



# 100 Series



Part  
Series H100-702  
LISTED 544A PUL. COUPL. EG  
UL CE  
UL LISTED 544A PUL. COUPL. EG  
Model: H100-702  
Part No: H100-702  
Date: 10/15/11  
Rev: 1.0  
UE  
United Electric Controls  
887 Chapel Ave. Waukegan, IL 60087  
www.uec.com



## APPROVALS

UE declarations and third-party issued Agency certifications are available for download at [www.ueonline.com/prod\\_approval](http://www.ueonline.com/prod_approval).



N. AMERICA, USA & CANADA (UL/CUL)

ENCLOSURE: TYPE 4X

CANADIAN REGISTRATION NUMBER (CRN) FOR CANADIAN PROVINCES  
CAN BE FOUND AT [WWW.UEONLINE.COM](http://WWW.UEONLINE.COM)



EUROPE (ATEX) (OPTIONAL - CODE M405)

II 1 G EX IA IIC T6  
-50°C ≤ TAMB ≤ +60°C



PRESSURE EQUIPMENT DIRECTIVE (PED) COMPLIANT  
PRODUCTS RATED LOWER THAN 7.5 PSI ARE OUTSIDE SCOPE OF PED

LOW VOLTAGE DIRECTIVE (LVD)  
UEC COMPLIANT  
PRODUCTS RATED LOWER THAN 50 VAC AND 75 VDC ARE OUTSIDE SCOPE OF LVD  
LVD DOES NOT APPLY FOR USE IN HAZARDOUS LOCATIONS



Russia (Optional - code M406)

NANIO CCVE Certified  
0Ex ia IIC T6 Ga X  
-50°C ≤ Tamb ≤ +60°C



International (IECEX) (Optional - Code M405)

Ex ia IIC T6 Ga  
-50°C ≤ Tamb ≤ +60°C



INMETRO - Brazil (Optional - code M391)



CCC - China (standard on all models)



PESO - India (Optional - code M405)

II 1 G Ex ia IIC T6 Ga  
-50°C ≤ Tamb ≤ +60°C



United Arab Emirates - UAE

Ex ia IIC T6 Ga  
-50°C ≤ Tamb ≤ +60°C



Safety Integrity Level (SIL2/SIL3) (Optional - code M400)

SIL 2 @ HFT=0, SIL 3 @ HFT=1; Route 2H

See page 11 for Certification Options

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product selector!



## SPECIFICATIONS

<b>STORAGE TEMPERATURE</b>	-54 to 71°C
<b>AMBIENT TEMPERATURE* LIMITS</b>	-40 to 71°C; models 520-525, 540-548, 700-706, 15731-15736: -18 to 71°C; Set point typically shifts less than 1% of range for a 28°C ambient temperature change

### SET POINT REPEATABILITY

Temperature	All Models	±1%
Pressure & Diff. Pressure	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%

<b>SHOCK</b>	Set point repeats after 15 G, 10 millisecond duration
<b>VIBRATION</b>	Set point repeats after 2.5 G, 5-500 Hz
<b>ENCLOSURE</b>	Die cast aluminum, epoxy powder coated, gasketed, captive cover screws
<b>ENCLOSURE CLASSIFICATION</b>	Enclosure type 4X
<b>SWITCH OUTPUT</b>	One SPDT snap action switch; switch may be wired “normally open” or “normally closed”

### Electric ratings without optional switches

Models	Pressure and Temp.	Specials (pressure)	Specials (Temp.)
	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

### Product approximate weights

Pressure Models	190-194, 490-494, 188-189, 488-489, 218-230, 270-274, 358-376, 700-706, 680, 5731-15736	0.9kg
	171-174, 471-474, 565-567, 610-616, 15884, 15623	1.1kg
	183-186, 483-486	1.6kg
	520-525, 530-535, 15737	2.7kg
Diff. Press. Models	540-548	2.7kg
Local Temperature	B100 & C100	1.1kg
Remote Temperature	F100 & E100	1.4kg

ELECTRICAL CONNECTION 1/2" NPT (female); Two 23mm diameter knockouts

TEMPERATURE DEADBAND Type F typically 1% and type B, C, and E typically 2% of range under laboratory conditions (21°C ambient circulating bath at rate of 0.3°C per minute change)

All temperature sensors use non-toxic oil fill.

