

# ST3000 New Ace Electric Differential Pressure Transmitter Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-23  |
| Effective : Apr. 1, 2007 | UNIT : 1000YEN |

| Model   | Pressure range/style                  | Service (Fill fluid)         | Process connection   |
|---------|---------------------------------------|------------------------------|--|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |

Selections Options 1

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Options 1, 2 : Refer to page 1-4-35

| Basic Model No. |                                   |         | Basic price |
|-----------------|-----------------------------------|---------|-------------|
| Measuring span  | 2.5 to 100kPa(250 to 10,160mmH2O) | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm2)  | JTE930A | 606         |

| Selections |                              |  | Additional price |              |    |
|------------|------------------------------|--|------------------|--------------|----|
| I          | Output                       | 4 to 20mA                                    | 1                | 0            |    |
|            |                              | Digital output (DE protocol)                 | 3                | *1,*2        | 0  |
|            |                              | 4 to 20mA (HART protocol)                    | 5                | *3,*4        | 5  |
| II         | Material of wetted part      | SUS316 (Diaphragm : SUS316L)                 | 2                | 0            |    |
|            |                              | Tantalum *15                                 | 4                | 250          |    |
|            |                              | Hastelloy C                                  | H                | 155          |    |
|            |                              | SUS316L                                      | 8                | 40           |    |
| III        | Fill Fluid                   | Regular type (Silicone oil)                  | 1                | 0            |    |
|            |                              | For oxygen service (Fluorine oil)            | 2                | 62           |    |
|            |                              | For High temperature service (Silicon oil)   | 3                | 62           |    |
| IV         | Flange rating                | JIS 10K                                      | A                | 0            |    |
|            |                              | JIS 20K                                      | C                | 35           |    |
|            |                              | JIS 30K                                      | D                | 55           |    |
|            |                              | JIS 63K                                      | F                | 180          |    |
|            |                              | ANSI 150                                     | G                | 0            |    |
|            |                              | ANSI 300                                     | H                | 35           |    |
|            |                              | ANSI 600                                     | J                | 180          |    |
|            |                              | JPI 150                                      | N                | 0            |    |
|            |                              | JPI 300                                      | P                | 35           |    |
|            |                              | JPI 600                                      | Q                | 180          |    |
|            |                              | V  | Flange size      | 3 in. /80 mm | 2  |
| VI         | Flange type                  | Standard                                     | 1                | 0            |    |
| VII        | Flange material/bolt and nut | SUS304/Carbon steel                          | D                | 0            |    |
|            |                              | SUS304/SUS304                                | E                | 10           |    |
|            |                              | SUS304/SUS630                                | F                | 20           |    |
|            |                              | SUS316/Carbon steel                          | G                | 80           |    |
|            |                              | SUS316/SUS304                                | H                | 90           |    |
|            |                              | SUS316/SUS630                                | J                | 100          |    |
|            |                              | SUS316L/Carbon steel                         | K                | 100          |    |
|            |                              | SUS316L/SUS304                               | L                | 110          |    |
|            |                              | SUS316L/SUS630                               | M                | 120          |    |
| VIII       | Length of Capillary tube     | 2m   | 2                | 5            |    |
|            |                              | 3m   | 3                | 10           |    |
|            |                              | 4m   | 4                | 20           |    |
|            |                              | 5m   | 5                | 30           |    |
|            |                              | 6m   | 6                | 40           |    |
|            |                              | 7m   | 7                | 50           |    |
|            |                              | 8m   | 8                | 60           |    |
|            |                              | 9m   | Q                | 70           |    |
|            |                              | 10m  | A                | 80           |    |
|            |                              | Length of capillary tube with Olefin coating | 2m               | B            | 25 |
|            | 3m                           |  | C                | 30           |    |
|            | 4m                           |  | H                | 40           |    |
|            | 5m                           |  | D                | 50           |    |
|            | 6m                           |  | J                | 60           |    |
|            | 7m                           |  | E                | 70           |    |
|            | 8m                           |  | F                | 80           |    |
|            | 9m                           |  | K                | 90           |    |
|            | 10m                          |  | G                | 100          |    |

