



100 Series

Weatherproof pressure, vacuum,
differential pressure and temperature switches



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ISO 9001:2015 certified



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100-B 14

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Glossary of Terms

Adjustable Set Point Range	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 affect 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 affect 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).
Working pressure range	The pressure range in which the differential pressure switch can be safely operated and still maintain set point provided the difference in pressure between the low and high sides does not exceed the designated adjustable range.

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

Building a Part Number

EXAMPLE: **H100-186-0140**

Type: Switch type from table below:

Type	
Pressure	
H100	One SPDT output; epoxy coated enclosure; internal adjustment with "High-Low" reference scale
Differential Pressure	
H100K	One SPDT output; epoxy coated enclosure; internal adjustment with "High-Low" reference scale
Temperature	
B100	Immersion stem; one SPDT output; internal adjustment with reference dial
C100	Immersion stem; one SPDT output; internal adjustment with no reference
E100	Bulb and capillary; one SPDT output; internal adjustment with reference dial
F100	Bulb and capillary; one SPDT output; internal adjustment with no reference

Model: Select the range and materials best for your application

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Options: Select any of available options for your switch

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Specifications

Electrical Ratings without optional switches ^[1]

	Pressure & temperature	Specials (pressure)	Specials (temperature)
Models	All Standard catalog models	15623, 15731 - 15737, 15884	B100-13546 & E100-13545
Electrical rating	15A @ 125/250/480 VAC Resistive; 2A Res. & 1A Inductive @ 24-30 VDC; 0.5A Res. & 0.03A Inductive @ 125 VDC	20A @ 125/250/480 VAC	22A @ 125/250/480 VAC

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

Set point repeatability [% of full scale]

Temperature	All models	± 1%
Pressure & Differential	Models: 15623, 15731-15737, 171-174, 218, 270-376, 520-535, 540-543, 700-706	± 1%
	Models: 190-194, 183-189, 483-494, 544-548, 565-567, 610-680, 15884	± 1.5%

Temperature Limits

		Ambient ^[2]	Storage
Model	Models 520-525, 540-548, 700-706, 15731-15737	0 to 160 °F (-17 to 71 °C)	-65 to 160 °F (-54 to 71 °C)
	All others	-40 to 160 °F (-40 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.

[2] Option may affect ratings, see option.

Shock	Set point repeats after 15 G, 10 millisecond duration				
Vibration	Set point repeats after 2.5 G, 5-500 Hz				
Enclosure	Die cast aluminum, epoxy powder coated, gasketed, captive cover screws				
Enclosure classification	Certified to enclosure type 4X				
Switch Output	One SPDT snap action switch; switch may be wired “normally open” or “normally closed”				
Electrical connection	1/2” NPT (female); Two 7/8” diameter knockouts				
Deadband	Refer to model charts for details				
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 100 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	

All temperature sensors use non-toxic oil fill.

Approx. Weight [lbs.]

Pressure Models	190-194, 490-494, 188-189, 488-489, 218-230, 270-274, 358-376, 700-706, 680, 15731-15736	2 lbs
	171-174, 471-474, 565-567, 610-616, 15884, 15623	2.5 lbs
	183-186, 483-486	3.5 lbs
	520-525, 530-535, 15737	6 lbs
Differential Pressure Models	540-548	6 lbs
Local Temperature	B100 & C100	2.5 lbs
Remote Temperature	F100 & E100	3 lbs

H100 Series

Vacuum and Ultra Low Pressure Models (Adjustable Range Vacuum to 10 psi)

