Table 1-2. Nomenclature (continued)

Position	5	6	7	8	9	10	11	12	13	14	15	Platinum Standard HART Pressure Transmitter — D Type Cell
P	T	H	D	_	_	_	_	_	_	_	_	_	_	_	

High pressure side flange

	Material	Purge Valve	Style	Types
2 _ _ _ _ _ _ _	Stainless steel 316	Side	North American 7/16 (ordered most)	All
4 _ _ _ _ _ _ _	Stainless steel 316	Rear	North American 7/16 (special)	
B _ _ _ _ _ _ _	Hastelloy C-276	Side	North American 7/16	
D _ _ _ _ _ _ _	Hastelloy C-276	Rear	North American 7/16 (special)	
N _ _ _ _ _ _ _	Stainless steel 304	Remote seal	North American 7/16	Not PTHDA or PTHDDA

Low pressure side flange

	Material	Purge Valve	Style	Types
2 _ _ _ _ _ _	Stainless steel 316	Side	North American 7/16 (ordered most)	PTHDD
4 _ _ _ _ _ _	Stainless steel 316	Rear	North American 7/16 (special)	
B _ _ _ _ _ _	Hastelloy C-276	Side	North American 7/16	
D _ _ _ _ _ _	Hastelloy C-276	Rear	North American 7/16 (special)	
N _ _ _ _ _ _	Stainless steel 304	Remote seal	North American 7/16	PTHDD, not PTHDDA

Table 1-2. Nomenclature (continued)

Position	5	6	7	8	9	10	11	12	13	14	15
P	T	H	D	_	_	_	_	_	_	_	_	_	_

Platinum Standard HART Pressure Transmitter — D Type Cell

Bolting and O-rings[2]

	Bolt Material	Rating[3] kPa	Rating[3] psi	O-Ring Material	Types
1	Carbon steel (ordered most)	25,000	3,625	Viton®	Note 2
2	Stainless steel	20,000	2,900		
3	ASTM A193 B7M: NACE Class 2	20,000	2,900		
4	Carbon steel	41,000	6,000		
5	Stainless steel	41,000	6,000		
6	ASTM A193 B7M: NACE Class 2	41,000	6,000		
A	Carbon steel	25,000	3,625	Teflon® (PTFE)	Note 2
B	Stainless steel	20,000	2,900		
C	ASTM A193 B7M: NACE Class 2	20,000	2,900		
D	Carbon steel	41,000	6,000		
E	Stainless steel	41,000	6,000		
F	ASTM A193 B7M: NACE Class 2	41,000	6,000		
M	Carbon steel	25,000	3,625	Ethylene propylene	Note 2
N	Stainless steel	20,000	2,900		
P	ASTM A193 B7M: NACE Class 2	20,000	2,900		
Q	Carbon steel	41,000	6,000		
R	Stainless steel	41,000	6,000		
S	ASTM A193 B7M: NACE Class 2	41,000	6,000		
W	Carbon steel	25,000	3,625	Metal for vacuum service	PTHD___NN[2]
X	Stainless steel	20,000	2,900		
Y	ASTM A193 B7M: NACE Class 2	20,000	2,900		

Table 1-2. Nomenclature (continued)

Position 5 6 7 8 9 10 11 12 13 14 15	Platinum Standard HART Pressure Transmitter — D Type Cell
P T H D _ _ _ _ _ _ _ _ _ _ _	

Adapters (two for PTHDD) and mounting bracket

	Adapters	Mounting Bracket	Types
0	None	None	All
1	None	Zinc plated chromate dipped C steel	
3	None	Stainless steel 316	
A	½ NPT stainless steel 316	None	
B	½ NPT stainless steel 316	Zinc plated chromate dipped C steel	
D	½ NPT stainless steel 316	Stainless steel 316	
M	½ NPT Hast C-276	None	
N	½ NPT Hast C-276	Zinc plated chromate dipped C steel	
Q	½ NPT Hast C-276	Stainless steel 316	

Certifications

0	NEMA 4X - ABB standard
1	NEMA 4X and CENELEC flameproof and intrinsically safe
2	NEMA 4X and FM and CSA explosionproof and intrinsically safe

Housing and electrical connection

	Housing	Electrical Connection	Types
1	Standard - low Cu light alloy Al	Two ½ NPT with 1 plug	All
A	Stainless steel 316	Two ½ NPT with 1 plug	All[3]

Indicator, lightning arrestor and EZ CAL option

	Indicator	Lightning Arrestor	EZ CAL Option[3]	Types
0	Not included	Not included	Not included	All
1	Not included	Included	Not included	All
3	Not included	Not included	Included	All[3]
4	Not included	Included	Included	All[3]
A	LCD	Not included	Not included	All
B	LCD	Included	Not included	All
D	LCD	Not included	Included	All[3]
E	LCD	Included	Included	All[3]
M	Analog meter	Not included	Not included	All
N	Analog meter	Included	Not included	All
Q	Analog meter	Not included	Included	All[3]
R	Analog meter	Included	Included	All[3]

Table 1-2. Nomenclature (continued)

