

# ST3000 Series 900

## Electric Differential Pressure Transmitter

### Model STD910 (Standard Type for Lowest Differential Pressure)

Model No. : STD910 - I II III - 00000 - Option I - Option II

Basic Model No.

|                |                                |        |
|----------------|--------------------------------|--------|
| Measuring Span | 0.1 to 2.0kPa (10 to 200mmH2O) | STD910 |
|----------------|--------------------------------|--------|

|                          |                |
|--------------------------|----------------|
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| Selection I |                    |                  |                                                                  |                |                  | Code                                  | Price | Material Code |   |
|-------------|--------------------|------------------|------------------------------------------------------------------|----------------|------------------|---------------------------------------|-------|---------------|---|
| I           | Material           |                  | Meter Body Cover                                                 | Adapter Flange | Vent/Drain Plugs | Wetted Parts of Center Body           |       |               | E |
|             |                    |                  | SCS14A *1                                                        | SCS14A*1       | SUS316           | Diaphragm: SUS316L<br>Others : SUS316 | E     | 320           |   |
| II          | Fill Fluid         |                  | Regular type (Silicone oil)                                      |                |                  |                                       | 1     | 0             | ✓ |
|             |                    |                  | For oxygen service (Fluorine oil) *3                             |                |                  |                                       | 2     | 18            | ✓ |
| III         | Process Connection | Front Connection | Rc1/2 with adapter flange                                        |                |                  |                                       | J     | 6             | ✓ |
|             |                    |                  | 1/2NPT internal thread with adapter flange                       |                |                  |                                       | H     | 6             | ✓ |
|             |                    |                  | Rc1/4 with adapter flange                                        |                |                  |                                       | M     | 6             | ✓ |
|             |                    |                  | 1/4NPT internal thread with adapter flange                       |                |                  |                                       | N     | 6             | ✓ |
|             |                    |                  | 1/4NPT internal thread on head                                   |                |                  |                                       | P     | 0             | ✓ |
|             |                    |                  |                                                                  |                |                  |                                       | -     |               |   |
|             |                    |                  |                                                                  |                |                  |                                       | 00000 |               |   |
|             |                    |                  |                                                                  |                |                  |                                       | -     |               |   |
| Options I   |                    |                  | No options                                                       |                |                  | X                                     | 0     |               |   |
|             |                    |                  | Lightning arrester                                               |                |                  | L                                     | 17    | ✓             |   |
|             |                    |                  | Built-in indicating smart meter(0 to 100% liner scales)          |                |                  | P                                     | 20    | ✓             |   |
|             |                    |                  | Built-in indicating smart meter(engineering unit scales)         |                |                  | R                                     | 30    | ✓             |   |
|             |                    |                  | SUS304 Bolt and nuts material *4                                 |                |                  | W                                     | 0     | ✓             |   |
|             |                    |                  | SUS630 Bolt and nuts material *4                                 |                |                  | U                                     | 35    | ✓             |   |
|             |                    |                  | Corrosion-resistant finish                                       |                |                  | A                                     | 11    | ✓             |   |
|             |                    |                  | Corrosion-proof finish                                           |                |                  | B                                     | 14    | ✓             |   |
|             |                    |                  | Corrosion-resistant finish, silver paint                         |                |                  | D                                     | 16    | ✓             |   |
|             |                    |                  | Oil Free finish                                                  |                |                  | K                                     | 10    | ✓             |   |
|             |                    |                  | Long Vent/drain plugs                                            |                |                  | J                                     | 5     | ✓             |   |
|             |                    |                  | FM Explosionproof                                                |                |                  | 3                                     | 8     | ✓             |   |
|             |                    |                  | FM Intrinsically safe                                            |                |                  | 4                                     | 8     | ✓             |   |
|             |                    |                  | Combination of FM Explosionproof and Intrinsically safe          |                |                  | 5                                     | 11    | ✓             |   |
|             |                    |                  | ATEX Flameproof                                                  |                |                  | 6                                     | 7     | ✓             |   |
|             |                    |                  | ATEX Intrinsic safety                                            |                |                  | 7                                     | 8     | ✓             |   |
|             |                    |                  | CSA Explosion-proof                                              |                |                  | 8                                     | 7     | ✓             |   |
|             |                    |                  | -                                                                |                |                  |                                       |       |               |   |
| Options II  |                    |                  | No options                                                       |                |                  | XX                                    | 0     | ✓             |   |
|             |                    |                  | Burn-out feature (Lower limit of value at abnormal condition) *2 |                |                  | A4                                    | 7     | ✓             |   |
|             |                    |                  | Burn-out feature (Upper limit of value at abnormal condition) *2 |                |                  | A5                                    | 7     | ✓             |   |
|             |                    |                  | Water free finish (with Oil free finish)                         |                |                  | A7                                    | 17    | ✓             |   |
|             |                    |                  | NEPSI Flameproof                                                 |                |                  | C1                                    | 8     | ✓             |   |
|             |                    |                  | NEPSI Intrinsically safe                                         |                |                  | C2                                    | 8     | ✓             |   |
|             |                    |                  | Combination of NEPSI Flameproof and Intrinsically safe           |                |                  | C3                                    | 11    | ✓             |   |
|             |                    |                  | Custom calibration                                               |                |                  | C7                                    | 5     | ✓             |   |
|             |                    |                  | Digital output *38                                               |                |                  | D5                                    | 0     | ✓             |   |
|             |                    |                  | HART communication *38                                           |                |                  | D7                                    | 5     | ✓             |   |
|             |                    |                  | One Elbow                                                        |                |                  | E1                                    | 2     | ✓             |   |
|             |                    |                  | Two Elbows                                                       |                |                  | E2                                    | 4     | ✓             |   |
|             |                    |                  | External zero/span adjustment                                    |                |                  | E5                                    | 30    | ✓             |   |
|             |                    |                  | Mounting bracket                                                 |                |                  | E9                                    | 2     | ✓             |   |
|             |                    |                  | Side vent/drain top                                              |                |                  | F1                                    | 4     | ✓             |   |
|             |                    |                  | Side vent/drain bottom                                           |                |                  | F2                                    | 4     | ✓             |   |
|             |                    |                  | Material certificate                                             |                |                  | H2                                    | 21    | ✓             |   |
|             |                    |                  | SI unit                                                          |                |                  | U1                                    | 5     | ✓             |   |

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*2 The output current value ranges from 3.0 to 3.8 mA for the lower limit and from 20.8 to 21.8 mA for the upper limit

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected

\*4 Notes of "Order Entry" : "W" or "U" must be selected.

