

ST3000 Series 900
Electric Pressure Transmitter

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| Issued : Jun. 15, 2001 | Page : 1-137 |
| Effective : Mar. 1, 2003 | UNIT : 1000YEN |

Model STH920 / STH940 / STH960 (Remote-sealed Diaphragm type for Gauge Pressure)

Flush Diaphragm Type: 3 in. / 80 mm

For Regular / High-Temperature Service

Model No. : STH9x0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|--|
| Measuring Span | 2.5 to 100kPa (250 to 10,160mmHzO) | STH920 | Flush Diaphragm Flange Type : 3in. / 80mm |
| | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| Selection I | | | Code | Price | Fill Fluid Code | | | | |
|-------------|--------------------------|--|---|-------|-----------------|---|---|---|---|
| I | Fill Fluid | Moswl No. | Fill Fluid | | 1 | 2 | 3 | 5 | |
| | | STH920 STH940 STH960 Flush Diaphragm Flange Type 3in. (80mm) | Regular type service (Silicone oil) | 1 | 433 | | | | |
| | | | For oxygen service (Fluorine oil) *3 | 2 | 495 | | | | |
| | | | For high-temperature service (Silicone oil) | 3 | 495 | | | | |
| | | | For chlorine service (Fluorine oil) *3 | 5 | 495 | | | | |
| II | Flange Standard | ANSI flange | A | 0 | ✓ | ✓ | ✓ | ✓ | |
| | | JIS flange | J | 0 | ✓ | ✓ | ✓ | ✓ | |
| | | JPI flange | P | 0 | ✓ | ✓ | ✓ | ✓ | |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF)equivalent | A | 0 | ✓ | ✓ | ✓ | ✓ | |
| | | JIS 20K , ANSI/JPI 300 (RF)equivalent | B | 10 | ✓ | ✓ | ✓ | ✓ | |
| | | JIS 30K , ANSI/JPI 600 (RF)equivalent | C | 15 | ✓ | ✓ | ✓ | ✓ | |
| IV | Flange Material | Carbon Steel | 1 | 0 | ✓ | ✓ | ✓ | ✓ | |
| | | SUS304 | 7 | 25 | ✓ | ✓ | ✓ | ✓ | |
| | | SUS316 | 2 | 40 | ✓ | ✓ | ✓ | ✓ | |
| | | SUS316L | 8 | 50 | ✓ | ✓ | ✓ | ✓ | |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, othes : SUS316) | 2 | 0 | ✓ | ✓ | ✓ | | |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) | 8 | 25 | ✓ | ✓ | ✓ | | |
| | | Tantalum (Diaphragm :Tantalum, others : Tantalum) *17 | 4 | 139 | ✓ | ✓ | ✓ | ✓ | |
| | | HastelloyC (Diaphragm :HastelloyC, others : HastelloyC) | 9 | 87 | ✓ | ✓ | ✓ | | |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | J | 0 | ✓ | ✓ | ✓ | ✓ | |
| VII | Length of Extended Parts | Flush Diaphragm 3in. / 80mm | 00 | 0 | ✓ | ✓ | ✓ | ✓ | |
| VIII | Length of Capillary Tube | 2m | 2 | 3 | ✓ | ✓ | ✓ | ✓ | |
| | | 3m | 3 | 7 | ✓ | ✓ | ✓ | ✓ | |
| | | 4m | 4 | 14 | ✓ | ✓ | ✓ | ✓ | |
| | | 5m | 5 | 21 | ✓ | ✓ | ✓ | ✓ | |
| | | 6m | 6 | 28 | ✓ | ✓ | ✓ | ✓ | |
| | | 7m | 7 | 35 | ✓ | ✓ | ✓ | ✓ | |
| | | 8m | 8 | 42 | ✓ | ✓ | ✓ | ✓ | |
| | | 9m | 9 | 49 | ✓ | ✓ | ✓ | ✓ | |
| | | 10m | A | 56 | ✓ | ✓ | ✓ | ✓ | |
| | | Length of Capillary Tube with Olefin Coating | 2m | B | 18 | ✓ | ✓ | ✓ | ✓ |
| | 3m | | C | 22 | ✓ | ✓ | ✓ | ✓ | |
| | 4m | | H | 29 | ✓ | ✓ | ✓ | ✓ | |
| | 5m | | D | 36 | ✓ | ✓ | ✓ | ✓ | |
| | 6m | | J | 43 | ✓ | ✓ | ✓ | ✓ | |
| | 7m | | E | 50 | ✓ | ✓ | ✓ | ✓ | |
| | 8m | | F | 57 | ✓ | ✓ | ✓ | ✓ | |
| | 9m | | K | 64 | ✓ | ✓ | ✓ | ✓ | |
| | | 10m | G | 71 | ✓ | ✓ | ✓ | ✓ | |

ST3000 Series 900
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Model STH920 / STH940 / STH960 (Remote-sealed DiaphragmType)

Flush Diaphragm Type: 3 in. / 80 mm

For Regular / High-Temperature Service

Model No. : STH9x0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|--|
| Measuring Span | 2.5 to 100kPa (250 to 10,160mmHzO) | STH920 | Flush Diaphragm Flange Type : 3in. / 80mm |
| | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| | Code | Price | Fill Fluid Code | | | | |
|------------|--|-------|-----------------|---|---|---|---|
| | | | 1 | 2 | 3 | 5 | |
| | - | | | | | | |
| 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 | 10 | ✓ | ✓ | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ | ✓ | ✓ |
| | FEP protective Film | T | 11 | ✓ | ✓ | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ | ✓ | ✓ |
| | 0.1mm Thickness Diaphragm *15 | F4 | 30 | ✓ | ✓ | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ | ✓ | ✓ |
| | SI unit | U1 | 5 | ✓ | ✓ | ✓ | ✓ |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*15 Only available for Material of Wetted parts : "SUS316" and "SUS316L".