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
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| Model   | Pressure range/style                  | Service (Fill fluid)         | Process connection             |
|---------|---------------------------------------|------------------------------|--------------------------------|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Chlorine service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Chlorine service(Fluorine oil) |

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic model No. |                                    |         | Basic price |
|-----------------|------------------------------------|---------|-------------|
| Measuring span  | 2.5 to 100kPa (250 to 10,160mmH2O) | JTE929A | 594         |
|                 | 35 to 350kPa (0.35 to 35kgf/cm2)   | JTE930A | 606         |

| Selections |                              |  | Additional price |     |
|------------|------------------------------|--|------------------|-----|
| I          | Output                       | 4 to 20mA                                    | 1                | 0   |
|            |                              | Digital output (DE protocol)                 | 3 *1,*2          | 0   |
|            |                              | 4 to 20mA (HART protocol)                    | 5 *3,*4          | 5   |
| II         | Material of wetted part      | Tantalum                                     | 4                | 250 |
| III        | Fill Fluid                   | For chlorine service (Fluorine oil)          | 5                | 62  |
| IV         | Flange rating                | JIS 10K                                      | A                | 0   |
|            |                              | JIS 20K                                      | C                | 35  |
|            |                              | JIS 30K                                      | D                | 55  |
|            |                              | *11 JIS 63K                                  | F                | 180 |
|            |                              | ANSI 150                                     | G                | 0   |
|            |                              | ANSI 300                                     | H                | 35  |
|            |                              | *11 ANSI 600                                 | J                | 180 |
|            |                              | JPI 150                                      | N                | 0   |
|            |                              | JPI 300                                      | P                | 35  |
|            |                              | *11 JPI 600                                  | Q                | 180 |
| V          | Flange size                  | 3 in. /80 mm                                 | 2                | 0   |
| VI         | Flange type                  | Standard                                     | 1                | 0   |
| VII        | Flange material/bolt and nut | SUS304/Carbon steel                          | D                | 0   |
|            |                              | SUS304/SUS304                                | E                | 10  |
|            |                              | SUS304/SUS630                                | F                | 20  |
|            |                              | SUS316/Carbon steel                          | G                | 80  |
|            |                              | SUS316/SUS304                                | H                | 90  |
|            |                              | SUS316/SUS630                                | J                | 100 |
|            |                              | SUS316L/Carbon steel                         | K                | 100 |
|            |                              | SUS316L/SUS304                               | L                | 110 |
|            |                              | SUS316L/SUS630                               | M                | 120 |
| VIII       | Length of Capillary tube     | 2m   | 2                | 5   |
|            |                              | 3m   | 3                | 10  |
|            |                              | 4m   | 4                | 20  |
|            |                              | 5m   | 5                | 30  |
|            |                              | 6m   | 6                | 40  |
|            |                              | 7m   | 7                | 50  |
|            |                              | 8m   | 8                | 60  |
|            |                              | 9m   | Q                | 70  |
|            |                              | 10m  | A                | 80  |
|            |                              | Length of capillary tube with Olefin coating | 2m               | B   |
|            | 3m                           |  | C                | 30  |
|            | 4m                           |  | H                | 40  |
|            | 5m                           |  | D                | 50  |
|            | 6m                           |  | J                | 60  |
|            | 7m                           |  | E                | 70  |
|            | 8m                           |  | F                | 80  |
|            | 9m                           |  | K                | 90  |
|            | 10m                          |  | G                | 100 |

Note

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- 4 The lowest output limit is -1.25%(3.8mA).
- 11 Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.



# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

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| Model   | Pressure range/style                               | Service (Fill fluid)         | Process connection   |
|---------|--|------------------------------|--|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH <sub>2</sub> O) | Medium differential pressure | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm <sup>2</sup> )    | High differential pressure   | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |

Selections

Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

Basic model No.

| Measuring span                                 | Basic price |
|--|-------------|
| 2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O) | 594         |
| 35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )  | 606         |

| Selections |  | Additional price                           |             |                       |   |   |
|------------|--|--|-------------|-----------------------|---|---|
| I          | Output                                       | 4 to 20mA                                  | 1           | 0                     |   |   |
|            |  | Digital output (DE protocol)               | 3           | *1,*2                 | 0 |   |
|            |  | 4 to 20mA (HART protocol)                  | 5           | *3,*4                 | 5 |   |
|            |  |  |             |                       |   |   |
| II         | Material of wetted part                      | SUS316 (Diaphragm : SUS316L)               | 2           | 0                     |   |   |
|            |  | Tantalum *15 *35                           | 4           | 295                   |   |   |
|            |  | SUS316L                                    | 8           | 40                    |   |   |
|            |  | Hastelloy C                                | H           | 155                   |   |   |
| III        | Fill Fluid                                   | Regular type (Silicone oil)                | 1           | 0                     |   |   |
|            |  | For oxygen service (Fluorine oil)          | 2           | 62                    |   |   |
|            |  | For High temperature service (Silicon oil) | 3           | 62                    |   |   |
| IV         | Flange rating                                | JIS 10K                                    | A           | 0                     |   |   |
|            |  | JIS 20K                                    | C           | 35                    |   |   |
|            |  | JIS 30K                                    | D           | 55                    |   |   |
|            |  | JIS 63K                                    | F           | 180                   |   |   |
|            |  | ANSI 150                                   | G           | 0                     |   |   |
|            |  | ANSI 300                                   | H           | 35                    |   |   |
|            |  | ANSI 600                                   | J           | 180                   |   |   |
|            |  | JPI 150                                    | N           | 0                     |   |   |
|            |  | JPI 300                                    | P           | 35                    |   |   |
|            |  | JPI 600                                    | Q           | 180                   |   |   |
|            |  | V  | Flange size | 2 in. /50mm           | 3 | 0 |
|            |  |  |             | 1.5 in. /40mm *11 *35 | 4 | 0 |
| VI         | Flange type                                  | Standard                                   | 1           | 0                     |   |   |
| VII        | Flange material/bolt and nut                 | SUS304/Carbon steel                        | D           | 0                     |   |   |
|            |  | SUS304/SUS304                              | E           | 10                    |   |   |
|            |  | SUS304/SUS630                              | F           | 20                    |   |   |
|            |  | SUS316/Carbon steel                        | G           | 80                    |   |   |
|            |  | SUS316/SUS304                              | H           | 90                    |   |   |
|            |  | SUS316/SUS630                              | J           | 100                   |   |   |
|            |  | SUS316L/Carbon steel                       | K           | 100                   |   |   |
|            |  | SUS316L/SUS304                             | L           | 110                   |   |   |
| VIII       | Length of Capillary tube                     | 2m   | 2           | 5                     |   |   |
|            |  | 3m   | 3           | 10                    |   |   |
|            |  | 4m *25                                     | 4           | 20                    |   |   |
|            |  | 5m *25                                     | 5           | 30                    |   |   |
|            | Length of capillary tube with Olefin coating | 2m   | B           | 25                    |   |   |
|            |  | 3m   | C           | 30                    |   |   |
|            |  | 4m *25                                     | H           | 40                    |   |   |
|            |  | 5m *25                                     | D           | 50                    |   |   |

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- 4 The lowest output limit is -1.25%(3.8mA).
- 11 Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- 15 If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C
- 25 The performance is as follows. Temperature characteristics and static pressure effect becomes 1.5 x high temperature model. For details, refer to specification
- 35 In the case the wetted parts material is Tantalum and the flange size is 1-1/2 in., the minimum span is 10kPa.

