

MODELS: 4000 PRESSURE SWITCH

This low cost, rugged and versatile control has been designed with dependability in mind. Gravity castings are used to eliminate the 'working' of the control housing, with subsequent shifting of the set point, commonly encountered in controls manufactured from sheet metal.

The Series 4000 switches cover the range of 0.14 to 21 Barg in a group of 4 basic models.

Repeatability is maintained due to exclusive 'SIRCO™' construction, which limits the movement of the full (100%) supported diaphragm between the zero ring and flange face, maintaining the 'Set Point' under the severest working and overpressure conditions. The cover is gasketed to weatherproof the unit.

These controls are known and used throughout the world and are available in a wide choice of ranges and materials. They are ideal for innumerable industrial and marine applications.

SWITCHES FOR HAZARDOUS AREAS

The Series 4000 switches can be supplied for use in hazardous areas compliant to:

- (CE)** EN IEC 60079-0:2018, EN 60079-1:2014, EN IEC 60079-7:2015
 Ex II 2 G Ex db eb IIC T6 Gb (Tamb = -20°C to +60°C)
 Certificate Number: Baseefa03ATEX0128
 Issue 4
 Certifying Authority: **SGS Fimko Oy**
- (UKCA)** EN IEC 60079-0:2018, EN 60079-1:2014, EN IEC 60079-7:2015 + A1:2018
 Ex II 2 G Ex db eb IIC T6 Gb (Tamb = -20°C to +60°C)
 Certificate Number: BAS22UKEX0247
 Certifying Authority: **SGS Baseefa Limited**

Switches are also available Intrinsically Safe to BS EN 60079-11: 2012,
 BS EN 60079-14: 2008 Para 3.5.4.

GENERAL SPECIFICATIONS

CONSTRUCTION:

- Housing: Rugged gravity cast aluminium with gasketed cover for weatherproofing – painted stoved blue epoxy resin.
- Pressure Chamber: Aluminium (also available in other materials – see code guide on page 2).
- Diaphragm: Buna-N, nylon reinforced (also available in other materials – see code guide on page 2).
- Range Adjustment: Spring-loaded.
- Mounting: Two mounting lugs integral with housing.
- Process Connection: Rp $\frac{1}{4}$ (1/4" BSP Female) Standard (other sizes available).
- Electrical Connection: M20 x 1.5 Int. Standard

ELECTRICAL:

- S.P.D.T. snap-acting microswitch rated at 15 amp 230/480 vac standard with screw terminals. Also available in other ratings.
 For D.P.D.T. operation 2 x S.P.D.T. microswitches rated at 5 amps 250 vac are fitted.



