
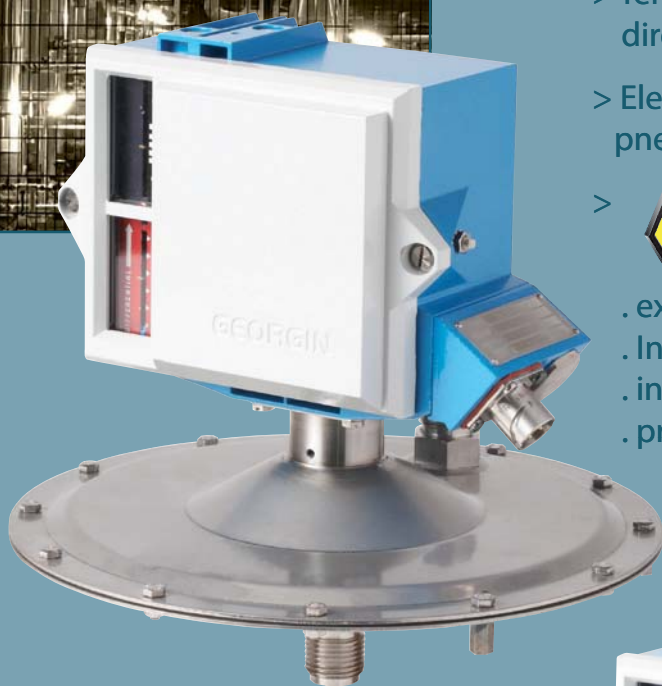


Pressure switches Temperature switches P Series

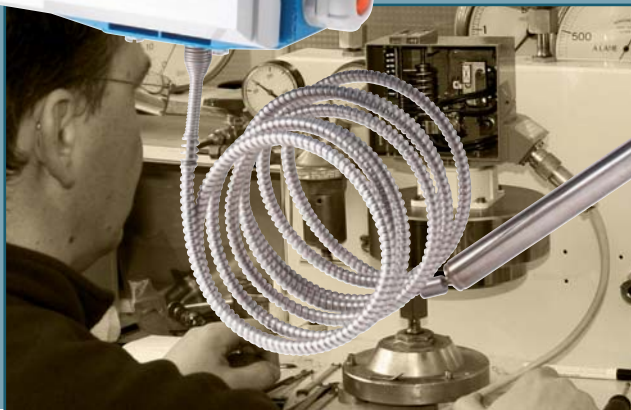
Characteristics*

- > Gauge, absolute and differential pressure control
- > Temperature control
direct bulb or through capillary
- > Electrical contact or
pneumatic signal output
- >  Available for installation
in hazardous area (ATEX)
 - . explosion-proof housing/contact
 - . Intrinsic Safety
 - . increased safety
 - . protection by constructional safety



* according to models

- > Industrial series
- > Homogeneous and
extensible range
- > Many qualifications
(marine, energy, ...)
- > High adaptability
- > Made in France



C O N T E N T S

| | |
|--|--------|
| Working principle | page 1 |
| General information | page 2 |
| Code numbers | page 3 |
| Microswitches available with current rating | page 3 |
| Pressure switches : ranges and dead bands | page 4 |
| Differential pressure switches : ranges and dead bands | page 5 |
| Temperature switches : ranges and dead bands | page 6 |
| Temperature switches accessories | page 7 |
| Dimensions and weight | page 8 |
| Drawings | page 9 |

QUALITY NOTIFICATION LCIE 02 ATEX Q8023

FRENCH ELECTRICITY BOARD APPROVED

NATO CODE F 3363

GOST-R CERTIFICATE (RUSSIAN FEDERATION)

A CERTIFIED RANGE OF PRODUCTS



ATEX 94/9 CE



PRESSURE and TEMPERATURE SWITCHES of the "P" Series from GEORGIN offer a wide range of products to suit most severe industrial applications where a high degree of accurate reliability is required.

APPLICATIONS :

- Power generation.
- Oil fields, off-shores, pipe-lines and refineries.
- Petrochemical and chemical industries.
- Natural gas or LPG storage and transportation.
- Compressed gas or high pressure fluids.
- Hydraulic, steam and gas turbines.
- Diesel engines, pumps and compressors.
- Trade or navy ship building.
- Steam, burners and furnaces.
- Glass and metal industries.

Many other applications such as breweries, milk, surgical gas, fire protection, tyres air and water treatment, sugar and paper mills... can be obtained on request together with our national or international reference list.

OTHER PRODUCTS and SERVICES

GEORGIN offers as well a large range of intrinsically safe electronic devices (relays, converters, power supplies, indicators).

GEORGIN is certified (Nr 11 920 903 792) to give lectures concerning all fields of its activity.



• FRANCE (Headquarters) :

REGULATEURS GEORGIN

14-16, rue Pierre Semard 92320 CHATILLON

Tel.: (+33) 1 46 12 60 00

Fax: (+33) 1 47 35 93 98

E-mail : regulateurs@georgin.com

www.georgin.com

• BELGIUM :

REGULATEURS GEORGIN

Temselaan 5 - First floor - 1853 STROMBEEK-BEVER

Tel. : 2 735 5475

Fax : 2 735 1679

E-mail : info@georgin.be

PRESSURE SWITCHES

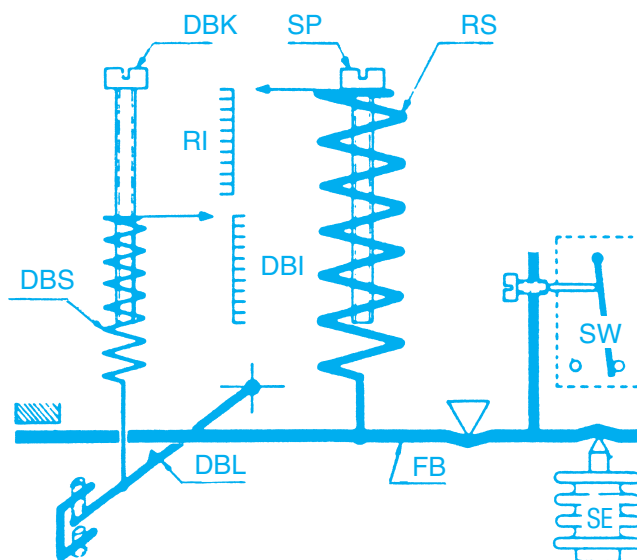
TEMPERATURE SWITCHES

P Series

B and C Series

MODELS:

| | | |
|-----------------------|---------------|------------|
| PRESSURE (absolute) | 0 Bar abs. to | 3 Bar abs. |
| PRESSURE (gauge) | - 1 Bar to | 800 Bar |
| DIFFERENTIAL PRESSURE | 0.002 Bar to | 90 Bar |
| TEMPERATURE | - 50°C to | 600°C |



| | |
|-----|------------------------------------|
| SP | Set point (range adjustment screw) |
| RS | Range spring |
| RI | Range index |
| DBI | Dead band index |
| DBS | Dead band adjustment spring |
| DBK | Dead band adjustment knob |
| SE | Sensing element |
| FB | Force balance |
| SW | Switch |
| DBL | Dead band level |

Working principle:

Force balance principle opposing a spring to the force developed by the strain of a sensing element such as a bellows, a diaphragm, a tube or a vapor actuated temperature element. Lack of balance causes the actuation of a microswitch.

An additional spring allows the increase of the dead band (or hysteresis).

If two microswitches are fitted, the additional spring allows the adjustment of one switch to the other.

Note: Continuous development of our products may necessitate changes without notice.
Please check with our Sales office prior to ordering.

Construction

Epoxy coated die-cast aluminium housing and cover, blue / grey color.
Option: die-cast aluminium explosion-proof housing (ATEX approved).
Cadmium plated steel screws and bolts or stainless steel on extra.
External set point settings. Factory sealed on request.
Range and dead band scales on front face.
Sensing elements:

- Bronze or stainless steel bellows (316 L)
- Stainless steel bourdon tube (316 Ti)
- NBR (standard), FKM or EPDM diaphragms
- Copper or 316 Ti st. steel thermostatic element

According to type and range, diaphragm seals with or without capillary extension may be quoted against specification.
Breather against condensation available as option.
Process connections: Brass or 316L BSP connection according to NF E03-005-1 / EN ISO 228-1
1/2" BSPM as a standard - 1/4" BSPM for diaphragm operated except (D)ML
NPT connection according to NF E 03-601
Other process connections on request
Mounting: Wall mounting (other on request).

