



**Model Selection Guide**

Model Selection Guides are subject to change and are inserted into the specifications as guidance only.

**Model STD700  
Differential Pressure Transmitter**

Model Selection Guide:  
34-ST-16-121 Issue 17

**Instructions:** Make selections from all Tables: Key through XIII using column below the proper arrow. Asterisk indicates availability. Letter (a) refer to restrictions highlighted in the restrictions table. Tables delimited with dashes.  
**List Price:** Price equals the sum of prices for all selections made.

Key      I      II      III      IV      V      VI      VII      VIII      IX  
 STD7\_\_ - \_\_\_\_\_ - \_\_\_ - \_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - 0000

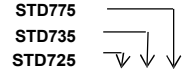
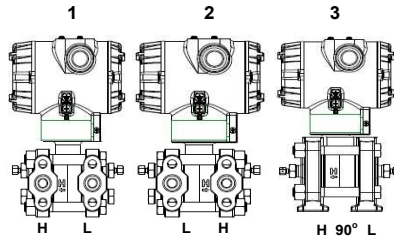
| KEY NUMBER           | URL        | LRL          | Max Span   | Min Span | Units                     |
|----------------------|------------|--------------|------------|----------|---------------------------|
| a. Measurement Range | 400/(1000) | -400/(-1000) | 400/(1000) | 4.0 (10) | " H <sub>2</sub> O (mbar) |
|                      | 100 (7.0)  | -100 (-7.0)  | 100 (7.0)  | 1 (0.07) | psi (bar)                 |
|                      | 3000 (210) | -100 (-7.0)  | 3000 (210) | 30 (2.1) | psi (bar)                 |

| Selection | Availability |
|-----------|--------------|
| STD725    | ↓            |
| STD735    | ↓            |
| STD775    | ↓            |

| TABLE I                                       |   | METER BODY SELECTIONS   |  |                                    |  |
|---|---|---|--|------------------------------------|--|
| a. Process Wetted Heads & Diaphragm Materials | Process Head Material   |   | Diaphragm Material                       |                                    |  |
|   | Plated Carbon Steel   |   | 316L Stainless Steel<br>Hastelloy® C-276 |                                    |  |
|   | 316 Stainless Steel   |   | 316L Stainless Steel<br>Hastelloy C-276  |                                    |  |
|   | Hastelloy C-276   |   | Hastelloy C-276                          |                                    |  |
| b. Fill Fluid                                 | Silicone Oil 200<br>Fluorinated Oil CTFE  |   |  |                                    |  |
| c. Process Connection                         | None<br>1/2" NPT female   | None (1/4" NPTF female thread Std)<br>Materials to Match Head & Head Bolt Materials Selections <sup>1</sup> |  |                                    |  |
| d. Bolt/Nut Materials                         | Carbon Steel<br>316 SS<br>Grade 660 (NACE A286) with NACE 304 SS Nuts<br>Grade 660 (NACE A286) Bolts & Nuts<br>Super Duplex |   |  |                                    |  |
| e. Vent/Drain Type/Location                   | Head Type   | Vent Type   | Location                                 | Vent Material                      |  |
|   | Single Ended  | None  | None                                     | None                               |  |
|   | Single Ended  | Standard Vent   | Side                                     | Matches Head Material <sup>1</sup> |  |
|   | Single Ended  | Center Vent   | Side                                     | Stainless Steel Only               |  |
|   | Dual Ended  | Standard Vent   | End                                      | Matches Head Material <sup>1</sup> |  |
|   | Dual Ended  | Center Vent   | End                                      | Stainless Steel Only               |  |
| Dual Ended                                    | Std Vent/Plug   | Side/End  | Matches Head Material <sup>1</sup>       |                                    |  |
| f. Gasket Material                            | Teflon® or PTFE (Glass Filled)<br>Viton® or Fluorocarbon Elastomer<br>Graphite  |   |  |                                    |  |
| g. Static Pressure                            | Standard Static Pressure - 4500 psig (315 bar)  |   |  |                                    |  |

|               |   |   |   |
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| B _____       | * | * | * |
| E _____       | * | * | * |
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| _ 2 _____     | * | * | * |
| _ A _____     | * | * | * |
| _ H _____     | * | * | * |
| _ C _____     | * | * | * |
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| _ D _____     | p | p | p |
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| _____ 4 _____ | * | * | * |
| _____ 5 _____ | t | t | t |
| _____ 6 _____ | * | * | * |
| _____ A _____ | * | * | * |
| _____ B _____ | * | * | * |
| _____ C _____ | * | * | * |
| _____ S _____ | * | * | * |

