

## SMART PRESSURE TRANSMITTER

### General Specifications

#### 1) Diaphragm Sealed Sensor Range (Rangeability: 20: 1)

| Class        | Code | mmH2O                 | KPa                  |
|--------------|------|-----------------------|----------------------|
| Low Level    | 4    | 0 ~ 194 to 0 ~ 3800   | 0 ~ 1.9 to 0 ~ 37.3  |
| Medium Level | 5    | 0 ~ 960 to 0 ~ 19000  | 0 ~ 9.4 to 0 ~ 186.5 |
| High Level   | 6    | 0 ~ 3518 to 0 ~ 70000 | 0 ~ 34.5 to 0 ~ 690  |

#### 2) Electrical Specifications

|                      |                |               |                    |
|----------------------|----------------|---------------|--------------------|
| Power Supply         | 11.9 ~ 45 V dc | Output Signal | 4 ~ 20 mA dc /HART |
| HART loop resistance | 250 ~ 550 ohm  | Isolation     | 500 Vrms (707V DC) |
| Update Time          | 0.25 Sec       | Turn-on Time  | 5 Sec.             |

#### 3) Performance Specifications (without seal)

|                         |   |                           |  |
|-------------------------|---|---------------------------|--|
| Reference Accuracy      | $\pm 0.075\%$ of Span ( $0.2URL \leq Span \leq URL$ )<br>$\pm [0.05 + 0.005 \times (URL/Span)]\%$ of Span<br>( $0.05URL \leq Span < 0.2URL$ ) | Operating Temp.           | -40 ~ +85 °C                               |
|                         |   | LCD Meter Operating Temp. | -30 ~ +80 °C                               |
|                         |   | Humidity Limits           | 5% ~ 98% RH                                |
| Ambient Temp. Effect    | $\pm [0.025\%URL + 0.125\% Span] / 28$ °C   | Process Temp. Limit       | -40 ~ +205 °C                              |
| Stability               | $\pm 0.1\%$ URL for 12 Months   | Power Supply Effects      | $\pm 0.005\%$ of Span per Volt             |
| Static Pressure Effects | $\pm 0.1\%$ of URL per 7MPa (Zero Error)<br>$\pm 0.2\%$ of Reading per 7MPa (Span Error)  | Mounting Position Effects | ·Zero Shift up to 350Pa<br>·No Span Effect |

#### 4) Physical Specifications

|                        |             |                                |                      |
|------------------------|-------------|--------------------------------|----------------------|
| Isolating Diaphragm    | 316L SST    | Process Connection Size        | 1/2" -14 NPT         |
| Drain & Vent Valve     | 316 SST     | Diaphragm Seal(Flush/Extended) | 2" or 3" / 3" or 4"  |
| Flange & Adapter       | 316 SST     | Electrical Connections         | 1/2" -14 NPT with M4 |
| O-ring                 | Viton, PTFE | Weight (only transmitter)      | 3.9 Kg               |
| Electronic Housing     | Aluminum    | 2" Pipe Stanchion Type bracket | Angle or Flat type   |
| Bolts & Bolting Flange | 304 SST     | Housing Class                  | Waterproof (IP67)    |

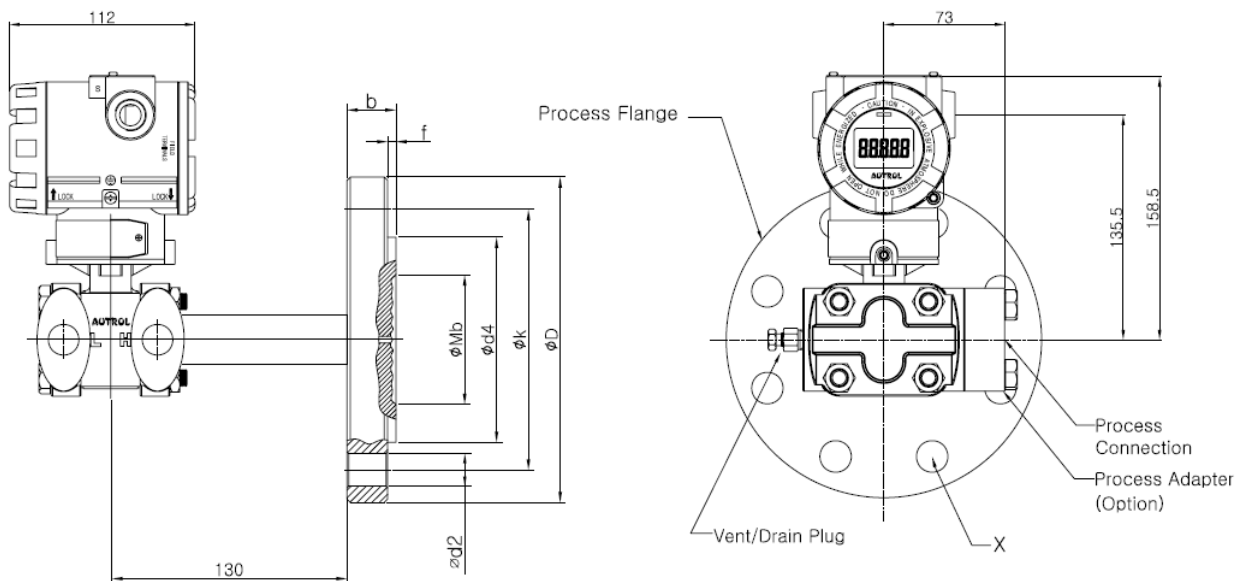
#### 5) Hazardous Location Certifications - Option

| Korea Standards Approval  | International Standards Approval   |
|---|--|
| Flameproof Approval : Ex d IIC T6 (KOSHA)<br>Intrinsic Safety Approval : Ex ia IIC T5 (KTL) | CSA Explosion proof Approval<br>FM Explosion proof Approval<br>ATEX Flame proof Approval |

## SMART PRESSURE TRANSMITTER

### APT3100LFD

Flush Diaphragm Seal and Direct Mount Type Transmitter



**Flange Size: 80mm (3 inch)**

Unit: mm

| Flange Rating | Mb | D   | b  | d2 | k     | f | d4  | x |
|---------------|----|-----|----|----|-------|---|-----|---|
| ANSI Class150 | 89 | 190 | 24 | 20 | 152.5 | 2 | 127 | 4 |
| ANSI Class300 |    | 210 | 29 | 22 | 168.5 |   | 127 | 8 |
| JIS 10K       | 89 | 185 | 18 | 19 | 150   | 2 | 126 | 8 |
| JIS 20K       |    | 200 | 22 | 23 | 160   |   | 132 |   |
| DIN PN 10/16  | 89 | 200 | 20 | 18 | 160   | 2 | 138 | 8 |
| DIN PN 25/40  |    |     | 24 |    |       |   |     |   |

