

# Absolute Pressure Gauges: Bellow Type

*General*

MODEL : APBL

## Why Absolute Pressure Gauge?

The atmospheric pressure varies from place to place depending up on the altitude of the location and prevailing weather conditions. In such variable conditions, precise pressure measurement can be arrived only if a fixed (un-changing) reference point is established.

For this purpose we have developed element of Twin Bellows, one of the same is totally evacuated and sealed, which shall be the reference point for calibration i.e. Absolute Zero. These twin bellows are connected through a special type of movement. Any pressure applied in the second bellow is compared to the reference bellow (sealed bellow) to get an accurate measurement of absolute pressure, through a precision Movement mechanism.



## Features

- Compliance to latest EN-837 standard
- Range : As shown in the table
- Bellow in SS316 as standard providing better mechanical properties guaranteeing repeatability and accuracy
- Accuracy  $\pm 1\%$  FSD

## Specifications

<b>Ref. Standard</b>	EN-837
<b>Dial</b>	150 mm in Aluminium, white background, black markings
<b>Case</b>	SS304 / SS316 with bayonet bezel
<b>Protection</b>	IP-68 (IS:13947 part I / IEC:60529)
<b>Window</b>	Safety glass (Shatter proof / Toughened glass)
<b>Sensor</b>	Bellow in SS316 / SS316L
<b>Socket</b>	22mm Square in SS316 / SS316L
<b>Movement</b>	SS304, SS316
<b>Connection</b>	1/2" NPT (M) as standard (other optional)
<b>Accuracy</b>	$\pm 1\%$ FSD
<b>Over range</b>	As per EN 837
<b>Zero adjustment</b>	Micrometer Pointer
<b>Temperature suitability</b>	Ambient (-)20°C to 60°C, Media 100°C
<b>Temperature Effect</b>	Within $\pm 0.4\%$ FSD/10°C, when temperature changes from reference temperature of 20°C (as per EN-837 standard)
<b>Optional</b>	NACE compliance CE Atex

## Ranges

0 to 0.6 Kg/cm<sup>2</sup>(a)  
0 to 1 kg/cm<sup>2</sup>(a)  
0 to 1.6 kg/cm<sup>2</sup>(a)  
Other on request

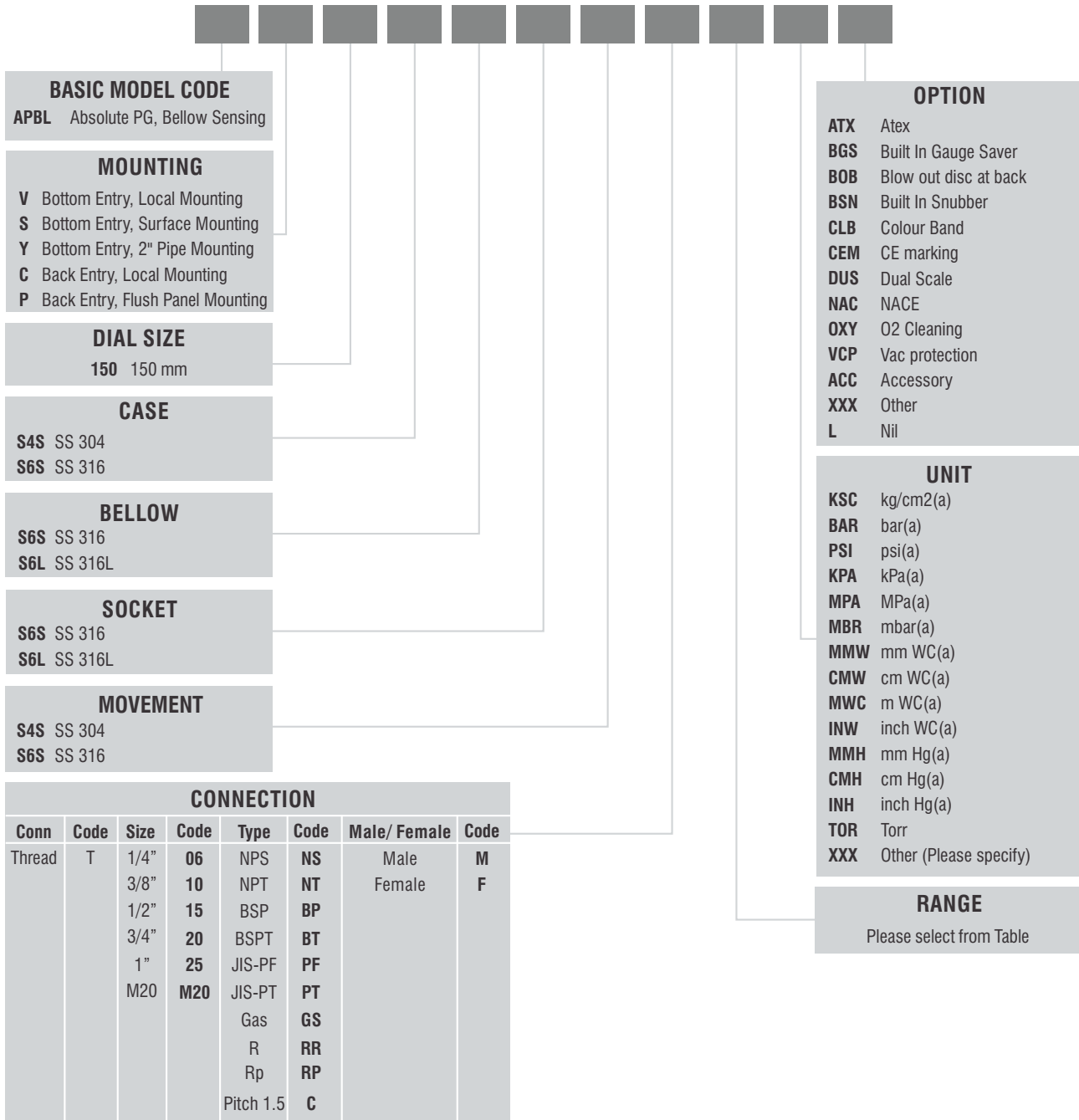
**Note:** Equivalent Reading in other pressure Units also can be provided on request