<sup>1</sup>Except Carbon Steel Heads shall use 316SS Vent/Drain, Plugs & Adapters when required



| TABLE II                 |             | Meter Body & Connection Orientation                                |
|--------------------------|-------------|--|
| Head/Connect Orientation | Standard    | High Side Left, Low Side Right <sup>2</sup> / Std Head Orientation |
|                          | Reversed    | Low Side Left, High Side Right <sup>2</sup> / Std Head Orientation |
|                          | 90/Standard | High Side Left, Low Side Right <sup>2</sup> / 90° Head Rotation    |

|   |   |   |   |
|---|---|---|---|
| 1 | * | * | * |
| 2 | * | * | * |
| 3 | h | h | h |

| TABLE III |   | Agency Approvals (see data sheet for Approval Code Details) |
|-----------|---|---|
| Approvals | No Approvals Required   |   |
|           | FM Explosion proof, Intrinsically Safe, Non-incendive, & Dustproof                        |   |
|           | CSA Explosion proof, Intrinsically Safe, Non-incendive, & Dustproof                       |   |
|           | ATEX Explosion proof, Intrinsically Safe & Non-incendive                                  |   |
|           | IECEX Explosion proof, Intrinsically Safe & Non-incendive                                 |   |
|           | SAEx Explosion proof, Intrinsically Safe & Non-incendive                                  |   |
|           | INMETRO Explosion proof, Intrinsically Safe & Non-incendive                               |   |
|           | NEPSI Explosion proof, Intrinsically Safe & Non-incendive                                 |   |
|           | EAC-Customs Union(Russia,Belarus and Kazakhstan)EX Approval Flameproof,Intrinsically Safe |   |
|           | CCoE Explosion proof, Intrinsically Safe & Non-incendive                                  |   |
|           | UATR Flameproof, Intrinsically Safe & Dustproof   |   |

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| G | * | * | * |
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| J | * | * | * |
| K | * | * | * |

| TABLE IV   |  | TRANSMITTER ELECTRONICS SELECTIONS |                      |  |
|--|--|------------------------------------|----------------------|--|
| a. Electronic Housing Material & Connection Type | Material   | Connection                         | Lightning Protection |  |
|  | Polyester Powder Coated Aluminum                 | 1/2 NPT                            | None                 |  |
|  | Polyester Powder Coated Aluminum                 | M20                                | None                 |  |
|  | Polyester Powder Coated Aluminum                 | 1/2 NPT                            | Yes                  |  |
|  | Polyester Powder Coated Aluminum                 | M20                                | Yes                  |  |
|  | 316 Stainless Steel (Grade CF8M)                 | 1/2 NPT                            | None                 |  |
|  | 316 Stainless Steel (Grade CF8M)                 | M20                                | None                 |  |
|  | 316 Stainless Steel (Grade CF8M)                 | 1/2 NPT                            | Yes                  |  |
| 316 Stainless Steel (Grade CF8M)                 | M20  | Yes                                |                      |  |
| b. Output/ Protocol                              | Analog Output                                    |                                    | Digital Protocol     |  |
|  | 4-20mA dc  |                                    | HART Protocol        |  |
| c. Customer Interface Selections                 | Indicator  | Ext Zero, Span & Config Buttons    | Languages            |  |
|  | None   | None                               | None                 |  |
|  | None   | Yes (Zero/Span Only)               | None                 |  |
|  | Standard (w/Internal Zero,Span & Config Buttons) | None                               | EN, RU               |  |
| Standard (w/Internal Zero,Span & Config Buttons) | Yes  | EN, RU                             |                      |  |

