

MODELS:

2001	Single Switch,	Differential Non-Adjustable
201	Single Switch,	Differential Adjustable
2002	Two Switch,	Differential Non-Adjustable
202	Two Switch,	Differential Adjustable on 1 st Switch Only

All models are available as either Pressure or Vacuum sensitive switches and cover the range -1 to +175 Barg in a group of 12 basic models.

Controls can be supplied with varying degrees of protection, and with various approvals for use in Explosion-proof/Flameproof areas. (Refer to list for options). More detailed information on these approvals can be found in the relevant sections of this catalogue.

Models falling within the range 0 to 1 Barg can be supplied as Vacuum switches (see code guide).

Materials used in the manufacture of sensing units and pressure chambers are according to customer requirements and operational application.

All switches are fitted with a mounting bracket as Standard (except Flanged Controls).

All switches are available with internal or external set point adjustment (External Adjustment is Standard).

For accuracy class and zone refer to leaflet 03/09.



PRESSURE AND VACUUM OPERATED CONTROLS

OPERATING RANGE	DIFFERENTIAL NON ADJUSTABLE	BASIC MODEL CODE		PROOF PRESSURE	MAX WORKING PRESSURE	
		RANGE CODE	SERIES CODE			
-1 to +5 Barg	0.1 or 0.2 Bar	00	2001W – AO†	7.5 Barg	5.8 Barg	
-112 to +112 mbarg	7.5 or 15 mbar	00A	2001W – AO†	7.5 Barg	5.8 Barg	
20 to 200 mbarg	7.5 or 15 mbar	2	2001W – AO†	10.5 Barg	8.07 Barg	
0.1 to 0.5 Barg	0.02 or 0.04 Bar	3	2001W – AO†	10.5 Barg	8.07 Barg	Higher Proof Pressures Available. Consult Factory.
0.14 to 1.4 Barg	0.02 or 0.04 Bar	3A	2001W – AO†	10.5 Barg	8.07 Barg	
0.14 to 4.2 Barg	0.04 or 0.07 Bar	4	2001W – AO†	10.5 Barg	8.07 Barg	
0.35 to 7 Barg	0.05 or 0.1 Bar	5	2001W – AO†	10.5 Barg	8.07 Barg	
1.4 to 14 Barg	0.1 or 0.2 Bar	6	2001W – SO††	52.5 Barg	40.38 Barg	Re-calibration of Operating Range may be required if Maximum Working Pressure exceeds 20% above the top of the Operating Range.
2.1 to 21 Barg	0.15 or 0.35 Bar	7	2001W – SO††	52.5 Barg	40.38 Barg	
3.5 to 35 Barg	0.35 or 0.7 Bar	7A	2001W – SO††	52.5 Barg	40.38 Barg	
7 to 100 Barg	3 or 6 Bar	8	2001W – ST†††	250 Barg	192 Barg	
70 to 175 Barg	5 or 10 Bar	9	2001W – ST†††	250 Barg	192 Barg	

DIFFERENTIAL ADJUSTABLE

-1 to +5 Barg	0.2 to 1.7 Barg	00	201W – AO†	7.5 Barg	5.8 Barg	Proof Pressures over 21 Bar will have High Tensile Steel Grade 12.9 Screws, Plated.
-112 to +112 mbarg	15 to 63 mbarg	00A	201W – AO†	7.5 Barg	5.8 Barg	
20 to 200 mbarg	15 to 60 mbarg	2	201W – AO†	10.5 Barg	8.07 Barg	
0.1 to 0.5 Barg	0.04 to 0.21 Barg	3	201W – AO†	10.5 Barg	8.07 Barg	Proof Pressures up to 21 Bar will have Stainless Steel Screws Grade A2/A4.
0.14 to 1.4 Barg	0.04 to 0.4 Barg	3A	201W – AO†	10.5 Barg	8.07 Barg	
0.14 to 4.2 Barg	0.07 to 0.7 Barg	4	201W – AO†	10.5 Barg	8.07 Barg	
0.35 to 7 Barg	0.1 to 2.1 Barg	5	201W – AO†	10.5 Barg	8.07 Barg	
1.4 to 14 Barg	0.2 to 3.5 Barg	6	201W – SO††	52.5 Barg	40.38 Barg	
2.1 to 21 Barg	0.35 to 6.3 Barg	7	201W – SO††	52.5 Barg	40.38 Barg	
3.5 to 35 Barg	0.7 to 10.5 Barg	7A	201W – SO††	52.5 Barg	40.38 Barg	

Standard switches contain one single pole double throw microswitch.

Standard electrical rating 15 amps 400 vac.

Standard electrical entry M20 x 1.5 Int. through 360°.

†Standard construction Aluminium Pressure Chamber and Nitrile Rubber Diaphragm (M.W.T. 90° C) = AO.

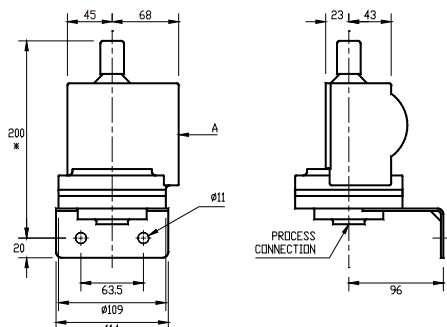
††Standard construction Stainless Steel Pressure Chamber and Nitrile Rubber Diaphragm (M.W.T. 90° C) = SO.