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
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| Model   | Pressure range/style                  | Service (Fill fluid)         | Process connection             |
|---------|---------------------------------------|------------------------------|--------------------------------|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Chlorine service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Chlorine service(Fluorine oil) |

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2  
 Basic model No.

|                |                                   |         | Basic price |
|----------------|-----------------------------------|---------|-------------|
| Measuring span | 2.5 to 100kPa(250 to 10,160mmH2O) | JTE929A | 594         |
|                | 35 to 3500kPa(0.35 to 35kgf/cm2)  | JTE930A | 606         |

|                   |  |                                     | Additional price |       |   |
|-------------------|--|-------------------------------------|------------------|-------|---|
| <b>Selections</b> |  |                                     |                  |       |   |
| I                 | Output                                       | 4 to 20mA                           | 1                | 0     |   |
|                   |  | Digital output (DE protocol)        | 3                | *1,*2 | 0 |
|                   |  | 4 to 20mA (HART protocol)           | 5                | *3,*4 | 5 |
|                   |  |                                     |                  |       |   |
| II                | Material of wetted part                      | Tantalum                            | 4                | 295   |   |
| III               | Fill Fluid                                   | For chlorine service (Fluorine oil) | 5                | 62    |   |
| IV                | Flange rating                                | JIS 10K                             | A                | 0     |   |
|                   |  | JIS 20K                             | C                | 35    |   |
|                   |  | JIS 30K                             | D                | 55    |   |
|                   |  | *11 JIS 63K                         | F                | 180   |   |
|                   |  | ANSI 150                            | G                | 0     |   |
|                   |  | ANSI 300                            | H                | 35    |   |
|                   |  | *11 ANSI 600                        | J                | 180   |   |
|                   |  | JPI 150                             | N                | 0     |   |
|                   |  | JPI 300                             | P                | 35    |   |
|                   |  | *11 JPI 600                         | Q                | 180   |   |
| V                 | Flange size                                  | 2 in./50mm                          | 3                | 0     |   |
|                   |  | 1.5 in./40mm *35                    | 4                | 0     |   |
| VI                | Flange type                                  | Standard                            | 1                | 0     |   |
| VII               | Flange material/bolt and nut                 | SUS304/Carbon steel                 | D                | 0     |   |
|                   |  | SUS304/SUS304                       | E                | 10    |   |
|                   |  | SUS304/SUS630                       | F                | 20    |   |
|                   |  | SUS316/Carbon steel                 | G                | 80    |   |
|                   |  | SUS316/SUS304                       | H                | 90    |   |
|                   |  | SUS316/SUS630                       | J                | 100   |   |
|                   |  | SUS316L/Carbon steel                | K                | 100   |   |
|                   |  | SUS316L/SUS304                      | L                | 110   |   |
| SUS316L/SUS630    | M  | 120                                 |                  |       |   |
| VIII              | Length of Capillary tube                     | 2m                                  | 2                | 5     |   |
|                   |  | 3m                                  | 3                | 10    |   |
|                   |  | 4m *25                              | 4                | 20    |   |
|                   |  | 5m *25                              | 5                | 30    |   |
|                   | Length of capillary tube with Olefin coating | 2m                                  | B                | 25    |   |
|                   |  | 3m                                  | C                | 30    |   |
|                   |  | 4m *25                              | H                | 40    |   |
|                   |  | 5m *25                              | D                | 50    |   |

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with THIS intrinsically safe and Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- The performance is as follows. Temperature characteristics and static pressure effect becomes 1.5 x high temperature model. For details, refer to specification
- In the case the wetted parts material is Tantalum and the flange size is 1-1/2 in., the minimum span is 10kPa.

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
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| Model   | Pressure range/style                               |                              | Service (Fill fluid)   | Process connection                            |
|---------|--|------------------------------|--|---|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH <sub>2</sub> O) | Medium differential pressure | High temperature and vacuum(Silicon oil),<br>High temperature and high vacuum(Silicon oil) | Flush diaphragm 2 in.<br>(50mm)/1.5 in.(40mm) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm <sup>2</sup> )    | High differential pressure   | High temperature and vacuum(Silicon oil),<br>High temperature and high vacuum(Silicon oil) | Flush diaphragm 2 in.<br>(50mm)/1.5 in.(40mm) |

### Selections

### Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No.