*17 In case "Tantalum " is used for diaphragm material and in case of "For high-temperature service", normal operating conditions of meter body (process fluid) temperature is -10 to +180deg.C

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

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Model STH940/STH960 (Remote-sealed DiaphragmType)

Flush Diaphragm 2 in./50 mm, 1.5 in./40 mm

For Regular / High-Temperature Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|---|
| Measuring Span | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | Flush Diaphragm Flange Type : 2in./50mm, 1.5in./40mm |
| | 0.7 to 10MPa (7 to 102 kgf/cm ²) | STH960 | |

| Selection I | | Model No. | Fill Fluid | Code | Price | Fill Fluid Code | | | |
|-------------|---|---|--|------|-------|-----------------|---|---|---|
| I | Fill Fluid | | | | | 1 | 2 | 3 | 5 |
| | Flush Diaphragm Flange Type 2in.(50mm) 1.5in.(40mm) | STH940 STH960 | Regular type service (Silicone oil) | 1 | 433 | | | | |
| | | | For oxygen service (Fluorine oil) *3 | 2 | 495 | | | | |
| | | | For high-temperature service (Silicone oil) | 3 | 495 | | | | |
| | | | For chlorine service (Fluorine oil) *3 | 5 | 495 | | | | |
| | | | | | | | | | |
| II | Flange Standard | ANSI flange | | A | 0 | ✓ | ✓ | ✓ | ✓ |
| | | JIS flange | | J | 0 | ✓ | ✓ | ✓ | ✓ |
| | | JPI flange | | P | 0 | ✓ | ✓ | ✓ | ✓ |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF)equivalent | | A | 0 | ✓ | ✓ | ✓ | ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF)equivalent | | B | 10 | ✓ | ✓ | ✓ | ✓ |
| | | JIS 30K , ANSI/JPI 600 (RF)equivalent | | C | 15 | ✓ | ✓ | ✓ | ✓ |
| IV | Flange Material | Carbon Steel | | 1 | 0 | ✓ | ✓ | ✓ | ✓ |
| | | SUS304 | | 7 | 25 | ✓ | ✓ | ✓ | ✓ |
| | | SUS316 | | 2 | 40 | ✓ | ✓ | ✓ | ✓ |
| | | SUS316L | | 8 | 50 | ✓ | ✓ | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, othes : SUS316) | | 2 | 0 | ✓ | ✓ | ✓ | ✓ |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) *17 | | 8 | 25 | ✓ | ✓ | ✓ | ✓ |
| | | Tantalum (Diaphragm :Tantalum, others : Tantalum) *27 | | 4 | 139 | ✓ | ✓ | ✓ | ✓ |
| | | HastelloyC (Diaphragm :HastelloyC, others : HastelloyC) | | 9 | 87 | ✓ | ✓ | ✓ | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ | ✓ | ✓ | ✓ |
| VII | Length of Extended Parts | Flush Diaphragm 2in. / 50mm | | 01 | 0 | ✓ | ✓ | ✓ | ✓ |
| | | Flush Diaphragm 1.5in. /40mm | | 02 | 0 | ✓ | ✓ | ✓ | ✓ |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ | ✓ | ✓ | ✓ |
| | | 3m | | 3 | 7 | ✓ | ✓ | ✓ | ✓ |
| | | 4m | | 4 | 14 | ✓ | ✓ | ✓ | ✓ |
| | | 5m | | 5 | 21 | ✓ | ✓ | ✓ | ✓ |
| | | | | | | | | | |
| | Length of Capillary Tube with Olefin Coating | 2m | | B | 18 | ✓ | ✓ | ✓ | ✓ |
| | | 3m | | C | 22 | ✓ | ✓ | ✓ | ✓ |
| | | 4m | | H | 29 | ✓ | ✓ | ✓ | ✓ |
| | | 5m | | D | 36 | ✓ | ✓ | ✓ | ✓ |

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Model STH940/STH960 (Remote-sealed DiaphragmType)

Flush Diaphragm 2 in./50 mm, 1.5 in./40 mm

For Regular / High-Temperature Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|---|
| Measuring Span | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | Flush Diaphragm Flange Type : 2in./50mm, 1.5in./40mm |
| | 0.7 to 10MPa (7 to 102 kgf/cm ²) | STH960 | |

| | Code | Price | Fill Fluid Code | | | | |
|----------------------------------|---|-------|-----------------|---|---|---|---|
| | | | 1 | 2 | 3 | 5 | |
| | - | | | | | | |
| 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 | 10 | ✓ | ✓ | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ | ✓ | ✓ |
| | FEP protective Film | T | 11 | ✓ | ✓ | | ✓ |
| | 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 Flameproof | 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 *5 *38 | D7 | 5 | ✓ | ✓ | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ | ✓ | ✓ |
| SI unit | U1 | 5 | ✓ | ✓ | ✓ | ✓ | |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*17 In case "Tantalum" is used for diaphragm material and in case of "For high-temperature service", normal operating conditions of meter body (process fluid) temperature is -10 to +180deg.C

*27 In case "Tantalum" is used for diaphragm material and flange size is 1.5in.,

fill fluid "For high-temperature service" is not applicable and only 2m and 3 m are available for capillary length.

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

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Model STH920/STH940/STH960 (Remote-sealed DiaphragmType)
Extended Diaphragm 4 in./100 mm
For Regular / High-Temperature Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|--|
| Measuring span | 2.5 to 100kPa (250 to 10,160mmHzO) | STH920 | Extended Diaphragm Flange Type : 4in./100mm |
| | 35 to 3,500 kPa (0.35 to 35 kgf/cm ²) | STH940 | |
| | 0.7 to 10MPa(7 to 102kgf/cm ²) | STH960 | |