Electrical switching and features

1 or 2 change over switches (SPDT).
Dry, nitrogen sealed, explosion-proof or gold plated microswitches according to application.
Electrical entry

- 3 wires screw terminal (2.5 mm² max. each) - ISO M20
- Approved screw terminal and packing gland for use in the **EEEx e** version
- External earthing screw connection (optional). Other connection arrangements on request.

Pneumatic switching


1 NO (YT1) or NC (YT3) - 2.5 to 8 Bar air supply - 1/8 BSP F - Filtered air at 50 microns.
Normally Open (NO) or Normally Close (NC) contact
Fluid supply : 1.5 to 8 bar (spool design) or 0 to 10 bar (poppet design – no leakage)
Fluid usage (spool design) : 10 to 52 liters/hour according to piloting pressure
Piloting fluid : dry fluid (max filtration 5 µm.) - air, nitrogen or any compatible fluid meeting standard ISO-VG 10
Cell connection : 1/8" BSPF (others on request)
Operating temperature : -10 to +60°C

Potentiometer output

Resistance variation at set point – Fixed dead band - range 135Ω to 220Ω

Certifications

All equipment designed in accordance with ATEX directives

| | | |
|---|---|---------------------------|
| – Intrinsic Safety Ex ia / Ex iaD |  | LCIE 01 ATEX 6008X |
| – Explosionproof solution Ex d / Ex tD | | LCIE 01 ATEX 6071X |
| – Increased safety Ex de / Ex tD | | LCIE 02 ATEX 6161X |

Applications

Every process fluids suitable with selected measuring element and process environment.

Temperature limits (material)

Typical characteristics of sensing element:

| | | |
|-----------------------------|---|----------------|
| Bronze bellows | : | – 20 to + 60°C |
| St.St. bellows | : | – 20 to +150°C |
| St.St. Bourdon tube | : | – 20 to +150°C |
| NBR diaphragm (Bunan® type) | : | – 20 to +100°C |
| FKM diaphragm (Viton® type) | : | 0 to +150°C |
| EPDM diaphragm | : | – 40 to +120°C |

Temperature bulbs according to specified range.

Working temperature (housing)

– 20 to +60°C (except BA: 55°C maxi).
Other on request

Storage temperature

– 40 to +70°C (except temp. sw. ranges C, M and G: 55°C maxi).

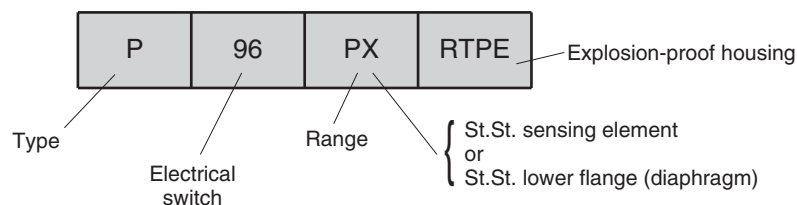
Repeatability

±1% of full scale in constant cycle and temperature

Recommendations

- Live, corrosive or crystallisable fluids will necessitate the use of well defined diaphragm seal. Process conditions to be clearly specified when ordering.
- Use upstream dampener against foreseeable process quick changes (on/off values, piston pumps for example).
- Location must be choosen so that temperature of internal will never exceed maximum specified limits for complete assembly (–20 to +60°C). Biggest care must be taken against radiations from heater sources.
- It is strongly recommended to protect outdoor mounted instrument against excessive sunshine and nocturnal condensations. Special attention to be paid when installing in coastal areas or damp atmospheres. Air exhausts, filters and drains are available as accessories.
- High degree of protection against vibrations does not exclude choosing the most stable location. In some cases excessive level of vibrations may necessitate the use of a ball bearing force balance or a flexible piping connection together with silent-blocks mounting devices.
- Upstream condensing pot or similar piping devices will be provided for steam pressure measurement.
- Some models using specific sensing element have restricted mounting possibilities.

CODE



That is to say for this example: a 0.5 to 10 bar pressure switch in explosion-proof housing, with stainless steel bellows and nitrogen sealed contacts.

Available models:

| | | |
|----------------------|--|--|
| Pressure switches | absolute (bellows) diaphragm bellows bourdon tube differential (diaphragm) differential (bellows) | PV ML - MPB - MABV - MJBV - PA - PAS P - PHB PL DML - DMPB - DMABV - DMJBV - DMKBV DPB - DPHB |
| Temperature switches | straight bulb bulb and capillary | B - BA for ambient C |

Electrical switches

| | | Fixed dead band | Adjustable dead band |
|--------------------------|--------------------------------------|--|----------------------|
| 1 Change over (SPDT) | Standard | 4, 4 D | 6, 6 D, 6 T, 6 V |
| | Tight dead band | 8, 8 D, 8 T, 10, 10 D, 10 T, 16, 16 D | — |
| | Nitrogen sealed | — | 96 |
| | Tight dead band nitrogen sealed | 98 | — |
| | Safety Ex de | — | 62 |
| | Tight dead band safety Ex de | 60 | — |
| | Explosion-proof Ex d | — | 62 C |
| | Tight dead band explosion-proof Ex d | 60 C | — |
| | Manual reset | 18 (at Maxi.) 20 (at Mini.) | — |
| 2 SPDT (acting together) | Standard | 44, 44 D | 34, 34 D, 34 T, 34 V |
| | Tight dead band | 30, 30 D, 30 T, 36, 36 D, 38, 38 D, 38 T | — |
| | Nitrogen sealed | — | 106 |
| | Tight dead band nitrogen sealed | 108 | — |
| | Safety Ex de | — | 162 |
| | Tight dead band safety Ex de | 160 | — |
| | Explosion-proof EEx d | — | 162 C |
| | Tight dead band explosion-proof Ex d | 160 C | — |
| Adjustable lagging | | | |
| 2 SPDT (two steps) | Standard | 46, 46 D, 54, 54 D, 54 T, 54 V | — |
| | Tight dead band | 50, 50 D, 50 T, 56, 56 D | — |
| | Nitrogen sealed | 116 | — |
| | Tight dead band nitrogen sealed | 118 | — |
| | Safety Ex de | 172 | — |
| | Tight dead band safety Ex de | 170 | — |
| | Explosion-proof Ex d | 172 C | — |
| | Tight dead band explosion-proof Ex d | 170 C | — |

[C] Means Ex d explosion-proof switch with 1 m cable length for use with certified junction terminal (3 or 5 meters length on extra).

[D] Means Gold plated contacts for intrinsically safe applications. Also suitable for low voltage signals.

Associated Georgin i.s. approved relay interfaces also available for 19" rack, DIN rail mounting, plug-in module onto backplane.

[T] Means Tropicalized switches.

[V] Means 2000 V isolated switches.