PRESSURE				PROCESS CONNECTION				Model
Adjustable Set Point ("wc)	DEADBAND ("wc)	Over Range (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	
300 Vac to 0	0.2 to 8	100	100	Buna-N; Aluminum	1/2"	0.62"	E	520
300 Vac to 0	0.2 to 15	50	100	316L SS	1/2"	0.72"	F	530
10 Vac to 10	0.1 to 0.6	100	100	Buna-N; Aluminum	1/2"	0.62"	E	521
10 Vac to 10	0.1 to 0.6	50	100	316L SS	1/2"	0.72"	F	531
50 Vac to 50	0.1 to 3	100	100	Buna-N; Aluminum	1/2"	0.62"	E	522
50 Vac to 50	0.1 to 3	50	100	316L SS	1/2"	0.72"	F	532
50 Vac to 50	0.5 to 10	100	100	Buna-N; Aluminum	1/2"	0.62"	E	15737 ^[1]
0.5 to 5	0.1 to 0.3	100	100	Buna-N; Aluminum	1/2"	0.62"	E	523
0.5 to 5	0.1 to 0.3	50	100	316L SS	1/2"	0.72"	F	533
2.5 to 50	0.1 to 0.8	100	100	Buna-N; Aluminum	1/2"	0.62"	E	524
2.5 to 50	0.1 to 0.8	50	100	316L SS	1/2"	0.72"	F	534
10 to 250	0.1 to 6	100	100	Buna-N; Aluminum	1/2"	0.62"	E	525
10 to 250	0.1 to 10	50	100	316L SS	1/2"	0.72"	F	535
30" Hg Vac to 0	1 to 2"Hg	3	30	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	D	218

[1] Models that include adjustable deadband switch.

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 Inches	Sensor Style	
1 to 20	0.3 to 2.5	500	1000	316 SS; Viton	1/2"	0.72"	B	183
1 to 20	0.3 to 2.5	500	1000	316 SS; Viton	1/2"	0.06"	B	483
1 to 20	0.1 to 1	500	1000	316L SS	1/2"	0.72"	A	171
1.5 to 30	1 to 2	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	H	701
3 to 30	1.5 to 5	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	H	15731 ^[1]
5 to 30	1 to 6	1500	2500	316 SS	1/2"	0.70"	C	190
5 to 30	1 to 6	1500	2500	316 SS	1/2"	0.06"	C	490
5 to 30	1 to 5	1000	1500	316L SS	1.5" sanitary connection		G	565
2 to 50	0.3 to 3	500	1000	316 SS; Viton	1/2"	0.72"	B	184
2 to 50	0.3 to 3	500	1000	316 SS; Viton	1/2"	0.06"	B	484
2 to 50	0.1 to 1.5	500	1000	316L SS	1/2"	0.72"	A	172
3 to 100	1 to 4	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	H	702
5 to 100	3 to 9	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	H	15732 ^[1]
4 to 100	0.5 to 6	500	1000	316 SS; Viton	1/2"	0.72"	B	185
4 to 100	0.5 to 6	500	1000	316 SS; Viton	1/2"	0.06"	B	485
10 to 100	1 to 15	1500	2500	316 SS	1/2"	0.70"	C	191
10 to 100	1 to 15	1500	2500	316 SS	1/2"	0.06"	C	491
4 to 100	0.1 to 2.5	500	1000	316L SS	1/2"	0.72"	A	173
10 to 100	1 to 12	1000	1500	316L SS	1.5" sanitary connection		G	566

[1] Models that include adjustable deadband switch.

H100 Series

Pressure Models (up to 500 psi)

Adjustable Set Point (psi)	PRESSURE			PROCESS CONNECTION				Model
	DEADBAND (psi)	Over Range (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	
8 to 200	1 to 11	500	1000	316 SS; Viton	1/2"	0.72"	B	186
8 to 200	1 to 11	500	1000	316 SS; Viton	1/2"	0.06"	B	486
8 to 200	0.1 to 3.5	500	1000	316L SS	1/2"	0.72"	A	174
4 to 200	1 to 8	200	250	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	D	270
15 to 200	1 to 6	200	800	316L SS	1/4"	0.09"	D	358
20 to 200	12 to 26	500	1000	316 SS; Viton	1/4"	0.06"	H	15623 ^[1]
9 to 300	1 to 5	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	H	703
9 to 300	4 to 16	500	600	Buna-N; Ni pl. Brass	1/4"	0.06"	H	15733 ^[1]
15 to 300	1 to 25	1500	2500	316 SS	1/2"	0.70"	C	192
15 to 300	1 to 25	1500	2500	316 SS	1/2"	0.06"	C	492
15 to 300	3 to 22	1000	1500	316L SS	1.5" sanitary connection		G	567
20 to 300	1 to 7	300	800	316L SS	1/4"	0.09"	D	361
15 to 500	2 to 8	1500	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	H	704
15 to 500	8 to 31	1500	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	H	15734 ^[1]
20 to 500	4 to 45	1500	2500	316 SS	1/2"	0.70"	C	193
20 to 500	4 to 45	1500	2500	316 SS	1/2"	0.06"	C	493
6 to 300	1 to 10	300	350	Ph. Bronze; Ni pl. Brass	1/4"	0.06"	D	274
25 to 500	1.5 to 8	500	800	316L SS	1/4"	0.09"	D	376

[1] Models that include adjustable deadband switch.