**Flange Size: 50mm (2 inch)**

| Flange Rating | Mb | D   | b    | d2 | k     | f | d4  | x |
|---------------|----|-----|------|----|-------|---|-----|---|
| ANSI Class150 | 59 | 150 | 20   | 20 | 120.5 | 2 | 92  | 4 |
| ANSI Class300 |    | 165 | 22.5 |    | 127   |   |     | 8 |
| JIS 10K       | 59 | 155 | 16   | 19 | 120   | 2 | 96  | 4 |
| JIS 20K       |    |     | 18   |    |       |   |     | 8 |
| DIN PN 10/16  | 59 | 165 | 20   | 18 | 125   | 2 | 102 | 4 |
| DIN PN 25/40  |    |     |      |    |       |   |     |   |

## SMART PRESSURE TRANSMITTER

### Ordering Information

| MODEL NO.                              | Code | Description  |                              |
|--|------|--|------------------------------|
| APT3100                                | LFD  | Flush Diaphragm Seal and Direct Mount Type Transmitter   |                              |
| Ranges                                 | 4    | 0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 KPa)               |                              |
|  | 5    | 0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 KPa)             |                              |
|  | 6    | 0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)             |                              |
|  | X    | Special  |                              |
| Mounting Flange Size/Material          | S2   | 2-inch (50mm)  | SST                          |
|  | S3   | 3-inch (80mm)  | SST                          |
|  | XX   | Special  |                              |
| Mounting Flange Rating                 | A1   | ANSI Class 150   |                              |
|  | A2   | ANSI Class 300   |                              |
|  | J1   | JIS 10K  |                              |
|  | J2   | JIS 20K  |                              |
|  | D1   | DIN PN 10/16   |                              |
|  | D2   | DIN PN 25/40   |                              |
|  | XX   | Special  |                              |
| Wetted Parts Material Diaphragm/Others |      | DIAPHRAGM  | OTHERS                       |
|  | S    | 316L SST   | 316 SST                      |
|  | PT   | PTFE + 316L SST  | 316 SST                      |
|  | H    | Hastelloy C-276  | 316 SST                      |
|  | T    | Tantalum   | 316 SST                      |
|  | X    | Special  | Special                      |
| Fill Fluid                             |      | FILL FLUID   | TEMPERATURE LIMITS           |
|  | 2    | D.C Silicone 200   | -40 to 205 °C(-40 to 400 °F) |
|  | 7    | D.C Silicone 704   | 15 to 205 °C(60 to 400 °F)   |
|  | X    | Special  |                              |
| Materials of Construction              |      | FLANGE   | VENT/DRAIN VALVE             |
|  | SS   | 316 SST  | 316 SST                      |
| Low Side                               | W    | without Process Adapter (1/4-18 NPT on the cover flange) |                              |
|  | N    | with 1/2-14 NPT Process Adapter (316 SST)                |                              |
|  | X    | Special  |                              |
| Electrical Connection                  |      | ELECTRICAL CONNECTION                                    | MATERIAL                     |
|  | 1    | 1/2-14NPT  | Epoxy Coated-Aluminum        |
|  | 2    | G1/2   | Epoxy Coated-Aluminum        |
|  | X    | Special  |                              |

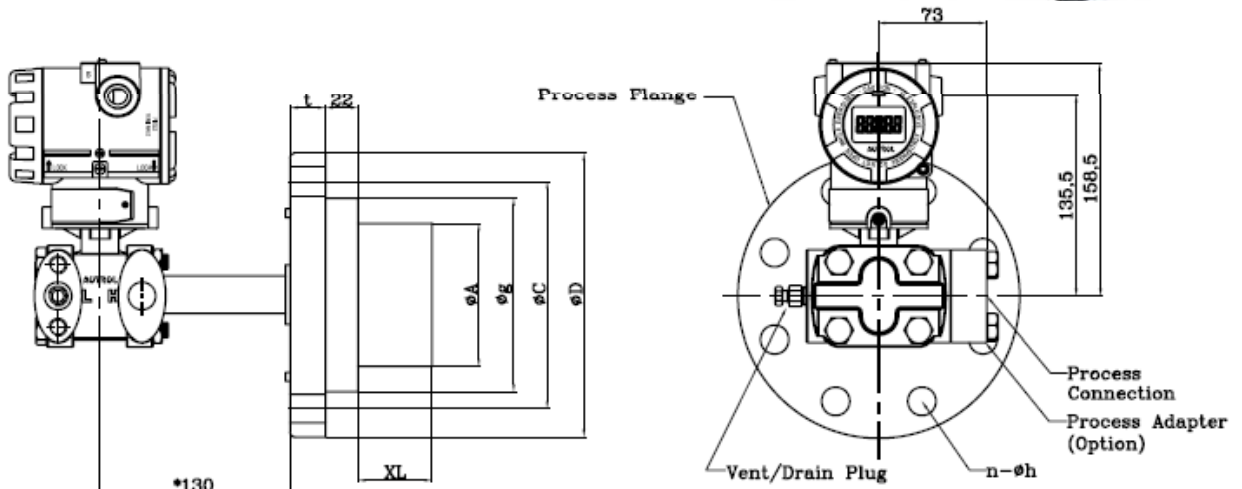
## SMART PRESSURE TRANSMITTER

|   |     |   |
|---|-----|---|
| Hazardous Locations Certifications (Option) | K0  | Maker Standard (Waterproof : IP67)        |
|   | K1  | KOSHA Flameproof Approval: Ex d IIC T6.   |
|   | K2  | KTL Intrinsic Safety Approval : Ex ia IIC |
|   | E1  | ATEX(KEMA) Flameproof                     |
|   | *E2 | ATEX(KEMA) Intrinsic Safety               |
|   | F1  | FM/FMC Explosion proof (for USA & Canada) |
|   | *F2 | FM Intrinsic Safety                       |
|   | M1  | LCD Indicator                             |
|   | LP  | Lighting Protector (Internal Type)        |
|   | K   | Oil Free Finish                           |
|   | X   | Special Order                             |

## SMART PRESSURE TRANSMITTER

### APT3100LED

Extended Diaphragm Seal and Direct Mount Type Transmitter



Unit: mm

#### Flange Size: 80mm (3 inch)

| Flange Rating | Mb | D   | b  | d2 | k     | f   | d4  | d5 | x |
|---------------|----|-----|----|----|-------|-----|-----|----|---|
| ANSI Class150 | 72 | 190 | 24 | 20 | 152.5 | 1.6 | 127 | 76 | 4 |
| ANSI Class300 |    | 210 | 29 | 22 | 168.5 |     |     |    | 8 |
| JIS 10K       | 72 | 185 | 18 | 19 | 150   | 2   | 126 | 76 | 8 |
| JIS 20K       |    | 200 | 22 | 23 | 160   |     | 132 |    |   |
| DIN PN 10/16  | 72 | 200 | 20 | 18 | 160   | 2   | 138 | 76 | 8 |
| DIN PN 25/40  |    |     | 24 |    |       |     |     |    |   |