Contact rating (resistive loads)

| | Contact | AC | | DC | |
|----|--|------------|-------|----------------|------------|
| | Standard (4, 44, 46) 6, 34, 54 | (10 A) 5 A | 240 V | 0.5 A | 110 V |
| | Tight dead band 8, 10, 30, 38, 50 | 5 A | 240 V | 0.5 A | 130 V |
| | Very tight dead band 16, 36, 56 | 2 A | 240 V | 1 A | 130 V |
| Ex | Nitrogen sealed 96, 98, 106, 116, 108, 118 | 2,5 A | 240 V | 1 A | 130 V |
| Ex | Gold plated 4 D, 44 D, 46 D | — | — | 1 mA / 100 mA | 4 V / 30 V |
| Ex | Gold plated 6 D, 34 D, 54 D, 8 D, 10 D, 30 D, 38 D, 50 D | — | — | 10 mA / 100 mA | 6 V / 24 V |
| Ex | Tight gold plated 16 D, 36 D, 56 D | — | — | 10 mA / 100 mA | 6 V / 24 V |
| Ex | Explosion-proof 62, 62 C, 162 C, 172 C | 5 A | 240 V | 0.4 A | 250 V |
| Ex | Tight explosion-proof 60, 60 C, 160 C, 170 C | 7 A | 240 V | 0.25 A | 250 V |

PRESSURE SWITCHES (diaphragm operated)

| Type | Range | 1 SPDT | | | | | | 2 SPDT | | 1 SPDT | | | | | | 2 SPDT | | Max. dead band ≥ | max. P |
|--------------|--------------|--|------|------|------|------|------|--------|------|------------------------|------|------|-----|------|------|--------|------|------------------------|--------|
| | | Fixed dead band ≤ | | | | | | | | Adjustable dead band ≤ | | | | | | | | | |
| | | 16 | | 60 | | 98 | | 108 | | 6 | | 62 | | 96 | | 106 | | | |
| | mBar | | | | | | | | | | | | | | | | | | mBar |
| | | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | | |
| ML • E (X) | - 50 to 0 | 0.35 | 0.45 | 1.5 | 1.8 | 4 | 5 | 5.5 | 6.5 | 2.5 | 3 | 3.6 | 4.5 | 5 | 6 | 7 | 8 | 25 | 0.3 |
| ML • F (X) | - 2 to + 10 | 0.15 | 0.25 | 0.9 | 1.1 | 2 | 2.5 | 3.5 | 4.5 | 1.4 | 1.8 | 2 | 2.6 | 3.5 | 4 | 4.5 | 6.5 | 5 | 0.3 |
| ML • G (X) | - 5 to + 50 | 0.25 | 0.35 | 1.4 | 2 | 3 | 4 | 4 | 5 | 2.2 | 3.2 | 3.2 | 4 | 4.6 | 4 | 5 | 7.5 | 15 | 0.3 |
| ML • H (X) | - 5 to + 100 | 0.3 | 0.4 | 2 | 3 | 4 | 5.5 | 5 | 6.5 | 3 | 4.5 | .5 | 6.5 | 5 | 6.5 | 6 | 8 | 25 | 0.3 |
| MPB • E | - 50 to + 10 | 0.8 | 0.8 | 3.6 | 3.6 | 8 | 8 | 11 | 14 | 6 | 6 | 9 | 9 | 10 | 13 | 14 | 16 | 35 | 3 |
| MPB • F | - 2 to + 10 | 0.5 | 0.5 | 2.5 | 2.5 | 7 | 9 | 8 | 11 | 4 | 4 | 6 | 6 | 7 | 9 | 10 | 13 | 30 | 3 |
| MPB • G ♦ | - 2 to + 50 | 0.8 | 0.8 | 3.6 | 3.6 | 8 | 8 | 12 | 14 | 6 | 6 | 9 | 9 | 10 | 12 | 15 | 18 | 35 | 3 |
| MPB • H | - 2 to + 170 | 0.8 | 0.8 | 4 | 4 | 7 | 7 | 10 | 13 | 6 | 6 | 9.5 | 9.5 | 10 | 13 | 12 | 14 | 80 | 3 |
| MPB • M | 0 to 1500 | 2.5 | 2.5 | 22 | 22 | 38 | 38 | 50 | 65 | 40 | 40 | 50 | 55 | 40 | 70 | 60 | 80 | 350 | 4 |
| MABV • G (X) | - 5 to + 20 | 1 | 1 | 2 | 2.5 | 4.5 | 4.5 | 8 | 11 | 3.5 | 4 | 5 | 6 | 7 | 7 | 9.5 | 14 | 15 | 50 |
| MABV • L (X) | 0 to 150 | 1 | 1.5 | 4.5 | 6 | 7 | 11 | 9 | 13 | 7 | 10 | 10 | 15 | 8 | 15 | 10 | 18 | 100 | 50 |
| MABV • M (X) | 0 to 500 | 1.5 | 2 | 11 | 15 | 19 | 24 | 22 | 29 | 17 | 22 | 25 | 32 | 20 | 26 | 24 | 31 | 100 | 50 |
| MJBV • M (X) | 0 to 700 | 4 | 5 | 20 | 30 | 35 | 50 | 40 | 60 | 30 | 50 | 45 | 75 | 40 | 60 | 50 | 70 | 400 | 70 |
| MJBV • N (X) | 0 to 2000 | 5 | 6 | 25 | 60 | 45 | 90 | 50 | 120 | 40 | 100 | 60 | 145 | 50 | 120 | 75 | 140 | 400 | 70 |
| MJBV • K (X) | 0 to 3000 | 7 | 8 | 40 | 100 | 60 | 155 | 80 | 190 | 60 | 160 | 85 | 240 | 80 | 200 | 100 | 220 | 400 | 70 |
| | Bar | PULSED PRESSURE or OVERANGE PROTECTION | | | | | | | | | | | | | | | | Bar | |
| PA • K (X) | - 0.8 to 3.5 | 0.05 | 0.05 | 0.14 | 0.35 | 0.23 | 0.55 | 0.3 | 0.66 | 0.22 | 0.55 | 0.32 | 0.8 | 0.28 | 0.66 | 0.45 | 0.77 | 3 | 80* |
| PA • P (X) | 0.5 to 10 | 0.035 | 0.10 | 0.16 | 0.45 | 0.27 | 0.55 | 0.39 | 0.72 | 0.26 | 0.72 | 0.37 | 1 | 0.36 | 0.77 | 0.50 | 0.88 | 2 | 80* |
| PA • Q (X) | 3.5 to 25 | 0.06 | 0.28 | 0.4 | 0.95 | 0.66 | 1.2 | 0.83 | 1.65 | 0.66 | 1.55 | 0.96 | 2.2 | 0.83 | 2 | 1.3 | 2.2 | 5 | 80* |
| PA • R (X) | 5 to 50 | 0.1 | 0.4 | 0.75 | 2 | 1.5 | 3 | 1.8 | 3.5 | 1.4 | 3 | 1.8 | 4.4 | 2 | 5 | 2.4 | 5.5 | 10 | 80* |

* Available with maximum pressure 200 Bar - Type: PAS.K/P/Q/R (X).

♦ for switches fitted with micro switches 62/162/172, 96/106/116, low of ranges is 0 mbar

PRESSURE SWITCHES (bellows operated) - Absolute version on request - Type: PV.A/L/N/K (X)