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| _ _ S | * | * | * |
| _ _ T | * | * | * |

| TABLE V  |   | CONFIGURATION SELECTIONS        |                                       |  |
|--|---|---------------------------------|---------------------------------------|--|
| a. Application Software                            | Diagnostics   |                                 |                                       |  |
|  | Standard Diagnostics                                    |                                 |                                       |  |
| b. Output Limit, Failsafe & Write Protect Settings | Write Protect   | Fail Mode                       | High & Low Output Limits <sup>3</sup> |  |
|  | Disabled  | High> 21.0mAdc                  | Honeywell Std (3.8 - 20.8 mAdc)       |  |
|  | Disabled  | Low< 3.6mAdc                    | Honeywell Std (3.8 - 20.8 mAdc)       |  |
|  | Enabled   | High> 21.0mAdc                  | Honeywell Std (3.8 - 20.8 mAdc)       |  |
| Enabled  | Low< 3.6mAdc  | Honeywell Std (3.8 - 20.8 mAdc) |                                       |  |
| c. General Configuration                           | Factory Standard  |                                 |                                       |  |
|  | Custom Configuration (Unit Data Required from customer) |                                 |                                       |  |

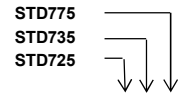
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| _ 3 _ | * | * | * |
| _ 4 _ | * | * | * |

|       |   |   |   |
|-------|---|---|---|
| _ _ S | * | * | * |
| _ _ C | * | * | * |

<sup>2</sup> Left side/Right side as viewed from the customer connection perspective

<sup>3</sup> NAMUR Output Limits 3.8 - 20.5mAdc can be configured by the customer or select custom configuration Table Vc



| TABLE VI CALIBRATION & ACCURACY SELECTIONS |          |                             |                    |
|--|----------|-----------------------------|--------------------|
| Accuracy and Calibration                   | Accuracy |                             | Calibration Qty    |
|  | Standard | Factory Std                 | Single Calibration |
|  |          | Custom (Unit Data Required) | Single Calibration |

|   |   |   |   |
|---|---|---|---|
| A | * | * | * |
| B | * | * | * |

| TABLE VII ACCESSORY SELECTIONS          |  |              |
|---|--|--------------|
| a. Mounting Bracket                     | Bracket Type   | Material     |
|   | a. Mounting Bracket  | None         |
| Angle Bracket                           |  | Carbon Steel |
| Angle Bracket                           |  | 304 SS       |
| Angle Bracket                           |  | 316 SS       |
| Marine Approved Bracket                 |  | 304 SS       |
| Flat Bracket                            |  | Carbon Steel |
| Flat Bracket                            |  | 304 SS       |
| Flat Bracket                            |  | 316 SS       |
| b. Customer Tag                         | Customer Tag Type  |              |
|   | No customer tag<br>One Wired Stainless Steel Tag (Up to 4 lines 26 char/line)  |              |
| c. Unassembled Conduit Plugs & Adapters | Unassembled Conduit Plugs & Adapters   |              |
|   | No Conduit Plugs or Adapters Required<br>1/2 NPT Male to 3/4 NPT Female 316 SS Certified Conduit Adapter<br>1/2 NPT 316 SS Certified Conduit Plug<br>M20 316 SS Certified Conduit Plug |              |

|   |     |   |   |   |
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| 0 | --- | * | * | * |
| 1 | --- | * | * | * |
| 2 | --- | * | * | * |
| 3 | --- | * | * | * |
| 4 | --- | * | * | * |
| 5 | --- | * | * | * |
| 6 | --- | * | * | * |
| 7 | --- | * | * | * |

|   |   |     |   |   |   |
|---|---|-----|---|---|---|
| _ | 0 | --- | * | * | * |
| _ | 1 | --- | * | * | * |

|     |    |   |   |   |
|-----|----|---|---|---|
| --- | A0 | * | * | * |
| --- | A2 | n | n | n |
| --- | A6 | n | n | n |
| --- | A7 | m | m | m |

| TABLE VIII OTHER Certifications & Options: (String in sequence comma delimited (XX, XX, XX,...)) |   |
|--|---|
| Certifications & Warranty  | None - No additional options  |
|  | NACE MR0175; MR0103; ISO 15156 Process wetted parts only              |
|  | NACE MR0175; MR0103; ISO 15156 Process wetted and non-wetted parts    |
|  | Marine (DNV,ABS,BV,KR,LR)   |
|  | EN10204 Type 3.1 Material Traceability                                |
|  | Certificate of Conformance  |
|  | Calibration Test Report & Certificate of Conformance                  |
|  | Certificate of Origin   |
|  | FMEDA (SIL 2/3) Certification   |
|  | Over-Pressure Leak Test Certificate (1.5X MAWP)                       |
|  | Cert Clean for O <sub>2</sub> or CL <sub>2</sub> service per ASTM G93 |
|  | PM Certification <sup>4</sup>   |
|  | Extended Warranty Additional 1 year                                   |
|  | Extended Warranty Additional 2 years                                  |
|  | Extended Warranty Additional 3 years                                  |
| Extended Warranty Additional 4 years   |   |