\*38 Either one of "Digital output - code D5" or "HART communication -code D7" can be selected at a time.

**ST3000 Series 900****Electric Differential Pressure Transmitter****Model STD920 (Standard Type for Medium Differential Pressure)**

Model No. : STD920 - I II III - 00000 - Option I - Option II

Basic Model No.

|                |                                                 |        |
|----------------|-------------------------------------------------|--------|
| Measuring Span | 0.75 to 100kPa (75 to 10,160mmH <sub>2</sub> O) | STD920 |
|----------------|-------------------------------------------------|--------|

|                          |                |
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| Selection I                            |                    |                                                                  |                                               |                             | Code                                               | Price | Material Code |   |   |   |   |   |   |   |   |
|----------------------------------------|--------------------|------------------------------------------------------------------|-----------------------------------------------|-----------------------------|----------------------------------------------------|-------|---------------|---|---|---|---|---|---|---|---|
| I                                      | Material           | Meter Body cover                                                 | Adapter Flange                                | Vent/Dra in Plugs           | Wetted Parts of Center Body                        |       |               | E | F | H | U | M | P |   |   |
|                                        |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316                      | Diaphragm:SUS316L<br>Others : SUS316               | E     | 310           |   |   |   |   |   |   |   |   |
|                                        |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316                      | Diaphragm : Hastelloy C<br>Others : Hastelloy C    | F     | 398           |   |   |   |   |   |   |   |   |
|                                        |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316                      | Diaphragm : Tantalum<br>Others : Tantalum          | H     | 500           |   |   |   |   |   |   |   |   |
|                                        |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316                      | Diaphragm:SUS316L<br>Others : SUS316L              | U     | 500           |   |   |   |   |   |   |   |   |
|                                        |                    | PVC                                                              | PVC                                           | PVC                         | Diaphragm : Hastelloy C<br>Others : Hastelloy C *8 | M     | 418           |   |   |   |   |   |   |   |   |
|                                        |                    | PVC                                                              | PVC                                           | PVC                         | Diaphragm : Tantalum<br>Others : Tantalum *8       | P     | 490           |   |   |   |   |   |   |   |   |
|                                        |                    | II                                                               | Fill Fluid                                    | Regular type (Silicone oil) |                                                    |       |               |   |   |   |   |   |   | 1 | 0 |
| For oxygen service (Fluorine oil) *3   |                    |                                                                  |                                               | 2                           | 18                                                 | ✓     | ✓             | ✓ | ✓ | ✓ | ✓ |   |   |   |   |
| For chlorine service (Fluorine oil) *3 |                    |                                                                  |                                               | 5                           | 18                                                 |       |               | ✓ |   |   | ✓ |   |   |   |   |
| III                                    | Process Connection | Front Connection                                                 | Rc1/2 with adapter flange                     |                             |                                                    |       | J             | 6 | ✓ | ✓ |   |   |   |   |   |
|                                        |                    |                                                                  | 1/2NPT internal thread with adapter flange    |                             |                                                    |       | H             | 6 | ✓ | ✓ |   |   |   |   |   |
|                                        |                    |                                                                  | Rc1/4 with adapter flange                     |                             |                                                    |       | M             | 6 | ✓ | ✓ |   |   |   |   |   |
|                                        |                    |                                                                  | 1/4NPT internal thread with adapter flange    |                             |                                                    |       | N             | 6 | ✓ | ✓ |   |   |   |   |   |
|                                        |                    |                                                                  | 1/4NPT internal thread on head                |                             |                                                    |       | P             | 0 | ✓ | ✓ |   |   |   |   |   |
|                                        |                    |                                                                  |                                               |                             |                                                    |       |               |   |   |   |   |   |   |   |   |
|                                        |                    | Top or Bottom Connection                                         | Rc1/2 with adapter flange *7                  |                             |                                                    |       | Q             | 6 |   |   | ✓ | ✓ | ✓ | ✓ |   |
|                                        |                    |                                                                  | 1/2NPT internal thread with adapter flange *7 |                             |                                                    |       | R             | 6 |   |   | ✓ | ✓ | ✓ | ✓ |   |
|                                        |                    |                                                                  | Rc1/4 with adapter flange *7                  |                             |                                                    |       | S             | 6 |   |   | ✓ | ✓ |   |   |   |
|                                        |                    |                                                                  | 1/4NPT internal thread with adapter flange *7 |                             |                                                    |       | T             | 6 |   |   | ✓ | ✓ |   |   |   |
|                                        |                    |                                                                  | 1/4NPT internal thread on head *7             |                             |                                                    |       | U             | 0 |   |   | ✓ | ✓ |   |   |   |
|                                        |                    |                                                                  |                                               |                             |                                                    |       |               |   |   |   |   |   |   |   |   |
|                                        |                    |                                                                  |                                               |                             | 00000                                              |       |               |   |   |   |   |   |   |   |   |
| Options I                              |                    | No options                                                       |                                               |                             |                                                    | X     | 0             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Lightning arrester                                               |                                               |                             |                                                    | L     | 17            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Built-in indicating smart meter(0 to 100% liner scales)          |                                               |                             |                                                    | P     | 20            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Built-in indicating smart meter(engineering unit scales)         |                                               |                             |                                                    | R     | 30            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | SUS304 Bolt and nuts material                                    |                                               |                             |                                                    | W     | 11            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | SUS630 Bolt and nuts material                                    |                                               |                             |                                                    | U     | 35            | ✓ | ✓ | ✓ |   |   |   |   |   |
|                                        |                    | Corrosion-resistant finish                                       |                                               |                             |                                                    | A     | 11            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Corrosion-proof finish                                           |                                               |                             |                                                    | B     | 14            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Corrosion-resistant finish, silver paint                         |                                               |                             |                                                    | D     | 16            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Oil Free finish                                                  |                                               |                             |                                                    | K     | 10            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Long Vent/drain plugs                                            |                                               |                             |                                                    | J     | 5             | ✓ | ✓ | ✓ |   |   |   |   |   |
|                                        |                    | FM Explosionproof                                                |                                               |                             |                                                    | 3     | 8             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | FM Intrinsically safe                                            |                                               |                             |                                                    | 4     | 8             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Combination of FM Explosionproof and Intrinsically safe          |                                               |                             |                                                    | 5     | 11            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | ATEX Flameproof                                                  |                                               |                             |                                                    | 6     | 7             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | ATEX Intrinsic safety                                            |                                               |                             |                                                    | 7     | 8             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | CSA Explosion-proof                                              |                                               |                             |                                                    | 8     | 7             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    |                                                                  |                                               |                             |                                                    |       |               |   |   |   |   |   |   |   |   |
| Options II                             |                    | No option                                                        |                                               |                             |                                                    | XX    | 0             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Adapter flange for corrosion -resistant application *6           |                                               |                             |                                                    | A1    | 15            |   |   | ✓ | ✓ |   | ✓ |   |   |
|                                        |                    | Burn-out feature (Lower limit of value at abnormal condition) *2 |                                               |                             |                                                    | A4    | 7             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Burn-out feature (Upper limit of value at abnormal condition) *2 |                                               |                             |                                                    | A5    | 7             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Water free finish (with Oil free finish)                         |                                               |                             |                                                    | A7    | 17            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | NEPSI Flameproof                                                 |                                               |                             |                                                    | C1    | 8             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | NEPSI Intrinsically safe                                         |                                               |                             |                                                    | C2    | 8             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Combination of NEPSI Flameproof and Intrinsically safe           |                                               |                             |                                                    | C3    | 11            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Custom calibration                                               |                                               |                             |                                                    | C7    | 5             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Digital output *38                                               |                                               |                             |                                                    | D5    | 0             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | HART communication *38                                           |                                               |                             |                                                    | D7    | 5             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | One Elbow                                                        |                                               |                             |                                                    | E1    | 2             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Two Elbows                                                       |                                               |                             |                                                    | E2    | 4             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | External zero/span adjustment                                    |                                               |                             |                                                    | E5    | 30            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Mounting bracket                                                 |                                               |                             |                                                    | E9    | 2             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Side vent/drain top                                              |                                               |                             |                                                    | F1    | 4             | ✓ | ✓ |   |   |   |   |   |   |
|                                        |                    | Side vent/drain bottom                                           |                                               |                             |                                                    | F2    | 4             | ✓ |   |   |   |   |   |   |   |
|                                        |                    | PED (97/23/EC) Conformity *34 *35                                |                                               |                             |                                                    | H1    | 40            | ✓ | ✓ | ✓ | ✓ |   |   |   |   |
|                                        |                    | Material certificate                                             |                                               |                             |                                                    | H2    | 21            | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |
|                                        |                    | Max working pressure 20MPa *35 *37                               |                                               |                             |                                                    | H3    | 0             | ✓ | ✓ | ✓ | ✓ |   |   |   |   |
|                                        |                    | SI unit                                                          |                                               |                             |                                                    | U1    | 5             | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |

\*1 SCS14A (Equivalent SUS316) or SUS316

\*2 The output current value ranges from 3.0 to 3.8 mA for the lower limit and from 20.8 to 21.8 mA for the upper limit.

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*6 In case Manifold valve is used and in case code D, H, U or P is used, please select code A1 of OptionII

\*7 Applicable for wetted parts of center body material ;Tantalum,SUS316L

\*8 SUS304 bolts and nuts material (-W) must be selected when PVC meterbody cover is selected (-M or -P).The max. working pressure is 1.5MPa.

\*11 When SUS304 bolt/nut is selected, max working pressure rating is 7MPa(70kgf/cm<sup>2</sup>).

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*35 Not applicable for the combination with "SUS304 Bolts/Nuts"

\*37 Not applicable for the combination with "PED Conformity"

\*38 Either one of "Digital output - code D5" or "HART communication -code D7" can be selected at a time.

**ST3000 Series 900****Electric Differential Pressure Transmitter****Model STD930 (Standard Type for High Differential Pressure)**

Model No. : STD930 - I II III - 00000 - Option I - Option II

Basic Model No.

|                          |                |
|--------------------------|----------------|
| Issued : Jun. 15, 2001   | Page : 1-1-3   |
| Effective : Jan. 1, 2006 | UNIT : 1000YEN |

|                |                                              |        |
|----------------|----------------------------------------------|--------|
| Measuring Span | 35 to 700kPa (0.35 to 7kgf/cm <sup>2</sup> ) | STD930 |
|----------------|----------------------------------------------|--------|

| Selection I         |                    |                                                                  |                                               | Code             | Price                                              | Material Code |     |   |   |   |   |   |   |   |  |
|---------------------|--------------------|------------------------------------------------------------------|-----------------------------------------------|------------------|----------------------------------------------------|---------------|-----|---|---|---|---|---|---|---|--|
| I                   | Material           | Meter Body Cover                                                 | Adapter Flange                                | Vent/Drain Plugs | Wetted Parts or Center Body                        |               |     | E | F | H | U | M | P |   |  |
|                     |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316           | Diaphragm:SUS316L<br>Others : SUS316               | E             | 323 |   |   |   |   |   |   |   |  |
|                     |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316           | Diaphragm : Hastelloy C<br>Others : Hastelloy C    | F             | 411 |   |   |   |   |   |   |   |  |
|                     |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316           | Diaphragm : Tantalum<br>Others : Tantalum          | H             | 513 |   |   |   |   |   |   |   |  |
|                     |                    | SCS14A*1                                                         | SCS14A*1                                      | SUS316           | Diaphragm:SUS316L<br>Others : SUS316L              | U             | 513 |   |   |   |   |   |   |   |  |
|                     |                    | PVC                                                              | PVC                                           | PVC              | Diaphragm : Hastelloy C<br>Others : Hastelloy C *6 | M             | 431 |   |   |   |   |   |   |   |  |
|                     |                    | PVC                                                              | PVC                                           | PVC              | Diaphragm : Tantalum<br>Others : Tantalum *6       | P             | 503 |   |   |   |   |   |   |   |  |
|                     |                    |                                                                  |                                               |                  |                                                    |               |     |   |   |   |   |   |   |   |  |
| II                  | Fill Fluid         | Regular type (Silicone oil)                                      |                                               |                  |                                                    | 1             | 0   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |  |
|                     |                    | For oxygen service (Fluorine oil) *8                             |                                               |                  |                                                    | 2             | 18  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |   |  |
|                     |                    | For chlorine service (Fluorine oil) *8                           |                                               |                  |                                                    | 5             | 18  |   | ✓ |   |   |   | ✓ |   |  |
| III                 | Process Connection | Front Connection                                                 | Rc1/2 with adapter flange                     |                  |                                                    |               | J   | 6 | ✓ | ✓ |   |   |   |   |  |
|                     |                    |                                                                  | 1/2NPT internal thread with adapter flange    |                  |                                                    |               | H   | 6 | ✓ | ✓ |   |   |   |   |  |
|                     |                    |                                                                  | Rc1/4 with adapter flange                     |                  |                                                    |               | M   | 6 | ✓ | ✓ |   |   |   |   |  |
|                     |                    |                                                                  | 1/4NPT internal thread with adapter flange    |                  |                                                    |               | N   | 6 | ✓ |   |   |   |   |   |  |
|                     |                    |                                                                  | 1/4NPT internal thread on head                |                  |                                                    |               | P   | 0 | ✓ |   |   |   |   |   |  |
|                     |                    |                                                                  |                                               |                  |                                                    |               |     |   |   |   |   |   |   |   |  |
|                     |                    | Top or Bottom Connection                                         | Rc1/2 with adapter flange *7                  |                  |                                                    |               | Q   | 6 |   |   | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    |                                                                  | 1/2NPT internal thread with adapter flange *7 |                  |                                                    |               | R   | 6 |   |   |   |   | ✓ | ✓ |  |
|                     |                    |                                                                  | Rc1/4 with adapter flange *7                  |                  |                                                    |               | S   | 6 |   |   |   | ✓ | ✓ |   |  |
|                     |                    |                                                                  | 1/4NPT internal thread with adapter flange *7 |                  |                                                    |               | T   | 6 |   |   |   | ✓ | ✓ |   |  |
|                     |                    |                                                                  | 1/4NPT internal thread on head *7             |                  |                                                    |               | U   | 0 |   |   |   | ✓ | ✓ |   |  |
|                     |                    |                                                                  |                                               |                  |                                                    |               |     |   |   |   |   |   |   |   |  |
|                     |                    |                                                                  |                                               |                  |                                                    | 00000         |     |   |   |   |   |   |   |   |  |