\*option may affect ratings, see option

# H100

## Vacuum and Ultra low pressure models (-1 to 0,62 bar)

Model	Adjustable Set Point Range (i)	Wetted Material	Pressure Connection		Deadband	Over Range Pressure (ii)	Proof Pressure (iii)
	mbar		Thread	Orifice (mm)	mbar	bar	bar
520	-746,7 to 0	Buna-N; Aluminum	1/2" NPT (F)	16	0,5 to 19,9	6,9	6,9
530	-746,7 to 0	316L st/st	1/2" NPT (F)	18	0,5 to 37,3	3,4	6,9
521	-24,9 to 24,9	Buna-N; Aluminum	1/2" NPT (F)	16	0,2 to 1,5	6,9	6,9
531	-24,9 to 24,9	316L st/st	1/2" NPT (F)	18	0,2 to 1,5	3,4	6,9
522	-124,5 to 124,5	Buna-N; Aluminum	1/2" NPT (F)	16	0,2 to 7,5	6,9	6,9
532	-124,5 to 124,5	316L st/st	1/2" NPT (F)	18	0,2 to 7,5	3,4	6,9
15737*	-124,5 to 124,5	Buna-N; Aluminum	1/2" NPT (F)	16	1,2 to 32,4	6,9	6,9
523	1,2 to 12,4	Buna-N; Aluminum	1/2" NPT (F)	18	0,2 to 0,7	6,9	6,9
533	1,2 to 12,4	316L st/st	1/2" NPT (F)	16	0,2 to 0,7	3,4	6,9
524	6,2 to 124,5	Buna-N; Aluminum	1/2" NPT (F)	16	0,2 to 2	6,9	6,9
534	6,2 to 124,5	316L st/st	1/2" NPT (F)	18	0,2 to 2	3,4	6,9
525	24,9 to 622,3	Buna-N; Aluminum	1/2" NPT (F)	16	0,2 to 14,9	6,9	6,9
535	24,9 to 622,3	316L st/st	1/2" NPT (F)	18	0,2 to 24,9	3,4	6,9
218	-1 bar to 0	Ph. Bronze; Ni pl. Brass	1/4" NPT (F)	1,5	33,9 to 67,7	0,2	2,1

\* Models that include adjustable deadband switch

[i] - Low end of range on fall; high end of range on rise

[ii] - over range pressure is the maximum pressure that may be applied continuously without causing damage and maintaining set point repeatability

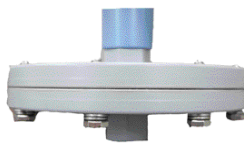
[iii] - Proof pressure is the maximum pressure to which a pressure sensor may be occasionally subjected which causes no permanent damage.

The unit may require re-calibration (i.e., start-up, testing)

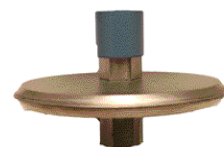
Green color indicates product is typically in stock at UE distributors.



