Diaphragm execution



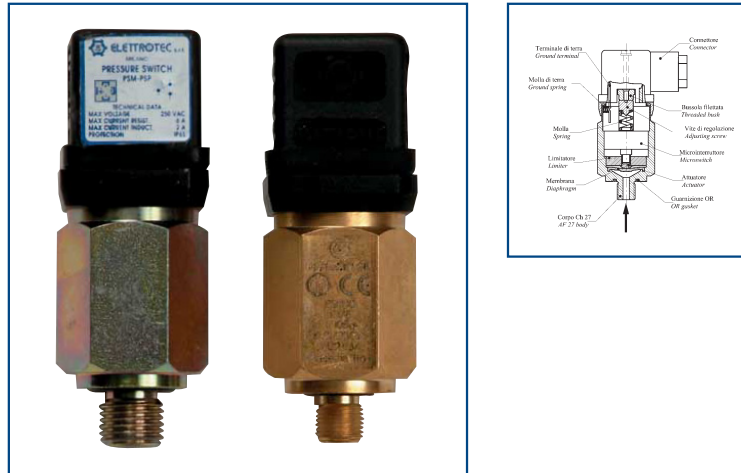
PS

Esecuzione a pistone
Piston execution



PRESSURE SWITCHES

PSM / PSP

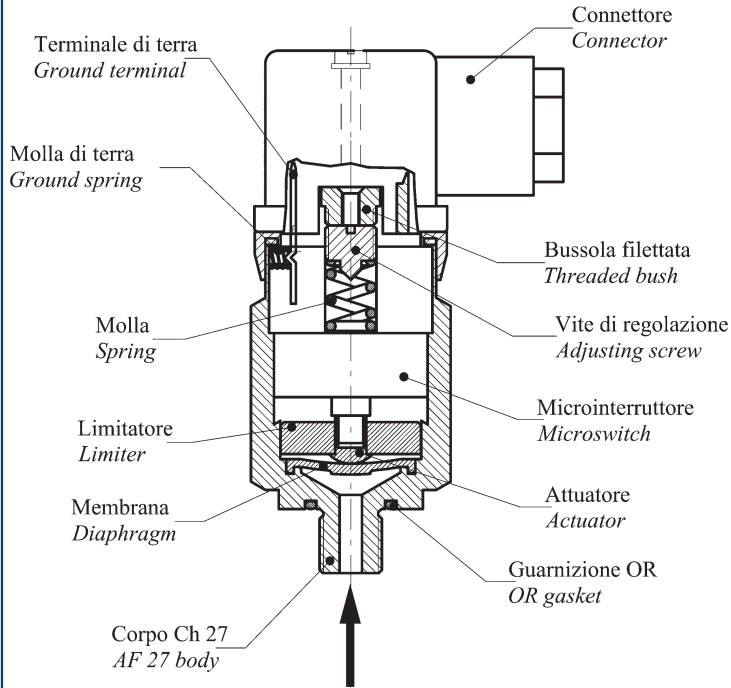


- Adjustment ranges 0.2 to 300 bar
- DIN 43650 PG09 connector
- C/O contacts (SPDT) rated at 6(2)A/220Vac
- IP65 protection
- Adjustable hysteresis 10% to 30% of set-point value
- Body in brass, tropicalized steel, 303 or 316 stainless steel

- Diaphragm or gasket in NBR, Viton, EPDM, HNBR, Neoprene, Silicone
- 1/8" BSP – 1/4" BSP – M10x1 – 1/8NPT thread connections
- Temperature range -25°C to $+140^{\circ}\text{C}$ (according to diaphragm/gasket material)
- Models available with IMQ and EExia product approvals.

