UNITED ELECTRIC CONTROLS

120 Series

Explosion-proof pressure, vacuum, differential pressure and temperature switches

United Electric Controls is ISO 9001:2015 certified

RoHS compliant

Find metric version at ueonline.com

120-B 12

Table of Content

Glossary of Terms

Adjustable Set Point	The upper and lower limits between which the set point can be adjusted. Low end of range on fall: set points on decreasing pressure or temperature at the lower end of range may be achieved; deadband will effect maximum set point (upper range) on fall. High end of range on rise: set points on increasing pressure or temperature at the upper end of range may be achieved; deadband will effect minimum set point (lower range) on rise.
Over Range Pressure	The maximum pressure that may be applied continuously without causing damage and maintaining set point repeatability
Proof Pressure	The maximum pressure to which a pressure sensor may be occasionally subjected which causes no permanent damage. The unit may require calibration (i.e., start-up, testing).

Use the follow pages to determine the best switch for your applications then build your part number.

Building a Part Number

EXAMPLE: **J120-551-M201**

Type: Switch type from table below:

Type	
Pressure	
J120	One SPDT; epoxy coated enclosure; internal adjustment, dual conduits
H121	One SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
H122	Two SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
Differential Pressure	
J120K	One SPDT; epoxy coated enclosure; internal adjustment, dual conduits
H121K	One SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
H122K	Two SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
Temperature	
B121	Immersion stem; one SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
B122	Immersion stem; two SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
C120	Immersion stem; one SPDT; epoxy coated enclosure; internal adjustment, dual conduits
E121	Bulb and capillary; one SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
E122	Bulb and capillary; two SPDT; epoxy coated enclosure; external adjustment with reference dial, single conduit
F120	Bulb and capillary; one SPDT; epoxy coated enclosure; internal adjustment, dual conduits

Model: Select the range and materials best for your application

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H121 / H122 ..... page 8-9
J120K ..... page 10
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Temperature models ..... page 12

Options: Select any of available options for your switch

J120 and J120K ..... page 13-14
H121/H122 and H121K / H122K ..... page 15
Temperature models ..... page 16-17

Specifications

Electrical Ratings *

Model	Pressure & temperature Standard models	Specials (pressure) 15622, 15834 - 15839, 15875	Specials (temperature) B121-13272, B122-13322, E121-13273 & E122-13321
125/250/480 VAC	15A Resistive	20A Resistive	22A Resistive
24-30 VDC	2A Resistive - 1A Inductive	6A Resistive	2A
48 VDC	2A Resistive - 1A Inductive		1A
125 VDC	0.5A Resistive - 0.03A Inductive	0.5A	0.5A Resistive - 0.04A Inductive
250 VDC		0.25A	

* DC ratings based on experience - Consult UE for further information. VDC ratings are not listed on nameplates.

Set point repeatability (% of full scale)

Temperature	Type B, C & F	± 1%
	Type E	± 2%
Presssure & Differential	450 - 457, 550 - 559	± 0.5%
	36 - 39, 183 - 194, 483 - 494, 544 - 548, 565 - 567, 612 - 680, 15875	± 1.5%
	All Others	± 1%

Temperature Limits

		Ambient	Storage
Model	36 - 39, 520 - 525, 540 - 548, 701 - 705, 15834 - 15839	0 to 160 °F (-17 to 71 °C)	-65 to 160 °F (-54 to 71 °C)
	All others	-58 to 160 °F (-50 to 71 °C)	-65 to 160 °F (-54 to 71 °C)

Set point typically shifts less than 1% of range for a 50 °F (28 °C) ambient temperature change; less than 2% for Types E121 & E122.

Shock	Set point repeats after 15 G, 10 msec duration
Vibration	Set point repeats after 2.5 G, 5-500 Hz
Enclosure	Die cast aluminum, epoxy powder coated; gasketed; cover lock Internal set point lock standard on types J, C, F; gasketed stainless steel tamper-resistant dial cover on types B, H, E; Aluminum nameplate.
Enclosure classification	Certified to enclosure type 4X. Class I, Division 1 product meets enclosure type 7; Class II, Division 1 product meets enclosure type 9. Certified to IP66 requirements. See Certifications (page 23) for hazardous location information.
Switch Output	One or two SPDT; Dual switch may be separated up to 100% of range. Switch may be wired normally open or closed.
Reference Scales	Types B, E, & H external dial. Scale divisions vary with range (see model charts).
Electrical connection	Type H, B, E: one 3/4" NPT connection with terminal block. Type J, C, F: two 3/4" NPT connections with terminal block.
Pressure connection	Refer to model charts for details. 1/2", 1/4", and 1/8" NPT female available. 1-1/2" flushmount sanitary fitting also available.
Deadband	Refer to model charts for details.
Differential pressure indicator	Option M210: Available for H121K and H122K. Accuracy approximately 1% at 50% range, 3% at ends; window is plexiglass and gasketed; indicator may be field adjusted approximately ±1% accuracy at any set point within range.
Alternate materials for wetted parts	The materials listed below are available on some switch models as an alternate material for wetted parts. This change may affect the temperature limits of the 120 series switches. Please consult with United Electric when selecting these materials. **Aflas®** **Buna-N** **Kalrez®** **Phosphor Bronze** **Teflon®** **Aluminum** **EPDM/EPR** **Kapton®** **Polyether / Polyurethane** **Viton®** **Brass** **Hastelloy®** **Monel®** **Stainless Steel**

Specifications

Approx. Weight (lbs.)

Pressure models		
Type	Model	Weight
J120	126-164, 171-174, 188-194, 270-274, 356-376, 488-489, 490-494, 565-567, 612-616, 680, 701-705, 15622, 15834-15839, 15884-15623	4.5 lbs
	183-186, 483-486, S126B-S164B	5 lbs
	450-454, 550-555	6 lbs
	520-523, 530-535	8.5 lbs
H121	126-164, 270-274, 358-376, 612-614, 15875	5 lbs
	S126B-S164B, 701-705	5.5 lbs
	450-454, 550-555	7 lbs
H122	126-164, 270-274, 358-376, 612-614, 15875	5.5 lbs
	S126B-S164B, 701-705	6 lbs
	450-454, 550-555	7.5 lbs

Differential pressure models		
Type	Model	Weight
J120K	455-457, 559	6 lbs
	367	6.5 lbs
	36-39, 147-157	7 lbs
	S147B-S157B	7.5 lbs
	540-548	10 lbs
H121K	456-457, 559	7 lbs
	147-157	8 lbs
	S147B-S157B	8.5 lbs
H122K	456-457, 559	7.5 lbs
	147-157	8.5 lbs
	S147B-S157B	9 lbs

Temperature models		
Type	Model	Weight
C120	120, 121	4 lbs
B121	120, 121, 13272	5.5 lbs
B122	120, 121, 13322	6 lbs
F120	2BS-8BS	5 lbs
E121	2BSA-8BS, 13273	6 lbs
E122	2BSA-8BS, 13321	6.5 lbs

J120 Series

Vacuum and Ultra Low Pressure Models (Vacuum to 250”wc)