| Type | Range | 1 SPDT | | | | | | 2 SPDT | | | | 1 SPDT | | | | | | 2 SPDT | | | | Max. dead band ≥ | max. P |
|------------|------------|-------------------|-------|---|-------|-------|-------|--------|-------|------------------------|-------|--------|-------|-------|-------|-------|-------|--------|------------|--|--|------------------------|--------|
| | | Fixed dead band ≤ | | | | | | | | Adjustable dead band ≤ | | | | | | | | | | | | | |
| | | 16 | | 60 | | 98 | | 108 | | 6 | | 62 | | 96 | | 106 | | | | | | | |
| | Bar | | | | | | | | | | | | | | | | | | Bar | | | | |
| P • A (X) | - 1 to 0 | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | 0.250 | 1.5 (2) | | | | |
| P • L (X) | 0 to 0.2 | 0.003 | 0.004 | 0.022 | 0.03 | 0.03 | 0.035 | 0.06 | 0.07 | 0.02 | 0.025 | 0.03 | 0.04 | 0.045 | 0.055 | 0.08 | 0.09 | 0.100 | 1.5 (2) | | | | |
| P • M (X) | 0 to 1.05 | 0.004 | 0.005 | 0.025 | 0.035 | 0.04 | 0.05 | 0.06 | 0.075 | 0.03 | 0.04 | 0.045 | 0.06 | 0.055 | 0.065 | 0.08 | 0.09 | 0.500 | 1.5 (2) | | | | |
| P • LN (X) | - 1 to 1 | 0.010 | 0.015 | 0.060 | 0.070 | 0.100 | 0.120 | 0.130 | 0.190 | 0.090 | 0.100 | 0.140 | 0.150 | 0.120 | 0.200 | 0.180 | 0.300 | 0.500 | 7 (8) | | | | |
| P • N (X) | 0 to 2 | 0.008 | 0.010 | 0.050 | 0.060 | 0.080 | 0.100 | 0.120 | 0.170 | 0.060 | 0.080 | 0.110 | 0.130 | 0.100 | 0.130 | 0.160 | 0.200 | 0.500 | 7 (8) | | | | |
| P • K (X) | - 1 to 3.5 | 0.016 | 0.02 | 0.12 | 0.16 | 0.23 | 0.25 | 0.360 | 0.380 | 0.2 | 0.22 | 0.3 | 0.34 | 0.33 | 0.36 | 0.58 | 0.625 | 3 | 13 or (15) | | | | |
| P • P (X) | 0.5 to 10 | 0.02 | 0.025 | 0.13 | 0.18 | 0.26 | 0.34 | 0.4 | 0.5 | 0.22 | 0.3 | 0.33 | 0.45 | 0.33 | 0.43 | 0.55 | 0.65 | 2 | 13 or (15) | | | | |
| P • KQ (X) | - 0.5 to 6 | 0.08 | 0.1 | 0.45 | 0.56 | 0.7 | 0.8 | 1 | 1.2 | 0.8 | 1 | 1 | 1.1 | 1 | 1.2 | 1.2 | 1.6 | 5 | 30 | | | | |
| P • PQ (X) | 0 to 12 | 0.08 | 0.1 | 0.46 | 0.58 | 0.75 | 0.90 | 1.1 | 1.35 | 0.8 | 1 | 1.1 | 1.3 | 1.1 | 1.35 | 1.35 | 1.8 | 5 | 30 | | | | |
| P • Q (X) | 3.5 to 25 | 0.08 | 0.1 | 0.48 | 0.6 | 0.8 | 1 | 1.2 | 1.5 | 0.8 | 1 | 1.2 | 1.5 | 1.2 | 1.5 | 1.5 | 2 | 5 | 30 | | | | |
| PHB • RX | 5 to 50 | 0.1 | 0.14 | 1.2 | 1.5 | 2.1 | 2.5 | 2.8 | 3.5 | 2 | 2.5 | 3 | 3.8 | 2.6 | 3.6 | 3.8 | 4.25 | 20 | 100 | | | | |
| PHB • SX | 10 to 90 | 0.28 | 0.45 | 3.4 | 4 | 6.6 | 7.7 | 7.2 | 8.3 | 5.5 | 6.6 | 8.5 | 10 | 8.2 | 9.3 | 8.8 | 10 | 20 | 250 | | | | |
| PHB • TX | 10 to 200 | 0.33 | 0.6 | 4 | 6 | 8 | 10 | 9 | 11 | 6.5 | 10 | 10 | 15 | 10 | 13 | 10.5 | 14 | 40 | 250 | | | | |
| PHB • GX | 0 to 0.4 | 0.008 | 0.010 | SPECIFIC DESIGN FOR HIGH PRESSURE STEAM BOILERS | | | | | | | | | | | | | | | 8 | | | | |

PRESSURE SWITCHES (bourdon tube operated) FOR HIGH PRESSURE

| Type | Range | 1 SPDT | | | | | | 2 SPDT | | 1 SPDT | | | | | | 2 SPDT | | Max. dead band ≥ | max. P |
|---------|------------|-------------------|-----|----|----|----|----|--------|-----|------------------------|----|-----|-----|-----|-----|--------|-----|------------------------|--------|
| | | Fixed dead band ≤ | | | | | | | | Adjustable dead band ≤ | | | | | | | | | |
| | | 16 | | 60 | | 98 | | 108 | | 6 | | 62 | | 96 | | 106 | | | |
| | Bar | | Bar | | | | | | | | | | | | | | | | |
| PL • TX | 10 to 200 | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | | |
| PL • VX | 25 to 400 | 2,5 | 2,5 | 12 | 12 | 23 | 23 | 45 | 45 | 20 | 20 | 30 | 30 | 35 | 35 | 55 | 55 | 65 | 300 |
| PL • WX | 50 to 600 | 3 | 3 | 25 | 25 | 45 | 45 | 75 | 75 | 40 | 40 | 60 | 60 | 60 | 60 | 90 | 90 | 110 | 600 |
| PL • YX | 100 to 800 | 4,5 | 4,5 | 35 | 35 | 60 | 60 | 80 | 80 | 55 | 55 | 75 | 75 | 70 | 70 | 100 | 100 | 130 | 800 |
| | | 6 | 6 | 45 | 45 | 90 | 90 | 135 | 135 | 80 | 80 | 110 | 110 | 120 | 120 | 170 | 170 | 190 | 1000 |

DIFFERENTIAL PRESSURE SWITCHES (diaphragm operated) Mini static $P > LP + \Delta P + D.B.$

| Type (Note 1) | Range ΔP | 1 SPDT | | | | 2 SPDT | | 1 SPDT | | | | 2 SPDT | | Max. dead band ≥ | Static P* | | | | | | |
|------------------|-------------|-------------------|------|-----|---|--------|---|--------|---|------------------------|---|--------|---|------------------------|--------------|-----|---|-----|------|--|-----|
| | | Fixed dead band ≤ | | | | | | | | Adjustable dead band ≤ | | | | | | | | | | | |
| | | 16 | | 60 | | 98 | | 108 | | 6 | | 62 | | | | 96 | | 106 | | | |
| | mBar | | mBar | | | | | | | | | | | | | | | | mBar | | Bar |
| | | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | | | | |
| DML • L11 (X) | 0 to 8 | 0.3 | | 1.5 | | 2.5 | | 4 | | 2.5 | | 3.8 | | 3 | | 5 | | 5 | 0,3 | | |
| DML • L22 (X) | 0 to 50 | 0.5 | | 2 | | 3.5 | | 5 | | 3 | | 4.5 | | 4 | | 6 | | 15 | 0,3 | | |
| DML • L43 (X) | 0 to 120 | 0.6 | | 2.5 | | 4.5 | | 6 | | 4 | | 6 | | 5 | | 8 | | 25 | 0,3 | | |
| DMPB • M11 | 2 to 40 | 1.5 | | 7 | | 15 | | 22 | | 11 | | 16.5 | | 18 | | 30 | | 30 | 3 | | |
| DMPB • M33 | 2 to 400 | 1.5 | | 10 | | 18 | | 28 | | 15 | | 23 | | 22 | | 35 | | 130 | 3 | | |
| DMPB • M54 | 2 to 900 | 1.5 | | 15 | | 23 | | 35 | | 20 | | 30 | | 28 | | 45 | | 200 | 3 | | |
| DMPB • K54 | 10 to 2000 | 8 | | 25 | | 45 | | 70 | | 38 | | 60 | | 55 | | 85 | | 400 | 4 | | |
| DMPBP • K54 | 10 to 2000 | 8 | | 25 | | 45 | | 70 | | 38 | | 60 | | 55 | | 85 | | 400 | 10 | | |
| DMKBV • P11 | 1 to 20 | 0.5 | | 2.5 | | 5 | | 7.5 | | 3.6 | | 5.5 | | 6 | | 10 | | 15 | 10 | | |
| DMKBV • P24 | 1 to 150 | 0.6 | | 4 | | 6.5 | | 10 | | 6 | | 9 | | 8 | | 13 | | 100 | 10 | | |
| DMKBV • P54 | 1 to 500 | 0.7 | | 5.5 | | 10 | | 15 | | 9 | | 14 | | 12 | | 20 | | 100 | 10 | | |
| DMABV • R10 (X) | 1 to 20 | 0.3 | | 4 | | 8 | | 12 | | 6 | | 9 | | 10 | | 15 | | | 50 | | |
| DMABV • R24 (X) | 1 to 150 | 0.5 | | 6 | | 9.5 | | 15 | | 10 | | 15 | | 12 | | 20 | | 100 | 50 | | |
| DMABV • R54 (X) | 1.5 to 500 | 1 | | 8 | | 12 | | 20 | | 13 | | 20 | | 15 | | 25 | | 100 | 50 | | |
| DMJBV • R33 (X) | 30 to 1000 | 5 | | 45 | | 65 | | 100 | | 70 | | 105 | | 80 | | 130 | | 400 | 70 | | |
| DMJBV • R43 (X) | 30 to 2000 | 6 | | 55 | | 80 | | 120 | | 90 | | 140 | | 100 | | 160 | | 400 | 70 | | |
| DMJBV • R53 (X) | 30 to 3000 | 6 | | 75 | | 115 | | 180 | | 120 | | 180 | | 140 | | 220 | | 400 | 70 | | |

* Some type could be available with static pressure < 0.