Models 218



Models 520-525, 15737



Models 530-535

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# H100

## Low Pressure models (up to 6,9 bar)

Model	Adjustable Set Point Range (i)	Wetted Material	Pressure Connection		Deadband	Over Range Pressure (ii)	Proof Pressure (iii)
	bar		Thread	Orifice (mm)	bar	bar	bar
183	0,1 to 1,4	316 st/st; Viton	1/2" NPT (F)	16	0,02 to 0,17	34,5	68,9
483	0,1 to 1,4	316 st/st; Viton	1/2" NPT (F)	18	0,02 to 0,17	34,5	68,9
171	0,1 to 1,4	316L st/st	1/2" NPT (F)	16	6,9 to 69 mbar	34,5	68,9
701	0,1 to 2,1	Buna-N; Ni pl. Brass	1/4" NPT (F)	18	0,07 to 0,1	34,5	41,4
15731*	0,2 to 2,1	Buna-N; Ni pl. Brass	1/4" NPT (F)	16	0,1 to 0,3	34,5	41,4
190	0,3 to 2,1	316 st/st	1/2" NPT (F)	18	0,1 to 0,2	103,4	172,4
490	0,3 to 2,1	316 st/st	1/2" NPT (F)	16	0,1 to 0,2	103,4	172,4
565	0,3 to 2,1	316L st/st	38 mm sanitary connection		0,07 to 0,3	68,9	103,4
184	0,1 to 3,4	316 st/st; Viton	1/2" NPT (F)	16	0,02 to 0,2	34,5	68,9
484	0,1 to 3,4	316 st/st; Viton	1/2" NPT (F)	16	0,02 to 0,2	34,5	68,9
172	0,1 to 3,4	316L st/st	1/2" NPT (F)	18	6,9 to 103 mbar	34,5	68,9
702	0,2 to 6,9	Buna-N; Ni pl. Brass	1/4" NPT (F)	16	0,07 to 0,3	34,5	41,4
15732*	0,3 to 6,9	Buna-N; Ni pl. Brass	1/4" NPT (F)	18	0,2 to 0,6	34,5	41,4
185	0,3 to 6,9	316 st/st; Viton	1/2" NPT (F)	1,5	0,02 to 0,17	34,5	68,9
485	0,3 to 6,9	316 st/st; Viton	1/2" NPT (F)	1,5	0,02 to 0,17	34,5	68,9
191	0,7 to 6,9	316 st/st	1/2" NPT (F)	18	0,1 to 0,6	103,4	172,4
491	0,7 to 6,9	316 st/st	1/2" NPT (F)	1,5	0,1 to 0,6	103,4	172,4
173	0,3 to 6,9	316L st/st	1/2" NPT (F)	18	6,9 to 172 mbar	34,5	68,9
566	0,7 to 6,9	316L st/st	38 mm sanitary connection		0,07 to 0,8	68,9	103,4

\* Models that include adjustable deadband switch

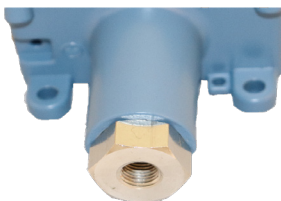
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[ii] - over range pressure is the maximum pressure that may be applied continuously without causing damage and maintaining set point repeatability

[iii] - Proof pressure is the maximum pressure to which a pressure sensor may be occasionally subjected which causes no permanent damage.

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Models 701-702,  
15731-15732



Models 171-173



Models 183-185, 483-485



Models 565-566



Models 190-191, 490-491

# H100

## Pressure Models (up to 34,5 bar)

Model	Adjustable Set Point Range (i)	Wetted Material	Pressure Connection		Deadband bar	Over Range Pressure (ii) bar	Proof Pressure (iii) bar
	bar		Thread	Orifice (mm)			
186	0,6 to 13,8	316 st/st; Viton	1/2" NPT (F)	18	0,02 to 0,2	34,5	68,9
486	0,6 to 13,8	316 st/st; Viton	1/2" NPT (F)	1,5	0,02 to 0,2	34,5	68,9
174	0,6 to 13,8	316L st/st	1/2" NPT (F)	1,5	0,01 to 0,25	34,5	68,9
270	0,3 to 13,8	Ph. Bronze; Ni pl. Brass	1/4" NPT (F)	18	0,1 to 0,6	13,8	17,2
358	1,0 to 13,8	316L st/st	1/4" NPT (F)	1,5	0,1 to 0,4	13,8	55,2
15623*	1,4 to 13,8	316 st/st; Viton	1/4" NPT (F)	2,3	0,8 to 1,8	34,5	68,9
703	0,6 to 20,7	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	0,07 to 0,3	34,5	41,4
15733*	0,6 to 20,7	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	0,3 to 1,1	34,5	41,4
192	1 to 20,7	316 st/st	1/2" NPT (F)	18	0,2 to 1,2	103,4	172,4
492	1 to 20,7	316 st/st	1/2" NPT (F)	1,5	0,2 to 1,2	103,4	172,4
361	1,4 to 20,7	316L st/st	1/4" NPT (F)	2,3	0,1 to 0,5	20,7	55,2
567	1 to 20,7	316L st/st	38 mm sanitary connection		0,2 to 1,5	68,9	103,4
704	1,0 to 34,5	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	0,1 to 0,6	103,4	172,4
15734*	1,0 to 34,5	Buna-N; Ni pl. Brass	1/2" NPT (F)	1,5	0,6 to 2,1	103,4	172,4
193	1,4 to 34,5	316 st/st	1/2" NPT (F)	18	0,3 to 2,1	103,4	172,4
493	1,4 to 34,5	316 st/st	1/2" NPT (F)	1,5	0,3 to 2,1	103,4	172,4
274	0,4 to 20,7	Ph. Bronze; Ni pl. Brass	1/4" NPT (F)	1,5	0,1 to 0,7	20,7	24,1
376	1,7 to 34,5	316L st/st	1/4" NPT (F)	2,3	0,1 to 0,6	34,6	55,2

\* Models that include adjustable deadband switch

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[ii] - Over range pressure is the maximum pressure that may be applied continuously without causing damage and maintaining set point repeatability

[iii] - Proof pressure is the maximum pressure to which a pressure sensor may be occasionally subjected which causes no permanent damage.