| Options I           |                    | No options                                                       |                                               |                  |                                                    | X             | 0   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Lightning arrester                                               |                                               |                  |                                                    | L             | 17  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Built-in indicating smart meter(0 to 100% liner scales)          |                                               |                  |                                                    | P             | 20  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Built-in indicating smart meter(engineering unit scales)         |                                               |                  |                                                    | R             | 30  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | SUS304 Bolt and nuts material                                    |                                               |                  |                                                    | W             | 11  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | SUS630 Bolt and nuts material                                    |                                               |                  |                                                    | U             | 35  | ✓ | ✓ | ✓ | ✓ |   |   |   |  |
|                     |                    | Corrosion-resistant finish                                       |                                               |                  |                                                    | A             | 11  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Corrosion-proof finish                                           |                                               |                  |                                                    | B             | 14  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Corrosion-resistant finish, silver paint                         |                                               |                  |                                                    | D             | 16  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Oil Free finish                                                  |                                               |                  |                                                    | K             | 10  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Long Vent/drain plugs                                            |                                               |                  |                                                    | J             | 5   | ✓ | ✓ | ✓ | ✓ |   |   |   |  |
|                     |                    | FM Explosionproof                                                |                                               |                  |                                                    | 3             | 8   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | FM Intrinsically safe                                            |                                               |                  |                                                    | 4             | 8   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Combination of FM Explosionproof and Intrinsically safe          |                                               |                  |                                                    | 5             | 11  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | ATEX Flameproof                                                  |                                               |                  |                                                    | 6             | 7   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | ATEX Intrinsic safety                                            |                                               |                  |                                                    | 7             | 8   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
| CSA Explosion-proof |                    |                                                                  |                                               | 8                | 7                                                  | ✓             | ✓   | ✓ | ✓ | ✓ | ✓ | ✓ |   |   |  |
| Options II          |                    | No option                                                        |                                               |                  |                                                    | XX            | 0   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Adapter flange for corrosion -resistant application *6           |                                               |                  |                                                    | A1            | 15  |   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Burn-out feature (Lower limit of value at abnormal condition) *2 |                                               |                  |                                                    | A4            | 7   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Burn-out feature (Upper limit of value at abnormal condition) *2 |                                               |                  |                                                    | A5            | 7   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Water free finish (with Oil free finish)                         |                                               |                  |                                                    | A7            | 17  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | NEPSI Flameproof                                                 |                                               |                  |                                                    | C1            | 8   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | NEPSI Intrinsically safe                                         |                                               |                  |                                                    | C2            | 8   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Combination of NEPSI Flameproof and Intrinsically safe           |                                               |                  |                                                    | C3            | 11  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Custom calibration                                               |                                               |                  |                                                    | C7            | 5   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Digital output *38                                               |                                               |                  |                                                    | D5            | 0   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | HART communication *38                                           |                                               |                  |                                                    | D7            | 5   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | One Elbow                                                        |                                               |                  |                                                    | E1            | 2   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Two Elbows                                                       |                                               |                  |                                                    | E2            | 4   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | External zero/span adjustment                                    |                                               |                  |                                                    | E5            | 30  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Mounting bracket                                                 |                                               |                  |                                                    | E9            | 2   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Side vent/drain top                                              |                                               |                  |                                                    | F1            | 4   | ✓ | ✓ |   |   |   |   |   |  |
|                     |                    | Side vent/drain bottom                                           |                                               |                  |                                                    | F2            | 4   | ✓ |   |   |   |   |   |   |  |
|                     |                    | PED (97/23/EC) Conformity *34 *35                                |                                               |                  |                                                    | H1            | 40  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Material certificate                                             |                                               |                  |                                                    | H2            | 21  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | Max working pressure 20MPa *35 *37                               |                                               |                  |                                                    | H3            | 0   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |
|                     |                    | SI unit                                                          |                                               |                  |                                                    | U1            | 5   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  |