| Selection I | | | Code | Price | Fill Fluid Code | | |
|-------------|--|--|--|-------|-----------------|----|---|
| I | Fill Fluid | Model No. | Fill Fluid | | 1 | 2 | 3 |
| | Extended Diaphragm Flange Type 4 in. / 100 mm | STH920 | Regular type service (Silicone oil) | 1 | 433 | | |
| | | STH940 | For oxygen service (Fluorine oil) *3 | 2 | 495 | | |
| | | STH960 | For high-temperature service (Silicone oil) *19 *20 | 3 | 495 | | |
| II | Flange Standard | ANSI flange | | A | 0 | ✓ | ✓ |
| | | JIS flange | | J | 0 | ✓ | ✓ |
| | | JPI flange | | P | 0 | ✓ | ✓ |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF)equivalent | | A | 0 | ✓ | ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF)equivalent *19 | | B | 10 | ✓ | ✓ |
| | | JIS 30K *16 *20 | | C | 15 | ✓ | ✓ |
| IV | Flange Material | Carbon Steel | | 1 | 0 | ✓ | ✓ |
| | | SUS304 | | 7 | 25 | ✓ | ✓ |
| | | SUS316 | | 2 | 40 | ✓ | ✓ |
| | | SUS316L *16 *20 | | 8 | 50 | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, othes : SUS316) | | 2 | 0 | ✓ | ✓ |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) *16 *19 *20 | | 8 | 25 | ✓ | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ | ✓ |
| VII | Length of Extended Parts | L = 50mm (4in. / 100mm) *20 | | 09 | 62 | ✓ | ✓ |
| | | L = 100mm (4in. / 100mm) *20 | | 14 | 68 | ✓ | ✓ |
| | | L = 150mm (4in. / 100mm) *16 *20 | | 19 | 75 | ✓ | ✓ |
| | | L = 200mm (4in. / 100mm) *16 *20 | | 24 | 83 | ✓ | ✓ |
| | | L = 250mm (4in. / 100mm) *16 *19 *20 | | 29 | 93 | ✓ | ✓ |
| | | L = 300mm (4in. / 100mm) *16 *19 *20 | | 34 | 103 | ✓ | ✓ |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ | ✓ |
| | | 3m | | 3 | 7 | ✓ | ✓ |
| | | 4m | | 4 | 14 | ✓ | ✓ |
| | | 5m | | 5 | 21 | ✓ | ✓ |
| | | 6m | | 6 | 28 | ✓ | ✓ |
| | | 7m | | 7 | 35 | ✓ | ✓ |
| | | 8m | | 8 | 42 | ✓ | ✓ |
| | | 9m | | 9 | 49 | ✓ | ✓ |
| | | 10m | | A | 56 | ✓ | ✓ |
| | | Length of Capillary Tube with Olefin Coating | 2m | | B | 18 | ✓ |
| | 3m | | | C | 22 | ✓ | ✓ |
| | 4m | | | H | 29 | ✓ | ✓ |
| | 5m | | | D | 36 | ✓ | ✓ |
| | 6m | | | J | 43 | ✓ | ✓ |
| | 7m | | | E | 50 | ✓ | ✓ |
| | 8m | | | F | 57 | ✓ | ✓ |
| | 10m | | | K | 64 | ✓ | ✓ |

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Model STH920/STH940/STH960 (Remote-sealed DiaphragmType)

Extended Diaphragm 4 in./100 mm

For Regular / High-Temperature Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|--|
| Measuring Span | 2.5 to 100kPa (250 to 10,160mmHzO) | STH920 | Extended Diaphragm Flange Type : 4in./100mm |
| | 35 to 3,500 kPa (0.35 to 35 kgf/cm ²) | STH940 | |
| | 0.7 to 10MPa(7 to 102kgf/cm ²) | STH960 | |

| | | Code | Price | Fill Fluid Code | | |
|-----------------------|--|------|-------|-----------------|---|---|
| | | | | 1 | 2 | 3 |
| | | - | | | | |
| 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 | 10 | ✓ | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ | ✓ |
| | 0.1mm Thickness Diaphragm | F4 | 30 | ✓ | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ | ✓ |
| SI unit | U1 | 5 | ✓ | ✓ | ✓ | |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*16 In case "JIS30K" is used for Flange type and rating, "SUS316L" is used for Flange Material and for regular service or oxygen service, not available for length of extended parts: 150/200/250/300mm.

*19 In case Fill Fluid: For high-temperature service and Flange rating: ANSI300 and wetted parts material: SUS316L, Extension length of Flange 250/300mm are not available.

*20 In case Flange Rating: JIS30K and Wetted Parts material: SUS316L, and for high temperature service, Extended diaphragm type is not available.