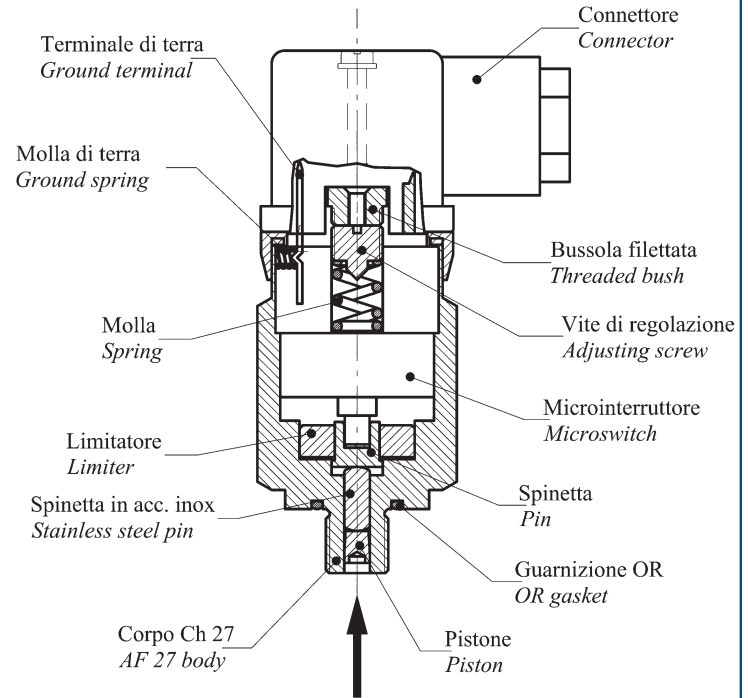
PSM

Esecuzione a membrana
Diaphragm execution



PSP

Esecuzione a pistone
Piston execution



PRESSURE SWITCHES

PSM...B/PSM...CE

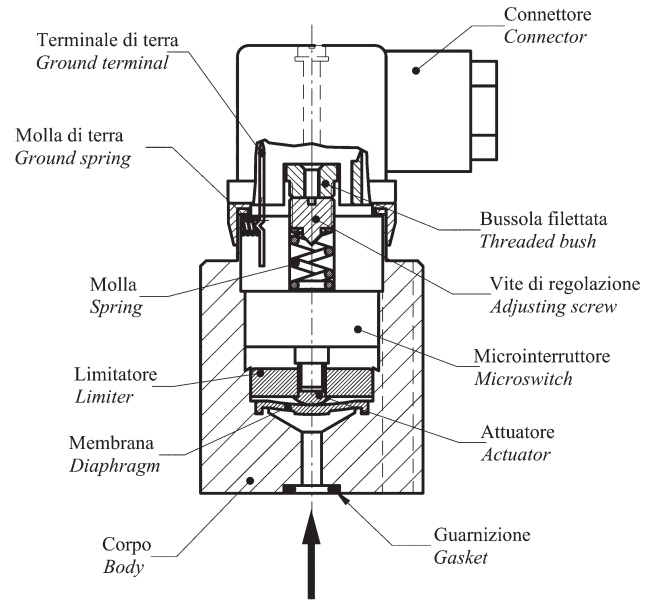
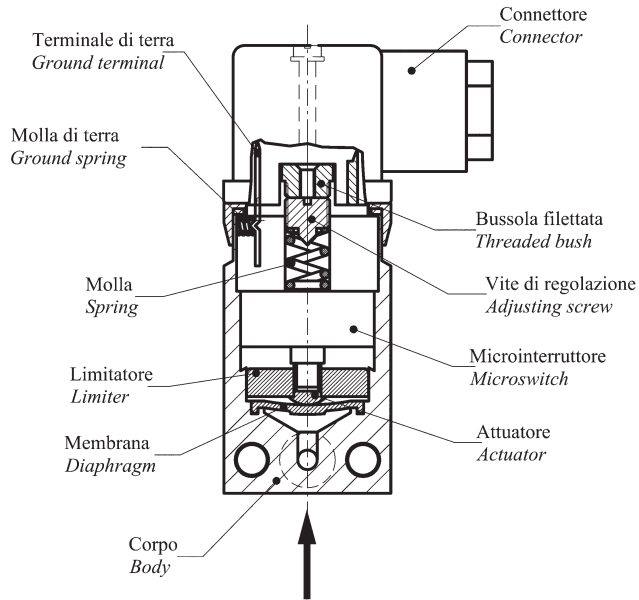


- PSM...B series for manifold assembly
- PSM...CE series suitable for CETOP mounting
- Adjustment ranges 0.2 to 10 bar
- Adjustable hysteresis 10% to 30% of set-point value
- DIN 43650 PG09 connector
- C/O contacts (SPDT) rated at 6(2)A/220Vac

- Body in anodized aluminium
- Diaphragm in NBR, Viton, Silicone, HNBR, EPDM
- Temperature range -25°C to $+140^{\circ}\text{C}$ (according to diaphragm material)
- PSM/PSP...CE available in Tropicalized steel for adjustment ranges up to 300 bar.

PSM...B

PSM...CE



PRESSURE SWITCHES

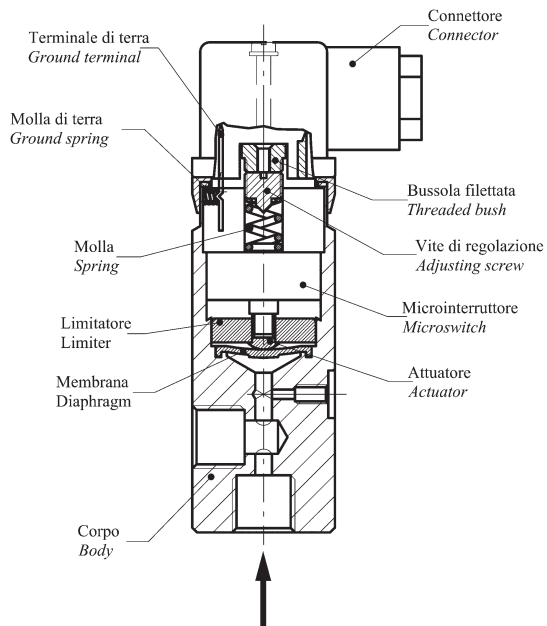
PSM/PSP...AM



- Designed with port for gauge (1/4" BSP)
- 0.2 to 300 bar adjustment ranges
- Adjustable hysteresis (10% to 30% set value)
- SPDT contacts rated at 6(2)A/250Vac
- Bottom 1/4" BSP port or side entry for manifold mounting (M5x40)
- Temperature range -25°C to $+140^{\circ}\text{C}$ (according to diaphragm/gasket material)
- Blue anodized aluminium or tropicalized steel body
- Standard HNBR diaphragm/gasket, Viton or EPDM on request
- DIN 43650 - PG09 connector
- IP65 protection.