Pressure Models (up to 5000 psi)

Adjustable Set Point (psi)	PRESSURE			PROCESS CONNECTION				Model
	DEADBAND (psi)	Over Range (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	
30 to 1000	3 to 20	1500	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	H	705
30 to 1000	9 to 90	1500	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	H	15735 ^[1]
50 to 1000	25 to 125	2000	7000	316 SS; Viton	1/2"	0.50"	B	188
50 to 1000	25 to 125	2000	7000	316 SS; Viton	1/2"	0.06"	B	488
75 to 1000	30 to 150	6000	10000	303 SS, Buna-N	1/4"	0.06"	C	610
80 to 1700	5 to 150	2000	2500	316 SS	1/2"	0.70"	C	194
80 to 1700	5 to 150	2000	2500	316 SS	1/2"	0.06"	C	494
100 to 1700	10 to 30	2000	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	H	706
100 to 1700	25 to 100	2000	2500	Buna-N; Ni pl. Brass	1/4"	0.06"	H	15736 ^[1]
100 to 1700	9 to 40	1700	2500	316 SS	1/4"	0.06"	D	680
125 to 3000	40 to 250	6000	10000	303 SS, Buna-N	1/4"	0.06"	C	612
250 to 3500	50 to 300	4000	7000	316 SS; Viton	1/2"	0.50"	B	189
250 to 3500	50 to 300	4000	7000	316 SS; Viton	1/2"	0.06"	B	489
700 to 5000	40 to 375	6000	10000	303 SS, Buna-N	1/4"	0.06"	C	616
700 to 5000	80 to 500	6000	10000	303 SS, Buna-N	1/4"	0.06"	C	15884 ^[1]

[1] Models that include adjustable deadband switch.

H100K Series

Low Differential Pressure Models (up to 200" wcd)

Adjustable Set Point ("wcd)	PRESSURE			PROCESS CONNECTION				Model
	DEADBAND ("wc)	Working Pressure (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	
0.2 to 7	0.05 to 0.6	30 "Hg Vac to 200	400	Buna-N; Aluminum	1/8"	0.12"	DF	540
1 to 20	0.1 to 1	30 "Hg Vac to 200	400	Buna-N; Aluminum	1/8"	0.12"	DF	541
5 to 50	0.2 to 2.5	30 "Hg Vac to 200	400	Buna-N; Aluminum	1/8"	0.12"	DF	542
10 to 200	0.5 to 8	30 "Hg Vac to 200	400	Buna-N; Aluminum	1/8"	0.12"	DF	543

Medium Differential Pressure Models (up to 500 psid)

Adjustable Set Point (psid)	PRESSURE			PROCESS CONNECTION				Model
	DEADBAND (psi)	Working Pressure (psi)	Proof (psi)	Wetted Material	Thread NPT (F)	Orifice Inches	Sensor Style	
2 to 20	0.1 to 1.3	30 "Hg Vac to 1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	544
5 to 50	0.2 to 2.2	30 "Hg Vac to 1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	545
10 to 125	0.4 to 5	30 "Hg Vac to 1200	2500	Buna-N; Aluminum	1/8"	0.12"	DG	546
50 to 250	0.8 to 10	30 "Hg Vac to 1200	2500	Buna-N; Aluminum	1/8"	0.06"	DG	547
100 to 500	2 to 15	30 "Hg Vac to 1200	2500	Buna-N; Aluminum	1/8"	0.06"	DG	548

B, C, E & F Series

Type B100, C100

TEMPERATURE				Material	STEM		Type & Model
Adjustable Set Point (°F)	Max (°F)	Dial Div. [1] (°F)	Deadband @70 °F TYP		Size [2] (Diameter x Length)	Sensor Style	
0 to 225	275	10	2%	Ni plated brass	9/16" x 1 7/8" below 1/2" NPT	TA	120
0 to 225	275	10	2%	316 SS	9/16" x 1 7/8" below 1/2" NPT	TA	120 + M504
200 to 425	475	10	2%	Ni plated brass	9/16" x 1 7/8" below 1/2" NPT	TA	121
200 to 425	475	10	2%	316 SS	9/16" x 1 7/8" below 1/2" NPT	TA	121 + M504
15 to 140	160	5	2%	304 SS	9/16" x 2-11/16 long	TA	13546 (B100 only) [3]

[1] Dial available on B100 only.