PRESSURE				PROCESS CONNECTION				
Adjustable Set Point (“Hg)	DEADBAND (“Hg)	Over Range (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice [1] Inches	Sensor Style	Model
30 to 3 Vac	0.1 to 0.4	3	225	Teflon; Viton; 316L SS	1/4"	0.22"	G	**550**
30 to 3 Vac	0.2 to 0.6	3	5	Brass; nickel plated brass; zinc plated steel	1/4"	0.06"	A	**126**
30 to 3 Vac	0.1 to 0.3	3	225	316L SS; Buna-N	1/4"	0.22"	G	**450**
30 to 3 Vac	0.2 to 0.6	3	5	Welded 316L SS	1/2"	0.12"	B	**S126B**
("wc)	("wc)	(psi)	(psi)		NPT (F)			
300 Vac to 0	0.2 to 8	100	100	Buna-N; Epoxy coated Al	1/2"	0.72"	H	**520**
300 Vac to 0	0.2 to 15	50	100	Welded 316L SS	1/2"	0.72"	I	**530**
10 Vac to 10	0.1 to 0.6	100	100	Buna-N; Epoxy coated Al [2]	1/2"	0.72"	H	**521**
10 Vac to 10	0.1 to 0.6	50	100	Welded 316L SS	1/2"	0.72"	I	**531**
0.5 to 5	0.1 to 0.3	100	100	Buna-N; Epoxy coated Al [2]	1/2"	0.72"	H	**523**
0.5 to 5	0.1 to 0.3	50	100	Welded 316L SS	1/2"	0.72"	I	**533**
50 Vac to 50	0.1 to 3	100	100	Buna-N; Epoxy Coated Al [2]	1/2"	0.72"	H	**522**
50 Vac to 50	0.1 to 3	50	100	Welded 316L SS	1/2"	0.72"	I	**532**
2.5 to 50	0.1 to 0.8	100	100	Buna-N; Epoxy coated Al [2]	1/2"	0.72"	H	**524**
2.5 to 50	0.1 to 0.8	50	100	Welded 316L SS	1/2"	0.72"	I	**534**
2 to 80	1 to 4	3	225	Teflon; Viton; 316SS	1/4"	0.22"	G	**551**
2 to 80	0.8 to 2	3	225	Buna-N; Aluminum	1/4"	0.22"	G	**451**
15 to 80	2 to 6	3	5	Brass; Ni pl. Brass	1/4"	0.06"	A	**137**
15 to 80	2 to 6	3	5	Welded 316L SS	1/2"	0.12"	B	**S137B**
10 to 250	0.1 to 6	100	100	Buna-N; Epoxy coated Al [2]	1/2"	0.72"	H	**525**
10 to 250	0.1 to 10	50	100	Welded 316L SS	1/2"	0.72"	I	**535**

[1] Large 0.72” orifice can be used to provide clean-out purposes. Small 0.06” orifice is used to dampen pulsations from the process.

[2] Alternate wetted materials available.

J120 Series

Pressure Models (up to 100 psi)

PRESSURE				PROCESS CONNECTION				Model
Adjustable Set Point (psi)	DEADBAND (psi)	Over Range (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice [1] Inches	Sensor Style	
30" Hg Vac to 20 psi	0.2 to 0.5" Hg	20	225	Teflon; Viton; 316L SS	1/4"	0.22"	G	**552**
30" Hg Vac to 20 psi	0.2 to 0.6" Hg	20	25	Brass; nickel plated brass; zinc plated steel	1/4"	0.06"	A	**134**
30" Hg Vac to 20 psi	0.1 to 0.4" Hg	20	225	316L SS; Buna-N	1/4"	0.22"	G	**452**
30" Hg Vac to 20 psi	0.2 to 0.6" Hg	20	25	316L SS	1/2"	0.12"	B	**S134B**
0.5 to 20	0.1 to 0.2	20	225	Teflon; Viton; 316L SS	1/4"	0.22"	G	**553**
0.5 to 20	0.05 to 0.1	20	225	Buna-N; Aluminum	1/4"	0.22"	G	**453**
0.5 to 20	0.1 to 0.3	20	25	Brass; Ni pl. Brass	1/4"	0.06"	A	**144**
0.5 to 20	0.1 to 0.3	20	25	316L SS	1/2"	0.12"	B	**S144B**
1 to 20	0.1 to 1	500	1000	316L SS	1/2"	0.72"	C	**171** [2]
1 to 20	0.3 to 2.5	500	1000	316 SS; 316L SS Viton [4]	1/2"	0.72"	D	**183**
1 to 20	0.3 to 2.5	500	1000	316 SS; 316L SS Viton [4]	1/2"	0.06"	D	**483**
0.8 to 30	0.1 to 0.3	30	225	Teflon; Viton; 316L SS	1/4"	0.22"	G	**554**
0.8 to 30	0.05 to 0.2	30	225	Buna-N; Aluminum	1/4"	0.22"	G	**454**
1.5 to 30	1 to 2	500	600	Buna-N; Ni pl. Brass [4]	1/4"	0.06"	J	**701**
3 to 30	1.5 to 5	500	1000	Buna-N; Ni pl. Brass	1/4"	0.06"	F	**15834** [3]
5 to 30	1 to 5	1000	1500	Welded 316L SS	1.5" sanitary fitting		K	**565**
5 to 30	1 to 6	1500	2500	316 SS	1/2"	0.72"	E	**190**
5 to 30	1 to 6	1500	2500	316 SS	1/2"	0.06"	E	**490**
1 to 50	0.1 to 0.5	50	75	Brass; Ni pl. Brass	1/4"	0.06"	A	**152**
1 to 50	0.1 to 0.5	50	75	316L SS	1/2"	0.12"	B	**S152B**
2 to 50	0.1 to 1.5	500	1000	316L SS	1/2"	0.72"	C	**172** [2]
2 to 50	0.3 to 3	500	1000	316 SS; 316L SS Viton [4]	1/2"	0.72"	D	**184**
2 to 50	0.3 to 3	500	1000	316 SS; 316L SS Viton [4]	1/2"	0.06"	D	**484**
2 to 100	0.2 to 0.4	100	225	Teflon; Viton; 316L SS	1/4"	0.22"	G	**555**
2 to 100	0.2 to 0.6	100	125	Brass; Ni pl. Brass	1/4"	0.06"	A	**156**
2 to 100	0.2 to 0.6	100	125	316L SS	1/2"	0.12"	B	**S156B**
3 to 100	1 to 5	500	600	Buna-N; Ni pl. Brass [4]	1/4"	0.06"	J	**702**
4 to 100	0.1 to 2.5	500	1000	316L SS	1/2"	0.72"	C	**173** [2]
4 to 100	0.5 to 6	500	1000	316 SS; 316L SS Viton [4]	1/2"	0.72"	D	**185**
4 to 100	0.5 to 6	500	1000	316 SS; 316L SS Viton [4]	1/2"	0.06"	D	**485**
5 to 100	3 to 9	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	F	**15835** [3]
10 to 100	1 to 12	1000	1500	Welded 316L SS	1.5" sanitary fitting		K	**566**
10 to 100	1 to 15	1500	2500	316 SS	1/2"	0.72"	E	**191**
10 to 100	1 to 15	1500	2500	316 SS	1/2"	0.06"	E	**491**
15 to 100	0.7 to 1.8	100	800	316L SS	1/4"	0.06"	F	**356**

[1] Large 0.72" orifice can be used to provide clean-out purposes. Small 0.06" orifice is used to dampen pulsations from the process.
[2] The use of metallic diaphragms where higher pressure shock or heavy cycling is expected should be avoided. Models 171-174 should not be used where system or start-up vacuum might exceed 26 " Hg Vac.
[3] Model includes adjustable deadband switch.
[4] Alternate wetted materials available.

