

MODELS:

2004	Single Switch,	Differential Non-Adjustable
204	Single Switch,	Differential Adjustable
2005	Two Switch,	Differential Non-Adjustable
205	Two Switch,	Differential Adjustable on 1 st Switch Only

All models are available as either Pressure or Vacuum sensitive switches and cover the range -5 mbar to +2.8 Barg in a group of 5 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	Higher Proof Pressures Available. Consult Factory.
		RANGE CODE	SERIES CODE			
-5 to +68 mbar	1.2 or 3 mbar	00	2004W – AO†	2345 mbar	1804 mbar	Re-calibration of Operating Range may be required if Maximum Working Pressure exceeds 20% above the top of the Operating Range.
25 to 200 mbar	1.2 or 3 mbar	0	2004W – AO†	2345 mbar	1804 mbar	
60 to 600 mbar	2.5 or 5 mbar	1	2004W – AO†	2345 mbar	1804 mbar	
130 to 1340 mbar	3.8 or 7.6 mbar	2	2004W – AO†	2345 mbar	1804 mbar	
0.35 to 2.8 Barg	7.6 or 15 mbar	4A	2004W – SO††	4.9 Barg	3.77 Barg	
DIFFERENTIAL ADJUSTABLE						
-5 to +68 mbar	3 to 22 mbar	00	204W – AO†	2345 mbar	1804 mbar	Proof Pressures over 4.2 Bar will have High Tensile Steel Grade 12.9 Screws, Plated.
25 to 200 mbar	3 to 60 mbar	0	204W – AO†	2345 mbar	1804 mbar	
60 to 600 mbar	5 to 152 mbar	1	204W – AO†	2345 mbar	1804 mbar	Proof Pressures up to 4.2 Bar will have Stainless Steel Screws Grade A2/A4.
130 to 1340 mbar	7.6 to 381 mbar	2	204W – AO†	2345 mbar	1804 mbar	
0.35 to 2.8 Barg	15 to 838 mbar	4A	204W – SO††	4.9 Barg	3.77 Barg	

Standard switches contain one single pole double throw microswitch.

Standard electrical rating 15 amps 400 vac.

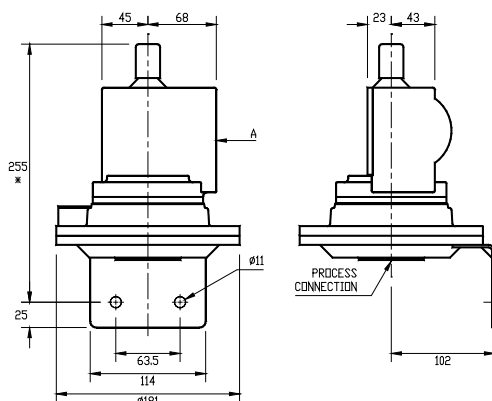
Standard electrical entry M20 x 1.5 Int. through 360°.

†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.

††(Aluminium Pressure Chambers 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 will differ when pressure chamber material is from solid blank.

DEGREE OF PROTECTION	WEATHERPROOF	CODE	W
	IP55	IP55	
	IP66	IP66	
ELECTRICAL OUTPUTS (FOR HAZARDOUS AREAS)	(CE) 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	E(d)	All ranges will have 2 x the larger of the two Non-Adjustable Differentials listed.
	(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		
	(CE) ATEX approved for Zone 1 areas EN IEC 60079-0:2018, EN 60079-1:2014 ⚡ II 2 G Ex db IIB + H ₂ 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	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
	(UKCA) EN IEC 60079-0:2018, EN 60079-1:2014 ⚡ II 2 G Ex db IIB + H ₂ 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		
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)	WIS	All ranges will have 1.5 x the larger of the two Non-Adjustable Differentials listed.	
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.	2005 205	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.) If P.T.F.E. lining is required for Pressure Chambers add - after Pressure Chamber material	S Z X J X	Not available with Vacuum
DIAPHRAGM MATERIAL	Stainless Steel (Differential x 2) P.T.F.E. Viton (Differential x 1½)	T X V	
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 2004/204 Series, except Explosion-proof/Flameproof Models.	MRR (Reset on Rising Pressure) MRF (Reset on Falling Pressure)	