[3] Heat tracing

[2] Optional immersion stem length available. Consult UE.

Type E100

TEMPERATURE				Material [2]	BULB		Model
Adjustable Set Point (°F)	Max (°F)	Dial Div. (°F)	Deadband @70 °F TYP		Size [1] (Diameter x Length)	Sensor Style	
-120 to 100	150	10	2%	304 SS	3/8 x 2 5/8"	TB	2BSA
-120 to 100	150	10	2%	Copper	3/8 x 2 5/8"	TB	2BCA
30 to 250	300	10	2%	304 SS	3/8 x 2 5/8"	TB	2BSB
30 to 250	300	10	2%	Copper	3/8 x 2 5/8"	TB	2BCB
100 to 400	450	10	2%	304 SS	3/8 x 2 1/8"	TB	3BS
100 to 400	450	10	2%	Copper	3/8 x 2 1/8"	TB	3BC
25 to 100	150	2	2%	304 SS	3/8 x 6 3/4"	TB	4BS
25 to 100	150	2	2%	Copper	3/8 x 6 3/4"	TB	4BC
-20 to 80	130	5	2%	304 SS	3/8 x 5"	TB	5BS
-20 to 80	130	5	2%	Copper	3/8 x 5"	TB	5BC
350 to 640	690	10	2%	304 SS	3/8 x 3 1/4"	TB	8BS
350 to 640	690	10	2%	Copper	3/8 x 3 1/4"	TB	8BC
25 to 325	360	10	2%	304 SS	1/8 x 11 5/8"	TB	13545 [3]

[1] Standard capillary length is 6ft, except model 13545 which is 10 ft. Optional capillary lengths available. Consult UE.

[3] Heat tracing

[2] Optional stainless steel armored or Teflon covered capillary available. Consult UE.

B, C, E & F Series

Type F100

TEMPERATURE			BULB			Sensor Style	Model
Adjustable Set Point (°F)	Max (°F)	Deadband @70 °F TYP	Material	Size ^[3] (Diameter x Length)			
-125 to 350	400	1%	304 SS	3/8 x 2 5/8"		TB	2BS
-125 to 350	400	1%	Copper	3/8 x 2 5/8"		TB	2BC
-125 to 500	550	1%	304 SS	3/8 x 2 1/8"		TB	3BS
-125 to 500	550	1%	Copper	3/8 x 2 1/8"		TB	3BC
-40 to 120	170	1%	304 SS	3/8 x 6 3/4"		TB	4BS
-40 to 120	170	1%	Copper	3/8 x 6 3/4"		TB	4BC
-40 to 180	230	1%	304 SS	3/8 x 5"		TB	5BS
-40 to 180	230	1%	Copper	3/8 x 5"		TB	5BC
0 to 250	300	1%	304 SS	3/8 x 4.5"		TB	6BS
0 to 250	300	1%	Copper	3/8 x 4.5"		TB	6BC
0 to 400	450	1%	304 SS	3/8 x 3"		TB	7BS
0 to 400	450	1%	Copper	3/8 x 3"		TB	7BC
50 to 650	700	1%	304 SS	3/8 x 3 1/4"		TB	8BS
50 to 650	700	1%	Copper	3/8 x 3 1/4"		TB	8BC

[1] Optional capillary lengths available. Consult UE.