- I II III IV V VI VII VIII

- IX X XI XII XIII XIV

-Options 2

Basic model No.

| Basic model No. |  |         | Basic price |
|-----------------|--|---------|-------------|
| Measuring span  | 2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O) | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )  | JTE930A | 606         |

Additional price

### Selections

| Selections        |                              |  |             | Additional price |
|-------------------|------------------------------|--|-------------|------------------|
| I                 | Output                       | 4 to 20mA                                      | 1           | 0                |
|                   |                              | Digital output (DE protocol)                   | 3 *1,*2     | 0                |
|                   |                              | 4 to 20mA (HART protocol)                      | 5 *3,*4     | 5                |
| II                | Material of wetted part      | SUS316L  | 8           | 0                |
|                   |                              | Tantalum *15                                   | 4           | 400              |
|                   |                              | Hastelloy C                                    | H           | 250              |
| III               | Fill Fluid                   | For high temperature vacuum (Silicon oil)      | 4           | 506              |
|                   |                              | For high temperature high vacuum (Silicon oil) | 7           | 906              |
| IV                | Flange rating                | JIS 10K  | A           | 0                |
|                   |                              | JIS 20K  | C           | 35               |
|                   |                              | JIS 30K  | D           | 55               |
|                   |                              | *11 JIS 63K                                    | F           | 180              |
|                   |                              | ANSI 150                                       | G           | 0                |
|                   |                              | ANSI 300                                       | H           | 35               |
|                   |                              | *11 ANSI 600                                   | J           | 180              |
|                   |                              | JPI 150  | N           | 0                |
|                   |                              | JPI 300  | P           | 35               |
|                   |                              | *11 JPI 600                                    | Q           | 180              |
|                   |                              | V  | Flange size | 2 in. /50mm      |
| 1.5 in. /40mm *11 | 4                            |  |             | 0                |
| VI                | Flange type                  | Standard                                       | 1           | 0                |
| VII               | Flange material/bolt and nut | SUS304/Carbon steel                            | D           | 0                |
|                   |                              | SUS304/SUS304                                  | E           | 10               |
|                   |                              | SUS304/SUS630                                  | F           | 20               |
|                   |                              | SUS316/Carbon steel                            | G           | 80               |
|                   |                              | SUS316/SUS304                                  | H           | 90               |
|                   |                              | SUS316/SUS630                                  | J           | 100              |
|                   |                              | SUS316L/Carbon steel                           | K           | 100              |
|                   |                              | SUS316L/SUS304                                 | L           | 110              |
| SUS316L/SUS630    | M                            | 120  |             |                  |
| VIII              | Length of Capillary tube     | 2m   | 2           | 5                |
|                   |                              | 3m   | 3           | 10               |
|                   |                              | 4m   | 4           | 20               |
|                   |                              | 5m   | 5           | 30               |

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- 4 The lowest output limit is -1.25%(3.8mA).
- 11 Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- 15 If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C

# ST3000 New Ace Electric Differential Pressure Transmitter Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
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| Model   | Pressure range/style                               | Service (Fill fluid)   | Process connection                 |
|---------|--|--|------------------------------------|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH <sub>2</sub> O) | Medium differential pressure<br>Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) | Extended flange type 4 in. (100mm) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm <sub>2</sub> )    | High differential pressure<br>Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil)   | Extended flange type 4 in. (100mm) |