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*2 The output current value ranges from 3.0 to 3.8 mA for the lower limit and from 20.8 to 21.8 mA for the upper limit.

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*6 In case Manifold valve is used and in case code D, H, U or P is used, please select code A1 of OptionII

\*7 Applicable for wetted parts of center body material ;Tantalum,SUS316L

\*8 SUS304 bolts and nuts material (-W) must be selected when PVC meterbody cover is selected (-M or -P).The max. working pressure is 1.5MPa.

\*11 When SUS304 bolt/nut is selected, max working pressure rating is 7MPa(70kgf/cm<sup>2</sup>).

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*35 Not applicable for the combination with "SUS304 Bolts/Nuts"

\*37 Not applicable for the combination with "PED Conformity"

\*38 Either one of "Digital output - code D5" or "HART communication -code D7" can be selected at a time.

# ST3000 Series 900

## Electric Differential Pressure Transmitter

|                          |                |
|--------------------------|----------------|
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### Model STD960 (Standard Type for Super-high Differential Pressure)

Model No. : STD960 - I II III - 00000 - Option I - Option II

Basic Model No.

|                |                                                |        |
|----------------|------------------------------------------------|--------|
| Measuring Span | 0.25 to 14MPa (2.5 to 140kgf/cm <sup>2</sup> ) | STD960 |
|----------------|------------------------------------------------|--------|