Common Options

Option	Description	Models														Temperature Models	
		171-174, 471-474, 190-194, 490-494	183-189, 483-489	218-230	270-274	358-376	520-525	530-535	565-567	610-616	680	700-706	540-548	15623, 15731-15737	15884	All Temp. Models	13545 & 1546
Switch options																	
0140	Gold Contact, 1A 125 VAC resistive	•	•	•	•	•	•	•	•	•	•	•	•			•	
0500	Close deadband, 5A 125/250 VAC resistive	•	•	•	•	•			•	•	•	•					
1010 ^[2]	DPDT switch, 10A 250 VAC resistive			•	•	•				•		•					
1070 ^[2]	High DC, 10A 125 VDC resistive			•	•	•				•	•	•	•			•	
1519 ^[3]	Adjustable deadband, 15A 120/250/480 VAC resistive			•	•	•	•	•			•	•	•			• ^[1]	
1530	External manual reset, latches on rise only, 15A 120/250/480 VAC resistive	•	•	•	•	•	•	•	•	•	•	•	•			•	
2000 ^[2]	20A 120/250/480 VAC resistive	•	•	•	•	•			•	•	•	•				•	
3000 ^[2]	30A 120/250/277 VAC resistive			•	•	•				•		•				•	
Misc. Options																	
M020	External red light	•	•	•	•	•	•	•	•	•	•	•	•			•	
M201 ^[4]	Factory setting	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
M400	SIL2 Certification	•	•	•	•	•	•	•	•	•	•	•	•			•	
M444	Paper ID tag	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
M446	Stainless Steel tag	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Accessories																	
6361-704	Mounting bracket kit	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SD6285-51	1/2" NPT (F) conduit kit	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

• Available

[1] Not available on types B100 and E100

[2] Deadbands will increase with these switch options

[3] Adjustable deadband switches are shipped with the minimum deadband setting as default. If M201 factory setpoint option is selected, the desired deadband must be provided with the set-point and if switched on rise or fall.

[4] Factory setpoint requires the setpoint, units, and on rise or fall to be specified at the time of order. Selection of special switch options may require additional information.

Pressure Options

H100 & H100K

Option	Description	Models													
		171-174, 471-474, 190-194, 490-494	183-189, 483-489	218-230	270-274	358-376	520-525	530-535	565-567	610-616	680	700-706	540-548	15623, 15731-15737	15884
Switch options															
M277	Range in KPa/MPa	●	●	●	●	●	●	●	●	●	●	●	●	●	
M278	Range in Kg/cm2	●	●	●	●	●	●	●	●	●	●	●	●	●	
M401	NACE MR0175 Compliance	● ^[2]	●												
M449	Mounting bracket						●	●					●		
M476	Stainless steel differential pressure sensor option												●		
M540	Viton elastomer									●		● ^[1]	●		
M550	O ₂ service cleaning	●	●	●	●	●	●	●	●	●	●	●	●	●	
M914	1/2" NPT (F) connection					●				●					
M921	Brass connection									●					
XC001	Viton Elastomer						●								
XC002	Kapton Diaphragm						●								
XC003	Kapton Diaph. / Viton seal						●								
XC004	316 Stainless Steel Diaph. /Viton seal						●								
XC005	316L Stainless Steel / Viton diaph.						●								
XC007	316L Stainless Steel / Teflon & Viton						●								
XD002	Hastelloy C276 Diaph.		●												
XD003	Monel 400 Diaph.		●												
XP112	Hastelloy C276 P/C		●												
XP113	Monel 400 P/C		●												
XR211	Kalrez seal		●												
XR213	EPR seal		●												
XR214	Aflas seal		●												