#### Flange Size: 50mm (2 inch)

| Flange Rating | Mb | D   | b    | d2 | k     | f | d4  | d5   | x |
|---------------|----|-----|------|----|-------|---|-----|------|---|
| ANSI Class150 | 47 | 150 | 20   | 20 | 120.5 | 2 | 92  | 48.3 | 4 |
| ANSI Class300 |    | 165 | 22.5 |    | 127   |   |     |      | 8 |
| JIS 10K       | 47 | 155 | 16   | 19 | 120   | 2 | 96  | 48.3 | 4 |
| JIS 20K       |    |     | 18   |    |       |   |     |      | 8 |
| DIN PN 10/16  | 47 | 165 | 20   | 18 | 125   | 2 | 102 | 48.3 | 4 |
| DIN PN 25/40  |    |     |      |    |       |   |     |      |   |

| Diaphragm Extension Length Code | R <sub>L</sub> |
|---------------------------------|----------------|
| 5                               | 50mm (2 inch)  |
| 10                              | 100mm (4 inch) |
| 15                              | 150mm (6 inch) |

## SMART PRESSURE TRANSMITTER

### Ordering Information

| MODEL NO.                              | Code | Description  |                                     |
|--|------|--|-------------------------------------|
| APT3100                                | LED  | <i>Extended Diaphragm Seal and Direct Mount Type Transmitter</i> |                                     |
| Ranges                                 | 4    | <i>0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 KPa)</i>                |                                     |
|  | 5    | <i>0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 KPa)</i>              |                                     |
|  | 6    | <i>0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)</i>              |                                     |
|  | X    | <i>Special</i>   |                                     |
| Mounting Flange Size/Material          | S2   | <i>2-inch (50mm)</i>   | <i>SST</i>                          |
|  | S3   | <i>3-inch (80mm)</i>   | <i>SST</i>                          |
|  | XX   | <i>Special</i>   |                                     |
| Mounting Flange Rating                 | A1   | <i>ANSI Class 150</i>  |                                     |
|  | A2   | <i>ANSI Class 300</i>  |                                     |
|  | J1   | <i>JIS 10K</i>   |                                     |
|  | J2   | <i>JIS 20K</i>   |                                     |
|  | D1   | <i>DIN PN 10/16</i>  |                                     |
|  | D2   | <i>DIN PN 25/40</i>  |                                     |
|  | XX   | <i>Special</i>   |                                     |
| Extension Length                       | 5    | <i>50mm (2 in.)</i>  |                                     |
|  | 10   | <i>100mm (4 in.)</i>   |                                     |
|  | 15   | <i>150mm (6 in.)</i>   |                                     |
|  | XX   | <i>Special</i>   |                                     |
| Wetted Parts Material Diaphragm/Others |      | <i>DIAPHRAGM</i>   | <i>OTHERS</i>                       |
|  | S    | <i>316L SST</i>  | <i>316L SST</i>                     |
|  | PT   | <i>PTFE + 316L SST</i>   | <i>316L SST</i>                     |
|  | H    | <i>Hastelloy C-276</i>   | <i>316L SST</i>                     |
|  | T    | <i>Tantalum</i>  | <i>316L SST</i>                     |
|  | X    | <i>Special</i>   | <i>Special</i>                      |
| Fill Fluid                             |      | <i>FILL FLUID</i>  | <i>TEMPERATURE LIMITS</i>           |
|  | 2    | <i>D.C Silicone 200</i>  | <i>-40 to 205 °C(-40 to 400 °F)</i> |
|  | 7    | <i>D.C Silicone 704</i>  | <i>15 to 205 °C(60 to 400 °F)</i>   |
|  | X    | <i>Special</i>   |                                     |
| Materials of Construction              |      | <i>FLANGE</i>  | <i>VENT/DRAIN VALVE</i>             |
|  | SS   | <i>316 SST</i>   | <i>316 SST</i>                      |
| Low Side                               | W    | <i>without Process Adapter (1/4-18 NPT on the cover flange)</i>  |                                     |
|  | N    | <i>with 1/2-14 NPT Process Adapter (316 SST)</i>                 |                                     |
|  | X    | <i>Special</i>   |                                     |

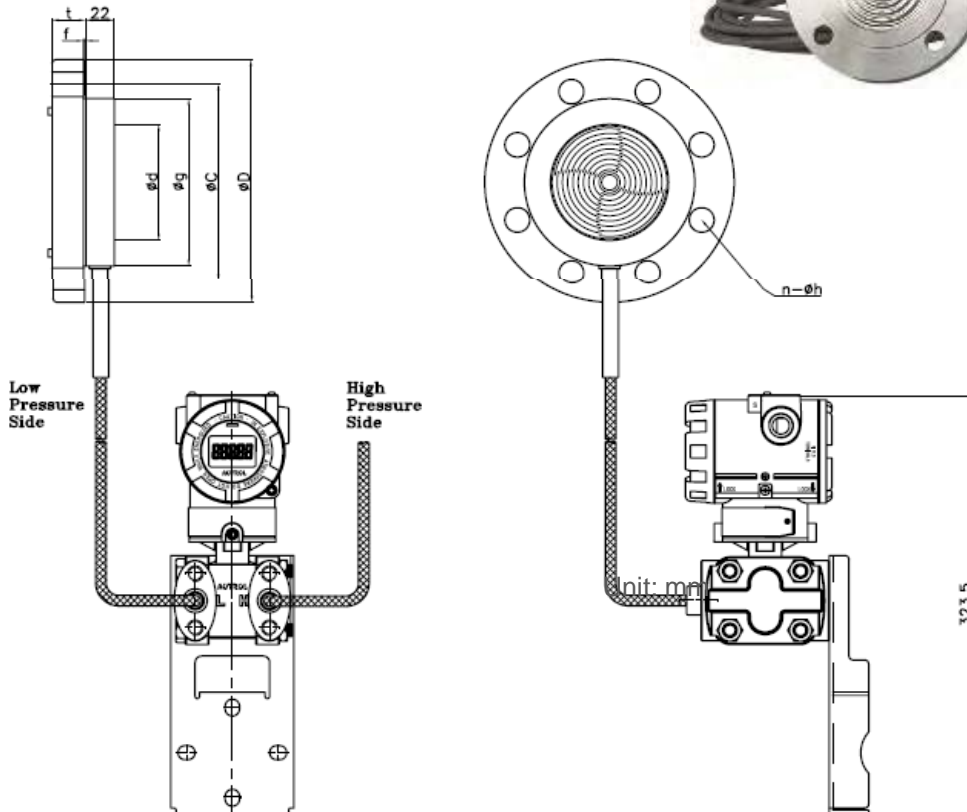
SMART TRANSMITTERS

|   |               | ELECTRICAL CONNECTION                     | MATERIAL              |
|---|---------------|---|-----------------------|
| Electrical Connection                       | 1             | 1/2-14NPT                                 | Epoxy Coated-Aluminum |
|   | 2             | G1/2                                      | Epoxy Coated-Aluminum |
|   | X             | Special                                   |                       |
| Hazardous Locations Certifications (Option) | K0            | Maker Standard (Waterproof : IP67)        |                       |
|   | K1            | KOSHA Flameproof Approval: Ex d IIC T6.   |                       |
|   | K2            | KTL Intrinsic Safety Approval : Ex ia IIC |                       |
|   | E1            | ATEX(KEMA) Flameproof                     |                       |
|   | *E2           | ATEX(KEMA) Intrinsic Safety               |                       |
|   | F1            | FM/FMC Explosion proof (for USA & Canada) |                       |
|   | *F2           | FM Intrinsic Safety                       |                       |
|   | M1            | LCD Indicator                             |                       |
|   | LP            | Lighting Protector (Internal Type)        |                       |
|   | K             | Oil Free Finish                           |                       |
| X   | Special Order |   |                       |