J120 Series

Pressure Models (up to 5000 psi)

PRESSURE				PROCESS CONNECTION				
Adjustable Set Point (psi)	DEADBAND (psi)	Over Range (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice [1] Inches	Sensor Style	Model
4 to 200	1 to 4	200	250	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	F	**270**
4 to 200	0.2 to 1	200	200	Brass; Ni pl. Brass	1/4"	0.06"	A	**164**
4 to 200	0.2 to 1	200	200	316L SS	1/2"	0.12"	B	**S164B**
8 to 200	0.1 to 3.5	500	1000	316L SS	1/2"	0.72"	C	**174** [2]
8 to 200	1 to 11	500	1000	316 SS; 316L SS; Viton [5]	1/2"	0.72"	D	**186**
8 to 200	1 to 11	500	1000	316 SS; 316L SS; Viton [5]	1/2"	0.06"	D	**486**
15 to 200	1 to 6	200	800	316L SS	1/4"	0.06"	F	**358**
20 to 200	12 to 26	500	1000	316 SS; Viton	1/4"	0.06"	J	**15622** [3]
6 to 300	1 to 5	300	350	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	F	**274**
9 to 300	1 to 7	500	600	Buna-N; Ni pl. Brass [5]	1/4"	0.06"	J	**703**
9 to 300	4 to 16	500	1000	Buna-N; Ni pl. Brass	1/4"	0.06"	F	**15836** [3]
15 to 300	3 to 22	1000	1500	Welded 316L SS	1.5" sanitary fitting		K	**567**
15 to 300	3 to 25	1500	2500	316 SS	1/2"	0.72"	E	**192**
15 to 300	3 to 25	1500	2500	316 SS	1/2"	0.06"	E	**492**
20 to 300	1 to 7	300	800	316L SS	1/4"	0.06"	F	**361**
15 to 500	2 to 11	1500	2500	Buna-N; Ni pl. Brass [5]	1/4"	0.06"	J	**704**
15 to 500	8 to 31	1500	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	F	**15837** [3]
20 to 500	4 to 45	1500	2500	316 SS	1/2"	0.72"	E	**193**
20 to 500	4 to 45	1500	2500	316 SS	1/2"	0.06"	E	**493**
25 to 500	1.5 to 8	500	800	316L SS	1/4"	0.06"	F	**376**
30 to 1000	3 to 22	1500	2500	Buna-N; Ni pl. Brass [5]	1/4"	0.06"	J	**705**
30 to 1000	9 to 90	1500	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	F	**15838** [3]
50 to 1000	25 to 125	2000	7000	316 SS; 316L SS; Viton [5]	1/2"	0.72"	E	**188**
50 to 1000	25 to 125	2000	7000	316 SS; 316L SS; Viton [5]	1/2"	0.06"	E	**488**
80 to 1700	5 to 150	2000	2500	316 SS	1/2"	0.72"	E	**194**
80 to 1700	5 to 150	2000	2500	316 SS	1/2"	0.06"	E	**494**
100 to 1700	25 to 100	2000	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	F	**15839** [3]
100 to 1700	9 to 40	1700	2500	316 SS	1/4"	0.06"	F	**680** [6]
125 to 3000	40 to 250	6000	10000	316 SS, Buna-N	1/4"	0.06"	J	**612** [4]
250 to 3500	50 to 300	4000	7000	316 SS; 316L SS; Viton [5]	1/2"	0.72"	E	**189**
250 to 3500	50 to 300	4000	7000	316 SS; 316L SS; Viton [5]	1/2"	0.06"	E	**489**
700 to 5000	40 to 375	6000	10000	316 SS, Buna-N	1/4"	0.06"	J	**616** [4]

[1] Large 0.72" orifice can be used to provide clean-out purposes. Small 0.06" orifice is used to dampen pulsations from the process.
[2] The use of metallic diaphragms where higher pressure shock or heavy cycling is expected should be avoided. Models 171-174 should not be used where system or start-up vacuum might exceed 26 " Hg Vac.
[3] Model includes adjustable deadband switch.
[4] Not recommended for gas service due to potential drying of O-ring.
[5] Alternate wetted materials available.
[6] Not recommended for rapid, high cycle applications.

H121/H122 Series

Vacuum and Ultra Low Pressure Models (Adjustable range Vacuum to 80”wc)

PRESSURE					PROCESS CONNECTION				
Adjustable Set Point	DEADBAND	Over Range	Proof	Dial Division	Wetted Material	Thread	Orifice [1]	Sensor Style	Model
(“Hg)	(“Hg)	(psi)	(psi)	(“Hg)		NPT (F)	Inches		
30 to 0 Vac	0.1 to 0.6	3	225	0.5	Teflon; Viton; 316L SS	1/4"	0.22"	G	**550**
30 to 0 Vac	0.2 to 0.9	3	5	0.5	Brass; nickel plated brass; zinc plated steel	1/4"	0.06"	A	**126**
30 to 0 Vac	0.1 to 0.4	3	225	0.5	316L SS; Buna-N	1/4"	0.22"	G	**450**
30 to 0 Vac	0.2 to 0.9	3	5	0.5	Welded 316L SS	1/2"	0.12"	B	**S126B**
("wc)	("wc)	(psi)	(psi)	(“wc)		NPT (F)			
2 to 80	2 to 10	3	5	2	Brass; Ni pl. Brass	1/4"	0.06"	A	**137** [2]
2 to 80	2 to 10	3	5	2	Welded 316L SS	1/2"	0.12"	B	**S137B** [2]

[1] Large 0.72” orifice can be used to provide clean-out purposes. Small 0.06” orifice is used to dampen pulsations from the process.

[2] Only availble as H121.