• Available

[1] Not available on model 706

[2] Not available on model 194 & 494

Temperature Options

Option	Replacement Part #	Material	Description	Local Stem Models			Bulb and Capillary Models							
				120	121	13546	2BS, 2BC, 2BSA, 2BCA, 2BSB, 2BCB	3BS, 3BC	4BS, 4BC	5BS, 5BC	6BS, 6BC	7BS, 7BC	8BS, 8BC	13545
M504		316L SS	Immersion Stem	•	•									
M550			O ₂ service cleaning	•	•		•	•	•	•	•	•	•	
Union Connectors for bulb & capillary models														
W027	SD6213-27	Brass	1/2" NPT W/3/4" bushing				•	•	•	•	•	•	•	
W028	SD6213-28	304 SS	1/2" NPT W/3/4" bushing				•	•	•	•	•	•	•	
W045	SD6213-45	Brass	3/4" NPT				•	•	•	•	•	•	•	
W046	SD6213-46	304 SS	3/4" NPT				•	•	•	•	•	•	•	
W051	SD6213-51	Brass	1/2" NPT				•	•	•	•	•	•	•	
W050	SD6213-50	304 SS	1/2" NPT				•	•	•	•	•	•	•	
Thermowells for bulb & capillary models														
W075	SD6225-75	Brass	4" BT, 1/2" NPT with 3/4" NPT adapter bushing				•	•				•	•	
W076	SD6225-76	316 SS	4.5" BT, 3/4" NPT				•	•				•	•	
W191	SD6225-191	Brass	4" BT, 1/2" NPT				•	•				•	•	
W193	SD6225-193	316 SS	4.5" BT, 1/2" NPT				•	•				•	•	
W118	SD6225-118	Brass	7" BT, 1/2" NPT with 3/4" NPT adapter bushing				•	•	•	•	•	•	•	
W119	SD6225-119	316 SS	7.5" BT, 3/4" NPT				•	•	•	•	•	•	•	
W192	SD6225-192	Brass	7" BT, 1/2" NPT				•	•	•	•	•	•	•	
W177	SD6225-177	316 SS	7.5" BT, 1/2" NPT				•	•	•	•	•	•	•	
Thermowells for all immersion stem models														
W139	SD6225-139	Brass	3/4" NPT x 1-23/32" Below Thread	•	•									
W140	SD6225-140	316 SS	3/4" NPT x 1-23/32" Below Thread	•	•									
W000 ^[1]		Brass	No thread	•	•									
W097		Brass	1/2" NPT x 1-23/32" Below Thread	•	•									
W099		316 SS	1/2" NPT x 1-23/32" Below Thread	•	•									

• Available

[1] Option W000 is a special immersion stem construction that has no external thread. This option fits inside a special thermowell and is secured with a set-screw.

Sensors

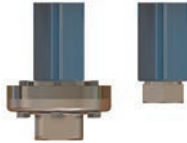
Pressure sensors

A



Models 171-174

B



Models 183-189, 483-489

C



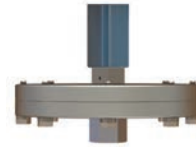
Models 190-194, 490-494, 610-616 and 15584

D



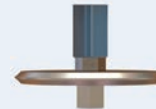
Models 218-274, 358-376 and 680

E



Models 520-525 and 15737

F



Models 530-535

G



Models 565-567

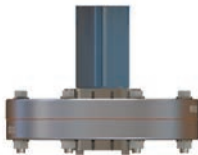
H



Models 701-706, 15623 and 15731-15736

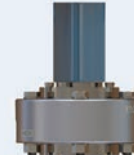
Differential Pressure sensors

DF



Models 540-543

DG



Models 544-548

Temperature sensors

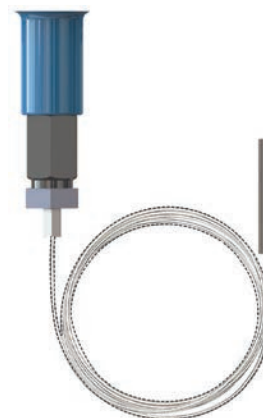
TA



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

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

TB



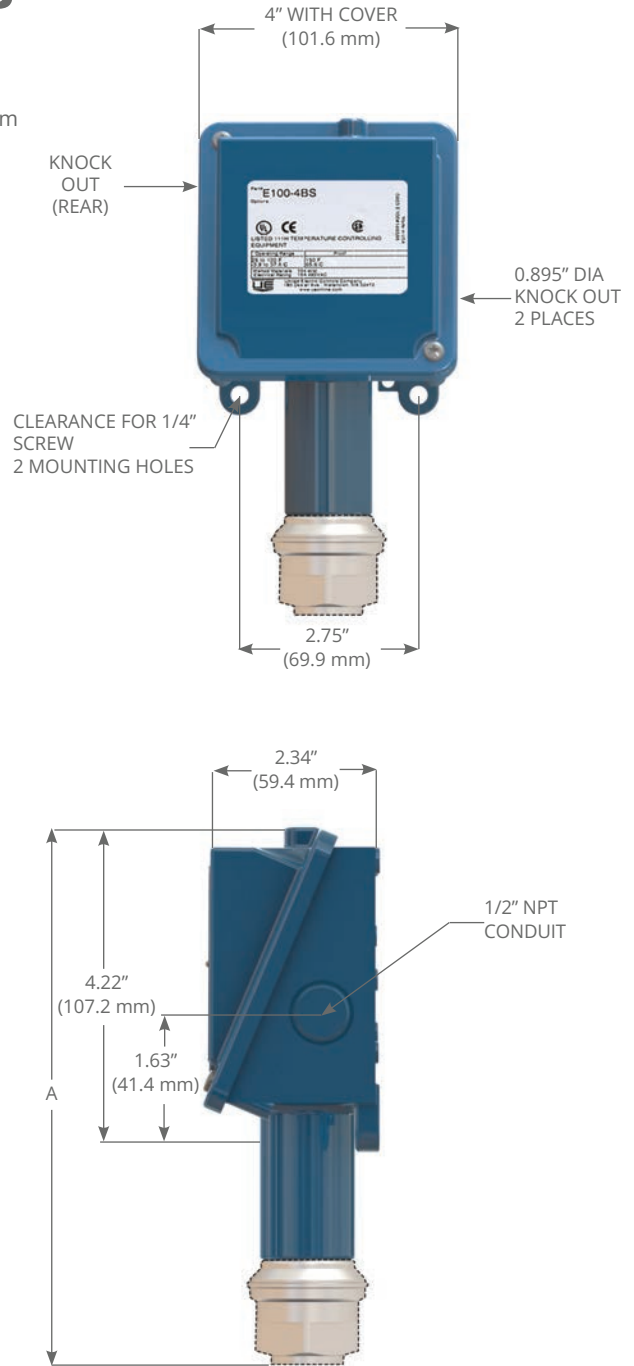
Bulb and capillary for remote installations