## SMART PRESSURE TRANSMITTER

### APT3100LFC

Flush Diaphragm Seal and Capillary  
Type Transmitter



Unit: mm

#### Flange Size: 80mm (3 inch)

| Flange Rating | Mb | D   | b  | d2 | k     | f | d4  | x |
|---------------|----|-----|----|----|-------|---|-----|---|
| ANSI Class150 | 89 | 190 | 24 | 20 | 152.5 | 2 | 127 | 4 |
| ANSI Class300 |    | 210 | 29 | 22 | 168.5 |   | 127 | 8 |
| JIS 10K       | 89 | 185 | 18 | 19 | 150   | 2 | 126 | 8 |
| JIS 20K       |    | 200 | 22 | 23 | 160   |   | 132 |   |
| DIN PN 10/16  | 89 | 200 | 20 | 18 | 160   | 2 | 138 | 8 |
| DIN PN 25/40  |    |     | 24 |    |       |   |     |   |

#### Flange Size: 50mm (2 inch)

| Flange Rating | Mb | D   | b    | d2 | k     | f | d4  | x |
|---------------|----|-----|------|----|-------|---|-----|---|
| ANSI Class150 | 59 | 150 | 20   | 20 | 120.5 | 2 | 92  | 4 |
| ANSI Class300 |    | 165 | 22.5 |    | 127   |   |     | 8 |
| JIS 10K       | 59 | 155 | 16   | 19 | 120   | 2 | 96  | 4 |
| JIS 20K       |    |     | 18   |    |       |   |     | 8 |
| DIN PN 10/16  | 59 | 165 | 20   | 18 | 125   | 2 | 102 | 4 |
| DIN PN 25/40  |    |     |      |    |       |   |     |   |



## SMART PRESSURE TRANSMITTER

### Ordering Information

| MODEL NO.                              | Code | Description   |                              |
|--|------|---|------------------------------|
| APT3100                                | LFC  | Flush Diaphragm Seal and Capillary Type Transmitter (Two Remote Seal) |                              |
| Ranges                                 | 4    | 0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 KPa)                            |                              |
|  | 5    | 0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 KPa)                          |                              |
|  | 6    | 0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)                          |                              |
|  | X    | Special   |                              |
| Mounting Flange Size/Material          | S2   | 2-inch (50mm)   | SST                          |
|  | S3   | 3-inch (80mm)   | SST                          |
|  | XX   | Special   |                              |
| Mounting Flange Rating                 | A1   | ANSI Class 150  |                              |
|  | A2   | ANSI Class 300  |                              |
|  | J1   | JIS 10K   |                              |
|  | J2   | JIS 20K   |                              |
|  | D1   | DIN PN 10/16  |                              |
|  | D2   | DIN PN 25/40  |                              |
|  | XX   | Special   | Special                      |
| Wetted Parts Material Diaphragm/Others |      | DIAPHRAGM   | OTHERS                       |
|  | S    | 316L SST  | 316L SST                     |
|  | PT   | PTFE + 316L SST   | 316L SST                     |
|  | H    | Hastelloy C-276   | 316L SST                     |
|  | T    | Tantalum  | 316L SST                     |
|  | X    | Special   | Special                      |
| Fill Fluid                             |      | FILL FLUID  | TEMPERATURE LIMITS           |
|  | 2    | D.C Silicone 200  | -40 to 205 °C(-40 to 400 °F) |
|  | 7    | D.C Silicone 704  | 15 to 205 °C(60 to 400 °F)   |
|  | X    | Special   |                              |
| Capillary Length (m)                   |      | Capillary length from 1 to 12 m (Example for 3m : 03)                 |                              |
| Materials of Construction              |      | FLANGE  | VENT/DRAIN VALVE             |
|  | SS   | 316 SST   | 316 SST                      |
| Electrical Connection                  |      | ELECTRICAL CONNECTION   | MATERIAL                     |
|  | 1    | 1/2-14NPT   | Epoxy Coated-Aluminum        |
|  | 2    | G1/2  | Epoxy Coated-Aluminum        |
|  | X    | Special   |                              |

