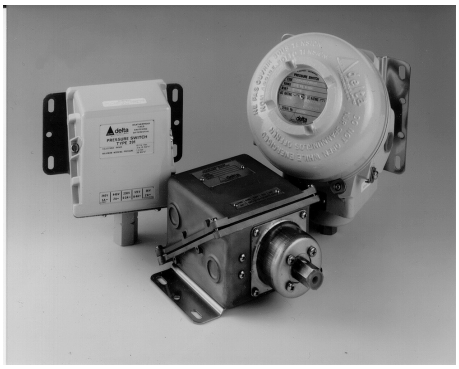
Technical **Datasheet**

delta-controls

Performance Series
Bellows Operated Pressure Switch
Models: 201, 202, 203 & 281



Key **Features**

- Precision stainless steel mechanism for arduous atmospheres and high humidity.
- Set point adjustable over whole range against calibrated scale with tamperproof adjuster.
- Weatherproof and Flameproof models ATEX and IECEx.
- Safety vented or blow out device as standard.
- NACE MR-01-75 compatibility.
- Hermetically sealed microswitch option.
- Models for fixed switching differential, adjustable differential and HI-LO operation.
- Precise and accurate operation guaranteed by use of hydraulic formed bellows, or capsule stack.
- Ranges available up to 75 bar (1,000 psi).
  Static pressure up to 100 bar (1,400 psi).

Series **Overview**

- Designed in the mid-1970s and developed over subsequent years, the Performance Series switch range offers users the broadest range of options, the highest levels of set-point repeatability and the confidence of long term performance that a mature product such as this can prove.
- The models 201/202/203/281 Performance Series pressure switches utilise bellows type sensor that offer a very linear response to pressure change. This sensor, coupled with a precision stainless steel mechanism designed to minimise friction in the moving parts, helps deliver the market leading performance customers have come to expect from the series.

Product **applications**

The 201 Performance Series is suitable for a wide range of applications in:

- Oil & Gas
- Chemical
- Petrochemical
- Refining
- Power
- Food Industry

The choice of models available ensures that the 201/2/3/281 Performance Series is suitable for use in:

- Corrosive atmospheres
- Resistant to chemical attack

How can we **help you?**

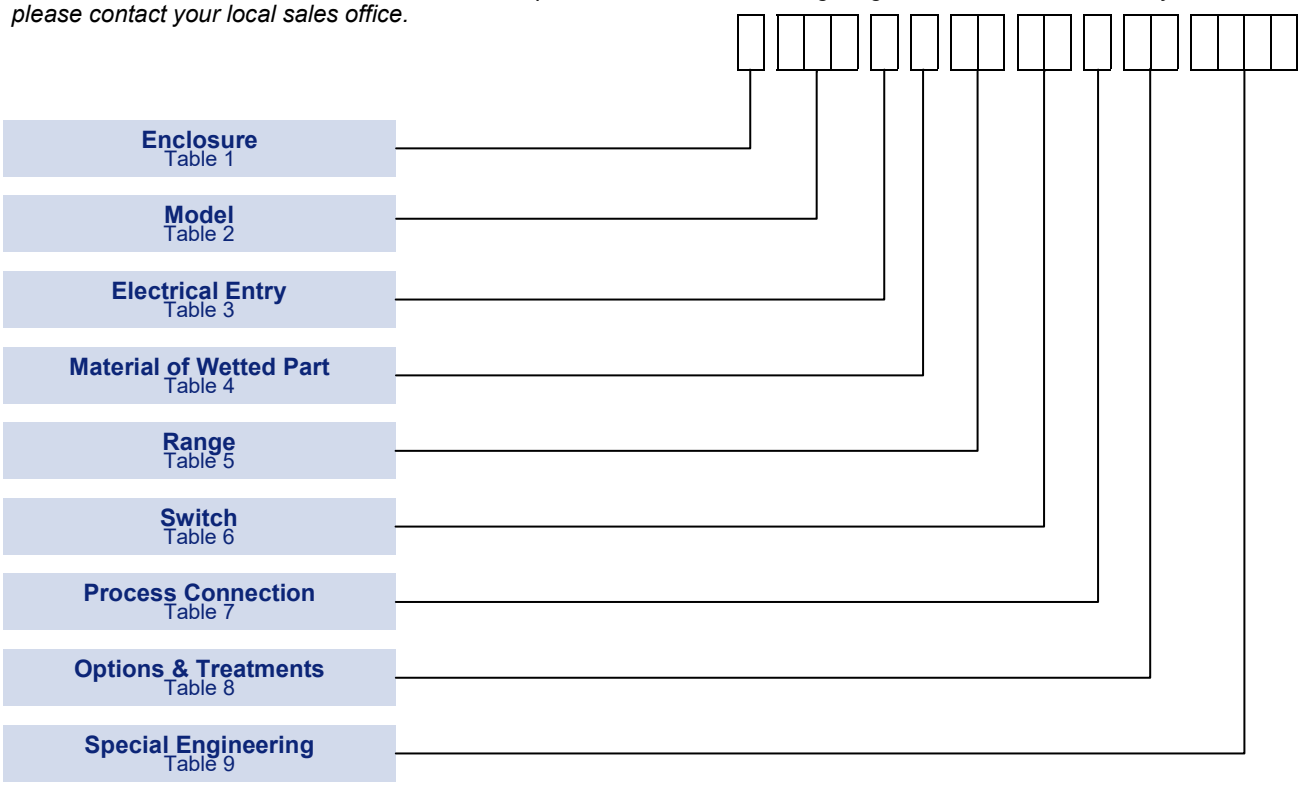
Delta Controls' offers fast, efficient and knowledgeable support when and where you need it. Please visit our web site at www.delta-controls.com to find your local support centre or call us on:

+44 (0) 1252 729140

Performance Series
Models: 201, 202, 203 & 281

How to order

Switches can be configured by selecting codes representing the desired features from the tables that follow. The chart below, describes how the model code is built up. For assistance in configuring a switch that best suits your needs, please contact your local sales office.



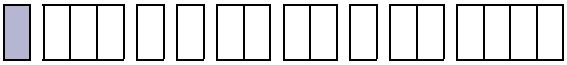
***NOTE**: Options shaded in the following tables are the most common options and are available on the quickest lead-times and at the lowest cost.*

***NOTE:** Only the most common options are shown in this data sheet. Should you require a feature that is not shown, please contact your local sales office for further details.*

Technical Specification

Accuracy:	Set point repeatability ± 0.5% of span at 20°C / 68°F ambient. Scale accuracy ± 2% of full scale.
Storage Temperature:	-25 to +60°C / -13 to +140°F
Ambient Temperature:	-25 to +60°C / -13 to +140°F Special build is also available for temperatures down to -60°C (-76°F)
Maximum Process Temperature:	Subject to appropriate installation practice, the component parts will withstand up to +60°C (+140°F). For process temperatures up to +120°C (+248°F), order WETTED PARTS Code R (Table 4). For higher temperatures, refer to special engineering.
Maximum Enclosure Temperature:	Instrument has not been tested regarding maximum temperature with respect to dust layer above 50 mm. Therefore product is not suitable for operating under excess layer of dust.
Enclosure classification:	IP66 / NEMA 4X / Flameproof Ex d
Switch output:	SPDT or DPDT snap action microswitch (standard) Hermetically sealed (optional)
Electrical rating:	See Table 6
Process Connection:	Rc 1/4 (BSP), 1/4 NPT Internal, 1/2 NPT Internal & 1/2 NPT External
Approximate Weight:	Enclosures: **"W & N"** 3.1kg/6.8lb; **"A & O"** 3.9kg/8.6lb; **"H"** 4.6kg/10.2lb; **"K"** 9.4kg/20.7lb; **"M"** 9.9kg/21.8lb.

Enclosure

TABLE 1 

FINISH

All enclosures except Type A are finished in light grey epoxy resin paint. Special finishes to order.

INTRINSIC SAFETY

Because of the low voltages and currency of I.S. circuits, we recommend using gold and/or sealed contacts.

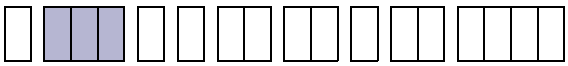
NOTE: Enclosure Codes W & A with range BC, C6, E1 and E8 (BU, CP, E4, E7) have weather protection reduced to IP54. In the interests of reliability not all enclosures are available with all wetted parts materials. See Table 4.

Temperatures in Table 1 refer to limitations for certified enclosures.