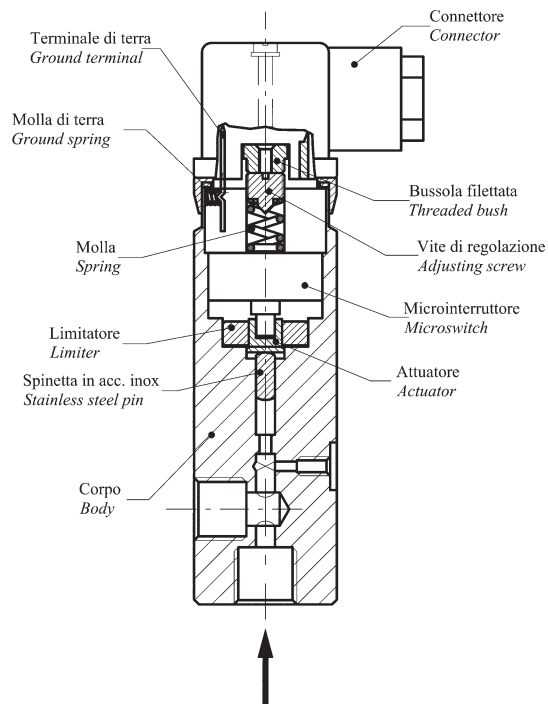
PSM...AM

Esecuzione a membrana
Diaphragm execution



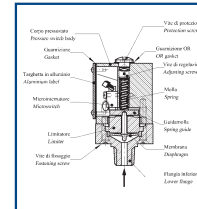
PSP...AM

Esecuzione a pistone
Piston execution



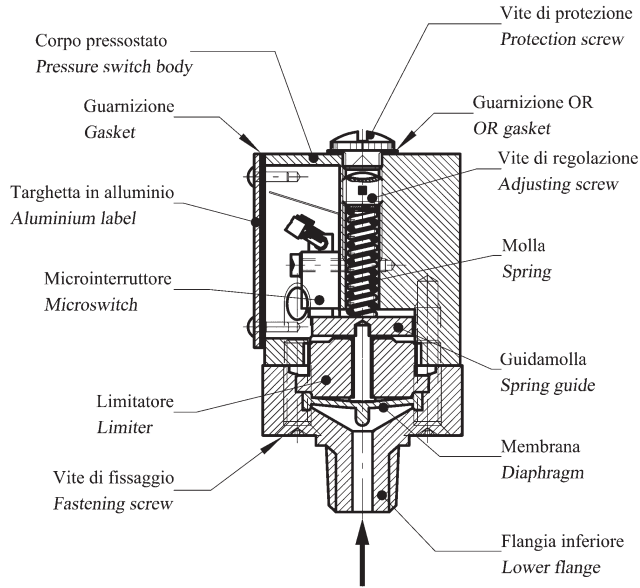
PRESSURE SWITCHES

PMC/PPC/PPCF/PMC.. – PPC...P

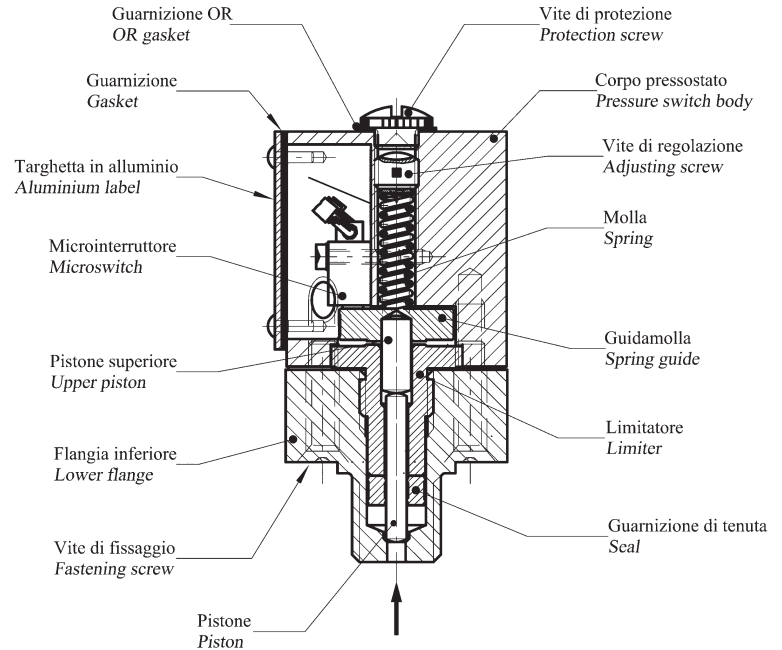


- Adjustment ranges 0.15 to 300 bar
- DIN 43650 PG09 connector
- C/O contacts (SPDT) rated at 3(2)A/220Vac
- Hysteresis $\leq 30\%$ of set-point value
- Aluminium body, flange in nickel-plated steel
- NBR diaphragm or gasket
- 1/8" BSPT – 1/4" BSPT male connection or suitable for manifold mounting according to CETOP standards
- Temperature range -5°C to $+80^{\circ}\text{C}$
- Models available with EExia approval.