| Selection I |                    |                                        |                                               |                  |                                                                  | Code | Price | Material Code |   |   |   |   |
|-------------|--------------------|----------------------------------------|-----------------------------------------------|------------------|------------------------------------------------------------------|------|-------|---------------|---|---|---|---|
| I           | Material           | Meter Body Cover                       | Adapter Flange                                | Vent/Drain Plugs | Wetted Parts of Center Body                                      |      |       | E             | F | H | U |   |
|             |                    | SCS14A*1                               | SCS14A*1                                      | SUS316           | Diaphragm:SUS316L<br>Others : SUS316                             | E    | 382   |               |   |   |   |   |
|             |                    | SCS14A*1                               | SCS14A*1                                      | SUS316           | Diaphragm : Hastelloy C<br>Others : Hastelloy C                  | F    | 470   |               |   |   |   |   |
|             |                    | SCS14A*1                               | SCS14A*1                                      | SUS316           | Diaphragm : Tantalum<br>Others : Tantalum                        | H    | 572   |               |   |   |   |   |
|             |                    | SCS14A*1                               | SCS14A*1                                      | SUS316           | Diaphragm:SUS316L<br>Others : SUS316L                            | U    | 572   |               |   |   |   |   |
| II          | Fill Fluid         | Regular type (Silicone oil)            |                                               |                  |                                                                  | 1    | 0     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    | For oxygen service (Fluorine oil) *3   |                                               |                  |                                                                  | 2    | 18    | ✓             | ✓ | ✓ |   |   |
|             |                    | For chlorine service (Fluorine oil) *3 |                                               |                  |                                                                  | 5    | 18    |               |   | ✓ |   |   |
| III         | Process Connection | Front Connection                       | Rc1/2 with adapter flange                     |                  |                                                                  | J    | 6     | ✓             |   |   |   |   |
|             |                    |                                        | 1/2NPT internal thread with adapter flange    |                  |                                                                  | H    | 6     | ✓             |   |   |   |   |
|             |                    |                                        | Rc1/4 with adapter flange                     |                  |                                                                  | M    | 6     | ✓             |   |   |   |   |
|             |                    |                                        | 1/4NPT internal thread with adapter flange    |                  |                                                                  | N    | 6     | ✓             |   |   |   |   |
|             |                    |                                        | 1/4NPT internal thread on head                |                  |                                                                  | P    | 0     | ✓             |   |   |   |   |
|             |                    |                                        |                                               |                  |                                                                  |      |       |               |   |   |   |   |
|             |                    | Top or Bottom Connection               | Rc1/2 with adapter flange *9                  |                  |                                                                  | Q    | 6     |               | ✓ | ✓ | ✓ | ✓ |
|             |                    |                                        | 1/2NPT internal thread with adapter flange *9 |                  |                                                                  | R    | 6     |               |   | ✓ | ✓ | ✓ |
|             |                    |                                        | Rc1/4 with adapter flange *9                  |                  |                                                                  | S    | 6     |               | ✓ | ✓ | ✓ | ✓ |
|             |                    |                                        | 1/4NPT internal thread with adapter flange *9 |                  |                                                                  | T    | 6     |               | ✓ | ✓ | ✓ | ✓ |
|             |                    |                                        | 1/4NPT internal thread on head *9             |                  |                                                                  | U    | 0     |               | ✓ | ✓ | ✓ | ✓ |
|             |                    |                                        |                                               |                  |                                                                  |      |       |               |   |   |   |   |
|             |                    |                                        |                                               |                  | 00000                                                            |      |       |               |   |   |   |   |
| Options I   |                    |                                        |                                               |                  | No options                                                       | X    | 0     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Lightning arrester                                               | L    | 17    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Built-in indicating smart meter(0 to 100% liner scales)          | P    | 20    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Built-in indicating smart meter(engineering unit scales)         | R    | 30    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | SUS304 Bolt and nuts material                                    | W    | 11    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | SUS630 Bolt and nuts material                                    | U    | 35    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Corrosion-resistant finish                                       | A    | 11    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Corrosion-proof finish                                           | B    | 14    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Corrosion-resistant finish, silver paint                         | D    | 16    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Oil Free finish                                                  | K    | 10    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Long Vent/drain plugs                                            | J    | 5     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | FM Explosionproof                                                | 3    | 8     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | FM Intrinsically safe                                            | 4    | 8     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Combination of FM Explosionproof and Intrinsically safe          | 5    | 11    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | ATEX Flameproof                                                  | 6    | 7     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | ATEX Intrinsic safety                                            | 7    | 8     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | CSA Explosion-proof                                              | 8    | 7     | ✓             | ✓ | ✓ | ✓ |   |
| Options II  |                    |                                        |                                               |                  | No option                                                        | XX   | 0     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Adapter flange for corrosion -resistant application *6           | A1   | 15    |               |   | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Burn-out feature (Lower limit of value at abnormal condition) *2 | A4   | 7     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Burn-out feature (Upper limit of value at abnormal condition) *2 | A5   | 7     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Water free finish (with Oil free finish)                         | A7   | 17    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | NEPSI Flameproof                                                 | C1   | 8     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | NEPSI Intrinsically safe                                         | C2   | 8     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Combination of NEPSI Flameproof and Intrinsically safe           | C3   | 11    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Custom calibration                                               | C7   | 5     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Digital output *38                                               | D5   | 0     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | HART communication *38                                           | D7   | 5     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | One Elbow                                                        | E1   | 2     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Two Elbows                                                       | E2   | 4     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | External zero/span adjustment                                    | E5   | 30    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Mounting bracket                                                 | E9   | 2     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Side vent/drain top                                              | F1   | 4     | ✓             |   |   |   |   |
|             |                    |                                        |                                               |                  | Side vent/drain bottom                                           | F2   | 4     | ✓             |   |   |   |   |
|             |                    |                                        |                                               |                  | PED (97/23/EC) Conformity *34 *35                                | H1   | 40    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Material certificate                                             | H2   | 21    | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | Max working pressure 20MPa *35 *37                               | H3   | 0     | ✓             | ✓ | ✓ | ✓ |   |
|             |                    |                                        |                                               |                  | SI unit                                                          | U1   | 5     | ✓             | ✓ | ✓ | ✓ |   |

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*2 The output current value ranges from 3.0 to 3.8 mA for the lower limit and from 20.8 to 21.8 mA for the upper limit.

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*6 In case Manifold valve is used and in case code D, H, U or P is used, please select code A1 of OptionII

\*9 Applicable for wetted parts of center body material ; HastelloyC or Tantalum

\*11 When SUS304 bolt/nut is selected, max working pressure rating is 7MPa(70kgf/cm<sup>2</sup>).

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*35 Not applicable for the combination with "SUS304 Bolts/Nuts"

\*37 Not applicable for the combination with "PED Conformity"

\*38 Either one of "Digital output - code D5" or "HART communication -code D7" can be selected at a time.

**ST3000 Series 900****Electric Differential Pressure Transmitter**

|                           |                |
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**Model STD921 (High Static Pressure Type for Medium Differential Pressure)****Model STD931 (High Static Pressure Type for High Differential Pressure)**

Model No. : STD921 - I II III - 00000 - Option I - Option II

Model No. : STD931 - I II III - 00000 - Option I - Option II

Basic Model No.

|  |                |                                                 |        |
|--|----------------|-------------------------------------------------|--------|
|  | Measuring Span | 2.5 to 100kPa (250 to 10,160mmH <sub>2</sub> O) | STD921 |
|  |                | 35 to 700kPa (0.35 to 7kgf/cm <sub>2</sub> )    | STD931 |