See **TECHNICAL SPECIFICATION**

ENCLOSURE TYPES	Code
Weatherproof Enclosures	
General Purpose The basic enclosure is pressure die-cast in zinc alloy, offering weather protection not less than NEMA 4 + 13/IP66.	W
For Aggressive Atmospheres Investment cast enclosure in austenitic stainless steel with weather protection not less than NEMA 4X + 13/IP66.	A
Flameproof Enclosures Category 2 (Zone 1)	H
ATEX Ex db IIC T6 (-60 to +40°C), T4 (-60 to +80°C) II 2 G D Gravity die-cast enclosure in aluminium-silicon alloy. Suitable for outdoor use, IP66 / NEMA 4. Ex II 2 G D	
IECEx Ex db IIC	
ATEX Ex db IIC T6 (-60 to +40°C), T4 (-60 to +80°C) II 2 G D As Code H, but sand cast in high quality grey iron. Ex II 2 G D	K
IECEx Ex db IIC	
Exn Enclosures Category 3 (Zone 2).	N
Type of Protection Exn II T6 (-25 to +60°C), T4 (-25 TO +80°C) II 3 G D As code 'W' but Exn. Weatherproof to NEMA 4/IP66. **Limited switching facility (see Table 6).** Ex II 3 G D	
As 'N' but with investment cast enclosure in austenitic stainless steel as 'A'.	O

Models

TABLE 2 

NOTE:
Models 202, 203 are not supplied with all materials of wetted parts. See table 4.

	Code
Fixed Switching Differential See Tables 10A & 10C. Basic model giving close, fixed switching differential using proprietary microswitch operated by high integrity stainless steel mechanism. Set point field adjustable over full range against calibrated scale. SPDT & DPDT options available.	201
Adjustable Switching Differential (Limited Span) See Tables 10B & 10D. Achieved by special microswitch with built in adjuster, SPDT only. Not available with enclosure code N or O.	202
Adjustable Switching Differential (Wide Span) See Tables 10B & 10D. Falling set point adjustable against a calibrated scale. Rising reset point adjustable to increase switching differential by up to 50% of range.	203
HI-LO Switching (Adjustable Gap) See Tables 10A & 10C. Two individual set points and separate electrical circuits, with independent adjustment against calibrated scale.	281

Electrical Entry

Adaptors are available for other popular thread sizes.

Enclosures 'W' and 'N'

Standard option code 1(22mm dia) is provided with a nylon 22/20 reducer and fibre washer suitable for a standard M20 cable gland and back nut. Option code 0 elbow adaptor is factory fitted. Adaptor kits may also be provided retrospectively to fit at site if required. Ask for details. See diagrams for dimensions.

'W' and 'N' SAFETY NOTE

If a metal cable gland is site fitted it must either be earthed locally or an earth/gland plate must be used to connect the body of the gland at the enclosure earthing point. Earth/gland plates can be provided either factory fitted or in kit form for site assembly. Ask for details.

TABLE 3

	Code
Enclosures W & N: Clearance for 20mm (3/4 in) outside dia conduit.	1
Enclosures H, K, A & O: M20 x 1.5 ISO thread (direct)	0
Enclosures H & K: M20 x 1.5 ISO thread, dual entry.	5
Enclosures H & K: 3/4-NPT INT.	3
Enclosures H & K: 1/2-NPT INT.	2
Enclosures H & K: 3/4-NPT INT dual entry.	6
Enclosure W: M20 x 1.5 elbow adaptor.	0
Enclosure N: M20 x 1.5 straight adaptor (Approved).	0

Material of Wetted Parts

Not all ranges are available with all materials. Refer to Table 5 for availability.

TABLE 4

	Code
Stainless steel bellows/capsule stack and process connection all welded fabrication.	2
Nickel Alloy (Monel) bellows/capsule stack and process connection. Suitable for NACE MR-01-75. All welded fabrication.	M

Setting Ranges

P_{max} = maximum working pressure

Ranges BC, C6 & E1 (BU, CP, E4) not available on Model 202. Range G1 (GF) is only available as Models 201/281.

§ Range BC & C6 (BU, CP) not available on HI-LO model (281).

† Available as Special Engineering.