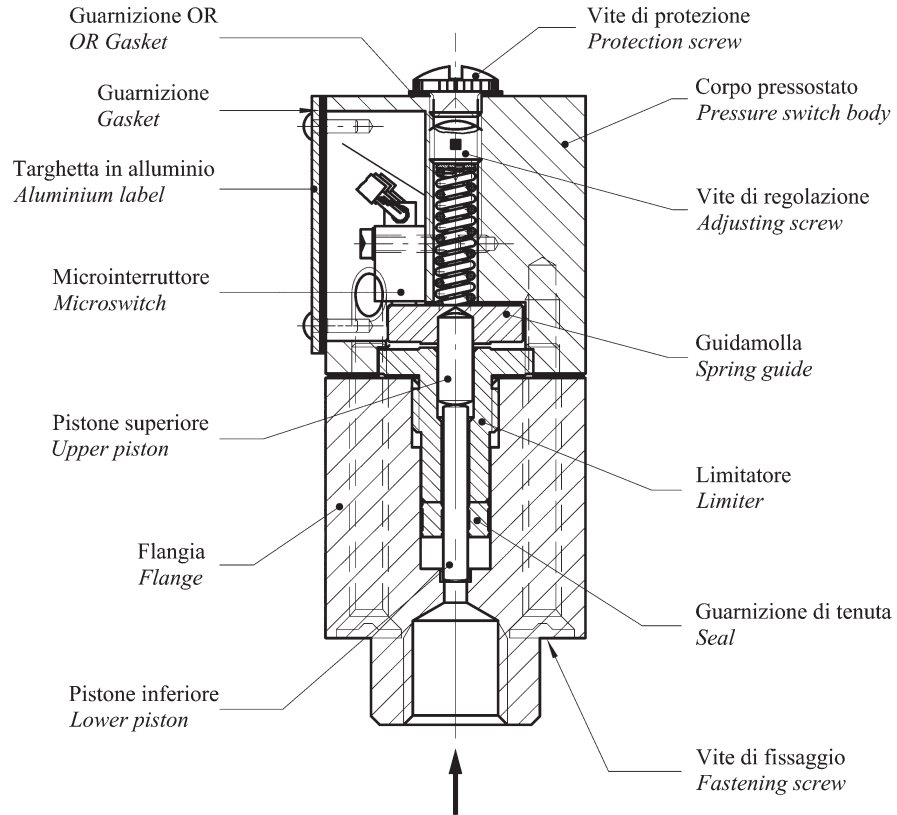
PMC



PPC

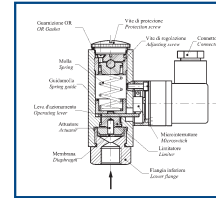


PPCF



PRESSURE SWITCHES

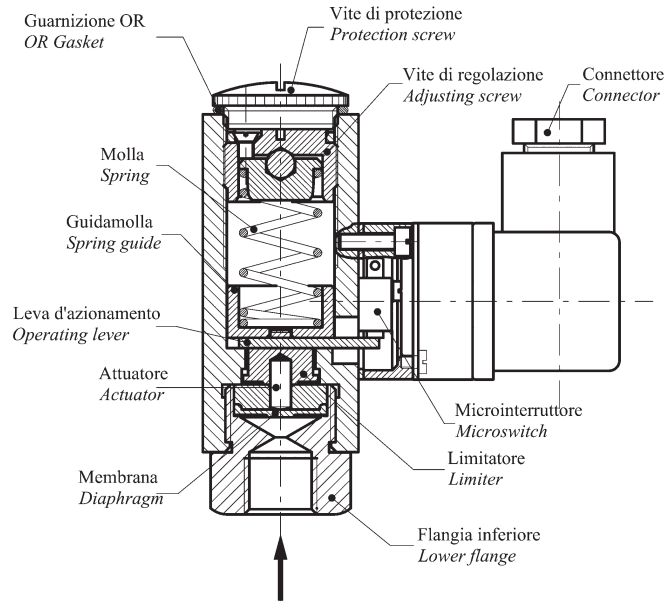
PML / PPL



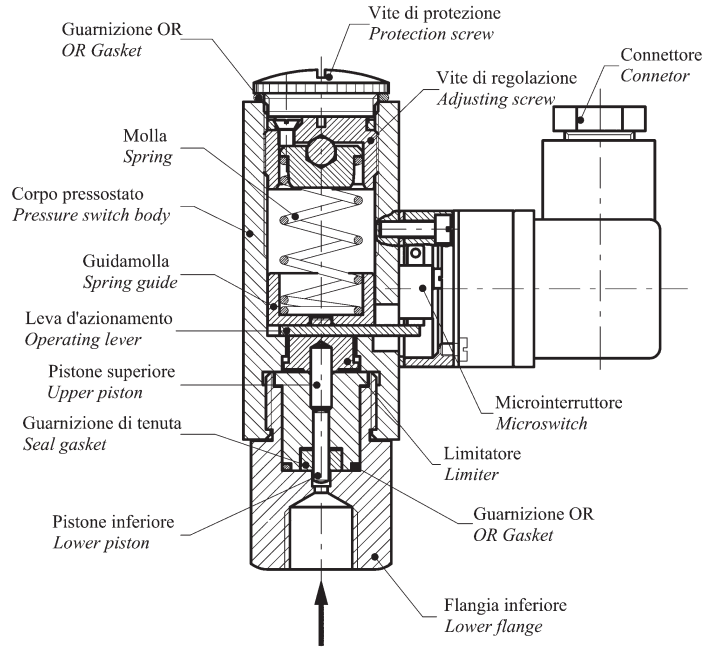
- Adjustment ranges 0.5 to 350 bar
- DIN 43650 PG09 connector
- C/O contacts (SPDT) rated at 3(2)A/220Vac
- Hysteresis $\leq 30\%$ of set-point value
- Aluminium body

- G1/4 female connection
- Diaphragm or gasket in NBR, HNBR, Viton, EPDM
- Temperature range -5°C to $+80^{\circ}\text{C}$.
- Models available with EExia approval.