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

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Model STH940/STH960 (Remote-sealed DiaphragmType)
Extended Diaphragm 3 in./80 mm, 2 in./50 mm
For Regular / High-Temperature Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| Measuring Span | | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | Extended Diaphragm Flange Type : 3in./80mm, 2in./50mm | | | |
|--|--------------------------|--|---|--|-----------------|---|---|
| | | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | | | | |
| Selection I | | | Code | Price | Fill Fluid Code | | |
| I | Fill Fluid | Model No. | | | 1 | 2 | 3 |
| | | STH940 | Regular type service (Silicone oil) | 1 | 433 | | |
| | | STH960 | For oxygen service (Fluorine oil) *3 | 2 | 495 | | |
| | | Extended Diaphragm Flange Type 3in.(80mm) 2in.(50mm) | For high-temperature service (Silicone oil) *31 | 3 | 495 | | |
| II | Flange Standard | ANSI flange | A | 0 | ✓ | ✓ | ✓ |
| | | JIS flange | J | 0 | ✓ | ✓ | ✓ |
| | | JPI flange | P | 0 | ✓ | ✓ | ✓ |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF) equivalent | A | 0 | ✓ | ✓ | ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF) equivalent | B | 10 | ✓ | ✓ | ✓ |
| | | JIS 30K , ANSI/JPI 600 (RF) equivalent *24 *31 | C | 15 | ✓ | ✓ | ✓ |
| IV | Flange Material | Carbon Steel | 1 | 0 | ✓ | ✓ | ✓ |
| | | SUS304 | 7 | 25 | ✓ | ✓ | ✓ |
| | | SUS316 | 2 | 40 | ✓ | ✓ | ✓ |
| | | SUS316L | 8 | 50 | ✓ | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, others : SUS316) | 2 | 0 | ✓ | ✓ | ✓ |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) *31 | 8 | 25 | ✓ | ✓ | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | J | 0 | ✓ | ✓ | ✓ |
| VII | Length of Extended Parts | L = 50mm (3in. /80mm) *24 | 05 | 62 | ✓ | ✓ | ✓ |
| | | L = 100mm (3in. /80mm) *24 | 10 | 68 | ✓ | ✓ | ✓ |
| | | L = 150mm (3in. /80mm) *24 | 15 | 75 | ✓ | ✓ | ✓ |
| | | L = 200mm (3in. /80mm) *24 | 20 | 83 | ✓ | ✓ | ✓ |
| | | L = 250mm (3in. /80mm) *24 | 25 | 93 | ✓ | ✓ | ✓ |
| | | L = 300mm (3in. /80mm) *24 | 30 | 103 | ✓ | ✓ | ✓ |
| | | L = 50mm (2in. / 50mm) *24 | 06 | 62 | ✓ | ✓ | ✓ |
| | | L = 100mm (2in. / 50mm) *24 | 11 | 68 | ✓ | ✓ | ✓ |
| | | L = 150mm (2in. / 50mm) *24 | 16 | 75 | ✓ | ✓ | ✓ |
| | | L = 200mm (2in. / 50mm) *24 *31 | 21 | 83 | ✓ | ✓ | ✓ |
| | | L = 250mm (2in. / 50mm) *24 *31 | 26 | 93 | ✓ | ✓ | ✓ |
| | | L = 300mm (2in. / 50mm) *24 *31 | 31 | 103 | ✓ | ✓ | ✓ |
| | | VIII | Length of Capillary Tube | 2m | 2 | 3 | ✓ |
| 3m | 3 | | | 7 | ✓ | ✓ | ✓ |
| 4m | 4 | | | 14 | ✓ | ✓ | ✓ |
| 5m | 5 | | | 21 | ✓ | ✓ | ✓ |
| Length of Capillary Tube with Olefin Coating | | | | | | | |
| 2m | B | | 18 | ✓ | ✓ | ✓ | |
| 3m | C | | 22 | ✓ | ✓ | ✓ | |
| 4m | H | | 29 | ✓ | ✓ | ✓ | |
| 5m | D | | 36 | ✓ | ✓ | ✓ | |

ST3000 Series 900

Electric Pressure Transmitter

Model STH940/STH960 (Remote-sealed Diaphragm Type)

Extended Diaphragm 3 in./80 mm, 2 in./50 mm

For Regular / High-Temperature Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | |
|-------------------------|----------------|
| Issued : Jun. 15, 2001 | Page : 1-1-44 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

| | | | |
|----------------|--|--------|---|
| Measuring Span | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | Extended Diaphragm Type : 3in./80mm, 2in./50mm |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| | | Code | Price | Fill Fluid Code | | |
|---------------------|--|------|-------|-----------------|---|---|
| | | | | 1 | 2 | 3 |
| | | | | | | |
| | | - | | | | |
| 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 | 10 | ✓ | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ | ✓ |
| | SI unit | U1 | 5 | ✓ | ✓ | ✓ |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*24 In case of "ANSI/JPI600" is used for 3in. Flange type and rating, not available for the extended diaphragm flange type

*31 In case Fill Fluid: For high-temperature service, for high-temperature vacuum service or high-temperature high vacuum service and 2 in. Flange Rating: ANSI/JPI600 and Wetted Parts material: SUS316L, Extension length of Flange 200/250/300mm are not available.

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

ST3000 Series 900
Electric Pressure Transmitter

| | |
|--------------------------|----------------|
| Issued : Jun. 16, 2001 | Page : 1-145 |
| Effective : Mar. 1, 2003 | UNIT : 1000YEN |

Model STH940 / STH960 (Remote-sealed Diaphragm Type for Gauge Pressure)
Flush Diaphragm 3 in./80 mm
For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9x0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|---------------------------------------|
| Measuring Span | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | Flush Diaphragm Type : 3in. / 80mm |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| Selection I | | | Code | Price | | |
|-------------|--------------------------|---|---|------------|------------------|-----|
| I | Fill Fluid | Moswl No. | Fill Fluid | | | 4 7 |
| | | STH940 STH960 Flush Diaphragm Flange Type 3in. (80mm) | For high-temperature vacuum service (Silicone oil) For high-temperature high vacuum service (Silicone oil) | 4 7 | 729 1,155 | |
| II | Flange Standard | ANSI flange | | A | 0 | ✓ ✓ |
| | | JIS flange | | J | 0 | ✓ ✓ |
| | | JPI flange | | P | 0 | ✓ ✓ |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF)equivalent | | A | 0 | ✓ ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF)equivalent | | B | 10 | ✓ ✓ |
| | | JIS 30K , ANSI/JPI 600 (RF)equivalent | | C | 15 | ✓ ✓ |
| IV | Flange Material | Carbon Steel | | 1 | 0 | ✓ ✓ |
| | | SUS304 | | 7 | 25 | ✓ ✓ |
| | | SUS316 | | 2 | 40 | ✓ ✓ |
| | | SUS316L | | 8 | 50 | ✓ ✓ |
| V | Material of Wetted Parts | SUS316L (Diaphragm :SUS316L, others : SUS316L) | | 8 | 25 | ✓ ✓ |
| | | Tantalum (Diaphragm :Tantalum, others : Tantalum) *17 | | 4 | 139 | ✓ ✓ |
| | | HastelloyC (Diaphragm :HastelloyC, others : HastelloyC) | | 9 | 87 | ✓ ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ ✓ |
| VII | Length of Extended Parts | Flush Diaphragm 3in. / 80mm | | 00 | 0 | ✓ ✓ |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ ✓ |
| | | 3m | | 3 | 7 | ✓ ✓ |
| | | 4m | | 4 | 14 | ✓ ✓ |
| | | 5m | | 5 | 21 | ✓ ✓ |
| | | 6m | | 6 | 28 | ✓ ✓ |
| | | 7m | | 7 | 35 | ✓ ✓ |
| | | 8m | | 8 | 42 | ✓ ✓ |
| | | 9m | | 9 | 49 | ✓ ✓ |
| | | 10m | | A | 56 | ✓ ✓ |