DMKBV only available with "Bunan" diaphragm.

NOTE 1 : Last figure becomes 0 for a fixed dead band.

DIFFERENTIAL PRESSURE SWITCHES (bellows operated) Mini static $P > LP + \Delta P + D.B.$

| Type (Note 1) | Range ΔP | 1 SPDT | | | | 2 SPDT | | 1 SPDT | | | | 2 SPDT | | Max. dead band ≥ | Static P* | | | | |
|------------------|----------------|-------------------|-----|-------|---|--------|---|------------------------|---|-------|---|--------|---|------------------------|--------------|-------|-----|-------|---------------|
| | | Fixed dead band ≤ | | | | | | Adjustable dead band ≤ | | | | | | | | | | | |
| | | 16 | | 60 | | 98 | | 108 | | 6 | | 62 | | | | 96 | | 106 | |
| | Bar | | Bar | | | | | | | | | | | | | | Bar | | |
| DPB • M12 (X) | 0.020 to 0.200 | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | 0,250 | mini / maxi |
| DPB • M23 (X) | 0.030 to 1.050 | 0.005 | | 0.025 | | 0.040 | | 0.065 | | 0.04 | | 0.06 | | 0.05 | | 0.075 | | | - 1 / 1.5 (2) |
| DPB • P11 (X) | 0.150 to 0.9 | 0.006 | | 0.3 | | 0.060 | | 0.090 | | 0.055 | | 0.085 | | 0.075 | | 0.115 | | 0,450 | - 1 / 1.5 (2) |
| DPB • P22 (X) | 0.150 to 4 | 0.025 | | 0.135 | | 0.240 | | 0.360 | | 0.22 | | 0.33 | | 0.3 | | 0.450 | | 0,500 | - 1 / 13 (15) |
| DPB • P44 (X) | 0.150 to 9 | 0.03 | | 0.150 | | 0.320 | | 0.480 | | 0.26 | | 0.4 | | 0.4 | | 0.600 | | 1 | - 1 / 1 (15) |
| DPB • Q11 (X) | 0.5 to 1.5 | 0.035 | | 0.180 | | 0.360 | | 0.540 | | 0.30 | | 0.48 | | 0.45 | | 0.700 | | 3 | - 1 / 13 (15) |
| DPB • Q22 (X) | 0.5 to 7 | 0.045 | | 0.55 | | 1 | | 1.5 | | 0.9 | | 1.4 | | 1.2 | | 1.8 | | 2 | 2.5 / 30 |
| DPB • Q33 (X) | 0.5 to 9 | 0.05 | | 0.60 | | 1 | | 1.6 | | 1 | | 1.5 | | 1.3 | | 1.9 | | 3 | 2.5 / 30 |
| DPHB • RX11 | 1 to 6 | 0.05 | | 0.65 | | 1.1 | | 1.6 | | 1.1 | | 1.7 | | 1.3 | | 2 | | 4 | 2.5 / 30 |
| DPHB • RX21 | 1 to 35 | 0.16 | | 1 | | 1.8 | | 2.7 | | 1.6 | | 2.8 | | 2.2 | | 3.3 | | 3,5 | 5 / 100 |
| DPHB • TX12 | 2.5 to 15 | 0.22 | | 1.1 | | 1.8 | | 3.0 | | 1.7 | | 3.2 | | 2.2 | | 3.6 | | 4,5 | 5 / 100 |
| DPHB • TX23 | 2.5 to 90 | 0.55 | | 4 | | 7 | | 7.5 | | 6.5 | | 10 | | 8.5 | | 13 | | 24 | 10 / 250 |
| | | 0.6 | | 4.5 | | 7.5 | | 8.0 | | 7 | | 11 | | 9 | | 14 | | 45 | 10 / 250 |

Notice: Instruments Type MPB and DMPB are not advised for use on water.

Instruments Type ML, DML range F, DMPB range M must be mounted with horizontal diaphragm.

Instruments Type DML, DMPB may have a minor leakage on upper part of the diaphragm flange.

Differential switches: static pressure must always be higher than low pressure + differential pressure + dead band (static > $LP + \Delta P + D.B.$).

Maximum static pressure can be applied on any input without damage.

NOTE 1 : Last figure becomes 0 for a fixed dead band.

"L" and "H" columns show minimum dead band when set point is selected in low or high part of the range and with a pressure variation of 5% of the full scale every minute while LP is connected to atmosphere. **Dead band must be multiplied by 1.5 when housing is explosion-proof.**

STRAIGHT BULB TEMPERATURE SWITCHES (vapour pressure)

Bulb Ø 14 x 120 mm (except BA)

| Type | Range | 1 SPDT | | | | | | 2 SPDT | | 1 SPDT | | | | | | 2 SPDT | | Max. dead band ≥ | | max. T | |
|---|--------------|-------------------|-------|-----|-----|-----|-----|--------|-----|------------------------|-----|-----|-----|-----|-----|--------|-----|------------------------|---|--------|--|
| | | Fixed dead band ≤ | | | | | | | | Adjustable dead band ≤ | | | | | | | | | | | |
| | | 16 | 60 | 98 | 108 | 6 | 62 | 96 | 106 | | | | | | | | | | | | |
| | °C | °C | | | | | | | | | | | | | | | | °C | | | |
| B • C B • G B • M B • P B • R | – 50 to + 10 | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | 55 | |
| | – 20 to + 20 | 0.3 | 0.2 | 2.1 | 0.9 | 2.8 | 1.3 | 4.5 | 2.5 | 2 | 1 | 4.5 | 1.8 | 3.5 | 2.5 | 7 | 3.5 | 15 | 7 | | |
| | 0 to 45 | 0.3 | 0.15 | 1.4 | 0.6 | 2.8 | 1.4 | 4.5 | 2.5 | 2.5 | 1.2 | 3.5 | 1.5 | 3.5 | 2.5 | 6 | 3.5 | 15 | 7 | | |
| | 25 to 95 | 0.6 | 0.15 | 2.5 | 0.8 | 5.2 | 1.8 | 8 | 3 | 4 | 1.5 | 6.5 | 1.9 | 6.5 | 3 | 10 | 4 | 25 | 9 | | |
| | 45 to 125 | 0.6 | 0.15 | 3 | 0.8 | 5.5 | 1.8 | 9 | 2.5 | 4.5 | 1.5 | 7.5 | 1.9 | 7 | 3 | 11 | 4 | 25 | 9 | | |
| SPECIAL TYPE FOR AMBIENT | | | | | | | | | | | | | | | | | | | | | |
| BA • M (X) | 0 to 45 | 0.3 | 0.150 | 1.4 | 0.6 | 2.8 | 1.4 | 4.5 | 2.5 | 2.5 | 1.2 | 4 | 1.5 | 4 | 2.5 | 6 | 3.5 | 15 | 7 | 55 | |
| BA • G (X) | – 20 to + 20 | 0.3 | .2 | 2.1 | 0.9 | 2.8 | 1.9 | 4.5 | 2.5 | 2 | 1 | 5 | 1.8 | 5 | 2.5 | 7 | 3.5 | 15 | 7 | 55 | |