PML

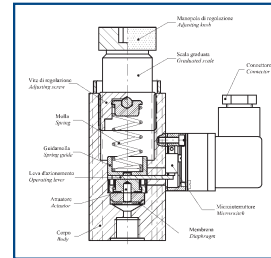


PPL



PRESSURE SWITCHES

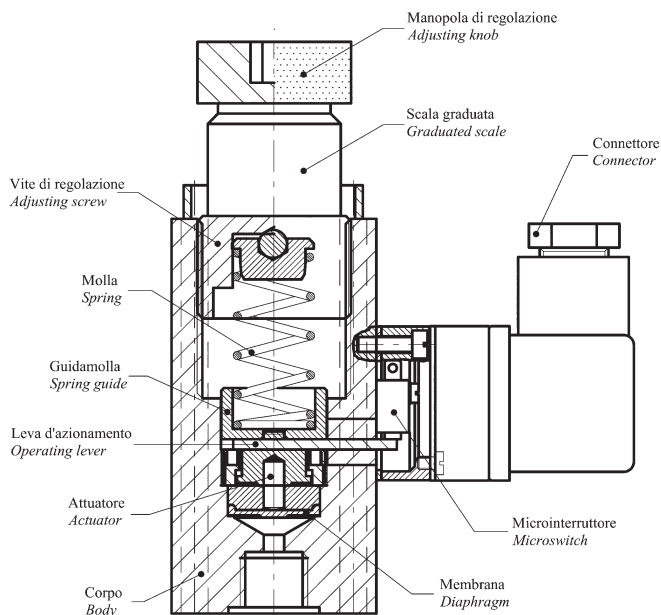
PSK



- Adjustment ranges 10 to 360 bar
- Designed with graduated knob for easy adjustment
- Body in yellow anodized aluminium
- NBR diaphragm or gasket
- Fixed hysteresis
- SPDT contacts rated at 3A/220Vac
- 1/4" BSP thread connection but also suitable for manifold assembly
- Temperature range -5°C to +80°C
- IP65 protection.

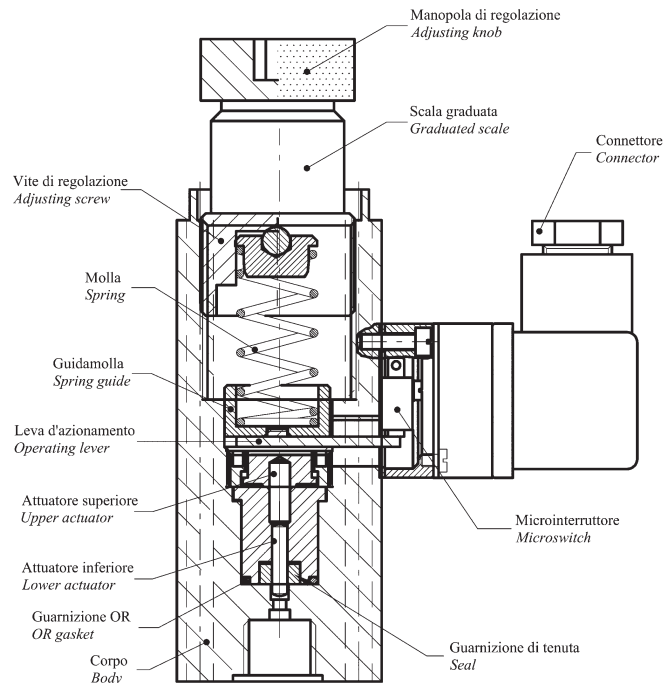
PSK100

Esecuzione a membrana
Diaphragm execution

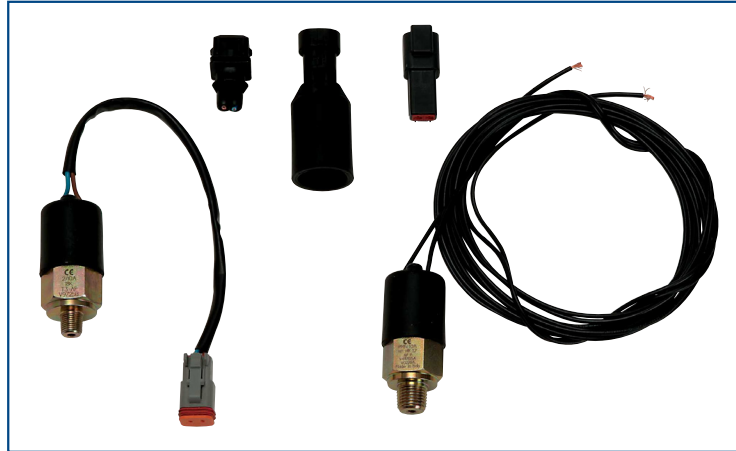


PSK360

Esecuzione a pistone
Piston execution



Customized executions



- PMN - PMM - MS/PS series
- Special thread connection (metric, taper or parallel)
- IP67 protection
- Potted flying leads with or without connector
- Epoxy encapsulated caps equipped with integrated plug
- Wide choice of connectors and plugs
- Type and length of cable to customer's need
- Factory pre-set.