TABLE 5

P_{max} bar	P_{max} psi	Range bar	Range mbar	Code	Range psi	Range In.Hg	Range In.H_2O	Code
1.4	20		-1000 to 0	A0		-30 to 0		AB
1	15		-12.5 to +12.5	BC§*			-5 to 5	BU§*
4	60	-1 to 1.5		G3	-14.5 to +20			GK
1	15		3 to 25	C6§*			1 to 10	CP§*
1	15		5 to 120	E1*			2 to 50	E4*
1	15		50 to 350	E8	1 to 5			E7
1.4	20	0.2 to 1		G1*	3 to 15			GF*
2	30	0.1 to 1.5		G5	1 to 20			GP
8	100	0.2 to 4		J0	2 to 60			J3
9	125	0.2 to 7		M1	3 to 100			M4
20	300	0.3 to 15		P6	4 to 200			PB
40	600	6 to 25		Q2	85 to 400			QB
100	1400	10 to 40		R3	140 to 600			RB
100	1400	15 to 75		S7	200 to 1000			SB

Availability material code (table 4)			Range code
1	**2**	**M**	
	√	†	A0/AB
	√	√	BC/BU
√	√	†	G3/GK
	√	√	C6/CP
√	√	√	E1/E4
	√	√	E8/E7
√	√	√	G1/GF
	√	√	G5/GP
	√	√	J0/J3
√	√	√	M1/M4
√	√	√	P6/PB
	√	√	Q2/QB
	√	√	R3/RB
	√	√	S7/SB

Switch Options

TABLE 6

A much wider variety of switching options can be engineered to customer's requirements for Model 201 switches including heavy DC, manual latching, pneumatic output etc. On Models 202, 203 & 281 only the switching options specified can be supplied. Please consult our engineers for further information.

CSA RATING (RESISTIVE) § see note	IEC947-5-1 / EN 60947-5-1 RATING						Contact	Code
	Designation & Utilisation Category	Rated operational current I_e (A) at rated operational voltage U_e	Ui	Uimp	VA Rating Make	VA Rating Break		
Model 201								
5 Amps @ 110/250V AC Light Duty for AC only	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.8kV	432 28	72 28	SPDT DPDT	00 01
5 Amps @ 110/250V AC & 2 Amps @ 30V DC General purpose precision	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.8kV	432 28	72 28	SPDT DPDT	02 03
1 Amp @ 125V AC & ***§ 100mA @ 30V DC*** Gold Alloy contacts for low voltage switching	1A @ 125 VAC RESISTIVE (IEC 1058-1 / EN 61058-1)						SPDT DPDT	04 05
§ 5 Amps @ 110/250V AC & 5 Amps @ 30V DC Environmentally sealed	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.5kV	432 28	72 28	SPDT* DPDT*	08 09
§ 1 Amp @ 30V AC & 30V DC Environmentally sealed with gold contacts	AC14 E150	0.3A @ 120 V AC	125V	0.5kV	216	36	SPDT* DPDT*	0G 0H
5 Amps @ 250V AC & 2 Amps @ 30V DC Hermetically sealed. Gold plated silver contacts	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.5kV	432 28	72 28	SPDT DPDT	H2 H3† H6‡
† 2 Single pole, double throw, simultaneous falling under pressure ‡ 2 Single pole, double throw, simultaneous rising under pressure								
Model 202 (Cannot be supplied with enclosure Code N/O)								
5 Amps @ 110/250V AC Light Duty for AC only	AC14 D300	0.6/0.3A @ 120/240 V AC	250V	0.8kV	432	72	SPDT	0C
5 Amps @ 110/250V AC & 2 Amps @ 30 V DC Adjustable	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.8kV	432 28	72 28	SPDT	0D
Model 203								
5 Amps @ 110/250V AC & 2 Amps @ 30V DC General purpose precision	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.8kV	432 28	72 28	SPDT DPDT	02 03
1 Amp @ 125V AC & ***§ 100mA @ 30V DC*** Gold Alloy contacts for low voltage switching	1A @ 125 VAC RESISTIVE (IEC 1058-1 / EN 61058-1)						SPDT DPDT	04 05
Model 281								
5 Amps @ 110/250V AC Light Duty for AC only	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.8kV	432 28	72 28	SPDT	20
5 Amps @ 110/250V AC & 2 Amps @ 30V DC General purpose precision	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.8kV	432 28	72 28	SPDT	22
1 Amp @ 125V AC & ***§ 100mA @ 30V DC*** Gold Alloy contacts for low voltage switching	1A @ 125 VAC RESISTIVE (IEC 1058-1/EN 61058-1)						SPDT	24
§ 5 Amps @ 110/250V AC & 5 Amps @ 30V DC Environmentally sealed	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.5kV	432 28	72 28	SPDT*	28
§ 1 Amp @ 30V AC & 30V DC Environmentally sealed with gold contacts	AC14 E150	0.3A @ 120 V AC	125V	0.5kV	216	36	SPDT*	2G
5 Amps @ 250V AC & 2 Amps @ 30V DC Hermetically sealed. Gold plated silver contacts	AC14 D300 DC13 R300	0.6/0.3A @ 120/240 V AC 0.22/0.1A @ 125/250V DC	250V	0.5kV	432 28	72 28	SPDT	H4