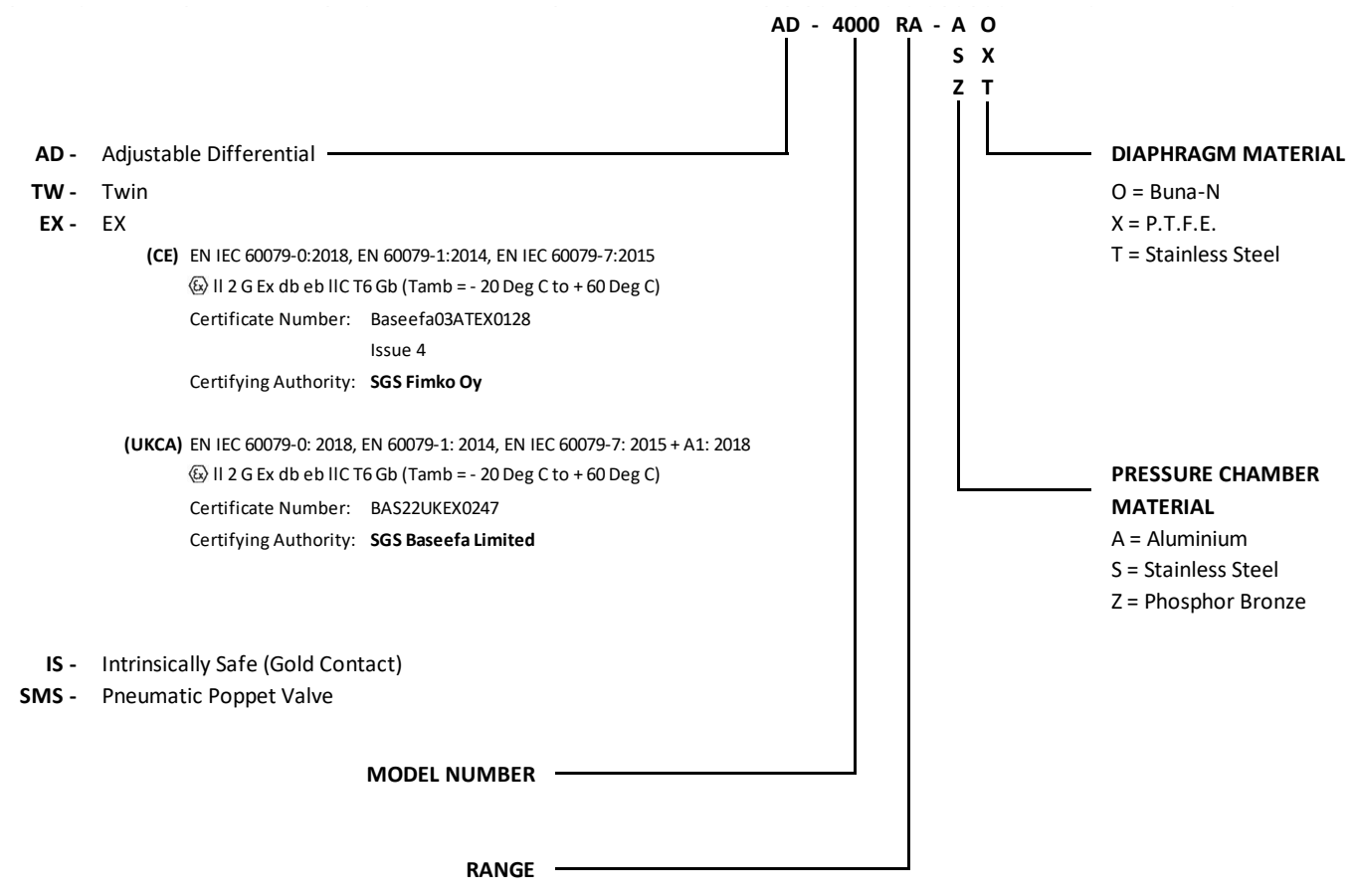
PRESSURE OPERATED CONTROLS – MODEL 4000

| OPERATING RANGE | DIFFERENTIAL NON-ADJUSTABLE | BASIC MODEL CODE | PROOF PRESSURE | MAX WORKING PRESSURE | Re-calibration of Operating Range may be required if Maximum Working Pressure exceeds 20% above the top of the Operating Range. |
|-------------------------|--------------------------------|------------------|-------------------|-------------------------|---|
| 0.14 to 1.1 Barg | 10 mbar | 4000RA-AO | 21 Barg | 16.16 Barg | |
| 0.14 to 1.4 Barg | 70 mbar | 4000RB-AO | 21 Barg | 16.16 Barg | |
| 0.7 to 7 Barg | 140 mbar | 4000RC-AO | 21 Barg | 16.16 Barg | |
| 2.1 to 21 Barg | 500 mbar | 4000RD-AO | 28 Barg | 21.54 Barg | |
| DIFFERENTIAL ADJUSTABLE | | | | | Proof Pressures over 21 Bar will have High Tensile Steel Grade 12.9 Screws, Plated. |
| 0.14 to 1.4 Barg | 0.07 to 0.1 Bar | AD4000RB-AO | 21 Barg | 16.16 Barg | |
| 0.7 to 7 Barg | 0.4 to 0.9 Bar | AD4000RC-AO | 21 Barg | 16.16 Barg | Proof Pressures up to 21 Bar will have Stainless Steel Screws Grade A2/A4. |
| 2.1 to 21 Barg | 0.6 to 1 Bar | AD4000RD-AO | 28 Barg | 21.54 Barg | |

NOTE:

- Model 4000RA is not available with adjustable differential.
- Models 4000RA and all adjustable differential models not available for use in hazardous areas.
- Twin microswitch variation not available with adjustable differential or Ex models.
- The non-adjustable differential will vary for Ex and IS Models.

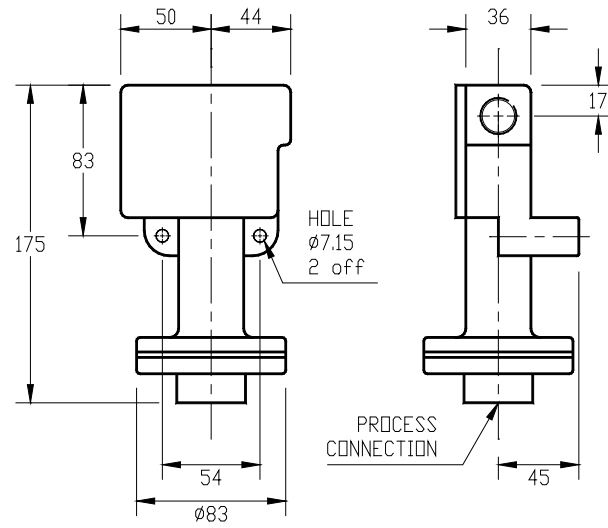
CODE GUIDE



TEMPERATURE RATINGS

| PRESSURE CHAMBER MATERIAL | DIAPHRAGM MATERIAL | TEMPERATURE (Degrees C) | |
|---------------------------|-----------------------|-------------------------|---------|
| | | MAXIMUM | MINIMUM |
| Aluminium | Buna-N | +90 | -40 |
| | P.T.F.E. | +170 | -40 |
| | Teflon FEP | +170 | -40 |
| Stainless Steel (316) | Buna-N | +90 | -40 |
| | P.T.F.E. | +200 | -40 |
| | Teflon FEP | +200 | -40 |
| | Stainless Steel (316) | +200 | -40 |
| Phosphor Bronze | Buna-N | +90 | -40 |
| | P.T.F.E. | +200 | -40 |
| | Teflon FEP | +200 | -40 |
| | Stainless Steel (316) | +200 | -40 |

**STANDARD PRESSURE SWITCH MODELS
4000RA, RB, RC and RD Only**



**PRESSURE SWITCH
MODEL Ex4000**