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic model No. | Measuring span                                 | Model   | Basic price |
|-----------------|--|---------|-------------|
|                 | 2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O) | JTE929A | 594         |
|                 | 35 to 350kPa(0.35 to 3.5kgf/cm <sub>2</sub> )  | JTE930A | 606         |

| Selections     |  |  |   |       |     | Additional price |     |    |
|----------------|--|--|---|-------|-----|------------------|-----|----|
| I              | Output                                       | 4 to 20mA                                  | 1 |       |     |                  | 0   |    |
|                |  | Digital output (DE protocol)               | 3 | *1 *2 |     |                  | 0   |    |
|                |  | 4 to 20mA (HART protocol)                  | 5 | *3 *4 |     |                  | 5   |    |
| II             | Material of wetted part                      | SUS316 (Diaphragm : SUS316L)               | 2 |       |     |                  | 0   |    |
|                |  | SUS316L                                    | 8 |       |     |                  | 120 |    |
| III            | Fill Fluid                                   | Regular type (Silicone oil)                | 1 |       |     |                  | 0   |    |
|                |  | For oxygen service (Fluorine oil)          | 2 |       |     |                  | 62  |    |
|                |  | For High temperature service (Silicon oil) | 3 |       |     |                  | 62  |    |
| IV             | Flange rating                                | JIS 10K                                    |   | A     |     |                  | 0   |    |
|                |  | JIS 20K                                    |   | C     |     |                  | 50  |    |
|                |  | JIS 30K                                    |   | D     |     |                  | 70  |    |
|                |  | ANSI 150                                   |   | G     |     |                  | 0   |    |
|                |  | ANSI 300                                   |   | H     |     |                  | 50  |    |
|                |  | JPI 150                                    |   | N     |     |                  | 0   |    |
|                |  | JPI 300                                    |   | P     |     |                  | 50  |    |
|                |  |  |   |       |     |                  |     | 0  |
| V              | Flange size                                  | 4 in./100mm                                | 1 |       |     |                  | 0   |    |
|                |  |  |   |       |     |                  |     |    |
| VII            | Flange type                                  | Length of extended part 50mm               | 2 |       |     |                  | 123 |    |
|                |  | Length of extended part 100mm              | 3 |       |     |                  | 136 |    |
|                |  | Length of extended part 150mm              | 4 |       |     |                  | 150 |    |
|                |  | Length of extended part 200mm              | 5 |       |     |                  | 175 |    |
|                |  | Length of extended part 250mm              | 6 |       |     |                  | 189 |    |
|                |  | Length of extended part 300mm              | 7 |       |     |                  | 200 |    |
|                |  |  |   |       |     |                  |     | 0  |
| VIII           | Flange material/bolt and nut                 | SUS304/Carbon steel                        |   | D     |     |                  | 0   |    |
|                |  | SUS304/SUS304                              |   | E     |     |                  | 10  |    |
|                |  | SUS304/SUS630                              |   | F     |     |                  | 20  |    |
|                |  | SUS316/Carbon steel                        |   | G     |     |                  | 80  |    |
|                |  | SUS316/SUS304                              |   | H     |     |                  | 90  |    |
|                |  | SUS316/SUS630                              |   | J     |     |                  | 100 |    |
|                |  | SUS316L/Carbon steel                       |   | K     |     |                  | 100 |    |
|                |  | SUS316L/SUS304                             |   | L     |     |                  | 110 |    |
| SUS316L/SUS630 |  | M  |   |       | 120 |                  |     |    |
| VIII           | Length of Capillary tube                     | 2m   |   |       | 2   |                  | 5   |    |
|                |  | 3m   |   |       | 3   |                  | 10  |    |
|                |  | 4m   |   |       | 4   |                  | 20  |    |
|                |  | 5m   |   |       | 5   |                  | 30  |    |
|                |  | 6m   |   |       | 6   |                  | 40  |    |
|                |  | 7m   |   |       | 7   |                  | 50  |    |
|                |  | 8m   |   |       | 8   |                  | 60  |    |
|                |  | 9m   |   |       | 9   |                  | 70  |    |
|                |  | 10m  |   |       | Q   |                  | 80  |    |
|                |  |  |   |       | A   |                  | 85  |    |
|                | Length of capillary tube with Olefin coating | 2m   |   |       |     | B                |     | 25 |
|                |  | 3m   |   |       |     | C                |     | 30 |
|                |  | 4m   |   |       |     | H                |     | 40 |
|                |  | 5m   |   |       |     | D                |     | 50 |
|                |  | 6m   |   |       |     | J                |     | 60 |
|                |  | 7m   |   |       |     | F                |     | 70 |
|                |  | 8m   |   |       |     | E                |     | 80 |
|                |  | 9m   |   |       |     | K                |     | 90 |
| 10m            |  |  |   | G     |     | 100              |     |    |