|    |   |   |   |   |
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| 00 | * | * | * | * |
| FG | * | * | * | * |
| F7 | c | c | c | b |
| MT | d | d | d |   |
| FX | * | * | * | * |
| F3 | * | * | * | * |
| F1 | * | * | * | b |
| F5 | * | * | * | * |
| FE | j | j | j |   |
| TP | * | * | * | * |
| OX | e | e | e |   |
| PM | * | * | * | * |
| 01 | * | * | * | * |
| 02 | * | * | * | * |
| 03 | * | * | * | * |
| 04 | * | * | * | * |

| TABLE IX Manufacturing Specials |                        |
|---------------------------------|------------------------|
| Factory                         | Factory Identification |

|      |   |   |   |   |
|------|---|---|---|---|
| 0000 | * | * | * | * |
|------|---|---|---|---|

MODEL RESTRICTIONS

| Restriction Letter | Available Only with                    |               | Not Available with |                            |
|--------------------|--|---------------|--------------------|----------------------------|
|                    | Table                                  | Selection(s)  | Table              | Selection(s)               |
| b                  | Select only one option from this group |               |                    |                            |
| c                  | 1d                                     | --- N,K,D --- |                    |                            |
| d                  | 1va                                    | C, D, G, H    | VIIa               | 1, 2, 3, 5, 6, 7           |
| e                  | 1b                                     | -- 2 -----    |                    |                            |
| h                  |  |               | 1e                 | --- 4, 5, 6 ---            |
|                    |  |               | VIIa               | 1, 2, 3, 4, 5, 6, 7        |
| j                  |  |               | Vb                 | -- 1,2 --                  |
| m                  | IV a                                   | B, D, F, H    |                    |                            |
| n                  | IV a                                   | A, C, E, G    |                    |                            |
| p                  |  |               | III                | B- No CRN number available |
| s                  | 1a                                     | A, E          |                    |                            |
| t                  |  |               | 1a                 | J -----                    |

<sup>4</sup>The PM option is available on all Smartline Pressure Transmitter process wetted parts such as process heads, flanges, bushings and vent plugs except plated carbon steel process heads and flanges. PM option information is also available on diaphragms except STG and STA in-line construction pressure transmitters.

FIELD INSTALLABLE REPLACEMENT PARTS

| Description   | Kit Number   | Price  |
|---|--------------|--------|
| Terminal Strip w/o Lightning Protection Kit for HART Module             | 50129832-501 | Note P |
| Terminal Strip w/Lightening Protection for HART Module                  | 50129832-502 | Note P |
| HART Electronics Module   | 50129828-501 | Note P |
| HART Electronics Module w/connection for external configuration buttons | 50129828-502 | Note P |
| Standard Display Module   | 50126003-501 | Note P |

Note P - For part number pricing please refer to WEB Channel

PRODUCT MANUALS

| Description   | Part Number |
|---|-------------|
| ST 700 Smart Transmitter User Manual - English                | 34-ST-25-44 |
| ST 700 Smart Transmitter HART Communications Manual - English | 34-ST-25-47 |
| ST 700 Smart Transmitter Safety Manual - English              | 34-ST-25-37 |

All product documentation is available at www.process.honeywell.com.



## Sales and Service

For application assistance, current specifications, ordering, pricing, and name of the nearest Authorized Distributor, contact one of the offices below.

### ASIA PACIFIC

Honeywell Process Solutions,  
Phone: + 800 12026455 or  
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[hfs-tac-support@honeywell.com](mailto:hfs-tac-support@honeywell.com)

#### Web

Knowledge Base search  
engine <http://bit.ly/2N5Vldi>

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Honeywell Process Solutions,  
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(Sales) 1-800-343-0228

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#### Web

Knowledge Base search  
engine <http://bit.ly/2N5Vldi>

*Specifications are subject to change without notice.*

### For more information

To learn more about SmartLine Pressure Transmitters visit [www.process.honeywell.com](http://www.process.honeywell.com)  
Or contact your Honeywell Account Manager

### Process Solutions

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Shanghai, China 20061

[www.process.honeywell.com](http://www.process.honeywell.com)

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