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

# Ordering Information

## MODEL



**BASIC MODEL CODE**  
**APBL** Absolute PG, Bellow Sensing

**MOUNTING**  
**V** Bottom Entry, Local Mounting  
**S** Bottom Entry, Surface Mounting  
**Y** Bottom Entry, 2" Pipe Mounting  
**C** Back Entry, Local Mounting  
**P** Back Entry, Flush Panel Mounting

**DIAL SIZE**  
**150** 150 mm

**CASE**  
**S4S** SS 304  
**S6S** SS 316

**BELLOW**  
**S6S** SS 316  
**S6L** SS 316L

**SOCKET**  
**S6S** SS 316  
**S6L** SS 316L

**MOVEMENT**  
**S4S** SS 304  
**S6S** SS 316

CONNECTION								
Conn	Code	Size	Code	Type	Code	Male/ Female	Code	
Thread	T	1/4"	06	NPS	NS	Male	M	
		3/8"	10	NPT	NT	Female	F	
	M20	M20	1/2"	15	BSP	BP		
			3/4"	20	BSPT	BT		
			1"	25	JIS-PF	PF		
					JIS-PT	PT		
					Gas	GS		
					R	RR		
			Rp	RP				
			Pitch 1.5	C				

**OPTION**  
**ATX** Atex  
**BGS** Built In Gauge Saver  
**BOB** Blow out disc at back  
**BSN** Built In Snubber  
**CLB** Colour Band  
**CEM** CE marking  
**DUS** Dual Scale  
**NAC** NACE  
**OXY** O2 Cleaning  
**VCP** Vac protection  
**ACC** Accessory  
**XXX** Other  
**L** Nil

**UNIT**  
**KSC** kg/cm2(a)  
**BAR** bar(a)  
**PSI** psi(a)  
**KPA** kPa(a)  
**MPA** MPa(a)  
**MBR** mbar(a)  
**MMW** mm WC(a)  
**CMW** cm WC(a)  
**MWC** m WC(a)  
**INW** inch WC(a)  
**MMH** mm Hg(a)  
**CMH** cm Hg(a)  
**INH** inch Hg(a)  
**TOR** Torr  
**XXX** Other (Please specify)

**RANGE**  
 Please select from Table

e.g. For 1/2"NPT(M), Code: **T15NTM**  
 For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **APBL-V-150-S4S-S6S-S6S-S4S-T15NTM-(0-1)-BAR-L**

# Absolute Pressure Gauges - Bourdon Type

# General

**MODEL : APBR**

## Why Absolute Pressure Gauge?

The atmospheric pressure varies from place to place depending up on the altitude of the location and prevailing weather conditions. In such variable conditions, precise pressure measurement can be arrived only if a fixed (un-changing) reference point is established.