- Notes
- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
  - Digital output (DE protocol) can not be combined with an external zero adjustment function.
  - HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
  - The lowest output limit is -1.25%(3.8mA).
  - Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
  - If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-30  |
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| Model   | Pressure range/style                  |                              | Service (Fill fluid)   | Process connection                 |
|---------|---------------------------------------|------------------------------|--|------------------------------------|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | High temperature and vacuum(Silicon oil),<br>High temperature and high vacuum(Silicon oil) | Extended flange type 4 in. (100mm) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | High temperature and vacuum(Silicon oil),<br>High temperature and high vacuum(Silicon oil) | Extended flange type 4 in. (100mm) |

Selections

Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic model No. | Measuring span                    | Pressure range | Model   | Basic price |
|-----------------|-----------------------------------|----------------|---------|-------------|
|                 | 2.5 to 100kPa(250 to 10,160mmH2O) |                | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm2)  |                | JTE930A | 606         |

| Selections     |                              |  |   |        |     |  | Additional price |
|----------------|------------------------------|--|---|--------|-----|--|------------------|
| I              | Output                       | 4 to 20mA                                      | 1 |        |     |  | 0                |
|                |                              | Digital output (DE protocol)                   | 3 | *1, *2 |     |  | 0                |
|                |                              | 4 to 20mA (HART protocol)                      | 5 | *3, *4 |     |  | 5                |
| II             | Material of wetted part      | SUS316 (Diaphragm : SUS316L)                   | 2 |        |     |  | 0                |
|                |                              | SUS316L  | 8 |        |     |  | 120              |
| III            | Fill Fluid                   | For high temperature vacuum (Silicon oil)      | 4 |        |     |  | 506              |
|                |                              | For high temperature high vacuum (Silicon oil) | 7 |        |     |  | 906              |
| IV             | Flange rating                | JIS 10K  |   | A      |     |  | 0                |
|                |                              | JIS 20K  |   | C      |     |  | 50               |
|                |                              | JIS 30K  |   | D      |     |  | 70               |
|                |                              | ANSI 150                                       |   | G      |     |  | 0                |
|                |                              | ANSI 300                                       |   | H      |     |  | 50               |
|                |                              | JPI 150  |   | N      |     |  | 0                |
|                |                              | JPI 300  |   | P      |     |  | 50               |
| V              | Flange size                  | 4 in./100A                                     |   | 1      |     |  | 0                |
| VI             | Flange type                  | Length of extended part 50mm                   |   | 2      |     |  | 123              |
|                |                              | Length of extended part 100mm                  |   | 3      |     |  | 136              |
|                |                              | Length of extended part 150mm                  |   | 4      |     |  | 150              |
|                |                              | Length of extended part 200mm                  |   | 5      |     |  | 175              |
|                |                              | Length of extended part 250mm                  |   | 6      |     |  | 189              |
|                |                              | Length of extended part 300mm                  |   | 7      |     |  | 200              |
| VII            | Flange material/bolt and nut | SUS304/Carbon steel                            |   | D      |     |  | 0                |
|                |                              | SUS304/SUS304                                  |   | E      |     |  | 10               |
|                |                              | SUS304/SUS630                                  |   | F      |     |  | 20               |
|                |                              | SUS316/Carbon steel                            |   | G      |     |  | 80               |
|                |                              | SUS316/SUS304                                  |   | H      |     |  | 90               |
|                |                              | SUS316/SUS630                                  |   | J      |     |  | 100              |
|                |                              | SUS316L/Carbon steel                           |   | K      |     |  | 100              |
|                |                              | SUS316L/SUS304                                 |   | L      |     |  | 110              |
| SUS316L/SUS630 |                              | M  |   |        | 120 |  |                  |
| VIII           | Length of Capillary tube     | 2m   |   | 2      |     |  | 5                |
|                |                              | 3m   |   | 3      |     |  | 10               |
|                |                              | 4m   |   | 4      |     |  | 20               |
|                |                              | 5m   |   | 5      |     |  | 30               |
|                |                              | 6m   |   | 6      |     |  | 40               |
|                |                              | 7m   |   | 7      |     |  | 50               |
|                |                              | 8m   |   | 8      |     |  | 60               |
|                |                              | 9m   |   | Q      |     |  | 70               |
|                |                              | 10m  |   | A      |     |  | 80               |