The unit may require re-calibration (i.e., start-up, testing)

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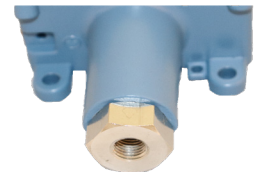
Model 174



Model 186, 486



Models 270-274, 358-376



Model 15623, 703-704,  
15733-15734

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Model 567



Models 192-193, 492-493

## H100 Pressure models (up to 344,7 bar)

Model	Adjustable Set Point Range (i)	Wetted Material	Pressure Connection		Deadband	Over Range Pressure (ii)	Proof Pressure (iii)
	bar		Thread	Orifice (mm)	bar	bar	bar
705	2,1 to 68,9	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	0,2 to 1,4	103,4	172,4
15735*	2,1 to 68,9	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	0,6 to 6,2	103,4	172,4
188	3,4 to 68,9	316 st/st; Viton	1/2" NPT (F)	12,7	1,7 to 8,6	137,9	482,6
488	3,4 to 68,9	316 st/st; Viton	1/4" NPT (F)	1,5	1,7 to 8,6	137,9	482,6
610	5,2 to 68,9	303 st/st, Buna-N	1/4" NPT (F)	1,5	2,1 to 10,3	413,7	689,5
706	6,9 to 117,2	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	0,7 to 2,1	137,9	172,4
15736*	6,9 to 117,2	Buna-N; Ni pl. Brass	1/4" NPT (F)	1,5	1,7 to 6,9	137,9	172,4
194	5,5 to 117,2	316 st/st	1/2" NPT (F)	18	0,3 to 8,3	137,9	172,4
494	5,5 to 117,2	316 st/st	1/2" NPT (F)	1,5	0,3 to 8,3	137,9	172,4
680	6,9 to 117,2	316 st/st	1/4" NPT (F)	1,5	0,6 to 2,8	117,2	172,4
612	8,6 to 206,8	303 st/st, Buna-N	1/4" NPT (F)	1,5	2,8 to 17,2	413,7	689,5
189	17,2 to 241,3	316 st/st; Viton	1/2" NPT (F)	12,7	3,4 to 20,7	275,8	482,6
489	17,2 to 241,3	316 st/st; Viton	1/2" NPT (F)	1,5	3,4 to 20,7	275,8	482,6
616	48,3 to 344,7	303 st/st, Buna-N	1/4" NPT (F)	1,5	2,8 to 25,9	413,7	689,5
15884*	48,3 to 344,7	303 st/st, Buna-N	1/4" NPT (F)	1,5	5,5 to 34,5	413,7	689,5

\* Models that include adjustable deadband switch

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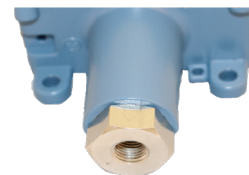
[ii] - over range pressure is the maximum pressure that may be applied continuously without causing damage and maintaining set point repeatability

[iii] - Proof pressure is the maximum pressure to which a pressure sensor may be occasionally subjected which causes no permanent damage. The unit may require re-calibration (i.e., start-up, testing)

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Models 188-189,  
488-489, 194, 494



Models 610-616, 705-706,  
15735, 15736, 15884



Model 680



## H100K

### Low Differential Pressure Models (up to 498 mbar)

Model	Adjustable Set Point Range (i)	Wetted Material	Pressure Connection		Deadband	Working Pressure(ii)	Proof Pressure (iii)
	mbar		Thread	Orifice (mm)			
540	0,5 to 17,4	Buna-N; Aluminum	1/8" NPT (F)	3	0,1 to 1,5	- 1 to 13,8	27,6
541	2,5 to 49,8	Buna-N; Aluminum	1/8" NPT (F)	3	0,2 to 2,5	- 1 to 13,8	27,6
542	12,4 to 124,5	Buna-N; Aluminum	1/8" NPT (F)	3	0,5 to 6,2	- 1 to 13,8	27,6
543	24,9 to 497,8	Buna-N; Aluminum	1/8" NPT (F)	3	1,2 to 19,9	- 1 to 13,8	27,6