MOST POPULAR APPLICATIONS VACUUM SWITCHES

- HANDLING SYSTEMS
- FILTERING
- EMPTYING SYSTEMS
- VACUUM PUMPS
- PACKAGING

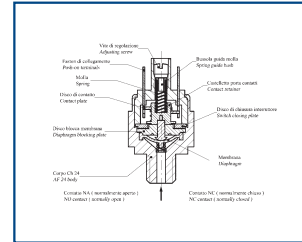


R & D



VACUUM SWITCHES

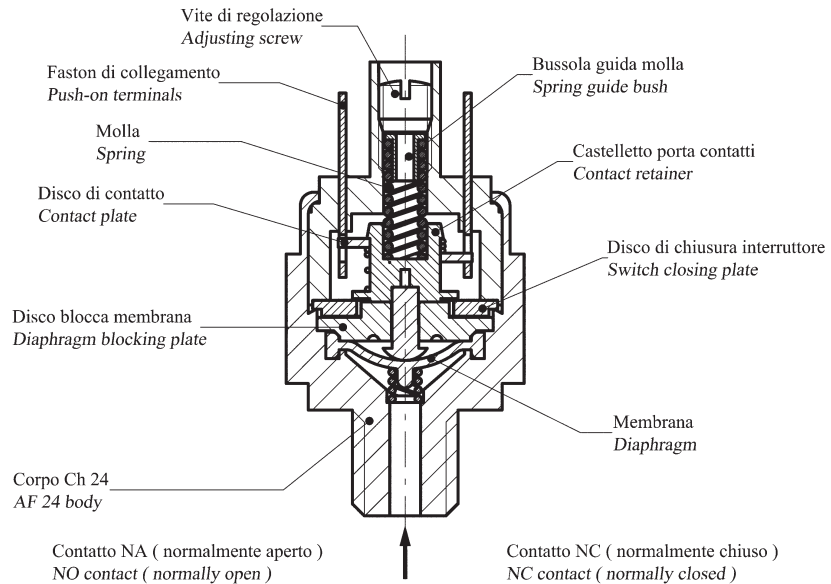
VCE



- Adjustment ranges -200 to -900mbar
- 6.3x0.8 push-on terminals
- Body in brass
- Diaphragm in NBR

- 1/8" BSPT - 1/4" BSPT thread connections
- Temperature range -5°C to +60°C
- NO/NC contacts rated at 0.5(0,2)A/48Vac-dc
- IP54 protection with CAP1 or CAP10.

VCE

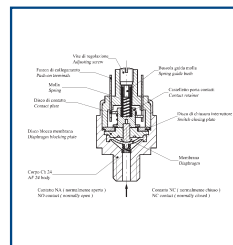


VACUUM SWITCHES

VCN2



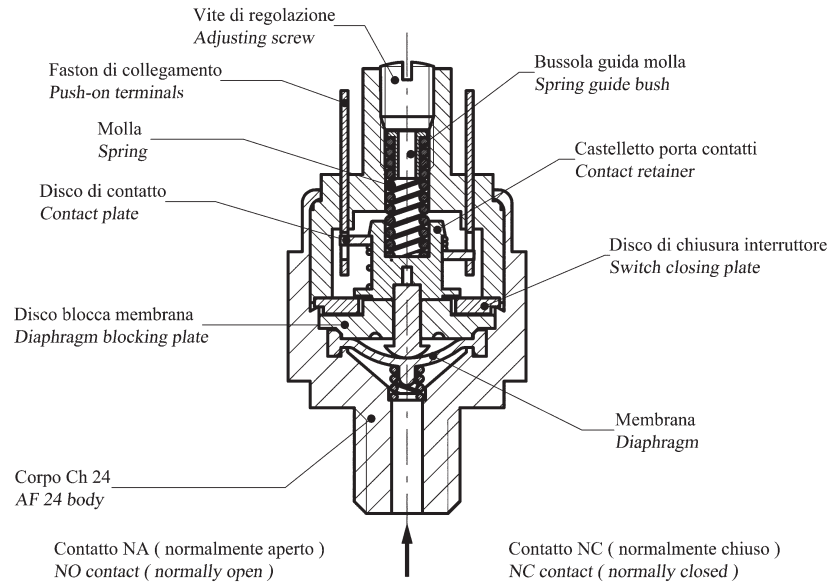
Protections Caps



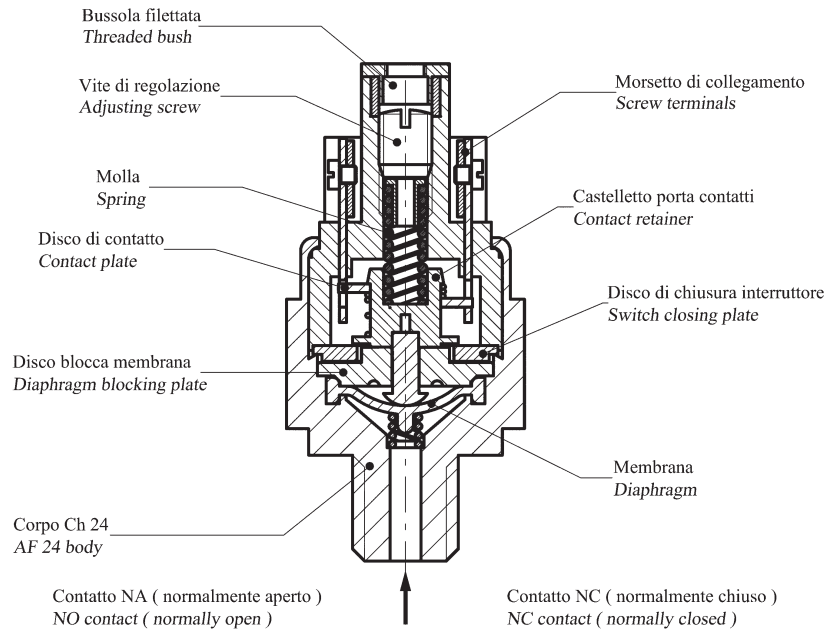
- Adjustment ranges -200 to -900 mbar
- 6.3x0.8 push-on terminals
- NO/NC contacts rated at 0.5(0.2)A/48Vac,
- Tropicalized steel body (stainless steel AISI 303 on request)
- 1/8" BSPT – 1/4" BSPT thread connections

- Diaphragm in NBR, Viton, Silicone, HNBR or EPDM
- Temperature range -25°C to +140°C (according to diaphragm material)
- IP54 protection with CAP1 or CAP10.