| Selection I |                    |                          |                                                                  | Code             | Price                                | Material Code |     |   |
|-------------|--------------------|--------------------------|------------------------------------------------------------------|------------------|--------------------------------------|---------------|-----|---|
| I           | Material           |                          | Meter Body Cover                                                 | Vent/Drain Plugs | Wetted Parts of Center Body          |               | E   |   |
|             |                    |                          | SCS14A*1                                                         | SUS316           | Diaphragm:SUS316L<br>Others : SUS316 | E             | 396 |   |
| II          | Fill Fluid         |                          | Regular type (Silicone oil)                                      |                  |                                      | 1             | 0   | ✓ |
|             |                    |                          | For oxygen service (Fluorine oil) *3                             |                  |                                      | 2             | 18  | ✓ |
| III         | Process Connection | Top or Bottom Connection | Rc1/2                                                            |                  |                                      | Q             | 0   | ✓ |
|             |                    |                          | 1/2NPT internal thread                                           |                  |                                      | R             | 0   | ✓ |
|             |                    |                          | Rc1/4                                                            |                  |                                      | S             | 0   | ✓ |
|             |                    |                          | 1/4NPT internal thread                                           |                  |                                      | T             | 0   | ✓ |
|             |                    |                          |                                                                  |                  |                                      | -             |     |   |
|             |                    |                          | 00000                                                            |                  |                                      |               |     |   |
|             |                    |                          | -                                                                |                  |                                      |               |     |   |
| Options I   |                    |                          | No options                                                       |                  |                                      | X             | 0   | ✓ |
|             |                    |                          | Lightning arrester                                               |                  |                                      | L             | 17  | ✓ |
|             |                    |                          | Built-in indicating smart meter(0 to 100% liner scales)          |                  |                                      | P             | 20  | ✓ |
|             |                    |                          | Built-in indicating smart meter(engineering unit scales)         |                  |                                      | R             | 30  | ✓ |
|             |                    |                          | SUS304 Bolt and nuts material                                    |                  |                                      | W             | 20  | ✓ |
|             |                    |                          | SUS630 Bolt and nuts material                                    |                  |                                      | U             | 100 | ✓ |
|             |                    |                          | Corrosion-resistant finish                                       |                  |                                      | A             | 11  | ✓ |
|             |                    |                          | Corrosion-proof finish                                           |                  |                                      | B             | 14  | ✓ |
|             |                    |                          | Corrosion-resistant finish, silver paint                         |                  |                                      | D             | 16  | ✓ |
|             |                    |                          | Oil Free finish                                                  |                  |                                      | K             | 10  | ✓ |
|             |                    |                          | Long Vent/drain plugs                                            |                  |                                      | J             | 5   | ✓ |
|             |                    |                          | FM Explosionproof                                                |                  |                                      | 3             | 8   | ✓ |
|             |                    |                          | FM Intrinsically safe                                            |                  |                                      | 4             | 8   | ✓ |
|             |                    |                          | Combination of FM Explosionproof and Intrinsically safe          |                  |                                      | 5             | 11  | ✓ |
|             |                    |                          | ATEX Flameproof                                                  |                  |                                      | 6             | 7   | ✓ |
|             |                    |                          | ATEX Intrinsic safety                                            |                  |                                      | 7             | 8   | ✓ |
|             |                    |                          | CSA Explosion-proof                                              |                  |                                      | 8             | 7   | ✓ |
|             |                    |                          | -                                                                |                  |                                      |               |     |   |
| Options II  |                    |                          | No option                                                        |                  |                                      | XX            | 0   | ✓ |
|             |                    |                          | Burn-out feature (Lower limit of value at abnormal condition) *2 |                  |                                      | A4            | 7   | ✓ |
|             |                    |                          | Burn-out feature (Upper limit of value at abnormal condition) *2 |                  |                                      | A5            | 7   | ✓ |
|             |                    |                          | Water free finish (with Oil free finish)                         |                  |                                      | A7            | 17  | ✓ |
|             |                    |                          | NEPSI Flameproof                                                 |                  |                                      | C1            | 8   | ✓ |
|             |                    |                          | NEPSI Intrinsically safe                                         |                  |                                      | C2            | 8   | ✓ |
|             |                    |                          | Combination of NEPSI Flameproof and Intrinsically safe           |                  |                                      | C3            | 11  | ✓ |
|             |                    |                          | Custom calibration                                               |                  |                                      | C7            | 5   | ✓ |
|             |                    |                          | Digital output *38                                               |                  |                                      | D5            | 0   | ✓ |
|             |                    |                          | HART communication *38                                           |                  |                                      | D7            | 5   | ✓ |
|             |                    |                          | One Elbow                                                        |                  |                                      | E1            | 2   | ✓ |
|             |                    |                          | Two Elbows                                                       |                  |                                      | E2            | 4   | ✓ |
|             |                    |                          | External zero/span adjustment                                    |                  |                                      | E5            | 30  | ✓ |
|             |                    |                          | Mounting bracket                                                 |                  |                                      | E9            | 2   | ✓ |
|             |                    |                          | PED (97/23/EC) Conformity *34                                    |                  |                                      | H1            | 40  | ✓ |
|             |                    |                          | Material certificate                                             |                  |                                      | H2            | 21  | ✓ |
|             |                    |                          | Max working pressure 20MPa *37                                   |                  |                                      | H3            | 0   | ✓ |
|             |                    |                          | SI unit                                                          |                  |                                      | U1            | 5   | ✓ |

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*2 The output current value ranges from 3.0 to 3.8 mA for the lower limit and from 20.8 to 21.8 mA for the upper limit.

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, "oil free finish - code K" must be selected.

\*12 When SUS304 bolt/nut is selected, max working pressure rating is 23MPa(230kgf/cm<sub>2</sub>).

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*37 Not applicable for the combination with "PED Conformity"

\*38 Either one of "Digital output - code D5" or "HART communication -code D7" can be selected at a time.