### Medium Differential Pressure Models (up to 34,5 mbar)

Model	Adjustable Set Point Range (i)	Wetted Material	Pressure Connection		Deadband	Working Pressure (ii)	Proof Pressure (iii)
	bar		Thread	Orifice (mm)			
544	2 to 20	Buna-N; Aluminum	1/8" NPT (F)	3	6,9 mbar to 89,6 mbar	- 1 to 82,7	172,4
545	5 to 50	Buna-N; Aluminum	1/8" NPT (F)	3	13,8 mbar to 0,1	- 1 to 82,7	172,4
546	10 to 125	Buna-N; Aluminum	1/8" NPT (F)	3	27,6 mbar to 0,3	- 1 to 82,7	172,4
547	50 to 250	Buna-N; Aluminum	1/8" NPT (F)	1,5	0,1 to 0,7	- 1 to 82,7	172,4
548	100 to 500	Buna-N; Aluminum	1/8" NPT (F)	1,5	0,1 to 1	- 1 to 82,7	172,4

[i] - Low end of range on fall; high end of range on rise

[ii] - Working pressure range is the pressure range within which two opposing sensors can be safely operated and still maintain set point repeatability

[iii] - Proof pressure is the maximum pressure to which a pressure sensor may be occasionally subjected which causes no permanent damage.

The unit may require re-calibration (i.e., start-up, testing)

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Models 540-543



Models 544-548

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### Type B100 Internal reference dial - Local immersion stem

Type	Ni plated brass stem models	stainless steel stem models	Adjustable Set Point Range (°C)	Max. Temp. (°C)	Scale Division (°C)	Stem size
<b>B100</b>	120	Use option M504	- 17,8 to 107,2	135	5	14,3 mm x 48 mm below 1/2" NPT
<b>B100</b>	121	Use option M504	93,3 to 218,3	246,1	5	14,3 mm x 48 mm below 1/2" NPT
<b>B100</b>	N/A	13546	- 9,4 to 60	71,1	2	14,3 mm x 69 mm long

Green color indicates product is typically in stock at UE distributors.

### Type C100 No reference dial - Local immersion stem

Type	Ni plated brass stem models	stainless steel stem models	Adjustable Set Point Range (°C)	Max. Temp. (°C)	Scale Division (°C)	Stem size
<b>C100</b>	120	Use option M504	- 17,8 to 107,2	135	N/A	14,3 mm x 48 mm below 1/2" NPT
<b>C100</b>	121	Use option M504	93,3 to 218,3	246,1	N/A	14,3 mm x 48 mm below 1/2" NPT

### Type E100 Internal reference dial - Bulb and capillary

Type	Copper sensor models	Stainless steel sensor models	Adjustable Set Point Range (°C)	Max. Temp. (°C)	Scale Division (°C)	Bulb size
<b>E100</b>	2BCA	2BSA	- 84,4 to 37,8	65,6	5	9,5 mm dia. x 67 mm long
<b>E100</b>	2BCB	2BSB	- 1,1 to 121,1	148,9	5	9,5 mm dia. x 67 mm long
<b>E100</b>	3BC	3BS	37,8 to 204,4	232,2	5	9,5 mm dia. x 54 mm long
<b>E100</b>	4BC	4BS	- 3,9 to 37,8	65,6	1	9,5 mm dia. x 172 mm long
<b>E100</b>	5BC	5BS	-28,9 to 26,7	54,4	2	9,5 mm dia. x 127 mm long
<b>E100</b>	8BC	8BS	176,7 to 337,8	365,6	5	9,5 mm dia. x 83 mm long
<b>E100</b>	N/A	13545	- 3,9 to 162,8	182,2	5	3,2 mm dia. x 296 mm long

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### Type F100 No reference dial - Bulb and capillary