H121/H122 Series

Pressure Models (up to 6000 psi)

PRESSURE					PROCESS CONNECTION				
Adjustable Set Point (psi)	DEADBAND (psi)	Over Range (psi)	Proof (psi)	Dial Division ("Hg)	Wetted Material	Thread NPT (F)	Orifice [1] Inches	Sensor Style	Model
30" Hg Vac to 20	0.2 to 1" Hg	20	225	1" Hg & 0.5 psi	Teflon; Viton; 316L SS	1/4"	0.22"	G	**552**
30" Hg Vac to 20	0.2 to 1.2" Hg	20	25	1" Hg & 0.5 psi	Brass; nickel plated brass; zinc plated steel	1/4"	0.06"	A	**134**
30" Hg Vac to 20	0.2 to 1" Hg	20	225	1" Hg & 0.5 psi	316L SS; Buna-N	1/4"	0.22"	G	**452**
30" Hg Vac to 20	0.2 to 1.2" Hg	20	25	1" Hg & 0.5 psi	Welded 316L SS	1/2"	0.12"	B	**S134B**
0 to 20	0.05 to 0.3	20	225	0.5	Teflon; Viton; 316L SS	1/4"	0.22"	G	**553**
0 to 20	0.05 to 0.2	20	225	0.5	Buna-N; Aluminum	1/4"	0.22"	G	**453**
0 to 20	0.1 to 0.5	20	25	0.5	Brass; Ni pl. Brass	1/4"	0.06"	A	**144**
0 to 20	0.1 to 0.5	20	25	0.5	Welded 316L SS	1/2"	0.12"	B	**S144B**
0 to 30	0.1 to 0.4	30	225	0.5	Teflon; Viton; 316L SS	1/4"	0.22"	G	**554**
0 to 30	0.05 to 0.3	30	225	0.5	Buna-N; Aluminum	1/4"	0.22"	G	**454**
0 to 30	0.1 to 0.6	40	40	0.5	Brass; Ni pl. Brass	1/4"	0.06"	A	**146**
0 to 30	0.1 to 0.6	40	40	0.5	Welded 316L SS	1/2"	0.12"	B	**S146B**
3 to 30	1 to 3	500	600	0.5	Buna-N; Ni pl. Brass [2]	1/4"	0.06"	J	**701** [5]
0 to 100	0.25 to 0.75	100	225	2	Teflon; Viton; 316L SS	1/4"	0.22"	G	**555**
0 to 100	0.2 to 0.8	100	125	2	Brass; Ni pl. Brass	1/4"	0.06"	A	**156**
0 to 100	0.2 to 0.8	100	125	2	Welded 316L SS	1/2"	0.12"	B	**S156B**
10 to 100	1 to 5	500	600	2	Buna-N; Ni pl. Brass [2]	1/4"	0.06"	J	**702**
0 to 200	1.5 to 8	200	250	5	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	L	**270**
0 to 200	0.3 to 2	200	200	5	Brass; Ni pl. Brass	1/4"	0.06"	A	**164**
0 to 200	0.3 to 2	200	200	5	Welded 316L SS	1/2"	0.12"	B	**S164B**
0 to 200	1.5 to 8	200	250	5	316L SS	1/4"	0.06"	L	**358**
0 to 300	2 to 10	300	350	10	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	L	**274**
0 to 300	2 to 9	200	350	10	316L SS	1/4"	0.06"	L	**361**
30 to 300	2 to 7	500	600	10	Buna-N; Ni pl. Brass [2]	1/4"	0.06"	J	**703**
0 to 500	3 to 12	200	575	10	316L SS	1/4"	0.06"	L	**376**
50 to 500	3 to 12	1500	2500	10	Buna-N; Ni pl. Brass [2]	1/4"	0.06"	J	**704**
200 to 1000	5 to 25	1500	2500	25	Buna-N; Ni pl. Brass [2]	1/4"	0.06"	J	**705**
200 to 3000	40 to 250	6000	10000	50	316 SS, Buna-N [3]	1/4"	0.06"	J	**612** [4]
500 to 6000	150 to 750	6000	10000	100	303 SS, Buna-N [3]	1/4"	0.06"	L	**15875**[4] [5]
500 to 6000	50 to 600	6000	10000	100	316 SS, Buna-N [3]	1/4"	0.06"	J	**614** [4]

[1] Large 0.72" orifice can be used to provide clean-out purposes. Small 0.06" orifice is used to dampen pulsations from the process.
[2] Alternate wetted materials available.
[3] Model includes adjustable deadband switch.
[4] Not recommended for gas service due to potential drying of O-ring.
[5] Only available as H121.

J120K Series

Low Differential Pressure Models (up to 200”wcd)

PRESSURE				PROCESS CONNECTION				
Adjustable Set Point (“wcd)	DEADBAND (“wc)	Working (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	Model
0.2 to 7	0.05 to 0.6	200	400	Buna-N; Aluminum	1/8"	0.12"	DF	**540**
1 to 20	0.1 to 1	200	400	Buna-N; Aluminum	1/8"	0.12"	DF	**541**
5 to 50	0.2 to 2.5	200	400	Buna-N; Aluminum	1/8"	0.12"	DF	**542**
5 to 80	1 to 4	225	225	Buna-N; Aluminum	1/4"	0.12"	DD	**455**
10 o 200	0.5 to 8	200	400	Buna-N; Aluminum	1/8"	0.12"	DF	**543**

Differential Pressure Models (up to 500 psid)

PRESSURE				PROCESS CONNECTION				
Adjustable Set Point (psid)	DEADBAND (psi)	Working (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	Model
2 to 20	0.1 to 0.3	225	225	Buna-N; Aluminum	1/4"	0.12"	DD	**456**
2 to 20	0.1 to 1.3	1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	**544**
3 to 30	1 to 5	350	1000	316 SS; Buna-N	1/4"	0.06"	DB	**36**
3 to 30	0.3 to 1.5	100	180	Brass; Ni pl. Brass	1/4"	0.06"	DC	**147**
3 to 30	0.3 to 1.5	100	300	316L SS	1/2"	0.12"	DE	**S147B**
3 to 30	0.1 to 0.4	225	225	Buna-N; Aluminum	1/4"	0.12"	DD	**457**
5 to 50	0.2 to 2.2	1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	**545**
10 to 100	0.5 to 2	150	180	Brass; Ni pl. Brass	1/4"	0.06"	DC	**157**
10 to 100	0.5 to 2	180	300	316L SS	1/2"	0.12"	DE	**S157B**
10 to 100	2 to 8	500	1000	316 SS; Buna-N	1/4"	0.06"	DB	**37**
10 to 100	4 to 10	350	500	316L SS	1/4"	0.06"	DA	**367**
10 to 100	0.2 to 1	225	225	Buna-N; Teflon; Aluminum	1/4"	0.12"	DD	**559**
10 to 125	0.4 to 5	1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	**546**
50 to 250	0.8 to 10	1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	**547**
30 to 300	2 to 15	1000	2500	316 SS; Buna-N	1/4"	0.06"	DB	**38**
50 to 500	3 to 20	1000	2500	316 SS; Buna-N	1/4"	0.06"	DB	**39**
100 to 500	2 to 15	1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	**548**

H121K/H122K Series

Differential Pressure Models (up to 500 psid)

PRESSURE					PROCESS CONNECTION				Model
Adjustable Set Point (psid)	DEADBAND (psi)	Over Range (psi)	Proof (psi)	Dial Division (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	
2 to 20	0.1 to 0.3	225	225	0.5	Buna-N; Aluminum	1/4"	0.12"	DD	**456**
3 to 30	0.3 to 2	100	180	0.5	Brass; Ni pl. Brass	1/4"	0.06"	DC	**147**
3 to 30	0.3 to 2	100	300	0.5	316L SS	1/2"	0.12"	DE	**S147B**
3 to 30	0.1 to 0.4	225	225	0.5	Buna-N; Aluminum	1/4"	0.12"	DD	**457**
10 to 100	0.5 to 3	150	180	2	Brass; Ni pl. Brass	1/4"	0.06"	DC	**157**
10 to 100	0.5 to 3	180	300	2	316L SS	1/2"	0.12"	DE	**S157B**
10 to 100	0.2 to 1	225	225	2	Buna-N; Teflon; Aluminum	1/4"	0.12"	DD	**559**