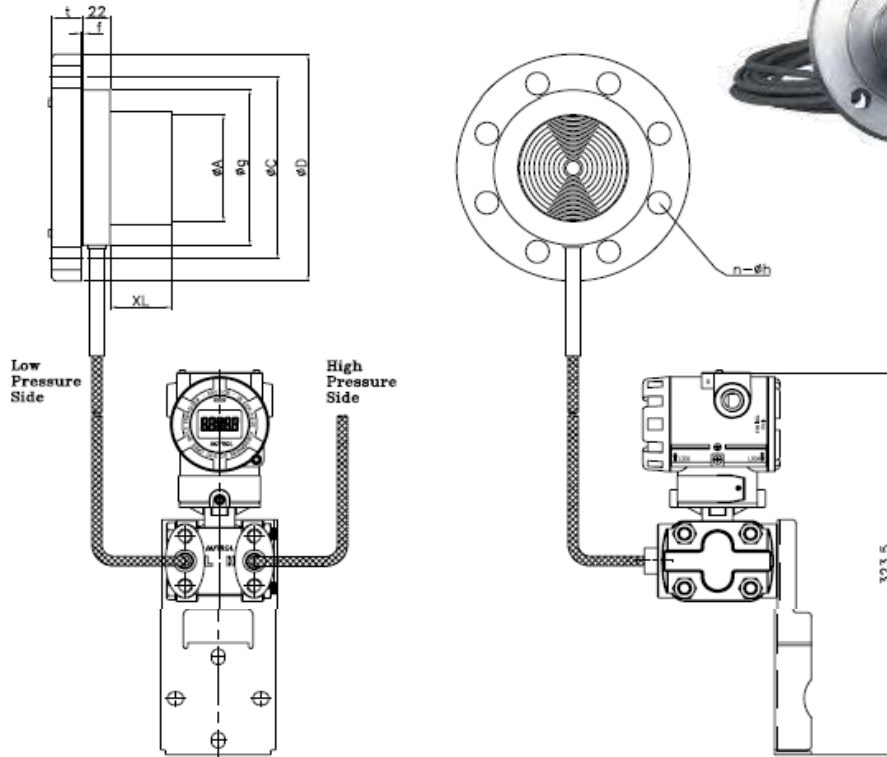
## SMART PRESSURE TRANSMITTER

|   |     |   |
|---|-----|---|
| Hazardous Locations Certifications (Option) | K0  | Maker Standard (Waterproof : IP67)                  |
|   | K1  | KOSHA Flameproof Approval: Ex d IIC T6.             |
|   | K2  | KTL Intrinsic Safety Approval : Ex ia IIC           |
|   | E1  | ATEX(KEMA) Flameproof                               |
|   | *E2 | ATEX(KEMA) Intrinsic Safety                         |
|   | F1  | FM/FMC Explosion proof (for USA & Canada)           |
|   | *F2 | FM Intrinsic Safety                                 |
|   | M1  | LCD Indicator                                       |
|   | LP  | Lighting Protector (Internal Type)                  |
|   | K   | Oil Free Finish                                     |
|   | BA  | Stainless Steel Bracket (Angle type) with SST Bolts |
|   | BF  | Stainless Steel Bracket (Flat type) with SST Bolts  |
|   | X   | Special Order                                       |

## SMART PRESSURE TRANSMITTER

### APT3100LEC

Extended Diaphragm Seal and Capillary Type Transmitter



#### Flange Size: 80mm (3 inch)

Unit: mm

| Flange Rating | Mb | D   | b  | d2 | k     | f   | d4  | d5 | x |
|---------------|----|-----|----|----|-------|-----|-----|----|---|
| ANSI Class150 | 72 | 190 | 24 | 20 | 152.5 | 1.6 | 127 | 76 | 4 |
| ANSI Class300 |    | 210 | 29 | 22 | 168.5 |     |     |    | 8 |
| JIS 10K       | 72 | 185 | 18 | 19 | 150   | 2   | 126 | 76 | 8 |
| JIS 20K       |    | 200 | 22 | 23 | 160   |     | 132 |    |   |
| DIN PN 10/16  | 72 | 200 | 20 | 18 | 160   | 2   | 138 | 76 | 8 |
| DIN PN 25/40  |    |     | 24 |    |       |     |     |    |   |

#### Flange Size: 50mm (2 inch)

| Flange Rating | Mb | D   | b    | d2 | k     | f | d4  | d5   | x |
|---------------|----|-----|------|----|-------|---|-----|------|---|
| ANSI Class150 | 47 | 150 | 20   | 20 | 120.5 | 2 | 92  | 48.3 | 4 |
| ANSI Class300 |    | 165 | 22.5 |    | 127   |   |     |      | 8 |
| JIS 10K       | 47 | 155 | 16   | 19 | 120   | 2 | 96  | 48.3 | 4 |
| JIS 20K       |    |     | 18   |    |       |   |     |      | 8 |
| DIN PN 10/16  | 47 | 165 | 20   | 18 | 125   | 2 | 102 | 48.3 | 4 |
| DIN PN 25/40  |    |     |      |    |       |   |     |      |   |

| Diaphragm Extension Length Code | R <sub>L</sub> |
|---------------------------------|----------------|
| 5                               | 50mm (2 inch)  |
| 10                              | 100mm (4 inch) |
| 15                              | 150mm (6 inch) |

For application support, quotations, pricing and lead times please contact our sales department directly at sales@autroltransmitters.com. Additional details including product technical specifications can be found online at www.autroltransmitters.com

## SMART PRESSURE TRANSMITTER

### Ordering Information

| MODEL NO.                              | Code | Description   |                                     |
|--|------|---|-------------------------------------|
| APT3100                                | LEC  | <i>Extended Diaphragm Seal and Capillary Type Transmitter (Two Remote</i> |                                     |
| Ranges                                 | 4    | <i>0-194 to 0-3800mmH2O (0-1.9 to 0-37.3 KPa)</i>                         |                                     |
|  | 5    | <i>0-960 to 0-19000mmH2O (0-9.4 to 0-186.5 KPa)</i>                       |                                     |
|  | 6    | <i>0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)</i>                       |                                     |
|  | X    | <i>Special</i>  |                                     |
| Mounting Flange Size/Material          | S2   | <i>2-inch (50mm)</i>  | <i>SST</i>                          |
|  | S3   | <i>3-inch (80mm)</i>  | <i>SST</i>                          |
|  | XX   | <i>Special</i>  |                                     |
| Mounting Flange Rating                 | A1   | <i>ANSI Class 150</i>   |                                     |
|  | A2   | <i>ANSI Class 300</i>   |                                     |
|  | J1   | <i>JIS 10K</i>  |                                     |
|  | J2   | <i>JIS 20K</i>  |                                     |
|  | D1   | <i>DIN PN 10/16</i>   |                                     |
|  | D2   | <i>DIN PN 25/40</i>   |                                     |
|  | XX   | <i>Special</i>  |                                     |
| Extension Length                       | 5    | <i>50mm (2 in.)</i>   |                                     |
|  | 10   | <i>100mm (4 in.)</i>  |                                     |
|  | 15   | <i>150mm (6 in.)</i>  |                                     |
|  | XX   | <i>Special</i>  |                                     |
| Wetted Parts Material Diaphragm/Others |      | <i>DIAPHRAGM</i>  | <i>OTHERS</i>                       |
|  | S    | <i>316L SST</i>   | <i>316L SST</i>                     |
|  | PT   | <i>PTFE + 316L SST</i>  | <i>316L SST</i>                     |
|  | H    | <i>Hastelloy C-276</i>  | <i>316L SST</i>                     |
|  | T    | <i>Tantalum</i>   | <i>316L SST</i>                     |
|  | X    | <i>Special</i>  | <i>Special</i>                      |
| Fill Fluid                             |      | <i>FILL FLUID</i>   | <i>TEMPERATURE LIMITS</i>           |
|  | 2    | <i>D.C Silicone 200</i>   | <i>-40 to 205 °C(-40 to 400 °F)</i> |
|  | 7    | <i>D.C Silicone 704</i>   | <i>15 to 205 °C(60 to 400 °F)</i>   |
|  | X    | <i>Special</i>  |                                     |
| Capillary Length (m)                   |      | <i>Capillary length from 1 to 12 mm (Example for 3m : 03)</i>             |                                     |
| Materials of Construction              |      | <i>FLANGE</i>   | <i>VENT/DRAIN VALVE</i>             |
|  | SS   | <i>316 SST</i>  | <i>316 SST</i>                      |
| Electrical Connection                  |      | <i>ELECTRICAL CONNECTION</i>  | <i>MATERIAL</i>                     |
|  | 1    | <i>1/2-14NPT</i>  | <i>Epoxy Coated-Aluminum</i>        |
|  | 2    | <i>G1/2</i>   | <i>Epoxy Coated-Aluminum</i>        |
|  | X    | <i>Special</i>  |                                     |