VCN2

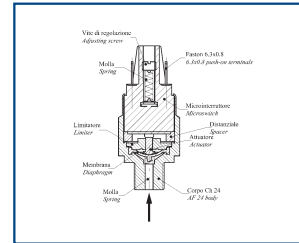


VCM1



VACUUM SWITCHES

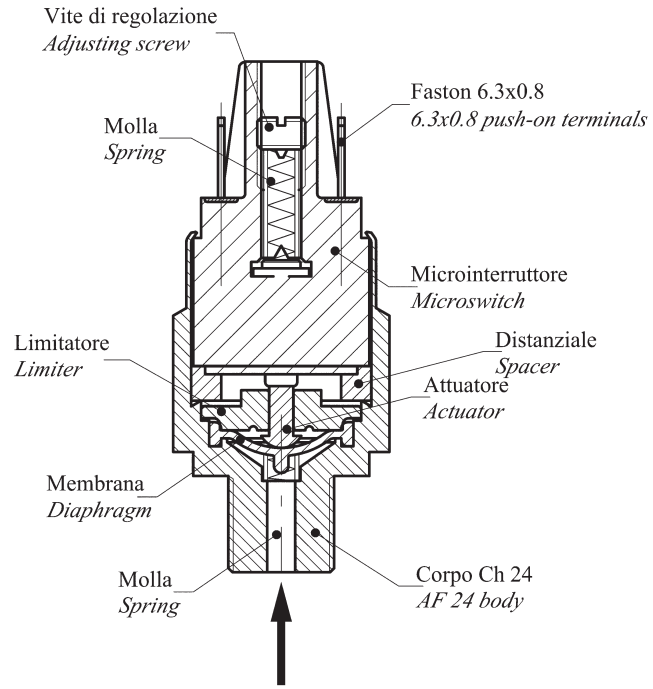
VS



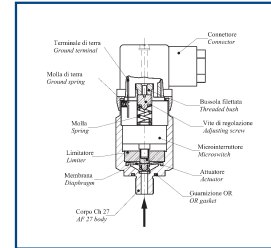
- Adjustment ranges -200 to -900 mbar
- Push-on terminals 6.3x0.8
- N/O, N/C or SPDT contacts rated at 6(2)A/250Vac
- 1/8" BSP and 1/4" BSP standard threads
- Tropicalized steel body – 303 or 316 stainless steel option

- NBR diaphragm – Viton, HNBR, or Silicone on request
- Temperature range -25°C to +140°C (according to diaphragm material)
- Protection to IP54 with CAP16 and protection to IP65 with CAP13.

VS



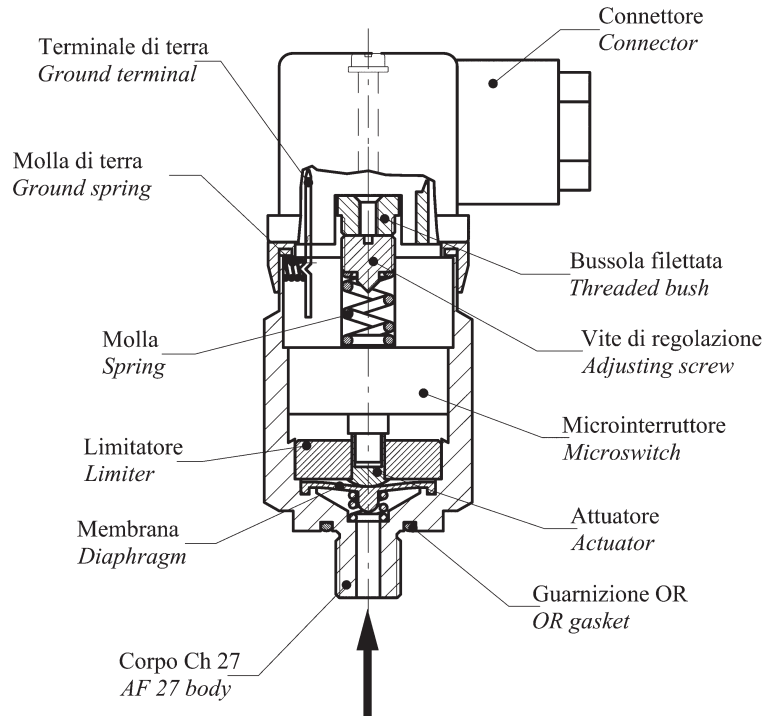
VSM



- Adjustment ranges -100 to -900 mbar
- DIN 43650 PG09 connector
- C/O contacts (SPDT) rated at 6(2)A/220Vac
- Protection IP65
- Factory adjustable hysteresis 10% to 30% set-point value
- Body in tropicalized steel – 303 or 316 stainless steel on request

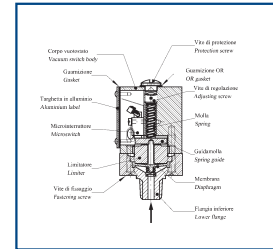
- NBR diaphragm (other materials available)
- 1/8" BSP – 1/4" BSP threads
- Temperature range -25°C to $+140^{\circ}\text{C}$ (according to diaphragm material).