ST3000 Series 900
Electric Pressure Transmitter

| | |
|-------------------------|----------------|
| Issued : Jun. 15, 2001 | Page : 1-1-46 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH940 / STH960 (Remote-sealed Diaphragm Type for Gauge Pressure)
Flush Diaphragm 3 in./80 mm

For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9x0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|---------------------------------------|
| Measuring Span | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | Flush Diaphragm Type : 3in. / 80mm |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| | | Code | Price | | |
|---------------------|--|------|-------|---|---|
| | | | | 4 | 7 |
| | - | | | | |
| 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 | 10 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| | SI unit | U1 | 5 | ✓ | ✓ |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*17 In case "Tantalum " is used for diaphragm material, and in case of "For high-temperature service", normal operating conditions of meter body (process fluid) temperature is -10 to +180deg.C

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

ST3000 Series 900
Electric Pressure Transmitter

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|--------------------------|----------------|
| Issued : Jun. 15, 2001 | Page : 1-147 |
| Effective : Mar. 1, 2003 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed DiaphragmType)
Flush Diaphragm 2 in./50 mm, 1.5 in./40 mm
For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|--|
| Measuring Span | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | Flush Diaphragm Type : 2in./50mm, 1.5in./40mm |
| | 0.7 to 10MPa (7 to 102 kgf/cm ²) | STH960 | |

| Selection I | | | Code | Price | Fill Fluid | |
|-------------|--------------------------|---|---|-------|------------|---|
| I | Fill Fluid | Model No. | Fill Fluid | | 4 | 7 |
| | | STH940 | For high-temperature vacuum service (Silicone oil) | 4 | 729 | |
| | | STH960 | For high-temperature high-vacuum service (Silicone oil) | 7 | 1,155 | |
| II | Flange Standard | ANSI flange | | A | 0 | ✓ |
| | | JIS flange | | J | 0 | ✓ |
| | | JPI flange | | P | 0 | ✓ |
| III | Flange Type and Rating | JIS 10K , ANSI/JPI 150 (RF)equivalent | | A | 0 | ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF)equivalent | | B | 10 | ✓ |
| | | JIS 30K , ANSI/JPI 600 (RF)equivalent | | C | 15 | ✓ |
| IV | Flange Material | Carbon Steel | | 1 | 0 | ✓ |
| | | SUS304 | | 7 | 25 | ✓ |
| | | SUS316 | | 2 | 40 | ✓ |
| | | SUS316L | | 8 | 50 | ✓ |
| V | Material of Wetted Parts | SUS316L (Diaphragm :SUS316L, others : SUS316L) | | 8 | 25 | ✓ |
| | | Tantalum (Diaphragm :Tantalum, others : Tantalum) *17 | | 4 | 139 | ✓ |
| | | HastelloyC (Diaphragm :HastelloyC, others : HastelloyC) | | 9 | 87 | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ |
| VII | Length of Extended Parts | Flush Diaphragm 2in. / 50mm | | 01 | 0 | ✓ |
| | | Flush Diaphragm 1.5in. /40mm | | 02 | 0 | ✓ |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ |
| | | 3m | | 3 | 7 | ✓ |
| | | 4m | | 4 | 14 | ✓ |
| | | 5m | | 5 | 21 | ✓ |

ST3000 Series 900
Electric Pressure Transmitter

| | |
|-------------------------|----------------|
| Issued : Jun. 15, 2001 | Page : 1-1-48 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed DiaphragmType)

Flush Diaphragm 2 in./50 mm, 1.5 in./40 mm

For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|--|
| Measuring Span | 35 to 3500kPa(0.35 to 35kgf/cm ²) | STH940 | Flush Diaphragm Type : 2in./50mm, 1.5in./40mm |
| | 0.7 to 10MPa (7 to 102 kgf/cm ²) | STH960 | |

| | Code | Price | Fill Fluid | | |
|------------|--|-------|------------|---|---|
| | | | 4 | 7 | |
| | - | | | | |
| 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 | 10 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| | SI unit | U1 | 5 | ✓ | ✓ |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*17 In case "Tantalum" is used for diaphragm material, and in case of "For high-temperature service" normal operating conditions of meter body (process fluid) temperature is -10 to +180deg.C

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

ST3000 Series 900
Electric Pressure Transmitter

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|--------------------------|----------------|
| Issued : Jun. 15, 2001 | Page : 1-149 |
| Effective : Mar. 1, 2003 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed DiaphragmType)
Extended Diaphragm 4 in./100 mm
For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|---|
| Measuring Span | 35 to 3,500 kPa (0.35 to 35 kgf/cm ²) | STH940 | Extended Diaphragm Type : 4in./100mm |
| | 0.7 to 10MPa(7 to 102kgf/cm ²) | STH960 | |