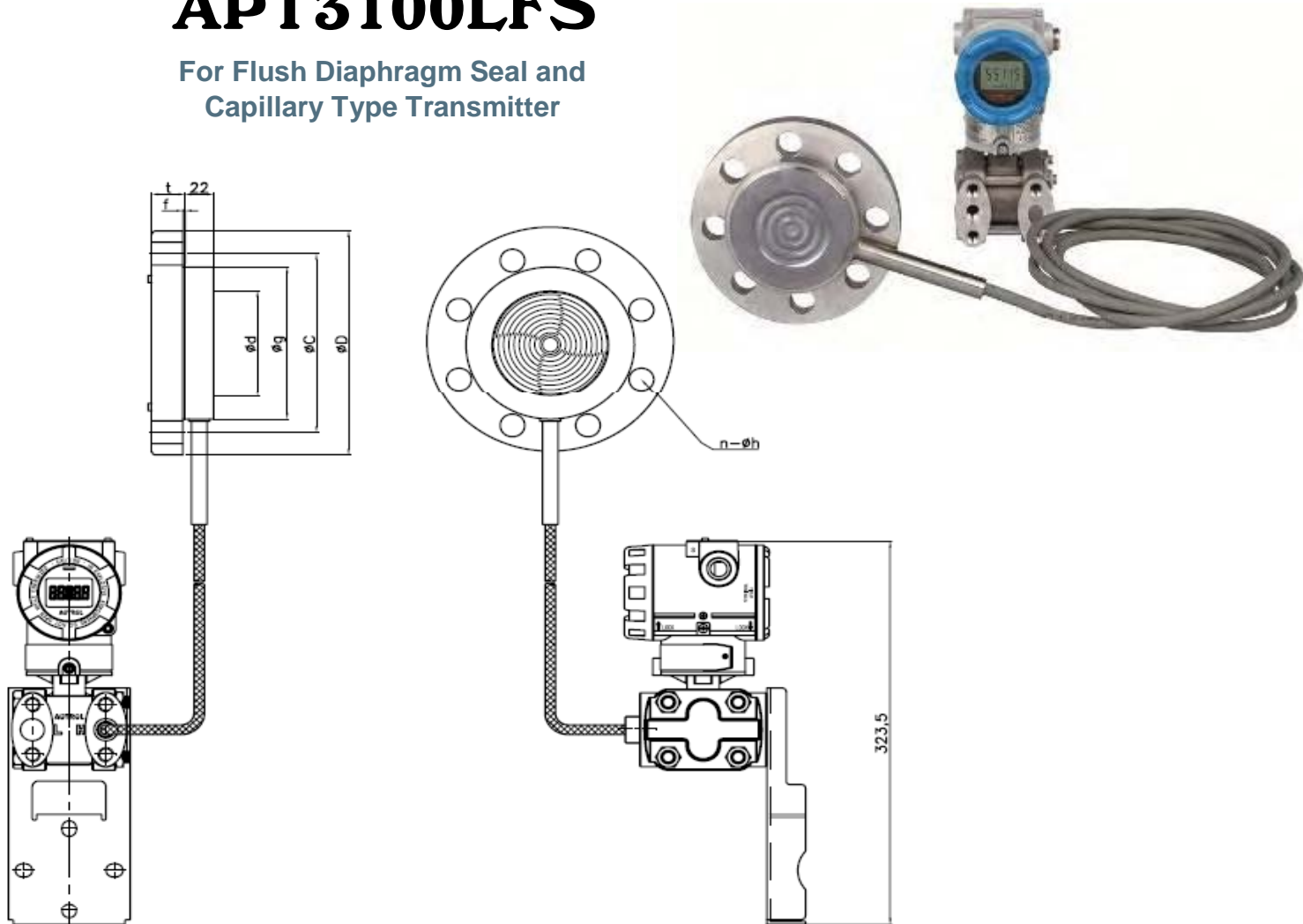
## SMART PRESSURE TRANSMITTER

|   |               |   |
|---|---------------|---|
| Hazardous Locations Certifications (Option) | K0            | Maker Standard (Waterproof : IP67)                  |
|   | K1            | KOSHA Flameproof Approval: Ex d IIC T6.             |
|   | K2            | KTL Intrinsic Safety Approval : Ex ia IIC           |
|   | E1            | ATEX(KEMA) Flameproof                               |
|   | *E2           | ATEX(KEMA) Intrinsic Safety                         |
|   | F1            | FM/FMC Explosion proof (for USA & Canada)           |
|   | F2            | FM Intrinsic Safety                                 |
|   | M1            | LCD Indicator                                       |
|   | LP            | Lighting Protector (Internal Type)                  |
|   | ET            | External Terminal Block                             |
|   | K             | Oil Free Finish                                     |
|   | BA            | Stainless Steel Bracket (Angle type) with SST Bolts |
|   | BF            | Stainless Steel Bracket (Flat type) with SST Bolts  |
| X   | Special Order |   |

## SMART PRESSURE TRANSMITTER

### APT3100LFS

For Flush Diaphragm Seal and Capillary Type Transmitter



#### Flange Size: 80mm (3 inch)

Unit: mm

| Flange Rating | Mb | D   | b  | d2 | k     | f | d4  | x |
|---------------|----|-----|----|----|-------|---|-----|---|
| ANSI Class150 | 89 | 190 | 24 | 20 | 152.5 | 2 | 127 | 4 |
| ANSI Class300 |    | 210 | 29 | 22 | 168.5 |   | 127 | 8 |
| JIS 10K       | 89 | 185 | 18 | 19 | 150   | 2 | 126 | 8 |
| JIS 20K       |    | 200 | 22 | 23 | 160   |   | 132 |   |
| DIN PN 10/16  | 89 | 200 | 20 | 18 | 160   | 2 | 138 | 8 |
| DIN PN 25/40  |    |     | 24 |    |       |   |     |   |

#### Flange Size: 50mm (2 inch)

| Flange Rating | Mb | D   | b    | d2 | k     | f | d4  | x |
|---------------|----|-----|------|----|-------|---|-----|---|
| ANSI Class150 | 59 | 150 | 20   | 20 | 120.5 | 2 | 92  | 4 |
| ANSI Class300 |    | 165 | 22.5 |    | 127   |   |     | 8 |
| JIS 10K       | 59 | 155 | 16   | 19 | 120   | 2 | 96  | 4 |
| JIS 20K       |    |     | 18   |    |       |   |     | 8 |
| DIN PN 10/16  | 59 | 165 | 20   | 18 | 125   | 2 | 102 | 4 |
| DIN PN 25/40  |    |     |      |    |       |   |     |   |