The electrical rating is dependent on the microswitch fitted to the instrument. The electrical ratings defined by each approval that the microswitch complies with and is shown on the product nameplate, ie CSA, or IEC. It should be noted that the instrument must be used within the electrical rating specified from the approval you require. This table lists the actual IEC ratings against the Designation & Utilisation Category marked on the nameplates. In the absence of any verification by CSA the microswitch § manufacturer's rating is stated in ***italics and bold***. **If in doubt seek guidance from the factory.**

NOTE: For low energy circuits e.g. 30V and up to 100mA, we recommend using gold alloy contact switches.
Ui = rated insulation voltage Uimp = rated impulse to withstand voltage across contacts.

*Suitable for use with Exn Enclosures (See Table 1)

Process Connection

Other thread specifications and sizes are available without using adaptors.

Adaptors are available for applications where their use is permitted.

TABLE 7

	Code
Rc 1/4 (1/4 BSP tr INT) to ISO 7/1	A
1/4—18 NPT INTERNAL	F
1/2—14 NPT INTERNAL	H
1/2—14 NPT EXTERNAL	J

Options & Treatments

Combinations available, apply for details.

TABLE 8

	Code
Tropicalisation High humidity atmospheres	01
Marine and Offshore Saline atmosphere or salt spray	02
Ammonia Process (wetted) parts and construction suitable for atmospheric ammonia	03
Oxygen Service 2: Process (wetted) parts are cleaned for oxygen	04
Oxygen Service 3: Process and non-process parts are cleaned for use with oxygen	05
Stainless Steel Pipe Mounting Bracket Permits local 2” pipe work to be utilized for mounting the instrument	10
Tagging - Variety of tagging methods are available	APPLY FOR DETAILS
Applies when - no option is required and selection is made from special engineering	00

Special Engineering

Last 4 digits of model code only used when special engineering is required.

TABLE 9

	Code
Please consult Delta sales engineering for special requirements	**TBA**

Performance Data

TABLE 10

Bar Units

Due to manufacturing tolerances the figures quoted in these tables are for guidance only and are typical for weatherproof models.

Flameproof models maybe up to 2 times higher depending on the range. Should the differential be critical for specific applications our engineers should be consulted prior to ordering.

Model 281: The switching differential on each point may be up to 1.5 times that of Table 10A & C. Care must be exercised, therefore, in specifying high differential switches on sensitive ranges, or set point separation less than 3 times switching differential.

MODELS 201 (281) **TABLE 10A**

Range Code	Range **mbar**/bar	Wetted parts code	SPDT OPTIONS (mbar)					DPDT OPTIONS (201 only) (mbar)				
			00 (20)	02 (22)	04 (24)	08/0G (28/2G)	H2 (H4)	01	03	05	09/0H	H3/H6
A0	**-1000 to 0**	**2**	**14**	**43**	**15**	**64**	**150**	**20**	**56**	**22**	**75**	**225**
BC	**-12.5 to +12.5**	**2M**	**2**	**6**	**2**	**13**	**5**	**3**	**10**	**4**	**15**	**8**
G3	-1 to +1.5	2	15	46	16	71	180	20	59	23	82	270
C6	**3 to 25**	**2M**	**2**	**6**	**2**	**13**	**5**	**3**	**10**	**4**	**15**	**8**
E1	**5 to 120**	**2M**	**2**	**7**	**2**	**14**	**5**	**4**	**11**	**4**	**16**	**8**
E8	**50 to 350**	**2M**	**2**	**7**	**2**	**14**	**6**	**3**	**10**	**4**	**16**	**9**
G1	0.2 to 1	2M	6	18	6	30	28	8	22	8	35	42
G5	0.1 to 1.5	2M	5	17	6	25	80	10	25	10	29	120
J0	0.2 to 4	2M	34	106	36	160	420	50	234	52	190	630
M1	0.2 to 7	2M	50	112	38	180	500	50	139	54	200	750
P6	0.3 to 15	2M	76	240	80	390	1200	100	285	110	440	1800
Q2	6 to 25	2M	160	492	165	800	2300	210	587	230	900	3450
R3	10 to 40	2M	310	991	340	1500	3000	440	1300	490	1700	4500
S7	15 to 75	2M	330	1000	350	1600	3060	460	1300	510	1900	4590