## ST3000 Series 900

### Electric Differential Pressure Transmitter

#### Model STD961 (High Static Pressure Type for Super-high Differential Pressure)

Model No. : STD961 - I II III - 00000 - Option I - Option II

Basic Model No.

|                |                                                |        |
|----------------|------------------------------------------------|--------|
| Measuring Span | 0.25 to 14MPa (2.5 to 140kgf/cm <sup>2</sup> ) | STD961 |
|----------------|------------------------------------------------|--------|

|                           |                |
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| Selection I |                    |                          |                                                                  | Code             | Price                                  | Material Code |     |   |
|-------------|--------------------|--------------------------|------------------------------------------------------------------|------------------|----------------------------------------|---------------|-----|---|
| I           | Material           |                          | Meter Body Cover                                                 | Vent/Drain Plugs | Wetted Parts of Center Body            |               |     | E |
|             |                    |                          | SCS14A*1                                                         | SUS316           | Diaphragm : SUS316L<br>Others : SUS316 | E             | 468 |   |
| II          | Fill Fluid         |                          | Regular type (Silicone oil)                                      |                  |                                        | 1             | 0   | ✓ |
|             |                    |                          | For oxygen service (Fluorine oil) *3                             |                  |                                        | 2             | 18  | ✓ |
| III         | Process Connection | Top or Bottom Connection | Rc1/2                                                            |                  |                                        | Q             | 0   | ✓ |
|             |                    |                          | 1/2NPT internal thread                                           |                  |                                        | R             | 0   | ✓ |
|             |                    |                          | Rc1/4                                                            |                  |                                        | S             | 0   | ✓ |
|             |                    |                          | 1/4NPT internal thread                                           |                  |                                        | T             | 0   | ✓ |
|             |                    |                          |                                                                  |                  |                                        | -             |     |   |
|             |                    |                          | 00000                                                            |                  |                                        |               |     |   |
|             |                    |                          | -                                                                |                  |                                        |               |     |   |
| Options I   |                    |                          | No options                                                       |                  |                                        | X             | 0   | ✓ |
|             |                    |                          | Lightning arrester                                               |                  |                                        | L             | 17  | ✓ |
|             |                    |                          | Built-in indicating smart meter(0 to 100% liner scales)          |                  |                                        | P             | 20  | ✓ |
|             |                    |                          | Built-in indicating smart meter(engineering unit scales)         |                  |                                        | R             | 30  | ✓ |
|             |                    |                          | SUS304 Bolt and nuts material                                    |                  |                                        | W             | 20  | ✓ |
|             |                    |                          | SUS630 Bolt and nuts material                                    |                  |                                        | U             | 100 | ✓ |
|             |                    |                          | Corrosion-resistant finish                                       |                  |                                        | A             | 11  | ✓ |
|             |                    |                          | Corrosion-proof finish                                           |                  |                                        | B             | 14  | ✓ |
|             |                    |                          | Corrosion-resistant finish, silver paint                         |                  |                                        | D             | 16  | ✓ |
|             |                    |                          | Oil Free finish                                                  |                  |                                        | K             | 10  | ✓ |
|             |                    |                          | Long Vent/drain plugs                                            |                  |                                        | J             | 5   | ✓ |
|             |                    |                          | FM Explosionproof                                                |                  |                                        | 3             | 8   | ✓ |
|             |                    |                          | FM Intrinsically safe                                            |                  |                                        | 4             | 8   | ✓ |
|             |                    |                          | Combination of FM Explosionproof and Intrinsically safe          |                  |                                        | 5             | 11  | ✓ |
|             |                    |                          | ATEX Flameproof                                                  |                  |                                        | 6             | 7   | ✓ |
|             |                    |                          | ATEX Intrinsic safety                                            |                  |                                        | 7             | 8   | ✓ |
|             |                    |                          | CSA Explosion-proof                                              |                  |                                        | 8             | 7   | ✓ |
|             |                    |                          | -                                                                |                  |                                        |               |     |   |
| Options II  |                    |                          | No option                                                        |                  |                                        | XX            | 0   | ✓ |
|             |                    |                          | Burn-out feature (Lower limit of value at abnormal condition) *2 |                  |                                        | A4            | 7   | ✓ |
|             |                    |                          | Burn-out feature (Upper limit of value at abnormal condition) *2 |                  |                                        | A5            | 7   | ✓ |
|             |                    |                          | Water free finish (with Oil free finish)                         |                  |                                        | A7            | 17  | ✓ |
|             |                    |                          | NEPSI Flameproof                                                 |                  |                                        | C1            | 8   | ✓ |
|             |                    |                          | NEPSI Intrinsically safe                                         |                  |                                        | C2            | 8   | ✓ |
|             |                    |                          | Combination of NEPSI Flameproof and Intrinsically safe           |                  |                                        | C3            | 11  | ✓ |
|             |                    |                          | Custom calibration                                               |                  |                                        | C7            | 5   | ✓ |
|             |                    |                          | Digital output *38                                               |                  |                                        | D5            | 0   | ✓ |
|             |                    |                          | HART communication *38                                           |                  |                                        | D7            | 5   | ✓ |
|             |                    |                          | One Elbow                                                        |                  |                                        | E1            | 2   | ✓ |
|             |                    |                          | Two Elbows                                                       |                  |                                        | E2            | 4   | ✓ |
|             |                    |                          | External zero/span adjustment                                    |                  |                                        | E5            | 30  | ✓ |
|             |                    |                          | Mounting bracket                                                 |                  |                                        | E9            | 2   | ✓ |
|             |                    |                          | PED (97/23/EC) Conformity *34                                    |                  |                                        | H1            | 40  | ✓ |
|             |                    |                          | Material certificate                                             |                  |                                        | H2            | 21  | ✓ |
|             |                    |                          | Max working pressure 20MPa *37                                   |                  |                                        | H3            | 0   | ✓ |
|             |                    |                          | SI unit                                                          |                  |                                        | U1            | 5   | ✓ |

\*1 SCS14A (Equivalent SUS316) or SUSF316

\*2 The output current value ranges from 3.0 to 3.8 mA for the lower limit and from 20.8 to 21.8 mA for the upper limit.

\*3 In case "For oxygen or chlorine (Fluorine oil) service" is used, it's recommended to select "oil free finish - code K"

\*12 When SUS304 bolt/nut is selected, max working pressure rating is 23MPa(230kgf/cm<sup>2</sup>).

\*34 "PED Conformity" is not applicable for the combination with FM, CSA or NEPSI approvals.

\*37 Not applicable for the combination with "PED Conformity"

\*38 Either one of "Digital output - code D5" or "HART communication -code D7" can be selected at a time.