Type	Copper sensor models	Stainless steel sensor models	Adjustable Set Point Range (°C)	Max. Temp. (°C)	Scale Division (°C)	Bulb size
<b>F100</b>	2BC	2BS	- 87,2 to 176,7	204,4	N/A	9,5 mm dia. x 67 mm long
<b>F100</b>	3BC	3BS	- 87,2 to 260	287,8	N/A	9,5 mm dia. x 67 mm long
<b>F100</b>	4BC	4BS	- 40 to 48,9	76,7	N/A	9,5 mm dia. x 54 mm long
<b>F100</b>	5BC	5BS	- 40 to 82,2	110	N/A	9,5 mm dia. x 172 mm long
<b>F100</b>	6BC	6BS	- 17,8 to 121,1	148,9	N/A	9,5 mm dia. x 127 mm long
<b>F100</b>	7BC	7BS	- 17,8 to 204,4	232,2	N/A	9,5 mm dia. x 77 mm long
<b>F100</b>	8BC	8BS	10 to 343,3	371,1	N/A	9,5 mm dia. x 83 mm long

## 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 & 13546
<b>Switch Options</b>																	
<b>0140</b>	Gold Contact, 1A 125 VAC resistive	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	
<b>0500</b>	Close deadband, 5A 125/250 VAC resistive	✓	✓	✓	✓	✓			✓	✓	✓	✓					
<b>1010<sup>3</sup></b>	DPDT switch, 10A 250 VAC resistive			✓	✓	✓				✓		✓					
<b>1070<sup>3</sup></b>	High DC, 10A 125 VDC resistive			✓	✓	✓				✓	✓	✓	✓			✓	
<b>1519</b>	Adjustable deadband, 15A 120/250/480 VAC resistive			✓	✓	✓	✓	✓	✓		✓	✓	✓			✓ <sup>1</sup>	
<b>1530</b>	External manual reset, latches on rise only, 15A 120/250/480 VAC resistive	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	
<b>1535</b>	High Ambient (up to 121°C), 15A 120/250/480 VAC resistive	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓			✓	
<b>2000<sup>3</sup></b>	20A 120/250/480 VAC resistive	✓	✓	✓	✓	✓			✓	✓	✓	✓				✓	
<b>3000<sup>3</sup></b>	30A 120/250/277 VAC resistive			✓	✓	✓				✓		✓				✓	

## Misc. Options

<b>M020</b>	External red pilot light	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	
<b>M201</b>	Factory setting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>M444</b>	Paper ID tag	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
<b>M446</b>	St/St tag	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

<sup>1</sup>Not available on types B100 and E100

<sup>2</sup>Not available on models 523 and 533

<sup>3</sup>Deadbands will increase with these switch options

## Accessories

<b>6361-704</b>	Mounting bracket kit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>SD6285-51</b>	1/2" NPT (F) conduit kit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

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\*- Consult factory for available options

# H100 and H100K

## Pressure Product Options

Option #	Description	Models													
<b>Other Options</b>		<b>171-174 471-474 190-194 490-494</b>	<b>183- 189 483- 489</b>	<b>218- 230</b>	<b>270- 274</b>	<b>358- 376</b>	<b>520- 525</b>	<b>530- 535</b>	<b>565- 567</b>	<b>610- 616</b>	<b>680</b>	<b>700 -706</b>	<b>540- 548</b>	<b>15623, 15731- 15737</b>	<b>15884</b>
<b>M277</b>	Range in KPa/MPa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>M278</b>	Range in Kg/cm <sup>2</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>M401</b>	NACE MR0175 Compliance	✓ <sup>2</sup>	✓												
<b>M449</b>	Mounting bracket						✓	✓		✓			✓		
<b>M540</b>	Viton elastomer									✓		✓ <sup>1</sup>	✓		
<b>M550</b>	Oxygen service cleaning	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>M914</b>	1/2" NPT (F) connection					✓				✓					
<b>M921</b>	Brass connection									✓					
<b>XC001</b>	Viton Elastomer						✓								
<b>XC002</b>	Kapton Diaphragm						✓								
<b>XC003</b>	Kapton Diaph. / Viton seal						✓								
<b>XC004</b>	316 st/st Diaph. /Viton seal						✓								
<b>XC005</b>	316L st/st / Viton diaph.						✓								
<b>XC007</b>	316L st/st / Teflon & Viton						✓								
<b>XD002</b>	Hastelloy C276 Diaph.		✓												
<b>XD003</b>	Monel 400 Diaph.		✓												
<b>XP112</b>	Hastelloy C276 P/C		✓												
<b>XP113</b>	Monel 400 P/C		✓												
<b>XR211</b>	Kalrez seal		✓												
<b>XR213</b>	EPR seal		✓												
<b>XR214</b>	Aflas seal		✓												