## SMART PRESSURE TRANSMITTER

### Ordering Information

| MODEL NO.                              | Code | Description   |                              |
|--|------|---|------------------------------|
| APT3100                                | LFS  | Flush Diaphragm Seal and Capillary Type Transmitter (One Remote Seal) |                              |
| Ranges                                 | 6    | 0-3518 to 0-7000mmH2O (0-34.5 to 0-690 KPa)                           |                              |
|  | 7    | 0-10565 to 0-211300mmH2O (0-103.4 to 0-2068 KPa)                      |                              |
|  | 8    | 0-35217 to 0-704340mmH2O (0-344.8 to 0-6895 KPa)                      |                              |
|  | X    | Special   |                              |
| Mounting Flange Size/Material          | S2   | 2-inch (50mm)   | SST                          |
|  | S3   | 3-inch (80mm)   | SST                          |
|  | XX   | Special   |                              |
| Mounting Flange Rating                 | A1   | ANSI Class 150  |                              |
|  | A2   | ANSI Class 300  |                              |
|  | J1   | JIS 10K   |                              |
|  | J2   | JIS 20K   |                              |
|  | D1   | DIN PN 10/16  |                              |
|  | D2   | DIN PN 25/40  |                              |
|  | XX   | Special   |                              |
| Wetted Parts Material Diaphragm/Others |      | DIAPHRAGM   | OTHERS                       |
|  | S    | 316L SST  | 316 SST                      |
|  | PT   | PTFE  | 316 SST                      |
|  | H    | Hastelloy C-276   | 316 SST                      |
|  | T    | Tantalum  | 316 SST                      |
|  | X    | Special   | Special                      |
| Fill Fluid                             |      | FILL FLUID  | TEMPERATURE LIMITS           |
|  | 2    | D.C Silicone 200  | -40 to 205 °C(-40 to 400 °F) |
|  | 7    | D.C Silicone 704  | 15 to 205 °C(60 to 400 °F)   |
|  | X    | Special   |                              |
| Capillary Length (m)                   |      | Capillary length from 1 to 12 mm (Example for 3m : 03)                |                              |
| Materials of Construction              |      | FLANGE  | VENT/DRAIN VALVE             |
|  | SS   | 316 SST   | 316 SST                      |
| Electrical Connection                  |      | ELECTRICAL CONNECTION   | MATERIAL                     |
|  | 1    | 1/2-14NPT   | Epoxy Coated-Aluminum        |
|  | 2    | G1/2  | Epoxy Coated-Aluminum        |
|  | X    | Special   |                              |

## SMART PRESSURE TRANSMITTER

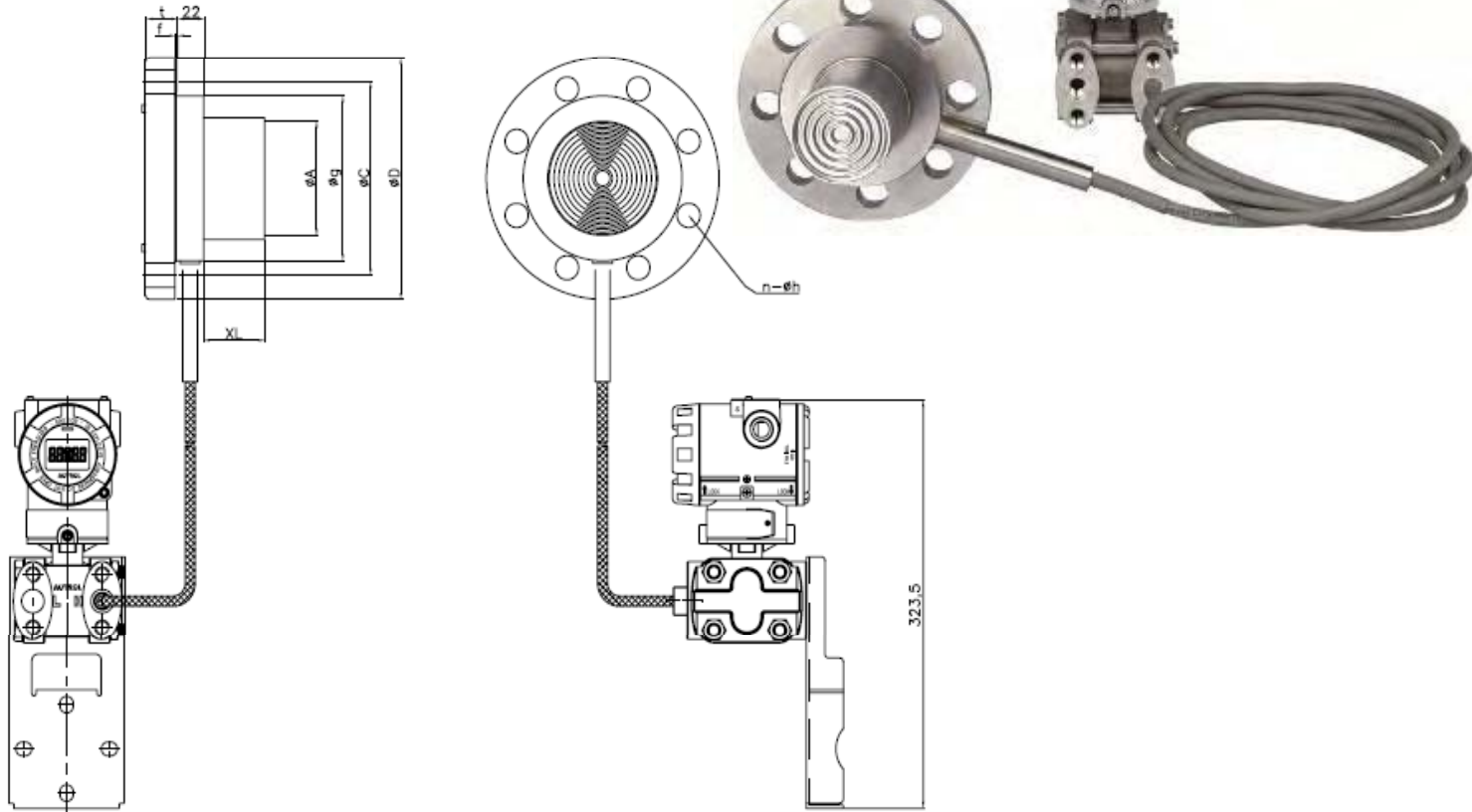
|   |     |   |
|---|-----|---|
| Hazardous Locations Certifications (Option) | K0  | Maker Standard (Waterproof : IP67)                  |
|   | K1  | KOSHA Flameproof Approval: Ex d IIC T6.             |
|   | K2  | KTL Intrinsic Safety Approval : Ex ia IIC           |
|   | E1  | ATEX(KEMA) Flameproof                               |
|   | *E2 | ATEX(KEMA) Intrinsic Safety                         |
|   | F1  | FM/FMC Explosion proof (for USA & Canada)           |
|   | *F2 | FM Intrinsic Safety                                 |
|   | M1  | LCD Indicator                                       |
|   | LP  | Lighting Protector (Internal Type)                  |
|   | K   | Oil Free Finish                                     |
|   | BA  | Stainless Steel Bracket (Angle type) with SST Bolts |
|   | BF  | Stainless Steel Bracket (Flat type) with SST Bolts  |
|   | X   | Special Order                                       |