| Selection I | | | Code | Price | | |
|-------------|--------------------------|---|--|-------|-------|---|
| I | Fill Fluid | Model No. | | | 4 | 7 |
| | | STH940 STH960 Extended Diaphragm Flange Type 4 in. / 100 mm | Fill Fluid | | | |
| | | | For high-temperature vacuum service (Silicone oil) | 4 | 729 | |
| | | | For high-temperature high-vacuum service (Silicone oil) | 7 | 1,155 | |
| II | Flange Standard | ANSI flange | A | 0 | ✓ | ✓ |
| | | JIS flange | J | 0 | ✓ | ✓ |
| | | JPI flange | P | 0 | ✓ | ✓ |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF)equivalent | A | 0 | ✓ | ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF)equivalent *23 | B | 10 | ✓ | ✓ |
| | | JIS 30K , ANSI/JPI 600 (RF)equivalent *20 *24 | C | 15 | ✓ | ✓ |
| IV | Flange Material | Carbon Steel | 1 | 0 | ✓ | ✓ |
| | | SUS304 | 7 | 25 | ✓ | ✓ |
| | | SUS316 | 2 | 40 | ✓ | ✓ |
| | | SUS316L *20 *23 | 8 | 50 | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, othes : SUS316) | 2 | 0 | ✓ | ✓ |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) | 8 | 25 | ✓ | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | J | 0 | ✓ | ✓ |
| VII | Length of Extended Parts | L = 50mm (4in. / 100mm) *24 | 09 | 62 | ✓ | ✓ |
| | | L = 100mm (4in. / 100mm) *24 | 14 | 68 | ✓ | ✓ |
| | | L = 150mm (4in. / 100mm) *24 | 19 | 75 | ✓ | ✓ |
| | | L = 200mm (4in. / 100mm) *23 *24 | 24 | 83 | ✓ | ✓ |
| | | L = 250mm (4in. / 100mm) *23 *24 | 29 | 93 | ✓ | ✓ |
| | | L = 300mm (4in. / 100mm) *23 *24 | 34 | 103 | ✓ | ✓ |
| VIII | Length of Capillary Tube | 2m | 2 | 3 | ✓ | ✓ |
| | | 3m | 3 | 7 | ✓ | ✓ |
| | | 4m | 4 | 14 | ✓ | ✓ |
| | | 5m | 5 | 21 | ✓ | ✓ |
| | | 6m | 6 | 28 | ✓ | ✓ |
| | | 7m | 7 | 35 | ✓ | ✓ |
| | | 8m | 8 | 42 | ✓ | ✓ |
| | | 9m | 9 | 49 | ✓ | ✓ |
| | | 10m | A | 56 | ✓ | ✓ |

ST3000 Series 900
Electric Pressure Transmitter

| | |
|-------------------------|----------------|
| Issued : Jun. 15, 2001 | Page : 1-1-50 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed DiaphragmType)

Extended Diaphragm 4 in./100 mm

For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|---|--------|---|
| Measuring Span | 35 to 3,500 kPa (0.35 to 35 kgf/cm ²) | STH940 | Extended Diaphragm Type : 4in./100mm |
| | 0.7 to 10MPa(7 to 102kgf/cm ²) | STH960 | |

| | | Code | Price | | |
|---------------------|--|------|-------|---|---|
| | | | | 4 | 7 |
| | | - | | | |
| 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 | 10 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| SI unit | U1 | 5 | ✓ | ✓ | |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*20 In case Flange Rating: JIS30K, Wetted parts material: SUS316L and for high temperature service, Extended diaphragm type is not available.

*23 In case "ANSI/JPI300" is used for Flange Type & Rating, Not available for Length of Extended Parts : 200/250/300mm.

*24 In case "ANSI/JPI600" is used for 3in. Flange type and rating, not available for the extended diaphragm flange type.

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

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| Issued : Jun. 5, 2001 | Page : 1-151 |
| Effective : Mar. 1, 2003 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed DiaphragmType)
Extended Diaphragm 3 in./80 mm, 2 in./50 mm
For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | Extended Diaphragm: 3in./80mm, 2in./50mm |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| Selection I | | | | Code | Price | Fill Fluid | |
|-------------|--------------------------|--|---|------|-------|------------|---|
| I | Fill Fluid | Model No. | Fill Fluid | | | 4 | 7 |
| | | STH940 | For high-temperature vacuum service (Silicone oil) | 4 | 729 | | |
| | | STH960 Extended Diaphragm 3in./80mm, 2in./50mm | For high-temperature high-vacuum service (Silicone oil) | 7 | 1,155 | | |
| II | Flange Standard | ANSI flange | | A | 0 | ✓ | ✓ |
| | | JIS flange | | J | 0 | ✓ | ✓ |
| | | JPI flange | | P | 0 | ✓ | ✓ |
| III | Flange Type & Rating | JIS 10K , ANSI/JPI 150 (RF) equivalent | | A | 0 | ✓ | ✓ |
| | | JIS 20K , ANSI/JPI 300 (RF) equivalent | | B | 10 | ✓ | ✓ |
| | | JIS 30K, equivalent *24 *32 | | C | 15 | ✓ | ✓ |
| IV | Flange Material | Carbon Steel | | 1 | 0 | ✓ | ✓ |
| | | SUS304 | | 7 | 25 | ✓ | ✓ |
| | | SUS316 | | 2 | 40 | ✓ | ✓ |
| | | SUS316L *32 | | 8 | 50 | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, others : SUS316) | | 2 | 0 | ✓ | ✓ |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) | | 8 | 25 | ✓ | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ | ✓ |
| VII | Length of Extended Parts | L = 50mm (3in. /80mm) *24 | | 05 | 62 | ✓ | ✓ |
| | | L = 100mm (3in. /80mm) *24 | | 10 | 68 | ✓ | ✓ |
| | | L = 150mm (3in. /80mm) *24 | | 15 | 75 | ✓ | ✓ |
| | | L = 50mm (2in. / 50mm) *24 | | 06 | 62 | ✓ | ✓ |
| | | L = 100mm (2in. / 50mm) *24 | | 11 | 68 | ✓ | ✓ |
| | | L = 150mm (2in. / 50mm) *24 | | 16 | 75 | ✓ | ✓ |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ | ✓ |
| | | 3m | | 3 | 7 | ✓ | ✓ |
| | | 4m | | 4 | 14 | ✓ | ✓ |
| | | 5m | | 5 | 21 | ✓ | ✓ |

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| Issued : Jun. 15, 2001 | Page: 1-1-52 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed DiaphragmType)

Extended Diaphragm 3 in./80 mm, 2 in./50 mm

For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | Extended Diaphragm: 3in./80mm, 2in./50mm |
| | 0.7 to 10 MPa (7 to 102 kgf/cm ²) | STH960 | |

| | | Code | Price | | |
|---------------------|--|------|-------|---|---|
| | | | | 4 | 7 |
| | | - | | | |
| 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 | 10 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 20 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| SI unit | U1 | 5 | ✓ | ✓ | |

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

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

*32 In case Flange Rating:JIS30K flange material: SUS316L is not available.