BULB AND CAPILLARY TEMPERATURE SWITCHES (vapour pressure)

| Type | Range | 1 SPDT | | | | | | 2 SPDT | | 1 SPDT | | | | | | 2 SPDT | | Max. dead band ≥ | max. T | |
|--|--------------|-------------------|------|-----|-----|------|-----|--------|-----|------------------------|-----|------|-----|-----|-----|--------|-----|------------------------|--------|---|
| | | Fixed dead band ≤ | | | | | | | | Adjustable dead band ≤ | | | | | | | | | | |
| | | 16 | 60 | 98 | 108 | 6 | 62 | 96 | 106 | | | | | | | | | | | |
| | °C | °C | | | | | | | | | | | | | | | | °C | | |
| C • C (X) C • G (X) C • M (X) C • P (X) C • R (X) C • T (X) C • V (X) C • WX* C • YX C • ZX | – 50 to + 10 | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | L | H | 55 55 55 105 135 225 260 400 540 630 |
| | – 20 to + 20 | 1.2 | 0.25 | 5.5 | 1.1 | 10.5 | 2.4 | 13 | 3.5 | 10 | 2.2 | 11.5 | 2.5 | 12 | 3.5 | 20 | 4.5 | 20 | 8 | |
| | 0 to 45 | 0.3 | 0.2 | 2.1 | 0.9 | 2.8 | 1.3 | 4.5 | 2.5 | 2 | 1 | 4.5 | 1.8 | 3.5 | 2.5 | 7 | 3.5 | 15 | 7 | |
| | 25 to 95 | 0.3 | 0.15 | 1.4 | 0.6 | 2.8 | 1.4 | 4.5 | 2.5 | 2.5 | 1.2 | 3.5 | 1.5 | 3.5 | 2.5 | 6 | 3.5 | 15 | 7 | |
| | 45 to 125 | 0.6 | 0.15 | 2.5 | 0.8 | 5.2 | 1.8 | 8 | 3 | 4 | 1.5 | 6.5 | 1.9 | 6.5 | 3 | 10 | 4 | 25 | 9 | |
| | 115 to 210 | 0.6 | 0.15 | 3 | 0.8 | 5.5 | 1.8 | 9 | 2.5 | 4.5 | 1.5 | 7.5 | 1.9 | 7 | 3 | 11 | 4 | 25 | 9 | |
| | 160 to 250 | 0.6 | 0.25 | 2.6 | 0.9 | 5.2 | 2.3 | 8 | 3.5 | 6 | 2 | 6.5 | 2.4 | 7 | 3.5 | 10 | 5 | 25 | 10 | |
| | 290 to 380 | 0.6 | 0.25 | 2.4 | 0.9 | 5.2 | 2.3 | 8 | 3.5 | 5.5 | 2 | 6 | 2.2 | 7 | 4 | 10 | 5 | 30 | 10 | |
| | 380 to 500 | 1 | 0.5 | 3.5 | 1.8 | 9.5 | 6 | 14 | 8 | 6 | 3 | 8 | 4.5 | 12 | 8 | 18 | 11 | 30 | 20 | |
| | 400 to 600 | 1 | 0.4 | 5 | 1.8 | 9 | 3 | 12 | 4 | 8 | 2.5 | 13 | 4.5 | 12 | 4.5 | 17 | 5.5 | 45 | 15 | |

Note1: All these values were found during tests under optimum conditions and with a bulb, without pocket, fully immersed in an agitated bath.

Note2: Install the probe vertically (capillary output up) or up to 45 ° angle. Between 45° and 75 ° angle, please consider the operating and the ambient temperature. Up to 75° angle, on request.

With ambient temperature < +6 °C, this instrument does not work anymore however it will start working again as soon as ambient temperature will increase over +6 °C (range "WX" only).

"L" and "H" columns show minimum dead band when set point is selected in low or high part of the range and with a variation of temperature of 0.5 °C by minute.
Dead band must be multiplied by 1.5 when housing is explosion-proof.

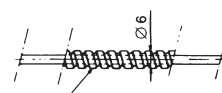
BULB AND CAPILLARY DIMENSIONS

(to be specified when ordering))

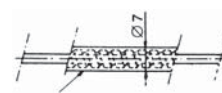
| Type | Ranges code | Bulb when capillary 2 to 4 m | | Bulb when capillary 5 to 8 m | | Bulb when capillary 9 to 20 m | |
|------|--------------------------|---|------|------------------------------|------|-------------------------------|------|
| | | Ø mm | L mm | Ø mm | L mm | Ø mm | L mm |
| C | C - R - T - V | 10 | 150 | 10 | 150 | 10 | 150 |
| | CX - RX - TX - VX - WX | 14 | 150 | 14 | 150 | 14 | 150 |
| | G - M - P - GX - MX - PX | 14 | 150 | 14 | 236 | 14 | 336 |
| | YX - ZX | 14 x 150 mm maximum 10 m St.St. capillary | | | | | |

Standard capillary length = 2 meters.

Capillary armour (option)



St.Steel armour



St.St. armour PVC coated

Armour is shorter than capillary (≈ 10 cm to 15 cm)

TEMPERATURE SWITCHES AND CAPILLARY

Soldered pocket with pressure gland and capillary

| For bulb mm | A mm | B mm | C mm | D 6 sided | E tapper | F mm | Reference | |
|----------------|---------|---------|---------|--------------|-------------|---------|-----------|--------|
| | | | | | | | Brass | St.St. |
| 10 x 150 | 145 | 22 | 22 | 29 | G 3/4 | 13 * | GC- 1 | GCX- 1 |
| 10 x 150 | 145 | 22 | 22 | 29 | G 1/2 | 13 * | GC-11 | GCX-11 |
| 14 x 120** | 105 | 22 | 22 | 29 | G 3/4 | 17 | GB-21 | GBX-21 |
| 14 x 150 | 145 | 22 | 22 | 29 | G 3/4 | 17 | GC-21 | GCX-21 |
| 14 x 120** | 105 | 22 | 22 | 29 | G 1/2 | 17 | - | GBX-61 |
| 14 x 150 | 145 | 22 | 22 | 29 | G 1/2 | 17 | - | GCX-61 |
| 14 x 236 | 232 | 22 | 22 | 29 | G 3/4 | 17 | GC-25 | GCX-25 |
| 14 x 336 | 332 | 22 | 22 | 29 | G 3/4 | 17 | GC-22 | GCX-22 |

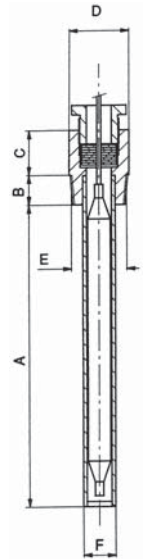
Other dimensions on request - * \varnothing 14 for St.St. pockets - all dimensions in mm.
 ** for type B : direct bulb without gland.

Standard fittings (E):

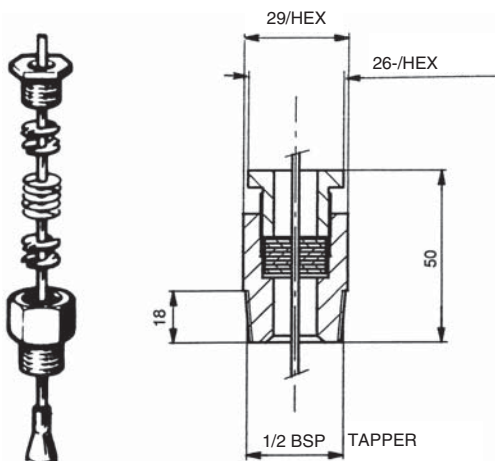
| | |
|-------------------|---|
| GC (X)- 1 = G 3/4 | } |
| GC (X)-11 = G 1/2 | |
| GC (X)-21 = G 3/4 | |
| GC (X)-25 = G 3/4 | |

Add "B" to code GC (X) = GC (X)-1B for NTP coupling.

Barstock drilled thermowells also available according to customer specifications.



Pressure gland and capillary assembly (Ref. PCX)



IMPORTANT

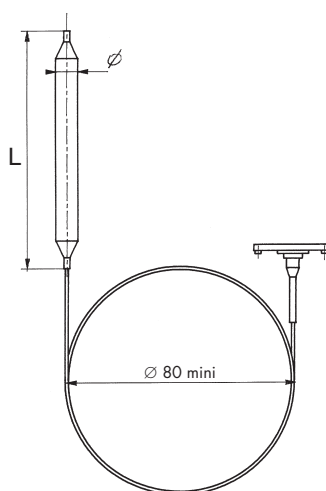
Time reaction of a bulb mounted in a pocket can strongly influence the measurement.