Position 5 6 7 8 9 10 11 12 13 14 15 P T H D _ _ _ _ _ _ _ _ _ _ _	Platinum Standard HART Pressure Transmitter — D Type Cell

Configuration, tagging and accessories[4]

	Configuration	Customer Tagging	Accessories[4]	Types
0	Standard	Not included	Not included	All
1	Standard	Riveted stainless steel	Not included	
2	Standard	Wired stainless steel	Not included	
3	Standard	Paper	Not included	
4	Standard	Not included	Included	
5	Standard	Riveted stainless steel	Included	
6	Standard	Wired stainless steel	Included	
7	Standard	Paper	Included	
A	Custom	Not included	Not included	All
B	Custom	Riveted stainless steel	Not included	
C	Custom	Wired stainless steel	Not included	
D	Custom	Paper	Not included	
E	Custom	Not included	Included	
F	Custom	Riveted stainless steel	Included	
G	Custom	Wired stainless steel	Included	
H	Custom	Paper	Included	

NOTES:

1. Units will be set to the nominal range. Specific customer calibrations are selected in nomenclature position 15. Refer to Table 1-8 for help.
2. Exceptions to the pressure ratings listed are: Type PTHDDA pressure transmitters are 2,000 kPa (300 psi); Types PTHDDH and PTHDGH pressure transmitters are 14,000 kPa (2,000 psi); all transmitters with tantalum diaphragms (3, C or G in nomenclature position 7) are 14,000 kPa (2,000 psi). High static pressure bolting and flanges (4, 5, 6, D, E, F, Q, R or S in nomenclature position 10) are only available for Types PTHDDB/C/D/F/G pressure transmitters, excluding those with tantalum diaphragms.
3. EZ CAL option cannot be used on transmitters with stainless steel housings (A in nomenclature position 13).
4. Typical accessories are mounted remote seals, manifolds, and integral orifice plates.

SPECIFICATIONS

The specifications are organized into separate tables. First is a list of specifications common to all Type PTHD pressure transmitters. This is followed by specifications unique to each of the three measurement applications (differential, gage and absolute pressure).

Common Specifications

Tables 1-3 and 1-4 list the specifications common to all Type PTHD pressure transmitters.

Table 1-3. Common Specifications

<table>
<tr><th>Property</th><th>Characteristic/Value</th></tr>
<tr><td>Reference conditions
Temperature
Humidity
Barometric pressure</td><td>
15.0° to 35.5°C (59.0° to 95.9°F)
45% to 75%
86.0 to 106.0 kPa (12.5 to 15.4 psi)</td></tr>
<tr><td>Temperature limits for electronics, cell and optional liquid crystal display</td><td>
<table>
<tr><th rowspan="2">Parameter</th><th colspan="2">Electronics[1]</th><th colspan="2">Cell[1,2]</th><th colspan="2">LCD[3]</th></tr>
<tr><th>°C</th><th>°F</th><th>°C</th><th>°F</th><th>°C</th><th>°F</th></tr>
<tr><td>Normal op</td><td>-40 to +85</td><td>-40 to +185</td><td>-40 to +85</td><td>-40 to +185</td><td>0 to +50</td><td>+32 to +122</td></tr>
<tr><td>Extreme op</td><td>-50 to +85</td><td>-58 to +185</td><td>-50 to +120</td><td>-58 to +248</td><td>0 to +50</td><td>+32 to +122</td></tr>
<tr><td>Storage/ transport</td><td>-55 to +85</td><td>-67 to +185</td><td>-55 to +85</td><td>-67 to +185</td><td>-20 to +70</td><td>-4 to +158</td></tr>
</table>
</td></tr>
<tr><td>Humidity limits</td><td>5% to 100% noncondensing continuous when the covers are properly installed and the conduit is sealed</td></tr>
<tr><td>Supply voltage[4,5]</td><td>12 to 53 VDC (12 to 42 VDC for CSA certified applications). Installation category III.</td></tr>
<tr><td>Power supply effect</td><td>±0.005% of URL per volt</td></tr>
<tr><td>Output signal
Analog
Digital</td><td>
4 to 20 mA
HART communications</td></tr>
<tr><td>Output current limiting
Maximum
Minimum</td><td>
≥21.6 mA
≤3.9 mA</td></tr>
<tr><td>Loop load limits</td><td>Refer to Figure 2-3</td></tr>
<tr><td>Damping/response time (one time constant - approximately 62% of final reading)</td><td>Analog and digital response to a step input change is adjustable from 0.0 to 32.0 secs and is entered during configuration. This value is in addition to:
Cell response time: dependent on cell and fill fluid
Electronics response time: approximately 0.3 secs</td></tr>
<tr><td>A/D sample rate</td><td>8 times per sec</td></tr>
<tr><td>RFI/EMI effects</td><td>±0.1% of URL in fields from 4 to 1,040 MHz at 10 V/m</td></tr>
<tr><td>Burst</td><td>Complies with IEC 801-4 test criteria</td></tr>
<tr><td>Vibration effect</td><td>±0.1% of URL for 1 g from 1 to 2,000 Hz in any axis of the transmitter</td></tr>
<tr><td>Enclosure rating</td><td>NEMA 4X and IP67</td></tr>
</table>