CONTROLS LTD.

## MODELS

| 204P | Single Switch, | Differential Non-Adjustable |
| :--- | :--- | :--- |
| 205P | Two Switch, | Differential Non-Adjustable |

All models are available as either Pressure or Vacuum sensitive switches and cover the range -5 mbarg 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.

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).


| PRESSURE AND VACUUM DIFFERENCE OPERATED CONTROLS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OPERATING RANGE | RESET SENSITIVITY NON-ADJUSTABLE | BASIC MODEL CODE Range series CODE CODE | MAX STATIC PRESSURE | PROOF PRESSURE | MAX WORKING PRESSURE |
| -5 to +68 mbarg | 1.2 or 3 mbar* | $00-204 \mathrm{PW}$ - AO $\dagger$ | 2.3 Barg | 3.5 Barg | 2.3 Barg |
| 25 to 200 mbarg | 1.2 or 3 mbar* | 0-204PW - AO $\dagger$ | 2.7 Barg | 3.5 Barg | 2.7 Barg |
| 60 to 600 mbarg | 2.5 or 5 mbar* | 1-204PW - AO $\dagger$ | 2.7 Barg | 3.5 Barg | 2.7 Barg |
| 130 to 1340 mbarg | 3.8 or 7.6 mbar* | $2-204 \mathrm{PW}$ - AO $\dagger$ | 2.7 Barg | 3.5 Barg | 2.7 Barg |
| 0.35 to 2.8 Barg | 7.6 or 15 mbar* | $\text { 4A - 204PW - SO } \dagger \dagger$ <br> *State preference | 7 Barg | 10 Barg | 7 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 $360^{\circ}$.
$\dagger$ Standard construction Aluminium Pressure Chamber and Nitrile Rubber Diaphragm (M.W.T. $90^{\circ} \mathrm{C}$ ) = AO.
$\dagger \dagger$ Standard construction Stainless Steel Pressure Chamber and Nitrile Rubber Diaphragm (M.W.T. $90^{\circ} \mathrm{C}$ ) = SO.
For construction other than above refer to the $2^{\text {nd }}$ page of this leaflet for options and change code accordingly.


Terminal box, explosion proof/flameproof enclosure, pneumatic valve fitted to surface ' $A$ ' L.P. - Low Pressure Connection, H.P. - High Pressure Connection

| DEGREE OF PROTECTION | WEATHERPROOF IP55 IP66 | $\begin{gathered} \hline \text { CODE } \\ \text { W } \\ \text { IP55 } \\ \text { IP66 } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: |
| ELECTRICAL OUTPUTS <br> (UKCA) <br> (CE) <br> (UKCA) | ATEX approved for Zone 2 areas <br> EN IEC 60079-0:2018, EN IEC 60079-15:2019, <br> EN IEC 60079-7:2015 + A1:2018 <br> (Ex) \\| 3G Ex ec nC IIC T6 Gc (Tamb $=-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ ) <br> Certificate Number: <br> Baseefa03ATEX0319X Issue 4 <br> Certifying Authority: SGS Fimko Oy | E(d) | All ranges will have $2 x$ the larger of the two Non-Adjustable Differentials listed. |
|  | EN IEC 60079-0:2018, EN IEC 60079-15:2019, <br> EN IEC 60079-7:2015 + A1:2018 <br> (x) \|| 3G Ex ec nC IIC T6 Gc (Tamb $=-20^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}$ ) <br> Certificate Number: BAS22UKEX0248X <br> Certifying Authority: SGS Baseefa Limited |  |  |
|  | ATEX approved for Zone 1 areas <br> EN IEC 60079-0:2018, EN 60079-1:2014 <br> © $x$ \\| \| $2 \mathrm{G} \mathrm{Ex} \mathrm{db} \\| \mathrm{B}+\mathrm{H} 2 \mathrm{~T} 6 \mathrm{~Gb}\left(\mathrm{Tamb}-20^{\circ} \mathrm{C}\right.$ to $\left.+60^{\circ} \mathrm{C}\right)$ <br> Certificate Number: Baseefa02ATEX0025X Issue 4 (single switch) *1 <br> Certificate Number: Baseefa02ATEX0026X <br> Issue 3 (twin/two switch) *1 | H(A - K ) |  |
|  | Certifying Authority: SGS Fimko Oy |  | Differentials Listed over and Electrical Ratings will vary depending on Microswitch Fitted. See Leaflet 22/02 for Details |
|  | EN IEC 60079-0:2018, EN 60079-1:2014 <br> (区x) \\|l $2 \mathrm{GEx} \mathrm{db} \\| \mathrm{IB}+\mathrm{H}_{2} \mathrm{~T} 6 \mathrm{~Gb}\left(\mathrm{Tamb}-20^{\circ} \mathrm{C}\right.$ to $+60^{\circ} \mathrm{C}$ ) |  |  |
|  | Certificate Number: BAS22UKEX0245X (single switch) *2 |  |  |
|  | Certificate Number: $\begin{aligned} & \text { BAS22UKEX0246X } \\ & \text { (twin/two switch) } 22\end{aligned}$ |  |  |
|  | 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 | $10 \mathrm{amp}, 125 \mathrm{vac} / \mathrm{vdc}$ |  | Prefix Range Code with ' X ' and state ratings. |
| TWO SWITCH MODELS (ELECTRICAL OUTPUT) | Max. Setting Span $=30 \%$ of the Range Span | 205P | $E(d), H(D), H(F), H(I)$ <br> Not available as Two Switch Model |
| TWIN SWITCH MODELS (ELECTRICAL OUTPUT) | Twin Microswitches for simultaneous action | TW | Reset Sensitivity $\times 2$ |
| PNEUMATIC VALVE SWITCHES | Poppet 3 port | SMS | All ranges will have $2 \times$ the Non-Adjustable |
|  | Prefix Range Code: |  | Reset Sensitivity listed. <br> Differential will be 5 x the larger listed. |
| PRESSURE | Stainless Steel | S |  |
| CHAMBER | Phosphor Bronze | Z |  |
| MATERIAL |  |  |  |
| DIAPHRAGM | Viton (Reset Sensitivity $\times 11 / 2$ ) | V |  |
| MATERIAL | P.T.F.E. | X |  |
| RESET SENSITIVITY ADJUSTABLE (on N/T Switch Only) <br> An Adjustable Reset Sensitivity (Adjustable Differential) is available on all ranges up to $30 \%$ of the span with the lowest Reset Sensitivity being $2 x$ the one listed. (Not available on Pneumatic Output). |  |  |  |
|  |  |  |  |  |  |
| FLANGES | Available on all models. Prefix Series Code with: | F |  |
| FOR VACUUM SERVICE Prefix Series Code with: |  | V |  |
| PROCESSCONNECTIONS | $1 / 4$ " B.S.P. Female standard ( $\mathrm{Rp}^{1 / 4}$ ) | Alternatives available up to $1 / 2$ " |  |
|  | $1 / 4$ " Flushout Prefix Pressure Chamber Material code with: |  |  |
| MANUAL RESET (RISING or FALLING) | Available on all Electrical \& Pneumatic 204P Series, except Explosion-proof/Flameproof Models. | MRR (Res MRF (Rese | t on Rising Pressure) on Falling Pressure) |