†††Standard construction Stainless Steel Pressure Chamber and Stainless Steel Diaphragm (M.W.T. 200° C) = ST.

††(Aluminium Pressure Chambers are not available on these models.)

†††(Aluminium Pressure Chambers and Fabric Diaphragms are not available on these models.)

For construction other than above refer to the 2nd page of this leaflet for options, and change code accordingly.



Terminal box, explosion-proof/flameproof enclosure, pneumatic valve fitted to surface 'A'

*This dimension is 242 for '00' and '00A' ranges, it will also differ for vacuum models and safety vented models.

DEGREE OF PROTECTION	WEATHERPROOF IP55 IP66	CODE W IP55 IP66
ELECTRICAL OUTPUTS (FOR HAZARDOUS AREAS)	<p>ATEX approved for Zone 2 areas EN IEC 60079-0:2018, EN IEC 60079-15:2019, EN IEC 60079-7:2015 + A1:2018 ⚡ II 3G Ex ec nC IIC T6 Gc (T_{amb} = -20°C to +60°C) Certificate Number: Baseefa03ATEX0319X – Issue 4 Certifying Authority: SGS Fimko Oy</p> <p>(UKCA) EN IEC 60079-0:2018, EN IEC 60079-15:2019, EN IEC 60079-7:2015 + A1:2018 ⚡ II 3G Ex ec nC IIC T6 Gc (T_{amb} = -20°C to +60°C) Certificate Number: BAS22UKEX0248X Certifying Authority: SGS Baseefa Limited</p> <p>ATEX approved for Zone 1 areas EN IEC 60079-0:2018, EN 60079-1:2014 ⚡ II 2 G Ex db IIB + H₂ T6 Gb (T_{amb} -20°C to +60°C) Certificate Number: Baseefa02ATEX0025X Issue 4 (single switch) *1 Certificate Number: Baseefa02ATEX0026X Issue 3 (twin/two switch) *1 Certifying Authority: SGS Fimko Oy</p> <p>(UKCA) EN IEC 60079-0:2018, EN 60079-1:2014 ⚡ II 2 G Ex db IIB + H₂ T6 Gb (T_{amb} -20°C to +60°C) Certificate Number: BAS22UKEX0245X (single switch) *2 Certificate Number: BAS22UKEX0246X (twin/two switch) *2 Certifying Authority: SGS Baseefa Limited</p> <p>Intrinsic Safety. Gold Contact Microswitch classed as 'Simple Electrical Apparatus' and may be used without certification in a barrier circuit. (BS EN 60079-11: 2012, BS EN 60079-14: 2014 Para 3.5.5)</p>	<p>E(d) All ranges will have 2 x the larger of the two Non-Adjustable Differentials listed.</p> <p>H(A – K) *1/*2 H(A) = BZ-2R *1/*2 H(B) = BZ-R *1/*2 H(C) = BZ-2R-722 *1 H(D) = 91-SE1 *1 H(F) = 91-SE1-3N55 *1 H(I) = MT-4R *1/*2 H(J) = BM-2R *1/*2 H(K) = BM-1R <i>Differentials Listed over and Electrical Ratings will vary depending on Microswitch Fitted. See Leaflet 22/02 for Details</i></p> <p>WIS All ranges will have 1.5 x the larger of the two Non-Adjustable Differentials listed.</p>
S.P.D.T. ALTERNATIVES	HIGH LOAD 10 amp, 125 vac/vdc	Prefix Range Code with 'X' and state ratings.
TWO SWITCH MODELS (ELECTRICAL OUTPUT)	Max. Setting Span = 30% of the Range Span Adjustable Differential is not available on second switch.	2002 202 E(d), H(D), H(F), H(I) Not available as Two Switch Model
TWIN SWITCH MODELS (ELECTRICAL OUTPUT)	Twin Microswitches for simultaneous action	TW Differential x 2
PNEUMATIC VALVE SWITCHES	Poppet 3 port Pilot Operated 3 port	SMS Prefix Range Code: PV All ranges will have 2 x the larger of the two Non-Adjustable Differentials listed. Differential will be 5 x the larger listed.
PRESSURE CHAMBER MATERIAL	Stainless Steel Phosphor Bronze P.T.F.E. Trovidor (P.V.D.F.) Phosphor Bronze Hastelloy Titanium Incoloy Monel If P.T.F.E. lining is required for Pressure Chambers add - after Pressure Chamber material	S Z X J Z Hast. Tit. I M X Other material available on request. Consult Factory
DIAPHRAGM MATERIAL	Stainless Steel (Differential x 2) P.T.F.E. Viton (Differential x 1½) Monel (Differential x 2) Tantalum (Differential x 2)	T X V M TANT Not available on 00 or 00A Range Not available on 00 or 00A Range Not available on 00 or 00A Range
SAFETY VENTED CONSTRUCTION		Prefix Range Code with: G
FLANGES	Available on all models.	Prefix Series Code with: F
FOR VACUUM SERVICE		Prefix Series Code with: V
PROCESS CONNECTIONS	¼" B.S.P. Female standard (Rp¼) ¼" Flushout Prefix Pressure Chamber Material code with: F	Alternatives available up to ½"
MANUAL RESET (RISING or FALLING)	Available on all Electrical & Pneumatic 2001/201 Series, except Explosion-proof/Flameproof Models.	MRR (Reset on Rising Pressure) MRF (Reset on Falling Pressure)