This is achieved by totally evacuating and sealing the Bourdon tube, which will act as the reference point for calibration i.e. Absolute Zero. The process pressure is applied inside the enclosure surrounding the Bourdon tube. Any pressure applied is compared to the sealed reference (Bourdon tube) to get an accurate measurement of absolute pressure, through a precision Movement mechanism.



## Features

- Compliance to latest EN-837 standard
- Range : As shown in the table
- Bourdon in SS316 as standard providing better mechanical properties guaranteeing repeatability and accuracy
- Accuracy  $\pm 1\%$  FSD

Note: Bourdon type Absolute Pressure Gauges are recommended for non-corrosive, clean, clear (colourless) & dry Gases / Air only

## Specifications

<b>Ref. Standard</b>	EN-837
<b>Dial</b>	100 mm/150 in Aluminium, white background, black markings
<b>Case</b>	SS304 / SS316 with bayonet bezel
<b>Protection</b>	IP-68 (IS:13947 part I / IEC:60529)
<b>Window</b>	Safety glass (Shatter proof / Toughened glass)
<b>Sensor</b>	Bourdon in SS316 / SS316L
<b>Socket</b>	22mm Square in SS316 / SS316L
<b>Movement</b>	SS304, SS316
<b>Connection</b>	1/2" NPT (M) as standard (other optional)
<b>Accuracy</b>	$\pm 1\%$ FSD
<b>Over range</b>	As per EN 837
<b>Zero adjustment</b>	Micrometer Pointer
<b>Temperature suitability</b>	Ambient (-)20°C to 60°C, Media 100°C
<b>Temperature Effect</b>	Within $\pm 0.4\%$ FSD/10°C, when temperature changes from reference temperature of 20°C (as per EN-837 standard)
<b>Optional</b>	NACE compliance CE Atex

## Ranges

0 to 1 kg/cm<sup>2</sup>(a)  
0 to 1.6 kg/cm<sup>2</sup>(a)  
0 to 2.5 kg/cm<sup>2</sup>(a)  
0 to 4 kg/cm<sup>2</sup>(a)  
Other on request

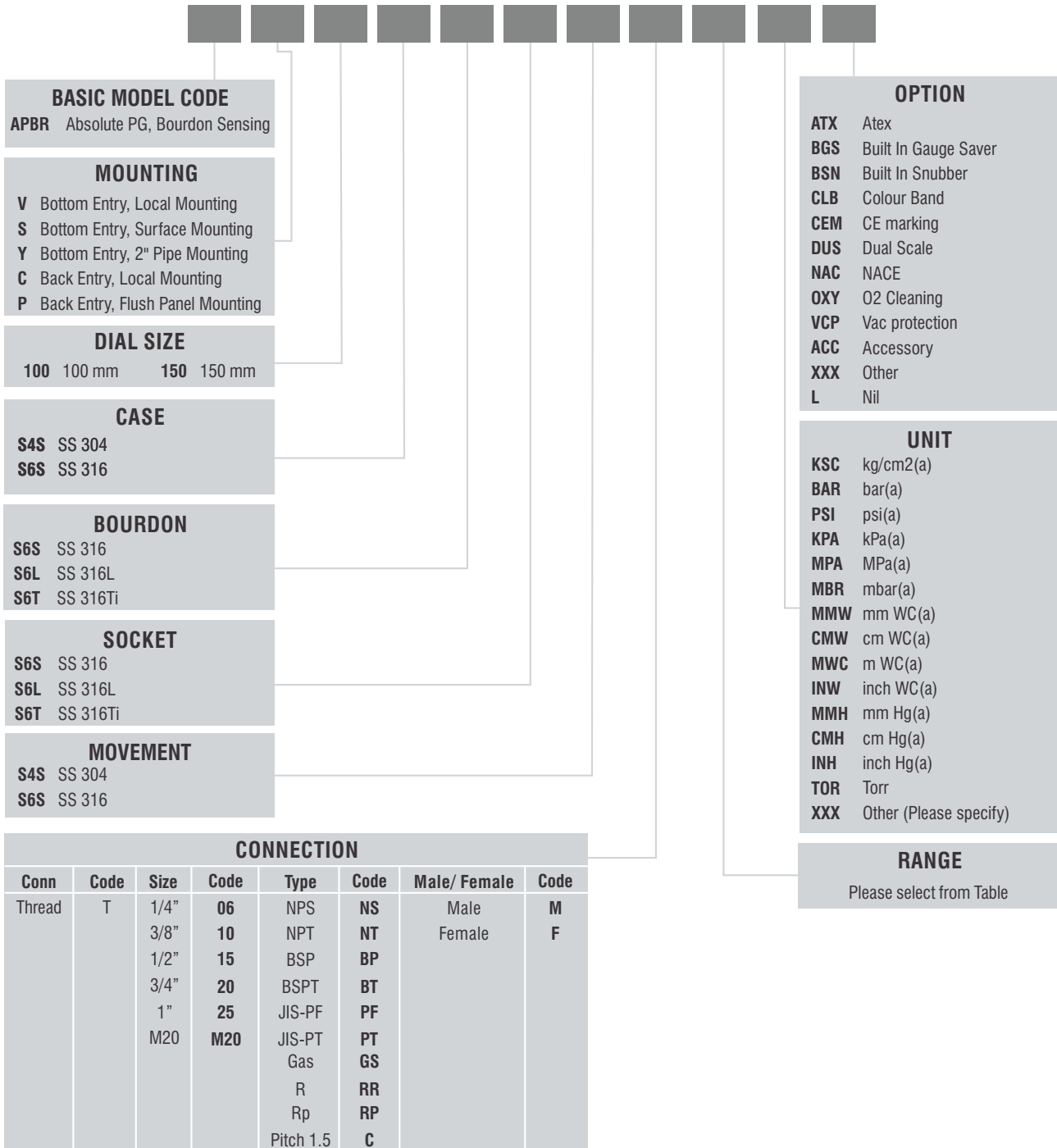
**Note:** Equivalent Reading in other pressure Units also can be provided on request