*24 In case of "ANSI/JPI600" is used for 3in. Flange type and rating, not available for the extended diaphragm flange type.

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

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| Issued : Oct. 31, 2001 | Page : 1-1-53 |
| Effective : Nov. 1, 2003 | UNIT : 1000YEN |

Model STH960/STH980 (Remote-sealed Button DiaphragmType)
Button Diaphragm 1-1/2 in. External Screw
For Regular / Oxygen Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 0.7 to 10MPa (7 to 102 kgf/cm ²) | STH960 | Button Diaphragm Type : 1-1/2 in. External screw |
| | 0.7 to 42MPa (7 to 420 kgf/cm ²) | STH980 | |

| Selection I | | | | Code | Price | Fill Fluid Code | | |
|-------------|--------------------------|---|-----------|--------------------------------------|-------|-----------------|----|---|
| I | Fill Fluid | Flange Type | Model No. | Fill Fluid | | 1 | 2 | |
| | | Button Diaphragm Type 1-1/2 in. External screw | STH960 | Regular type service (Silicone oil) | 1 | 433 | | |
| | | | | For oxygen service (Fluorine oil) *3 | 2 | 495 | | |
| | | | STH980 | Regular type service (Silicone oil) | 1 | 487 | | |
| | | | | For oxygen service (Fluorine oil) *3 | 2 | 549 | | |
| II | Flange Standard | No flange | | N | 0 | ✓ | ✓ | |
| III | Flange Type & Rating | 1-1/2in. External screw button diaphragm | | 2 | 0 | ✓ | ✓ | |
| IV | Screw Material | SUS304 | | 7 | 25 | ✓ | ✓ | |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, othes : SUS316) | | 2 | 0 | ✓ | ✓ | |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) | | 8 | 25 | ✓ | ✓ | |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ | ✓ | |
| VII | Length of Extended Parts | Flush Diaphragm (For 1-1/2in. External screw) | | 00 | 0 | ✓ | ✓ | |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ | ✓ | |
| | | 3m | | 3 | 7 | ✓ | ✓ | |
| | | 4m | | 4 | 14 | ✓ | ✓ | |
| | | 5m | | 5 | 21 | ✓ | ✓ | |
| | | Length of Capillary Tube with Olefin Coating | | 2m | | B | 18 | ✓ |
| | 3m | | C | | 22 | ✓ | ✓ | |
| | 4m | | H | | 29 | ✓ | ✓ | |
| | 5m | | D | | 36 | ✓ | ✓ | |

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| Issued : Jun. 15, 2001 | Page : 1-1-54 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH960/STH980 (Remote-sealed Button DiaphragmType)
Button Diaphragm 1-1/2 in. External Screw
For Regular / Oxygen Service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 0.7 to 10MPa (7 to 102 kgf/cm ²) | STH960 | Button Diaphragm Type : 1-1/2 in. Male screw |
| | 0.7 to 42MPa (7 to 420 kgf/cm ²) | STH980 | |

| | | Code | Price | Fill Fluid Code | |
|------------|--|------|-------|-----------------|---|
| | | | | 1 | 2 |
| 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 | 10 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 30 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *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 *36 | H1 | 40 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| | Max working pressure 20MPa *36 | H3 | 0 | ✓ | ✓ |
| SI unit | U1 | 5 | ✓ | ✓ | |

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

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

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

*36 Applicable for STH980 only.

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

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| Issued : Oct. 31,2001 | Page : 11-55 |
| Effective : Apr. 1,2003 | UNIT : 1000YEN |

Model STH920/940/960/980 (Remote-sealed 2 in. Wafer DiaphragmType)

2 in. Wafer (Pancake)

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 2.5 to 100kPa (250 to 10,160mmHzO) | STH920 | 2 in. Wafer Diaphragm Type ANSI1500 equivalent |
| | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | |
| | 0.7 to 10MPa (7 to 102kgf/cm ²) | STH960 | |
| | 0.7 to 42MPa (7 to 420kgf/cm ²) | STH980 | |

| Selection I | | | | Code | Price | Fill Fluid Code | | |
|-------------|---|--|----------------------------|---|-------|-----------------|---|---|
| I | Fill Fluid | Flange Type | Model No. | Fill Fluid | | 1 | 2 | |
| | | 2 in. Wafer Type | STH920 STH940 STH960 | Regular type service (Silicone oil) | 1 | 433 | | |
| | | | | For oxygen service (Fluorine oil) *3 | 2 | 495 | | |
| | | | STH980 | Regular type service (Silicone oil) | 1 | 487 | | |
| | | | | For oxygen service (Fluorine oil) *3 | 2 | 549 | | |
| II | Flange Standard | No flange | | | N | 0 | ✓ | ✓ |
| III | Flange Type & Rating | 2 in. Wafer Type (ANSI1500 equivalent) | | | 1 | 0 | ✓ | ✓ |
| IV | Flange Material | No flange | | | N | 0 | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316 (Diaphragm : SUS316L, othes : SUS316) | | | 2 | 0 | ✓ | ✓ |
| | | SUS316L (Diaphragm :SUS316L, others : SUS316L) | | | 8 | 25 | ✓ | ✓ |
| VI | Finish of Gasket Face | Standard (JIS Ra3.2 (12.5S)) | | | J | 0 | ✓ | ✓ |
| VII | Length of Extended Parts | Flush | | | 00 | 0 | ✓ | ✓ |
| VIII | Length of Capillary Tube | 2m | | | 2 | 3 | ✓ | ✓ |
| | | 3m | | | 3 | 7 | ✓ | ✓ |
| | | 4m | | | 4 | 14 | ✓ | ✓ |
| | | 5m | | | 5 | 21 | ✓ | ✓ |
| | | 6m | | | 6 | 28 | ✓ | ✓ |
| | | 7m | | | 7 | 35 | ✓ | ✓ |
| | | 8m | | | 8 | 42 | ✓ | ✓ |
| | | 9m | | | 9 | 49 | ✓ | ✓ |
| | | 10m | | | A | 56 | ✓ | ✓ |
| | | | | | B | 18 | ✓ | ✓ |
| | Length of Capillary Tube with Olefin Coating | 2m | | | C | 22 | ✓ | ✓ |
| | | 3m | | | H | 29 | ✓ | ✓ |
| | | 4m | | | D | 36 | ✓ | ✓ |
| | | 5m | | | J | 43 | ✓ | ✓ |
| | | 6m | | | E | 50 | ✓ | ✓ |
| | | 7m | | | F | 57 | ✓ | ✓ |
| | | 8m | | | K | 64 | ✓ | ✓ |
| | | 9m | | | G | 71 | ✓ | ✓ |