B, C, E & F Series

Type B121 & B122, C120

TEMPERATURE				STEM			
Adjustable Set Point (°F)	Max (°F)	Dial Div. [1] (°F)	Deadband @70 °F TYP	Material	Size [2] (Diameter x Length)	Sensor Style	Model
0 to 225	275	5	2%	Ni plated brass	9/16" x 1-7/8" below 1/2" NPT	TA	**120**
0 to 225	275	5	2%	316SS	9/16" x 1-7/8" below 1/2" NPT	TA	**120 + M504**
200 to 225	475	5	2%	Ni plated brass	9/16" x 1-7/8" below 1/2" NPT	TA	**121**
200 to 225	475	5	2%	316SS	9/16" x 1-7/8" below 1/2" NPT	TA	**121 + M504**
15 to 140	160	2	2%	304SS	9/16" x 2-11/16" long	TA	**13272 (B121 only)** [3]
15 to 140	160	2	2%	304SS	9/16" x 2-11/16" long	TA	**13322 (B122 only)** [3]

[1] Dial available on B121 and B122 only.
[2] Optional immersion stem length available. Consult UE.
[3] Heat tracing

Type E121 & E122

TEMPERATURE				BULB			
Adjustable Set Point (°F)	Max (°F)	Dial Div. (°F)	Deadband @70 °F TYP	Material [2]	Size [1] (Diameter x Length)	Sensor Style	Model
-120 to 100	150	5	2%	304SS	3/8 x 2-5/8"	TB	**2BSA**
30 to 250	300	5	2%	304SS	3/8 x 2-5/8"	TB	**2BSB**
100 to 400	450	5	2%	304SS	3/8 x 2-1/8"	TB	**3BS**
25 to 100	150	2	2%	304SS	3/8 x 6-3/4"	TB	**4BS**
-20 to 80	130	2	2%	304SS	3/8 x 5"	TB	**5BS**
350 to 640	690	5	2%	304SS	3/8 x 3-1/4"	TB	**8BS**
25 to 325	360	5	2%	304SS	1/4 x 9-1/2"	TB	**13273 (E121 only)** [3]
25 to 325	360	5	2%	304SS	1/4 x 9-1/2"	TB	**13321 (E122 only)** [3]

[1] Optional capillary lengths available. Standard capillary length is 6ft, except models 13321 and 13273 which are 10 ft. Consult UE.
[2] Optional stainless steel armored or Teflon covered capillary available. Consult UE.
[3] Heat tracing

Type F120

TEMPERATURE			BULB			
Adjustable Set Point (°F)	Max (°F)	Deadband @70 °F TYP	Material	Size [1] (Diameter x Length)	Sensor Style	Model
-125 to 350	400	1%	304SS	3/8 x 2-5/8"	TB	**2BS**
-125 to 500	550	1%	304SS	3/8 x 2-1/8"	TB	**3BS**
-40 to 120	170	1%	304SS	3/8 x 6-3/4"	TB	**4BS**
-40 to 180	230	1%	304SS	3/8 x 5"	TB	**5BS**
0 to 250	300	1%	304SS	3/8 x 4-1/2"	TB	**6BS**
0 to 400	450	1%	304SS	3/8 x 3"	TB	**7BS**
50 to 650	700	1%	304SS	3/8 x 3-1/4"	TB	**8BS**

[1] Optional capillary lengths available. Consult UE.

Pressure Options

J120

Option	Description	J120 Models																				J120K Models						
		126-164	171-174	183-186	188-189	190-194	270-274	356-376	450-454	483-486	488-489	490-494	520-525	530-535	550-555	565-567	612-616	680	701-705	15622	15834-15839	S126B-S164B	36 - 39	147 - 157	367	455 - 457	540-548	559	S147B - S157B
Switch options																													
0140	1A Gold Contact	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
0500	5A low Deadband	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●			●	●	●	●	●		●	●
1010	10A 250VAC DPDT	●					●	●	●						●		●		●					●		●		●	●
1070	10A 125VDC						●	●	●						●		●	●	●					●	●	●	●	●	●
1180	11A Hermetic switch SPDT	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
1190	11A Hermetic switch DPDT, set on Rise	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
1195	11A Hermetic switch DPDT, set on fall	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
1519 [2]	Adjustable deadband	●					●	●	●						●			●	●			●	●	●	●	●	●	●	●
2000	20A 480VAC	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●			●	●	●	●	●		●	●
3000	30A 277VAC	●					●	●	●						●		●	●	●			●							
Miscellaneous options																													
M201	Factory set one switch	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M277	Range in KPa/MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M278	Range in Kg/cm2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M400	SIL2 (Consult factory)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●
M401	NACE® MR0175 [1]	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M444	Paper ID tag	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●
M446	Stainless steel tag	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M449	Mounting bracket												●	●														●		
M550	O_2 service cleaning	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●		●		●

● Standard

[1] Consult UE. Potential impact on sensor repeatability, deadband and overpressure limits.
[2] Adjustable deadband switch can only be set on rise. It will ship with the lowest deadband setting.

Pressure Options

J120

Option	Description	J120 Models																				J120K Models						
		126-164	171-174	183-186	188-189	190-194	270-274	356-376	450-454	483-486	488-489	490-494	520-525	530-535	550-555	565-567	612-616	680	701-705	15622	15834-15839	S126B-S164B	36 - 39	147 - 157	367	455 - 457	540-548	559	S147B - S157B
Pressure Connection Materials (Listed as "Pressure connection; diaphragm; O-Ring" unless otherwise noted)																												
M319	Diaphragm seal (consult factory)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M476	Stainless diff. diaphragm																										●		
M540	Standard + Viton[1]								●								●		●				●			●	●		
M913	1/4" NPT(F) stainless steel				●																	●							
M914	1/2" NPT(F) stainless steel							●									●												
XC001	Aluminum; Viton; Viton												●																
XC002	Aluminum; Kapton; Buna N												●																
XC003	Aluminum; Kapton; Viton												●																
XC004	316LSS; 316LSS; Viton [2]												●																
XC005	316LSS; Viton; Viton												●																
XC007	316LSS; Teflon; Viton												●																
XD002	Hastelloy C276 diaphragm			●	●					●	●																		
XD003	Monel 400 diaphragm			●	●					●	●																		
XP112	Hastelloy C276 press. Conn.			●	●					●	●																		
XP113	Monel 400 press. Conn.			●	●					●	●																		
XR211	Kalrez O-ring seal			●	●					●	●																		
XR213	EPR O-ring seal			●	●					●	●																		
XR214	Aflas O-ring seal			●	●					●	●																		
Accessories																													
6361-704	Mounting bracket kit	●	●	●	●	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●		●	●
6361-761	1/4" NPT to G1/2 male adapter	●					●	●	●						●	●	●	●	●	●	●		●	●	●	●		●	
6361-762	1/2" NPT to G1/2 male adapter		●	●	●	●				●	●	●	●	●								●							●

● Standard

[1] Includes adjustable deadband switch.
[2] Deadband and low end of range may increase.