Models 2BS-8BS, 2BC-8BC, 13273, 13321

Dimensional Drawings

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

Dimension A		
Models	Inches	mm
Pressure		
171-174	7.63	193.8
183-186, 484-486	7.56	192.0
188-189, 488-489	6.63	168.4
190-194, 490-494	6.63	168.4
218	6.56	166.4
270-274	7.00	177.8
358-376	7.00	177.8
520-525, 15737	8.44	214.4
530-535	8.00	203.2
565-567	6.63	168.4
610-616, 680, 15884	7.00	177.8
701-706, 15623, 15731-15736	6.63	168.4
Differential Pressure		
540-543	8.47	215.2
544-548	8.53	216.7
Temperature		
120, 121, 13546	9.38	238.3
2BC-8BC, 2BS-8BS, 13545	8.69	220.7



Certifications

	Region	Agency	Classification
	North America	UL	Pressure Switch: UL E42272, V1S7 ANSI/UL 508; CSA-C22.2 No. 14 Certificate #: 20181026-E42272 Temperature Switch: UL E10667, V3S1 UL 873; CSA-C22.2 No. 24 Certificate #: 20181204-E10667
	Europe	ATEX	II 1 G Ex ia IIC T6 Ga (Optional – code M405) $T_{amb} = -50\text{ °C to }+60\text{ °C}$ Certificate #: DEMKO 11 ATEX 1105261X Compliant to Pressure Equipment Directive (PED) (2014/68/EU) Compliant to Low Voltage Directive (LVD) (2014/35/EU)
	International	IECEx	Ex ia IIC T6 Ga (Optional – code M405) $T_{amb} = -50\text{ °C to }+60\text{ °C}$ Certificate #: IECEx UL 14.0075X UEC compliant to IEC 61058-1, IEC 61010-1

Regional Certifications

	Country	Option	Classification
	China (CCC)	M408	Ex ia IIC T6 Ga $T_{amb} = -50\text{ °C to }+60\text{ °C}$ CCC Certificate #: 2020322304002958
	Brazil (InMetro)	M391	Ex ia IIC T6 Ga $T_{amb} = -50\text{ °C to }+60\text{ °C}$ Certificate #: UL-BR 15.0169X
	India (Peso)	M405	Ex ia IIC T6 Ga $T_{amb} = -50\text{ °C to }+60\text{ °C}$ Certificate #: P417586/1
	United Kingdom (UKCA)	M462	II 1 G Ex ia IIC T6 Ga $T_{amb} = -50\text{ °C to }+60\text{ °C}$ Certificate #: UL21UKEX2238X
	EAC (Russia, Armenia, Belarus, Kazakhstan, and Kyrgyzstan)	M406	0Ex ia IIC T6 Ga X $T_{amb} = -50\text{ °C to }+60\text{ °C}$ EAC Certificate #: RU C-US.AA87.B.00503/20
	Taiwan		ITRI available through Taiwan channel partner. Consult United Electric.

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