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| Issued : Jun. 15, 2001 | Page : 1-1-56 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH920/940/960/980 (Remote-sealed 2 in. Wafer Diaphragm Type)
2 in. Wafer (Pancake)

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 2.5 to 100kPa (250 to 10,160mmHzO) | STH920 | 2 in. Wafer Diaphragm Type ANSI1500 equivalent |
| | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | |
| | 0.7 to 10MPa (7 to 102kgf/cm ²) | STH960 | |
| | 0.7 to 42MPa (7 to 420kgf/cm ²) | STH980 | |

| | | Code | Price | Fill Fluid Code | |
|---------------------|--|------|-------|-----------------|---|
| | | | | 1 | 2 |
| | | - | | | |
| 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 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 30 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *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 *36 | H1 | 40 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| | Max working pressure 20MPa *36 | H3 | 0 | ✓ | ✓ |
| SI unit | U1 | 5 | ✓ | ✓ | |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

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

*36 Applicable for STH980 only.

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

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| Issued : Jun. 15, 2001 | Page : 1-1-57 |
| Effective : Apr. 1, 2003 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed 2 in. Wafer DiaphragmType)

2 in. Wafer (Pancake)

For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | 2 in. Wafer Diaphragm Type ANSI1500 equivalent |
| | 0.7 to 10MPa (7 to 102kgf/cm ²) | STH960 | |

| Selection I | | | | Code | Price | Fill Fluid Code | |
|-------------|--------------------------|--|------------------|---|-------|-----------------|---|
| I | Fill Fluid | Flange Type | Model No. | Fill Fluid | | 4 | 7 |
| | | 2 in. Wafer Type | STH940 STH960 | For high-temperature vacuum service (Silicone oil) | 4 | 729 | |
| | | | | For high-temperature high-vacuum service (Silicone oil) | 7 | 1,155 | |
| II | Flange Standard | No flange | | N | 0 | ✓ | ✓ |
| III | Flange Type & Rating | 2 in. Wafer Type (ANSI1500 equivalent) | | 1 | 0 | ✓ | ✓ |
| IV | Flange Material | No flange | | N | 0 | ✓ | ✓ |
| V | Material of Wetted Parts | SUS316L (Diaphragm :SUS316L, others : SUS316L) | | 8 | 25 | ✓ | ✓ |
| VI | Finish of gasket face | Standard (JIS Ra3.2 (12.5S)) | | J | 0 | ✓ | ✓ |
| VII | Length of Extended Parts | Flush | | 00 | 0 | ✓ | ✓ |
| VIII | Length of Capillary Tube | 2m | | 2 | 3 | ✓ | ✓ |
| | | 3m | | 3 | 7 | ✓ | ✓ |
| | | 4m | | 4 | 14 | ✓ | ✓ |
| | | 5m | | 5 | 21 | ✓ | ✓ |
| | | 6m | | 6 | 28 | ✓ | ✓ |
| | | 7m | | 7 | 35 | ✓ | ✓ |
| | | 8m | | 8 | 42 | ✓ | ✓ |
| | | 9m | | 9 | 49 | ✓ | ✓ |
| | | 10m | | A | 56 | ✓ | ✓ |

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Electric Pressure Transmitter

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| Issued : Jun. 15, 2001 | Page : 1-1-58 |
| Effective : May 1, 2004 | UNIT : 1000YEN |

Model STH940/STH960 (Remote-sealed 2 in. Wafer DiaphragmType)
2 in. Wafer (Pancake)
For High-Temperature/Vacuum, High-Temperature/High-Vacuum service

Model No. : STH9X0 - I II III IV V VI VII VIII - Option I - Option II

Basic Model No.

| | | | |
|----------------|--|--------|---|
| Measuring Span | 35 to 3500kPa (0.35 to 35kgf/cm ²) | STH940 | 2 in. Wafer Diaphragm Type ANSI1500 equivalent |
| | 0.7 to 10MPa (7 to 102kgf/cm ²) | STH960 | |

| | | Code | Price | Fill Fluid Code | |
|---------------------|---|------|-------|-----------------|---|
| | | | | 4 | 7 |
| | | - | | ✓ | ✓ |
| 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 | ✓ | ✓ |
| | SUS630 Bolt and nuts material | U | 30 | ✓ | ✓ |
| | Corrosion-resistant finish | A | 11 | ✓ | ✓ |
| | Corrosion-proof finish | B | 14 | ✓ | ✓ |
| | Corrosion-resistant finish, silver paint | D | 16 | ✓ | ✓ |
| | Oil Free finish | K | 10 | ✓ | ✓ |
| | 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 *5 *38 | D7 | 5 | ✓ | ✓ |
| | One Elbow | E1 | 2 | ✓ | ✓ |
| | Two Elbows | E2 | 4 | ✓ | ✓ |
| | External zero/span adjustment | E5 | 30 | ✓ | ✓ |
| | Mounting bracket | E9 | 2 | ✓ | ✓ |
| | Material certificate | H2 | 21 | ✓ | ✓ |
| | SI unit | U1 | 5 | ✓ | ✓ |

*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.

*5 Intrinsically safe for NEPSI cannot be selected with -D7.

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

*36 Applicable for STH980 only.

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