Pressure Options

H121 / H122

Option	Description	PRESSURE																			DIFFERENTIAL PRESSURE							
		H121 Models										H122 Models									H121K models				H122K models			
		15875[i]	126 - 164	270 - 274	358 - 376	450 - 454	550 - 555	612 - 614	701 - 705	704 - 705	S126B - S164B	126 - 164	270 - 274	358 - 376	450 - 454	550 - 555	612 - 614	701 - 705	704 - 705	S126B - S164B	147 - 157	456 - 457	559	S147B - S157B	147 - 157	456 - 457	559	S147B - S157B
Switch options																											
0140	1A Gold Contact		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
0500	5A low Deadband		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1010	10A 250VAC DPDT		●	●	●	●	●	●	●	●	●										●	●	●	●	●		
1070	10A 125VDC		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
1180	11A Hermetic switch SPDT		●	●	●	●	●	●	●	●	●																
1190	11A Hermetic switch DPDT, set on rise		●	●	●	●	●	●	●	●	●																
1195	11A Hermetic switch DPDT, set on fall		●	●	●	●	●	●	●	●	●																
2000	20A 480VAC		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Miscellaneous options																											
M201	Factory set one switch	●	●	●	●	●	●	●	●	●	●										●	●	●	●			
M202	Factory set two switches											●	●	●	●	●	●	●	●	●					●	●	●	●
M210	Differential press. Indicator																				●			●	●			●
M277	Range in KPa/MPa		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M278	Range in Kg/cm2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M400	SIL2 (Consult factory)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M444	Paper ID tag		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M446	Stainless Steel Tag	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M550	O_2 service cleaning		●	●	●	●	●	●	●		●	●	●	●	●	●	●	●		●	●			●	●			●
Pressure Connection Materials																											
M319	Diaphragm seal (Consult factory)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
M540	Standard + Viton [1]					●		●	●						●		●	●				●				●		
M913	1/4" NPT(F) stainless steel										●									●								
914	1/2" NPT(F) stainless steel			●				●						●			●											
Accessories																											
6361-704	Mounting bracket kit	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6361-761	1/4" NPT to G1/2 male adapter	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●		●	●	●		●	●	●	
6361-762	1/2" NPT to G1/2 male adapter										●									●				●				●

● Standard

[i] Deadband and low end of range may increase

Temperature Options

B, C, E and F temperature model options

Option #	Description	C120	B121		B122		F120	E121		E122	
		120 - 121	120 - 121	13272	120 - 121	13322	2BS - 8BS	2BSA - 8BS	13273	2BSA - 8BS	13321
Switch options											
0140	1A Gold Contact	●	●		●		●	●		●	
0500	5A low Deadband	●	●		●		●	●		●	
1070	10A 125VDC	●	●				●	●		●	
1180	11A Hermetic switch SPDT	●	●				●	●			
1190	11A Hermetic switch DPDT, set on Rise	●	●				●	●			
1195	11A Hermetic switch DPDT, set on fall	●	●				●	●			
1519	Adjustable deadband	●					●				
2000	20A 480VAC	●	●		●		●	●		●	
3000	30A 277VAC	●					●	●			
Miscellaneous options											
M201	Factory setting	●	●	●			●	●	●		
M202	Factory setting				●	●				●	●
M400	SIL2 (Consult factory)	●	●		●		●	●		●	
M444	Paper ID tag	●	●	●	●	●	●	●	●	●	●
M446	SS tag	●	●	●	●	●	●	●	●	●	●
M504	316L SS Immersion Stem	●	●		●						
M550	O_2 service cleaning	●	●		●		●	●		●	
Accessories											
6361-704	Mounting bracket kit	●	●	●	●	●	●	●	●	●	●

● Standard

Option	Description	Material	Replacement Part
Union Connectors for bulb & capillary models except for 13273 & 13321			
W027	1/2" NPT with 3/4" bushing	Brass	SD6213-27
W028	1/2" NPT with 3/4" bushing	304 SS	SD6213-28
W045	3/4" NPT	Brass	SD6213-45
W046	3/4" NPT	304 SS	SD6213-46
W050	1/2" NPT	304 SS	SD6213-50
W051	1/2" NPT	Brass	SD6213-51

Option	Description	Material	Replacement Part
Thermowells for bulb & capillary[1] models except for 13272 & 13322			
W075	4" BT, 1/2" NPT with 3/4" NPT adapter bushing	Brass	SD6225-75
W076	4.5" BT, 3/4" NPT	316 SS	SD6225-76
W191	4" BT, 1/2" NPT	Brass	SD6225-191
W193	4.5" BT, 1/2" NPT	316 SS	SD6225-193
W118	7" BT, 1/2" NPT with 3/4" NPT adapter bushing	Brass	SD6225-118
W119	7.5" BT, 3/4" NPT	316 SS	SD6225-119
W192	7" BT, 1/2" NPT	Brass	SD6225-192
W177	7.5" BT, 1/2" NPT	316 SS	SD6225-177

[1] Make sure that the bulb length is equal or less than the “Below Thread” length of the thermowell.

Temperature Options

B, C, E and F temperature model options

Option	Description	Material	Replacement Part
Thermowells for all immersion stem models except for 13272 & 13322			
W139	3/4" NPT x 1-23/32" BT	Brass	SD6225-139
W140	3/4" NPT x 1-23/32" BT	316 SS	SD6225-140
W000	No thread	Brass	
W097	1/2" NPT x 1-23/32" BT	Brass	
W099	1/2" NPT x 1-23/32" BT	316 SS	

Sensors

Pressure sensors

A

Bellows sensor with 1/4" NPT (F) pressure connection

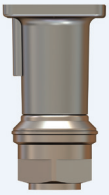
Models: 126-164

B

Welded bellows sensor with 1/2" NPT (F) pressure connection

Models: S126B-S164B

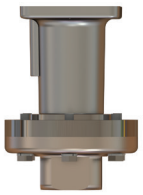
C



Welded diaphragm sensor with 1/2" NPT (F) pressure connection

Models: 171-174

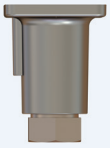
D



Diaphragm sensor with 1/2" NPT (F) pressure connection

Models: 183-186, 483-486

E



Diaphragm sensor with 1/2" NPT (F) pressure connection

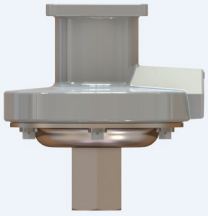
Models: 188-199, 488-499

F

Bellows sensor with 1/4" NPT (F) pressure connection

Models: 270-376, 680 (J120)