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

# Ordering Information

## MODEL



e.g. For 1/2"NPT(M), Code: **T15NTM**  
For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **APBR-V-150-S4S-S6S-S6S-S4S-T15NTM-(0-1)-KSC-L**

# Absolute Pr. Gauges - Diaphragm Type

**MODEL : APDS**

## Why Absolute Pressure Gauge?

The atmospheric pressure varies from place to place depending up on the altitude of the location and prevailing weather conditions. In such variable conditions, precise pressure measurement can be arrived only if a fixed (un-changing) reference point is established.

For this purpose, the Gauge is provided with 2 Chambers separated by a Diaphragm. One chamber is totally evacuated and sealed, which acts as the reference point for calibration i.e. Absolute Zero. The process pressure is applied to the pressure chamber at the other side of the Diaphragm. Any pressure applied inside the pressure chamber is compared to the sealed chamber to get an accurate measurement of absolute pressure, through a precision Movement mechanism



## Features

- Compliance to latest EN-837 standard
- Range : As shown in the table
- Diaphragm in SS316 as standard providing better mechanical properties guaranteeing repeatability and accuracy
- Accuracy  $\pm 1.6\%$  FSD

## Specifications

<b>Ref. Standard</b>	EN-837
<b>Dial</b>	100 mm/150 in Aluminium, white background, black markings
<b>Case</b>	SS304 / SS316 with bayonet bezel
<b>Protection</b>	IP-68 (IS:13947 part I / IEC:60529)
<b>Window</b>	Safety glass (Shatter proof / Toughened glass)
<b>Sensor</b>	Diaphragm in SS316 / SS316L
<b>Wetted Parts</b>	SS316 / SS316L
<b>Movement</b>	SS304, SS316
<b>Connection</b>	1/2" NPT (M) as standard (other optional)
<b>Accuracy</b>	$\pm 1.6\%$ FSD
<b>Over range</b>	As per EN 837
<b>Zero adjustment</b>	Micrometer Pointer
<b>Temperature suitability</b>	Ambient (-)20°C to 60°C, Media 100°C
<b>Temperature Effect</b>	Within $\pm 0.8\%$ FSD/10°C, when temperature changes from reference temperature of 20°C (as per EN-837 standard)
<b>Optional</b>	NACE compliance CE Atex

## Ranges

0 to 500 mmWC(a)
0 to 600 mmWC(a)
0 to 1000 mmWC(a)
0 to 1600 mmWC(a)
0 to 2500 mmWC(a)
0 to 4000 mmWC(a)
0 to 6000 mmWC(a)
Other on request