<sup>1</sup>- Not available on model 706  
<sup>2</sup>- Not available on models 194 & 494

<b>100 Series Certification Options</b>		
Option #	Description	Models
<b>M391</b>	InMetro Certification for Brazil	All
<b>M400</b>	SIL2 Certification	All*
<b>M405</b>	Intrinsically Safe Compliance (see page 2 for details)	All
<b>M406</b>	Intrinsically Safe Compliance For Russia (EAC Standards)	All

\*-Consult factory for available options

## Temperature Model Options

Option #	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
<b>M504</b>	316L st/st	Immersion Stem	✓	✓									
<b>M550</b>		Oxygen service cleaning	✓	✓		✓	✓	✓	✓	✓	✓	✓	

## Union Connectors for bulb & capillary models

Option #	Replacement Part #													
<b>W027</b>	SD6213-27	Brass	1/2" NPT W/3/4" bushing				✓	✓	✓	✓	✓	✓	✓	
<b>W028</b>	SD6213-28	304 st/st	1/2" NPT W/3/4" bushing				✓	✓	✓	✓	✓	✓	✓	
<b>W045</b>	SD6213-45	Brass	3/4" NPT				✓	✓	✓	✓	✓	✓	✓	
<b>W046</b>	SD6213-46	304 st/st	3/4" NPT				✓	✓	✓	✓	✓	✓	✓	
<b>W051</b>	SD6213-51	Brass	1/2" NPT				✓	✓	✓	✓	✓	✓	✓	
<b>W050</b>	SD6213-50	304 st/st	1/2" NPT				✓	✓	✓	✓	✓	✓	✓	

## Thermowells for bulb & capillary models

<b>W075</b>	SD6225-75	Brass	102mm BT, 1/2" NPT with 3/4" NPT adapter bushing				✓	✓				✓	✓	
<b>W076</b>	SD6225-76	316 st/st	115mm BT, 3/4" NPT				✓	✓				✓	✓	
<b>W191</b>	SD6225-191	Brass	102mm BT, 1/2" NPT				✓	✓				✓	✓	
<b>W193</b>	SD6225-193	316 st/st	115mm BT, 1/2" NPT				✓	✓				✓	✓	
<b>W118</b>	SD6225-118	Brass	178mm BT, 1/2" NPT with 3/4" NPT adapter bushing				✓	✓	✓	✓	✓	✓	✓	
<b>W119</b>	SD6225-119	316 st/st	191mm BT, 3/4" NPT				✓	✓	✓	✓	✓	✓	✓	
<b>W192</b>	SD6225-192	Brass	178mm BT, 1/2" NPT				✓	✓	✓	✓	✓	✓	✓	
<b>W177</b>	SD6225-177	316 st/st	191mm BT, 1/2" NPT				✓	✓	✓	✓	✓	✓	✓	

## Thermowells for all immersion stem models

<b>W139</b>	SD6225-139	Brass	3/4" NPT x 44mm BT	✓	✓									
<b>W140</b>	SD6225-140	316 st/st	3/4" NPT x 44mm BT	✓	✓									
<b>W000</b>		Brass	No thread	✓	✓									
<b>W097</b>		Brass	1/2" NPT x 44mmBT	✓	✓									
<b>W099</b>		316 st/st	1/2" NPT x 44mm BT	✓	✓									

BT-Below Thread

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# HOW TO ORDER

## BUILDING A PART NUMBER

### Select a **Type**

Refer to the "Type" section below.

**Example:**

**Type:** H100

**Model:** 186

**Option:** 0140

### Select a **Model**

Refer to "Model Charts" on pages 4-9.