Such influence is mostly depending on thickness, type of material of the pocket and diameter of the bulb into the pocket.

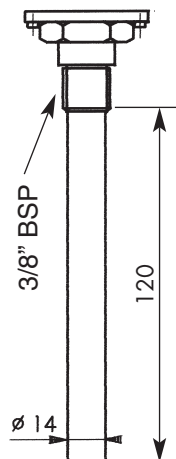
It is advised to fill free space in the pocket with conductive liquid or paste whenever a high sensibility is requested.

Overfilling is dangerous for the bulb when screwing the pressure gland.

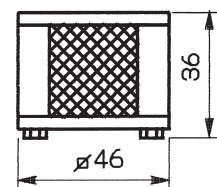
SENSING ELEMENTS TEMPERATURE



TYPE C



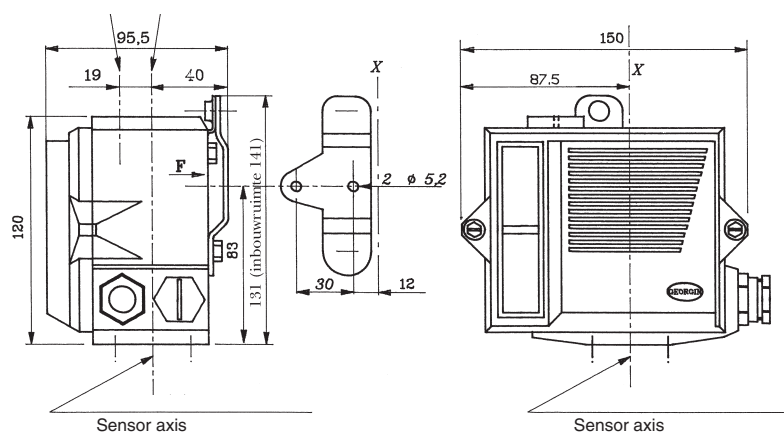
TYPE B



TYPE BA

APPROXIMATE DIMENSIONS AND NETT WEIGHTS (PACKING)

| TYPE | RANGES | STANDARD CASE | | EXPLOSION PROOF CASE | |
|-------------------|--------------------|---------------|------------------------|----------------------|------------------------|
| | | WEIGHT (kg) | H x l x p (mm) | WEIGHT (kg) | H x l x p (mm) |
| ML / DML | All | 4 | 238 x 220 x 220 | 11 | 347 x 290 x 220 |
| MPB / DMPB | — | 4 | 214 x 166 x 122 | 11 | 323 x 290 x 149 |
| MABV / DMA (K) BV | — | 10.5 | 238 x 168 x 168 | 17.4 | 347 x 290 x 149 |
| MJBV / DMJBV | — | 5.1 | 246 x 165 x 128 | 12 | 355 x 290 x 149 |
| PA | — | 2.5 | 165 x 165 x 96 | 9.4 | 274 x 290 x 149 |
| P | A - L - M - N - LN | 2.5 | 203 x 165 x 96 | 9.4 | 312 x 290 x 149 |
| P | K - P - Q - R | 1.7 | 171 x 165 x 96 | 8.6 | 275 x 290 x 149 |
| PHB | All | 2.2 | 171 x 165 x 96 | 9.1 | 280 x 290 x 149 |
| PL | — | 2.5 | 214 x 165 x 96 | 9.4 | 323 x 290 x 149 |
| DPB (PV #) | M | 3.5 | 258 x 186 x 96 | 10.4 | 367 x 290 x 149 |
| DPB | P – Q | 3.3 | 226 x 186 x 96 | 10.2 | 335 x 290 x 149 |
| DPHB | All | 3.3 | 226 x 186 x 96 | 10.2 | 335 x 290 x 149 |
| BA | — | 1.8 | 167 x 165 x 96 | 8.7 | 276 x 290 x 149 |
| B | — | 1.8 | 281 x 165 x 96 | 8.7 | 413 x 290 x 149 |
| C (cap. 2 m) | — | 2 | according to capillary | 9 | according to capillary |



Standard Case

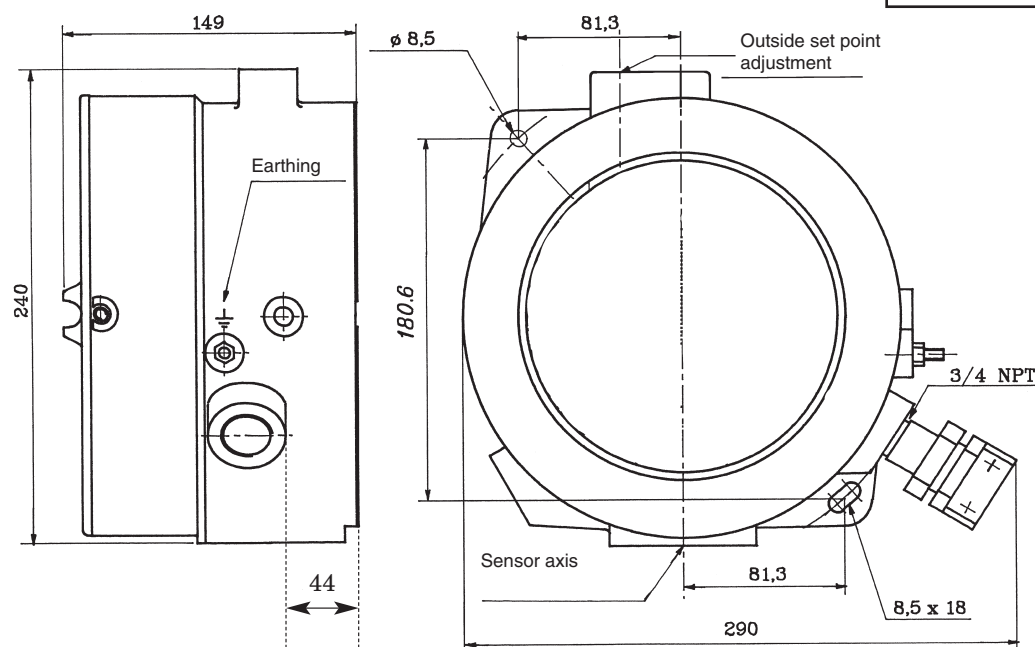
IP 56 or IP 66

P, M, C (B) Series

REMINDER :

Instrument's mounting must follow recommended manner.

For this reason, pay attention to mounting instructions given in instruction manual or contact our technical staff.



Explosion-proof housing

Ex d / Ex tD
(refer page 10)