MODELS 202, 203 **TABLE 10B**

Range Code	Range **mbar**/bar	Wetted parts code	202 (mbar/bar value)				203 (mbar/bar value)			
			SPDT ONLY				SPDT		DPDT	
			0C		0D		02 or 04		03 or 05	
			Min	Max	Min	Max	Min	Max	Min	Max
A0	**-1000 to 0**	**2**	**27**	**77**	**80**	**185**	**170**	**500**	**250**	**500**
BC	**-12.5 to +12.5**	**2M**	**N/A**	**N/A**	**N/A**	**N/A**	**8**	**25**	**10**	**25**
G3	-1 to +1.5	2	29	80	86	200	700	1500	1100	1500
C6	**3 to 25**	**2M**	**N/A**	**N/A**	**N/A**	**N/A**	**8**	**25**	**10**	**25**
E1	**5 to 120**	**2M**	**N/A**	**N/A**	**N/A**	**N/A**	**25**	**60**	**37**	**60**
E8	**50 to 350**	**2M**	**4**	**14**	**11**	**23**	**100**	**200**	**150**	**200**
G5	0.1 to 1.5	2M	11	35	31	67	150	700	225	700
J0	0.2 to 4	2M	65	183	197	459	400	2000	600	2000
M1	0.2 to 7	2M	68	189	207	488	600	3500	900	3500
P6	0.3 to 15	2M	143	338	443	1000	1000	7000	1500	7000
Q2	6 to 25	2M	294	796	908	2100	2	12.5	3	12.5
R3	10 to 40	2M	611	1700	1800	4200	5	20	7.5	20
S7	15 to 75	2M	639	1700	1900	4500	5	37.5	7.5	37.5

PSI Units

MODELS 201 (281) **TABLE 10C**

Range Code	Range psi / **in.Hg** / *in. H_20*	Wetted parts code	SPDT OPTIONS					DPDT OPTIONS (201 only)				
			00 (20)	02 (22)	04 (24)	08/0G (28/2G)	H2 (H4)	01	03	05	09/0H	H3/H6
AB	**-30 to 0**	2	**0.45**	**1.30**	**0.5**	**2.0**	**4.4**	**0.65**	**1.7**	**0.65**	**2.25**	**6.64**
BU	*-5 to +5*	*2M*	*0.8*	*2.4*	*0.8*	*5.2*	*2*	*1.2*	*4.0*	*1.6*	*6.0*	*3.2*
GK	-14.5 to +20	2	0.2	0.67	0.23	1.0	2.6	0.3	0.85	0.33	1.2	3.9
CP	*1 to 10*	*2M*	*0.8*	*2.4*	*0.8*	*5.2*	*2*	*1.2*	*4.0*	*1.6*	*6.0*	*3.2*
E4	*2 to 50*	*2M*	*0.8*	*2.8*	*0.8*	*5.5*	*2*	*1.6*	*4.5*	*1.6*	*6.5*	*3.2*
E7	1 to 5	2M	0.03	0.1	0.03	0.2	0.09	0.04	0.15	0.06	0.23	0.13
GF	3 to 15	2M	0.09	0.26	0.1	0.43	0.41	0.1	0.32	0.12	0.50	0.61
GP	1 to 20	2M	0.07	0.25	0.1	0.35	1.2	0.15	0.38	0.15	0.42	1.74
J3	2 to 60	2M	0.5	1.5	0.5	2.5	6.1	0.7	3.5	0.8	2.8	9.14
M4	3 to 100	2M	0.5	1.6	0.6	2.6	7.3	0.7	2.0	0.8	2.9	10.88
PB	4 to 200	2M	1.1	3.5	1.2	5.7	17.4	1.5	4.2	1.6	6.4	26.1
QB	85 to 400	2M	2.3	7	2.5	11.6	33.4	3.0	8.5	3.3	13	50.03
RB	140 to 600	2M	4.5	14.3	5	22	43.5	6.4	19	7	25	65.25
SB	200 to 1000	2M	4.8	14.5	5	23	44.4	6.7	19	7.5	28	65.26