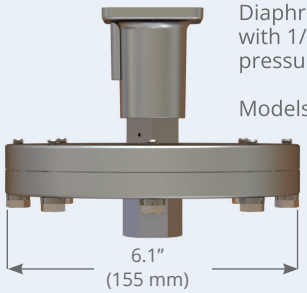
G



Diaphragm sensor with 1/4" NPT (F) pressure connection

Models: 450-454, 550-555

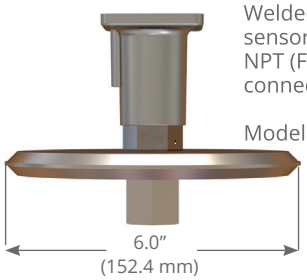
H



Diaphragm sensor with 1/2" NPT (F) pressure connection

Models: 520-525

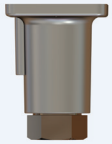
I



Welded diaphragm sensor with 1/2" NPT (F) pressure connection

Models: 530-535

J



Piston or diaphragm sensor with 1/4" NPT (F) pressure connection

Models: 612-616, 701-705, 15622

K

Diaphragm sensor with 1-1/2" Sanitary fitting pressure connection

Models: 565-567

L

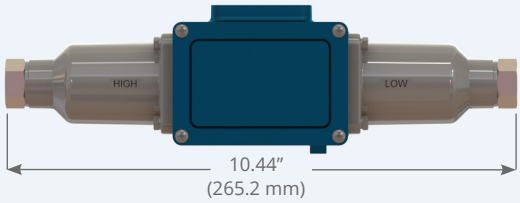
Bellows sensor with 1/4" NPT (F) pressure connection

Models: 270-376 (H121/H122)

Sensors

Differential pressure sensors

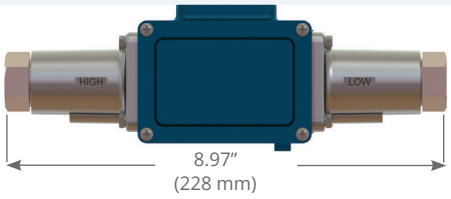
DA



Welded bellows sensor with 1/4″ NPT (F) pressure connection

Models: 367

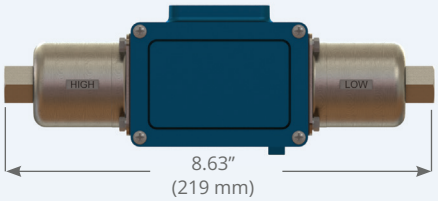
DB



Diaphragm sensor with 1/4″ NPT (F) pressure connection

Models: 36-39

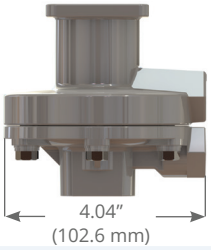
DC



Welded bellows sensor with 1/4″ NPT (F) pressure connection

Models: 147-157

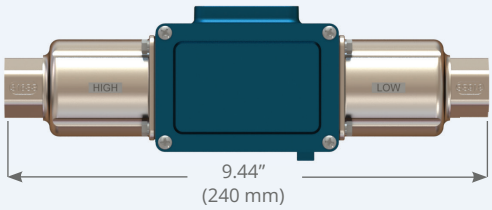
DD



Diaphragm sensor with 1/4″ NPT (F) pressure connection

Models: 455-457, 559

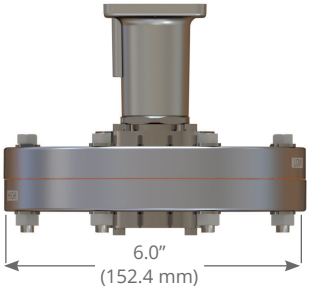
DE



Welded bellows sensor with 1/2″ NPT (F) pressure connection

Models: S147B-S157B

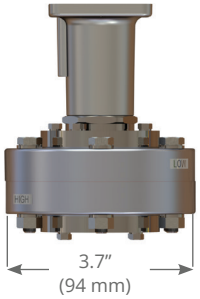
DF



Diaphragm sensor with 1/8″ NPT (F) pressure connection

Models: 540-543

DG



Diaphragm sensor with 1/8″ NPT (F) pressure connection

Models: 544-548

Sensors

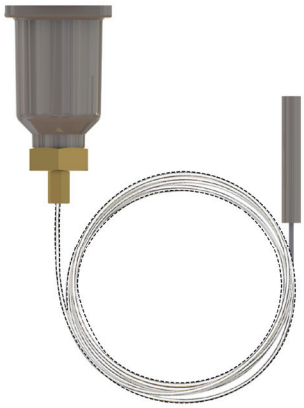
Temperature sensors

TA

Immersion stem with 1/2” NPT (F) pressure connection

Models: 120-121, 13272*, 13322*
* No NPT connection available on these models

TB



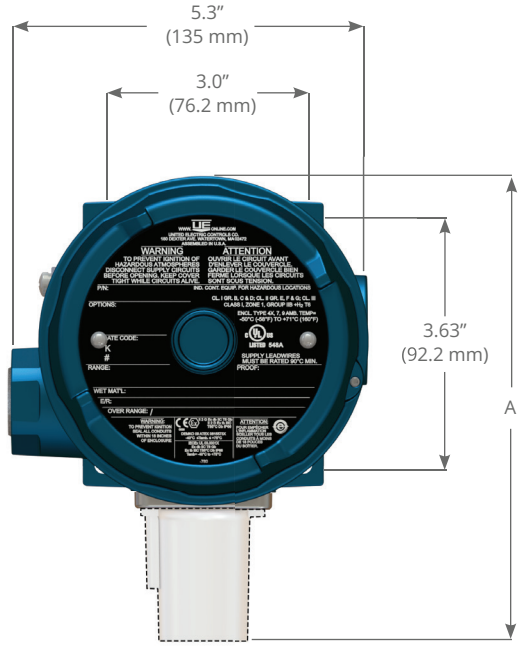
Bulb and capillary for remote installations