## SMART PRESSURE TRANSMITTER

### APT3100LES

Extended Diaphragm Seal and Capillary Type Transmitter



Unit: mm

#### Flange Size: 80mm (3 inch)

| Flange Rating | Mb | D   | b  | d2 | k     | f   | d4  | d5 | x |
|---------------|----|-----|----|----|-------|-----|-----|----|---|
| ANSI Class150 | 72 | 190 | 24 | 20 | 152.5 | 1.6 | 127 | 76 | 4 |
| ANSI Class300 |    | 210 | 29 | 22 | 168.5 |     |     |    | 8 |
| JIS 10K       | 72 | 185 | 18 | 19 | 150   | 2   | 126 | 76 | 8 |
| JIS 20K       |    | 200 | 22 | 23 | 160   |     | 132 |    |   |
| DIN PN 10/16  | 72 | 200 | 20 | 18 | 160   | 2   | 138 | 76 | 8 |
| DIN PN 25/40  |    |     | 24 |    |       |     |     |    |   |

#### Flange Size: 50mm (2 inch)

| Flange Rating | Mb | D   | b    | d2 | k     | f | d4  | d5   | x |
|---------------|----|-----|------|----|-------|---|-----|------|---|
| ANSI Class150 | 47 | 150 | 20   | 20 | 120.5 | 2 | 92  | 48.3 | 4 |
| ANSI Class300 |    | 165 | 22.5 |    | 127   |   |     |      | 8 |
| JIS 10K       | 47 | 155 | 16   | 19 | 120   | 2 | 96  | 48.3 | 4 |
| JIS 20K       |    |     | 18   |    |       |   |     |      | 8 |
| DIN PN 10/16  | 47 | 165 | 20   | 18 | 125   | 2 | 102 | 48.3 | 4 |
| DIN PN 25/40  |    |     |      |    |       |   |     |      |   |

| Diaphragm Extension Length Code | R <sub>L</sub> |
|---------------------------------|----------------|
| 5                               | 50mm (2 inch)  |
| 10                              | 100mm (4 inch) |
| 15                              | 150mm (6 inch) |

For application support, quotations, pricing and lead times please contact our sales department directly at sales@autroltransmitters.com. Additional details including product technical specifications can be found online at www.autroltransmitters.com

## SMART PRESSURE TRANSMITTER

### Ordering Information

| MODEL NO.                              | Code | Description   |                              |
|--|------|---|------------------------------|
| APT3100                                | LES  | <i>Extended Diaphragm Seal and Capillary Type Transmitter (One Remote Seal)</i> |                              |
| Ranges                                 | 6    | 0-3518 to 0-70000mmH2O (0-34.5 to 0-690 KPa)                                    |                              |
|  | 7    | 0-10565 to 0-211300mmH2O (0-103.4 to 0-2068 KPa)                                |                              |
|  | 8    | 0-35217 to 0-704340mmH2O (0-344.8 to 0-6895 KPa)                                |                              |
|  | X    | <i>Special</i>  |                              |
| Mounting Flange Size/Material          | S2   | 2-inch (50mm)   | SST                          |
|  | S3   | 3-inch (80mm)   | SST                          |
|  | XX   | <i>Special</i>  |                              |
| Mounting Flange Rating                 | A1   | ANSI Class 150  |                              |
|  | A2   | ANSI Class 300  |                              |
|  | J1   | JIS 10K   |                              |
|  | J2   | JIS 20K   |                              |
|  | D1   | DIN PN 10/16  |                              |
|  | D2   | DIN PN 25/40  |                              |
|  | XX   | <i>Special</i>  |                              |
| Extension Length                       | 5    | 50mm (2 in.)  |                              |
|  | 10   | 100mm (4 in.)   |                              |
|  | 15   | 150mm (6 in.)   |                              |
|  | XX   | <i>Special</i>  |                              |
| Wetted Parts Material Diaphragm/Others |      | DIAPHRAGM   | OTHERS                       |
|  | S    | 316L SST  | 316 SST                      |
|  | PT   | PTFE  | 316 SST                      |
|  | H    | Hastelloy C-276   | 316 SST                      |
|  | T    | Tantalum  | 316 SST                      |
|  | X    | <i>Special</i>  | <i>Special</i>               |
| Fill Fluid                             |      | FILL FLUID  | TEMPERATURE LIMITS           |
|  | 2    | D.C Silicone 200  | -40 to 205 °C(-40 to 400 °F) |
|  | 7    | D.C Silicone 704  | 15 to 205 °C(60 to 400 °F)   |
|  | X    | <i>Special</i>  |                              |
| Capillary Length (m)                   |      | Capillary length from 1 to 12 mm (Example for 3m : 03)                          |                              |
| Materials of Construction              |      | FLANGE  | VENT/DRAIN VALVE             |
|  | SS   | 316 SST   | 316 SST                      |
| Electrical Connection                  |      | ELECTRICAL CONNECTION   | MATERIAL                     |
|  | 1    | 1/2-14NPT   | Epoxy Coated-Aluminum        |
|  | 2    | G1/2  | Epoxy Coated-Aluminum        |
|  | X    | <i>Special</i>  |                              |

## SMART PRESSURE TRANSMITTER

|   |            |  |
|---|------------|--|
| Hazardous Locations Certifications (Option) | <i>K0</i>  | <i>Maker Standard (Waterproof : IP67)</i>                  |
|   | <i>K1</i>  | <i>KOSHA Flameproof Approval : Ex d IIC T6.</i>            |
|   | <i>K2</i>  | <i>KTL Intrinsic Safety Approval : Ex ia IIC</i>           |
|   | <i>E1</i>  | <i>ATEX(KEMA) Flameproof</i>                               |
|   | <i>*E2</i> | <i>ATEX(KEMA) Intrinsic Safety</i>                         |
|   | <i>F1</i>  | <i>FM/FMC Explosion proof (for USA &amp; Canada)</i>       |
|   | <i>*F2</i> | <i>FM Intrinsic Safety</i>                                 |
|   | <i>M1</i>  | <i>LCD Indicator</i>                                       |
|   | <i>LP</i>  | <i>Lighting Protector (Internal Type)</i>                  |
|   | <i>K</i>   | <i>Oil Free Finish</i>                                     |
|   | <i>BA</i>  | <i>Stainless Steel Bracket (Angle type) with SST Bolts</i> |
|   | <i>BF</i>  | <i>Stainless Steel Bracket (Flat type) with SST Bolts</i>  |
|   | <i>X</i>   | <i>Special Order</i>                                       |

## SMART PRESSURE TRANSMITTER

www.autroltransmitters.com

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Email: [info@autroltransmitters.com](mailto:info@autroltransmitters.com)

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For application support, quotations, pricing and lead times please contact our sales department directly at [sales@autroltransmitters.com](mailto:sales@autroltransmitters.com). Additional details including product technical specifications can be found online at [www.autroltransmitters.com](http://www.autroltransmitters.com)

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