MODELS 202, 203 **TABLE 10D**

Range Code	Range psi / **in.Hg** / *in. H_20*	Wetted parts code	202				203			
			SPDT ONLY				SPDT		DPDT	
			0C		0D		02 or 04		03 or 05	
			Min	Max	Min	Max	Min	Max	Min	Max
AB	**-30 to 0**	2	**0.80**	**2.2**	**2.4**	**5.4**	**5.0**	**14.5**	**7.5**	**14.5**
BU	*-5 to +5*	*2M*	*N/A*	*N/A*	*N/A*	*N/A*	*3.5*	*10*	*4*	*10*
GK	-14.5 to +20	2	0.45	1.1	1.2	2.9	10	21	16	21
CP	*1 to 10*	*2M*	*N/A*	*N/A*	*N/A*	*N/A*	*3.5*	*10*	*4*	*10*
E4	*2 to 50*	*2M*	*N/A*	*N/A*	*N/A*	*N/A*	*10*	*24*	*15*	*24*
E7	1 to 5	2M	0.06	0.20	0.16	0.33	1.5	29	2.1	2.9
GP	1 to 20	2M	0.16	0.50	0.5	0.95	2.2	10	3.3	10
J3	2 to 60	2M	1.0	2.6	2.9	6.6	6	29	9	29
M4	3 to 100	2M	1.0	2.7	3.0	7.0	9	50	13	50
PB	4 to 200	2M	2.1	4.9	6.5	14.5	15	100	22	100
QB	85 to 400	2M	4.3	11.5	13.5	30	30	180	44	180
RB	140 to 600	2M	8.9	24	26	60	75	290	110	290
SB	200 to 1000	2M	9.33	24	28	65	75	500	110	500

Electrical Connections

Terminal Block
Cable entry is to a non-pinching terminal block made of a non-hygroscopic thermosetting plastic, suitable for cables up to 2.5mm²/14AWG.

Earthing/Grounding
An earthing stud is provided inside all weatherproof enclosures, adjacent to the entry.External earthing is standard on flameproof versions. Safety note see Table 3.

Dielectric Strength
The electrical assembly is capable of withstanding *2kV between live parts and earth/ground and 500V between open contacts.
* 1.2kV for micro switch Codes H2, H3, H4 and H6. Refer to Table 6.

Electrical Entry
Standard options are listed in Table 3. Other threads can be accommodated by adaptors. Dual entry available, see Table 3.

Optional Extras

Chemical Seals
Chemical seals of our own or proprietary manufacture can be fitted when required.

Mounting Position/Location/Installation
Vertical as shown, IN DIMENSIONS, taking care to avoid siting in locations that transmit excessive shock or vibration. For further advice contact our engineers.

Pollution degree (EN60947-5-1)
All products are suitable for use in pollution degree 3. For extreme conditions where condensation may readily form, then sealed contacts should be used. See Table 6 Codes 08/09, 0G/0H, 2G, 28, H2/H3/H4/H6.

Electrical Isolation
These products are not suitable for electrical isolation. Always isolate circuit separately to carry out any electrical work.

Approvals

EUROPEAN DIRECTIVES

CE

Low voltage Directive (LVD) 2014/35/EU.
Compliant to LVD

Pressure Equipment Directive (PED) 97/23/EC:
This product has a process connection size <=DN25 and is therefore categorised as sound engineering practice under Cat 3.3

ATEX APPROVALS

FLAMEPROOF:
Certificate No. BAS01ATEX2426X
EN 60079-0, EN 60079-1, EN 60079-31

For Zone 1 models **(Enclosure code H/K, see Table 1)**

Ex II 2 GD	Ex db IIC T4 (Tamb -60°C to +80°C) Gb Ex tb IIIC T135°C (Tamb -60°C to +80°C) Db IP66
Ex II 2 GD	Ex db IIC T6 (Tamb -60°C to +40°C) Gb Ex tb IIIC T85°C (Tamb -60°C to +40°C) Db IP66