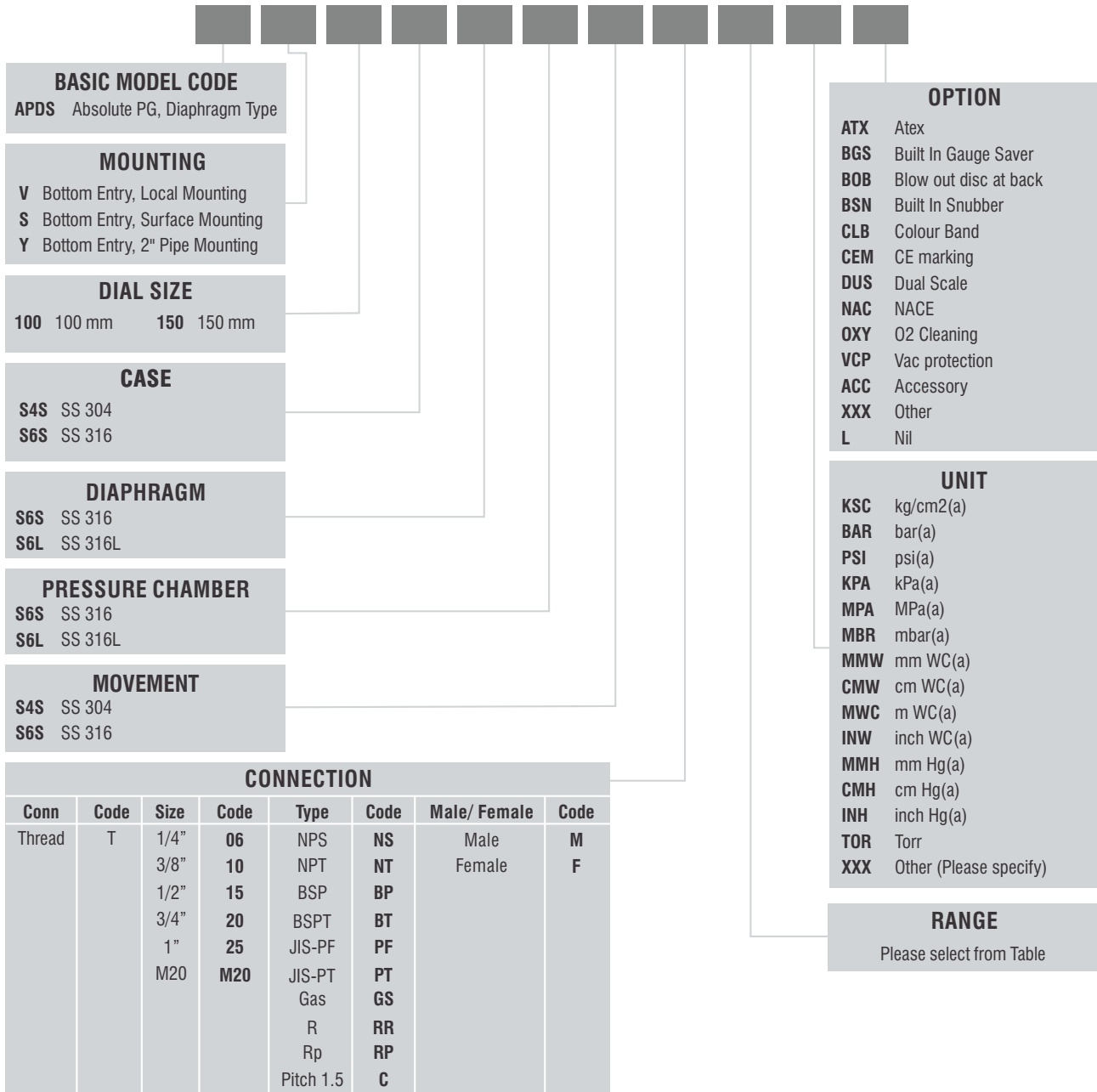
**Note:** Equivalent Reading in other pressure Units also can be provided on request

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

# Ordering Information

## MODEL



e.g. For 1/2"NPT(M), Code: **T15NTM**  
For M20x1.5 (F), Code: **TM20CF**

**Sample Model Code: APDS-V-150-S4S-S6S-S6S-S4S-T15NTM-(0-1000)-MMW-L**

The recommendations made in this catalogue are to be used as intended guide. No guarantee of material can be undertaken since other factors may affect the performance. We reserve the right to change the specifications mentioned in this catalogue without any notice as improvements & development is a continuous process at General. Responsibility of typographical errors is specifically disclaimed.