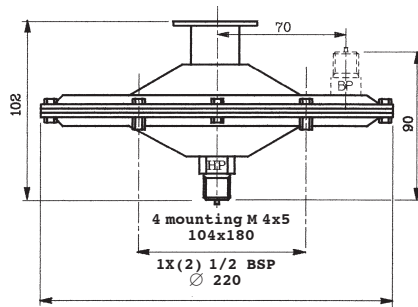
Code:
RTPEA

IP 66

Dimensions in mm

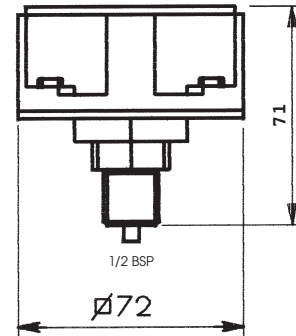
SENSING ELEMENTS PRESSURE

DIAPHRAGM

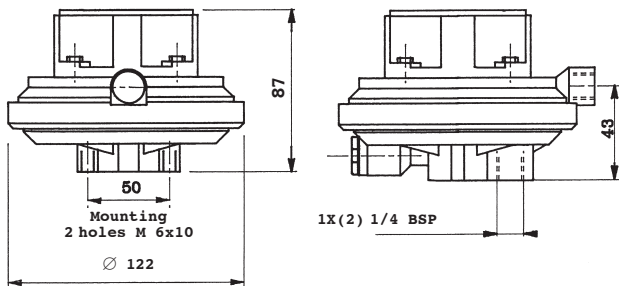


ML/DML

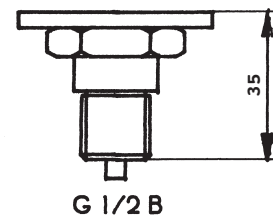
BELLOWS



P (A - L - M - LN - N) - PHB GX

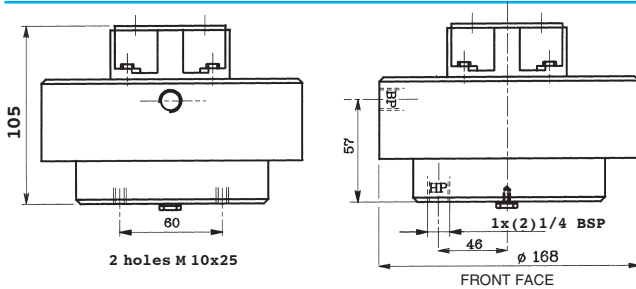


MPB/DMPB

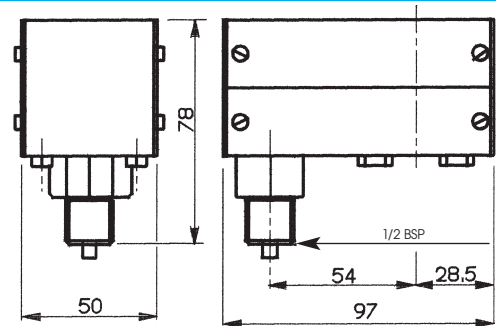


G 1/2 B

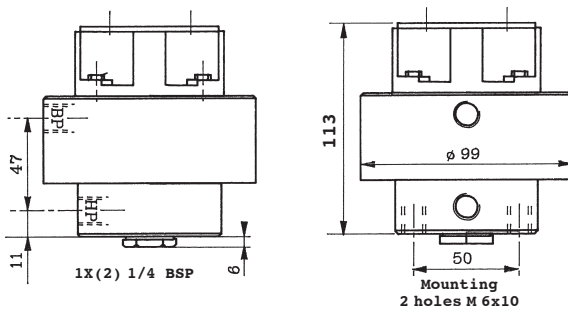
P/PHB (K - P - Q - RX - SX - TX)



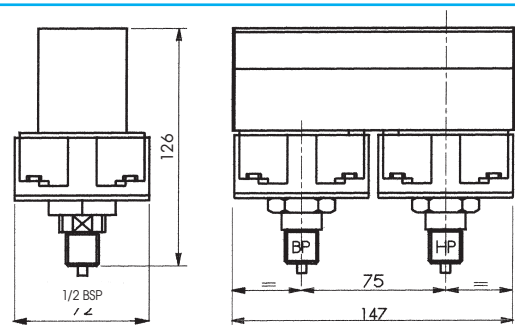
MABV/DMABV/DMKBV



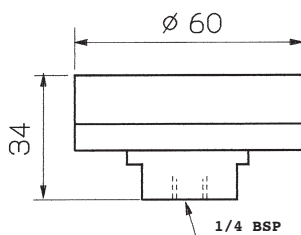
PL



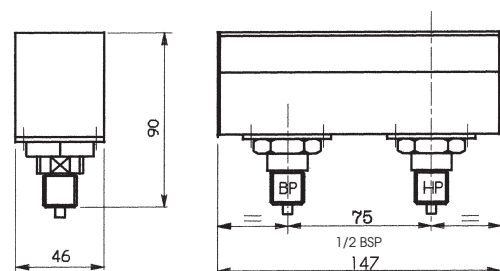
MJBV/DMJBV



DPB gamme M (PV #)



PA



DPB/DPHB (P - Q - R - T)

CONNECTION: 1/4 or 1/2 BSP according to models.
NPT F or M as option. Others on request.



Dimensions in mm

ATEX CERTIFIED INSTRUMENT - INTRINSIC SAFETY (Ex ia)

Principle : gold plated switch for low current – must be connected to intrinsically safe certified equipment.

Housing : standard

According to IP housing, markings, using zones and equipment categories are the following :



| | | |
|---|--|--|
| EC examination type Examination type | LCIE 01 ATEX 6008X | LCIE 01 ATEX 6008X LCIE 08 ATEX 6057X (voluntary attestation) |
| Housing protection | IP66 | IP56 |
| Marking | CE 0081  II 1GD Exia IIC T6 - Ex iaD 20 | CE 0081  II 1G/3D Exia IIC T6 - Ex iaD 22 |
| for ATEX zones | 0 / 1 / 2 for gas of groups IIA, IIB, IIC 20 / 21 / 22 for dusts | 0 / 1 / 2 for gas of groups IIA, IIB, IIC 22 for non-conductive dusts |
| Equipment category | 1GD | 1G/3D (non-conductive dusts) |
| Max. surface temperature | 80°C | |

ATEX CERTIFIED INSTRUMENT - INCREASED SAFETY (Ex de)

Principle : explosion proof switch "d" – increased safety "e" terminals blocks & cable gland

Housing : standard

According to IP housing, markings, using zones and equipment categories are the following :


| | | |
|---|--|--|
| EC examination type Examination type | LCIE 02 ATEX 6161X | LCIE 02 ATEX 6161X LCIE 08 ATEX 6057X (voluntary attestation) |
| Housing protection | IP66 | IP56 |
| Marking | CE 0081  II 2GD Exde IIC T6 - Ex tD A21 | CE 0081  II 2G/3D Exde IIC T6 - Ex tD A22 |
| for ATEX zones | 1 / 2 for gas of groups IIA, IIB, IIC 21 / 22 for dusts | 1 / 2 for gas of groups IIA, IIB, IIC 22 for non-conductive dusts |
| Equipment category | 2GD | 2G/3D (non-conductive dusts) |
| Max. surface temperature | 80°C | |

ATEX CERTIFIED INSTRUMENT - EXPLOSION PROOF (Ex d)

Principle : explosion proof housing "d"

Housing : RTPE type

According to IP 66, markings, using zones and equipment categories are the following :



| | |
|--------------------------|---|
| EC examination type | LCIE 01 ATEX 6071X |
| Housing protection | IP66 |
| Marking | CE 0081  II 2GD Ex d IIC T6 - Ex tD A21 (with or without line resistances) |
| for ATEX zones | 1 / 2 for gas of groups IIA, IIB, IIC 21 / 22 for dusts |
| Equipment category | 2GD |
| Max. surface temperature | 80°C |

Be careful : use of the cable gland must be conform to the EN 60.079-14 § 10.4 norm (internal volume RTPE > 2 dm³)

Principle : explosion proof switch "d" with output cable

Housing : standard

According to IP housing, markings, using zones and equipment categories are the following :

| | | |
|---|---|---|
| EC examination type Examination type | LCIE 01 ATEX 6071X | LCIE 01 ATEX 6071X LCIE 08 ATEX 6057X (voluntary attestation) |
| Housing protection | IP66 | IP56 |
| Marking | CE 0081  II 2GD Exd IIC T6 - Ex tD A21 | CE 0081  II 2G/3D Exd IIC T6 - Ex tD A22 |
| for ATEX zones | 1 / 2 for gas of groups IIA, IIB, IIC 21 / 22 for dusts | 1 / 2 for gas of groups IIA, IIB, IIC 22 for non-conductive dusts |
| Equipment category | 2GD | 2G/3D (non-conductive dusts) |
| Max. surface temperature | 80°C | |

SPECIAL OPTIONS

- Manual reset
- Oxygen cleaning
- Special cases
- Line resistances (serie / parallel)
- Navy and nuclear versions
- Electrical output at 40°

ACCESSORIES

Several accessories could be fitted : diaphragm seals to be screwed or to be welded, with normalized flanges, pressure gauges, temperature gauges, pulsation dampner, cone gauge cocks, 2, 3 or 5 valves manifolds, and so on.