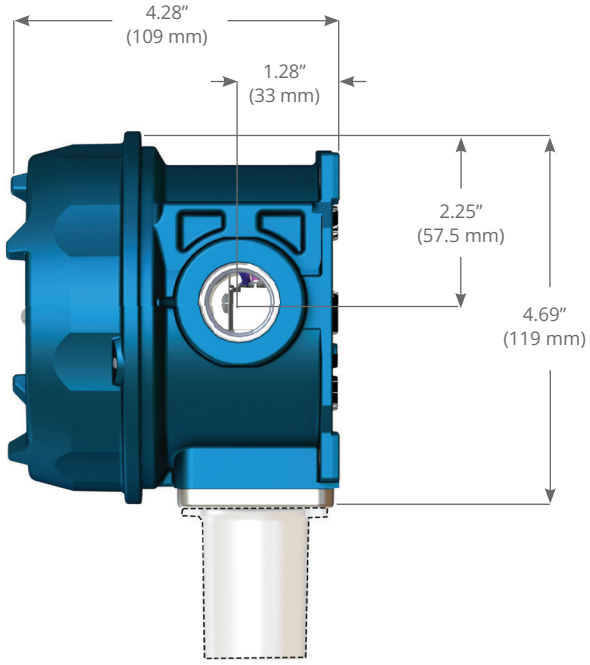
Models: 2BS-8BS, 13273, 13321

Types J120, J120K, C120, F120

Internal Set Point Adjustment

Dimension A			
Models	Inches	mm	NPT
Pressure			
126-164	7.25	184.2	1/4
S126B-S164B	7.63	193.3	1/2
171-174	8.72	221.5	1/2
183-186, 483-486	8.41	213.6	1/2
188-189, 488-489	7.47	189.7	1/2
190-194, 490-494	7.44	189.0	1/2
270-274	8.13	206.5	1/4
356-361, 376	8.09	205.5	1/4
450, 452	8.81	223.8	1/4
451, 453, 454	8.06	204.7	1/4
520-525	9.25	235.0	1/2
530-535	8.84	224.5	1/2
550, 552	8.81	223.8	1/4
551, 553-555	8.34	211.8	1/4
565-567	7.53	191.3	1-1/2" Sanitary
612, 616	7.88	200.2	1/4
680	8.13	206.5	1/4
701-705, 15622	7.44	189.0	1/4
Differential Pressure			
36-39, 147-157, 367	7.59	192.8	1/4
S147B-S157B	7.59	192.8	1/2
455-457, 559	8.44	214.4	1/4
540-543	9.34	237.2	1/8
544-548	9.41	239.0	1/8
Temperature			
120-121	9.13	231.9	Immersion Stem
2BS-8BS	8.47	215.1	Bulb & Capillary



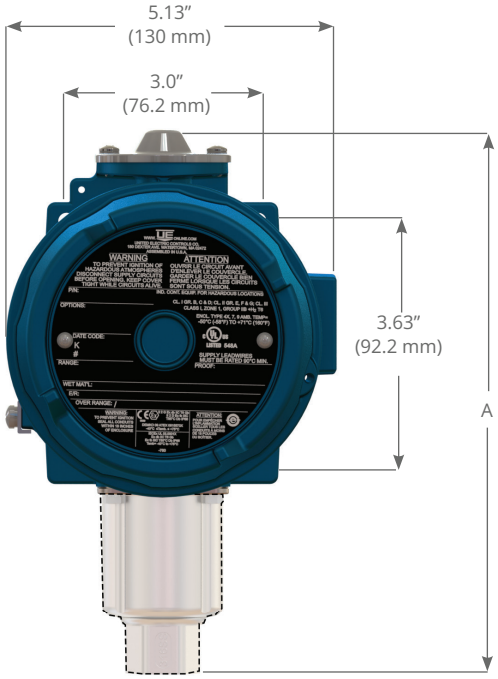


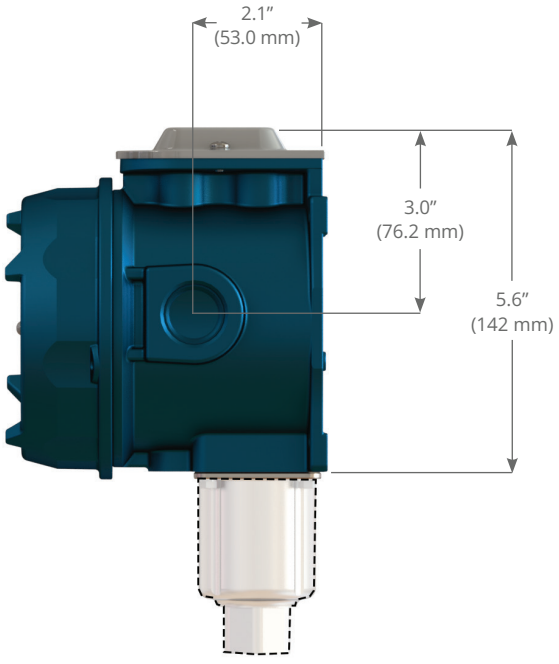
All dimensions stated in inches (millimeters)
Dimensional drawings for all models may be found at www.ueonline.com

Types B121, B122, E121, E122, H121, H122, H121K, H122K

External Set Point Adjustment

Dimension A			
Models	Inches	mm	NPT
Pressure			
126-164	8.09	205.5	1/4
S126B-S164B	8.50	215.9	1/2
270-274	7.88	200.2	1/4
358-376	7.81	198.4	1/4
450, 452	9.69	246.1	1/4
453, 454	8.94	227.1	1/4
550, 552	9.75	247.7	1/4
553-555	9.31	236.5	1/4
612, 614	8.75	222.3	1/4
701-705	8.31	211.1	1/4
Differential Pressure			
147-157	8.44	214.4	1/4
S147B-S157B	8.44	214.4	1/2
456-457, 559	9.31	236.5	1/4
Temperature			
120,121	10.00	254.0	Immersion Stem
2BS-8BS	9.31	236.5	Bulb & capillary
13272, 13322	10.00	254.0	Immersion Stem (Heat tracing)
13273, 13321	9.31	236.5	Bulb & capillary (Heat tracing)





All dimensions stated in inches (millimeters)
Dimensional drawings for all models may be found at www.ueonline.com

Standard certifications

	Region	Agency	Classification
	North America	UL	Class I, Division 1 and 2, Groups B, C & D Class II, Division 1 and 2, Groups E, F & G Class III -50°C < T_{amb} < 71°C Enclosure: Type 4X, IP66 Canadian registration number (CRN) for Canadian provinces can be found at www.ueonline.com
	Europe	ATEX	II 2 G Ex db IIC T6 Gb II 2 D Ex tb IIIC T85°C Db IP66 -40°C < T_{amb} < +75°C II 1 G Ex ia IIC T6 Ga (OPTIONAL – **code M405**) -50°C < T_{amb} < +60°C Pressure Equipment Directive (PED) (2014/68/EU) Compliant to PED UL 508, UL 61010 Products rated lower than 7.5 psi are outside the scope of the PED Low Voltage Directive (LVD) (2014/35/EU) UEC compliant to LVD EN 61058-1, EN 61010-1 Products rated lower than 50 VAC and 75 VDC are outside of the scope of the LVD The Low Voltage Directive does not apply to products for use in hazardous locations
	International	IECEx	Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP66 -40°C < T_{amb} < +75°C Ex ia IIC T6 Ga -50°C ≤ T_{amb} ≤ +60°C

Optional certifications

	Country	Option	Classification	
	China	M408	Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP66 -40°C < T_{amb} < +75°C	Ex ia IIC T6 Ga -50°C ≤ Tamb ≤ +60°C
	Brazil	M391	Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP66 -40°C ≤ T_{amb} ≤ +75°C	Ex ia IIC T6 Ga -50°C ≤ T_{amb} ≤ +60°C
	Korea	M395	Ex d IIC T6 Ex td IIIC T85C -40°C < T_{amb} < +75°C	
	India	Standard M405	Ex d IIC T6 Gb Ex ia IIC T6 Ga	
	United Kingdom	M462	Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP66 -40°C ≤ T_{amb} ≤ +75°C	Ex ia IIC T6 Ga -50°C ≤ T_{amb} ≤ +60°C
	Ukraine	M404	Ex db IIC T6 Gb -40°C < T_{amb} < +71°C	
	Taiwan		ITRI available through Taiwan channel partner. Consult United Electric.	

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