VSM



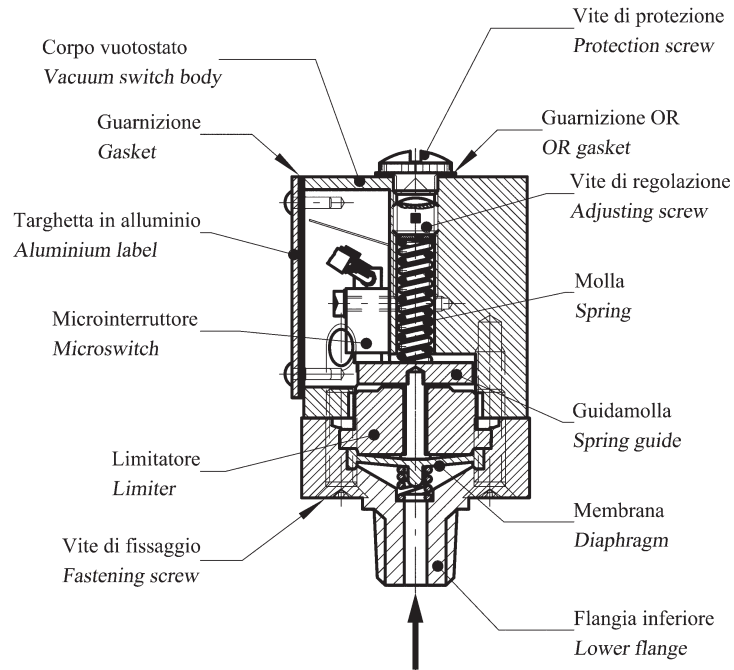
VACUUM SWITCHES

VMC

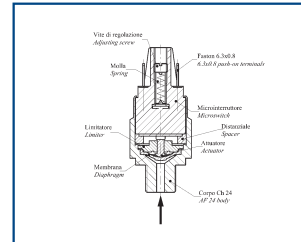


- Adjustment ranges from -200 to -900 mbar
- DIN 43650 PG09 connector
- C/O contacts (SPDT) rated at 3(2)A/220Vac
- Hysteresis $\leq 30\%$ set-point value
- Anodized aluminium body, flange in nickel-plated steel
- 1/4" BSPT connection
- Standard NBR diaphragm
- Temperature range -5°C to $+80^{\circ}\text{C}$

VMC



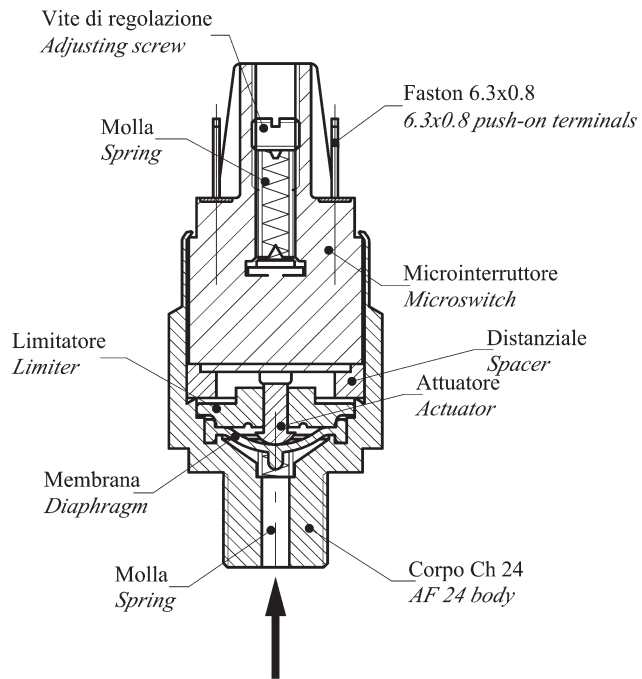
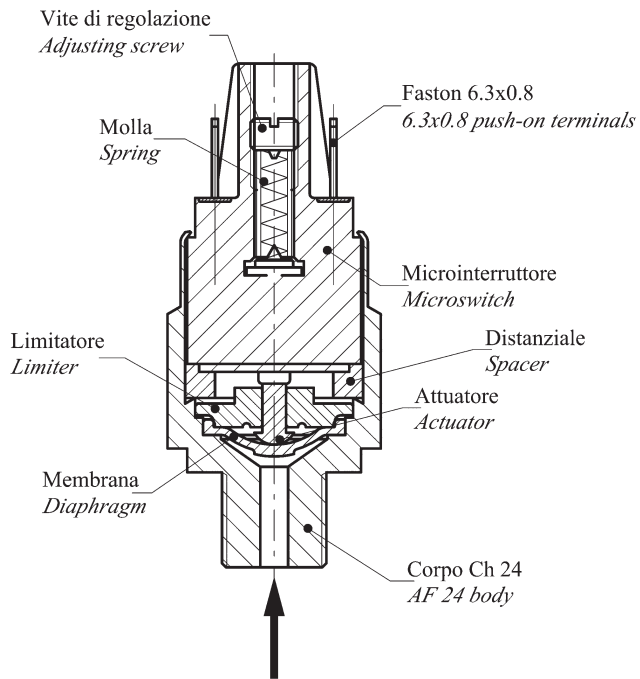
MSA/VSA



- Pressure and vacuum switches
- 6.3x0.8 push-on terminals
- 0.2 to 10 bar and -200 to -900 mbar adjustment ranges
- N/O, N/C or SPDT contacts rated at 6(2)A/250Vac
- 1/8" BSP and 1/4" BSP standard threads
- MSA designed with blue anodized aluminium body and HNBR diaphragm
- VSA have red anodized aluminium body and NBR diaphragm
- Temperature range from -25° to +140°C (according to diaphragm material)
- Protection to IP65 with CAP13 and IP54 with CAP16.

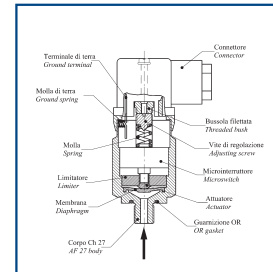
MSA

VSA



SWITCHES FOR PNEUMATIC APPLICATIONS

PSA



- 0.2 to 10 bar adjustment ranges
- Adjustable hysteresis (10% to 30% set value)
- SPDT contacts rated at 6(2)A/250Vac
- 1/8" BSP and 1/4" BSP standard threads
- Blue anodised aluminium body
- HNBR diaphragm
- Temperature range -25°C to $+140^{\circ}\text{C}$
- DIN 43650 - PG09 connector
- IP65 protection.

PSA