### Select an **Option**

Refer to the "Options" pages 10-12

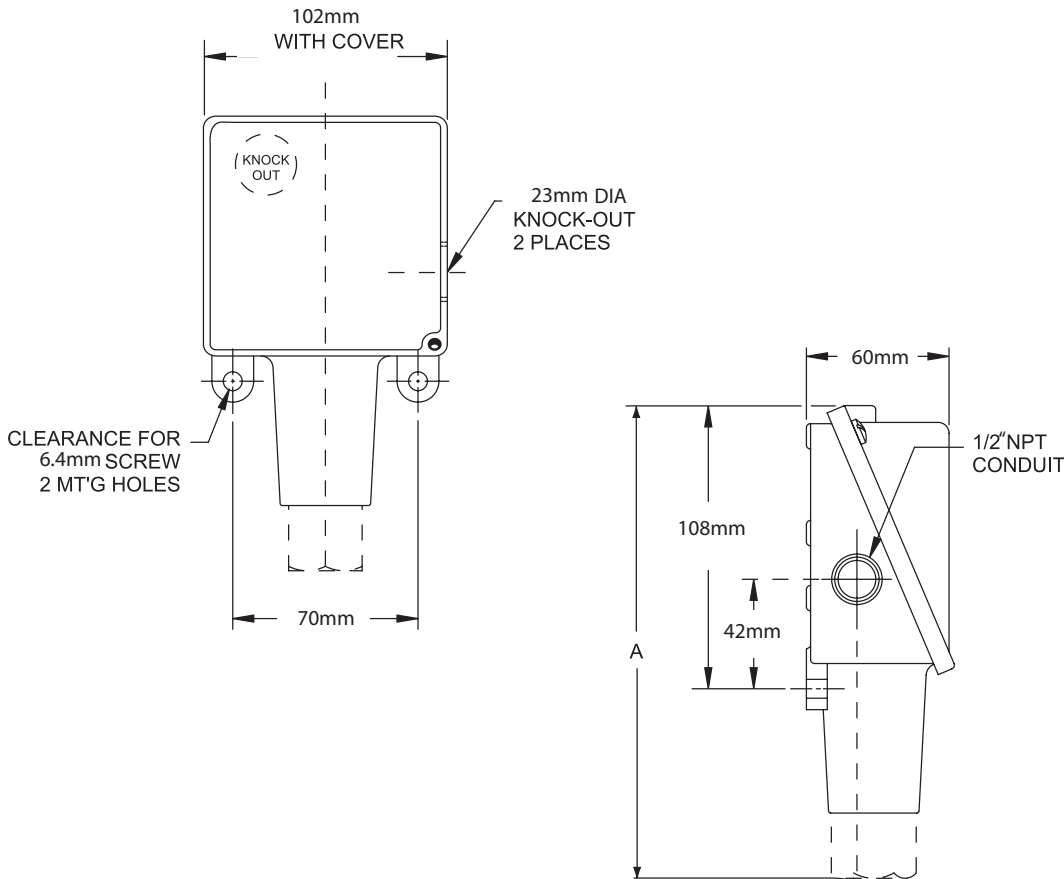
## Type

## Description

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

## Dimensional drawings

Dimensional drawings for all models may be found [online](#).



Dimension A	
Models	mm
<b>Pressure</b>	
171-174	194
183-186, 484-486	192
188-189, 488-489	169
190-194, 490-494	169
218	167
270-274	178
358-376	178
520-525, 15737	215
530-535	204
565-567	169
610-616, 680, 15884	178
701-706, 15623, 15731-15736	169
<b>Differential Pressure</b>	
540-543	215
544-548	217
<b>Temperature</b>	
120, 121, 13546	239
2BC-8BC, 2BS-8BS, 13545	221

## ADDITIONAL PRODUCTS FROM UE

### One Series Safety Transmitter for Division 1 (Zone 1)

- Improve Uptime with safety diagnostics
- Meet regulatory requirements with SIL2 IEC 61508 certification
- High-capacity solid-state safety relay for direct control



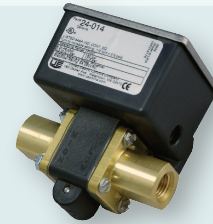
### Vanguard Gas Detector – Toxic and Combustible Gas Detector

- WirelessHART Communication
- 5+ year battery life
- Heavy duty design with Class 1, Div 1 & 2 hazardous location approvals



### 24 Series

- Compact, lightweight corrosion-resistant polyester enclosure
- Designed to meet enclosure type 4 requirements



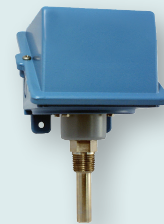
### One Series for Division 1 & 2 (Zone 0, 1, 2)

- HART® 7 communications
- Drop-in replacement for mechanical switches using the existing 2-wires.



### 400 Series

- One, two or three switch outputs may be separated up to 100% of range
- Epoxy-coated enclosure, designed to meet enclosure type 4X requirements
- Choice of reference dial or multi-turn hex screw for set point adjustment



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