GLOBAL CERTIFICATION

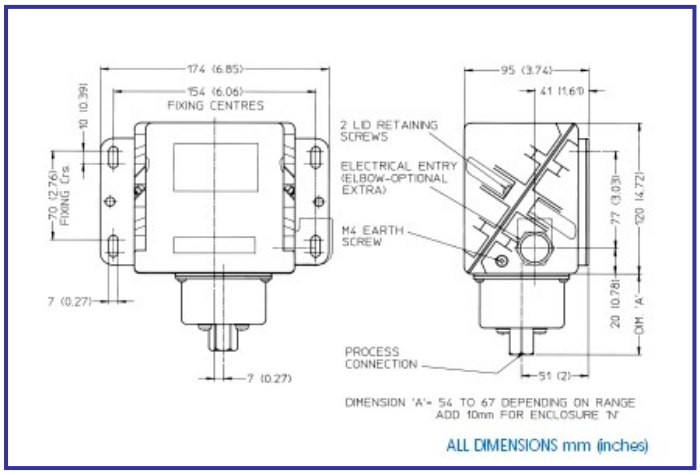
IECEx

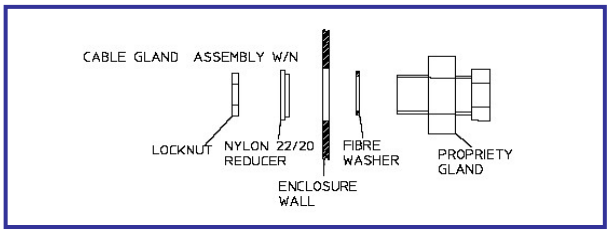
IECEx Certified
Ex db IIC T4 (Tamb -60°C to +80°C) Gb
Ex db IIC T6 (Tamb -60°C to +40°C) Gb

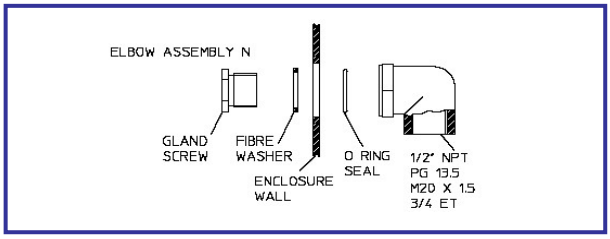
Certificate No. IECEx ITS 04.0006X
IEC 60079-0, EN 60079-1

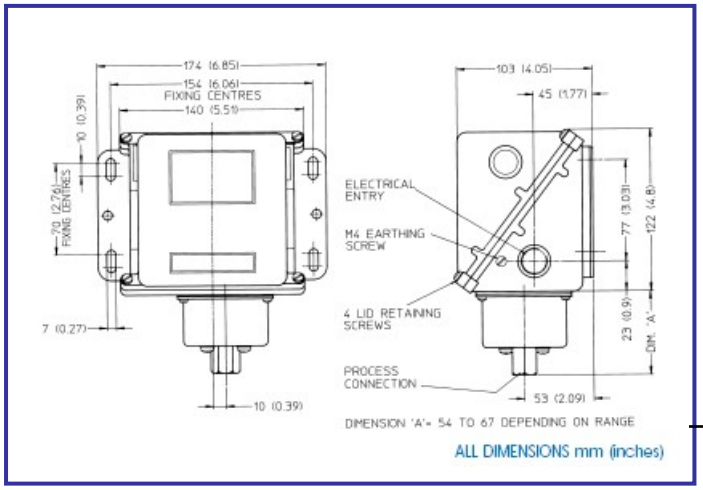
Dimensions

All dimensions mm (inches)

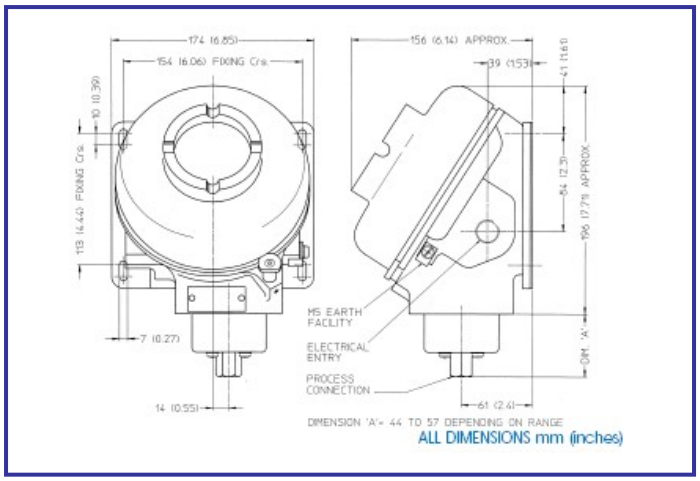








NOTE – Add 10mm for enclosure O (Dimension A)



In the interest of development and improvement Delta Controls Ltd, reserves the right to amend, without notice, details contained in this publication. No legal liability will be accepted by Delta Controls Ltd for any errors, omissions or amendments.

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