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).

# ST3000 New Ace Electric Differential Pressure Transmitter Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-31  |
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| Model   | Pressure range/style                  | Service (Fill fluid)         | Process connection   |
|---------|---------------------------------------|------------------------------|--|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |

Selections

Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic model No. | Measuring span                    | Basic price    |
|-----------------|-----------------------------------|----------------|
|                 | 2.5 to 100kPa(250 to 10,160mmH2O) | JTE929A<br>594 |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm2)  | JTE930A<br>606 |

Selections

|      |  |   |   |       |  | Additional price |
|------|--|---|---|-------|--|------------------|
| I    | Output                                       | 4 to 20mA   | 1 |       |  | 0                |
|      |  | Digital output (DE protocol)                        | 3 | *1,*2 |  | 0                |
|      |  | 4 to 20mA (HART protocol)                           | 5 | *3,*4 |  | 5                |
| II   | Material of wetted part                      | SUS316 (Diaphragm : SUS316L)                        | 2 |       |  | 0                |
|      |  | SUS316L   | 8 |       |  | 120              |
| III  | Fill Fluid                                   | Regular type (Silicone oil)                         | 1 |       |  | 0                |
|      |  | For oxygen service (Fluorine oil)                   | 2 |       |  | 62               |
|      |  | *11, *15 For High temperature service (Silicon oil) | 3 |       |  | 62               |
| IV   | Flange rating                                | JIS 10K   |   | A     |  | 0                |
|      |  | JIS 20K   |   | C     |  | 50               |
|      |  | JIS 30K   |   | D     |  | 70               |
|      |  | ANSI 150  |   | G     |  | 0                |
|      |  | ANSI 300  |   | H     |  | 50               |
|      |  | JPI 150   |   | N     |  | 0                |
|      |  | JPI 300   |   | P     |  | 50               |
| V    | Flange size                                  | 3 in./80 mm   | 2 |       |  | 0                |
|      |  | 2 in./ 50 mm  | 3 |       |  | 0                |
| VI   | Flange type                                  | Length of extended part 50mm                        | 2 |       |  | 123              |
|      |  | Length of extended part 100mm                       | 3 |       |  | 136              |
|      |  | Length of extended part 150mm                       | 4 |       |  | 150              |
|      |  | Length of extended part 200mm                       | 5 |       |  | 175              |
|      |  | Length of extended part 250mm                       | 6 |       |  | 189              |
|      |  | Length of extended part 300mm                       | 7 |       |  | 200              |
| VII  | Flange material/bolt and nut                 | SUS304/Carbon steel                                 |   | D     |  | 0                |
|      |  | SUS304/SUS304                                       |   | E     |  | 10               |
|      |  | SUS304/SUS630                                       |   | F     |  | 20               |
|      |  | SUS316/Carbon steel                                 |   | G     |  | 80               |
|      |  | SUS316/SUS304                                       |   | H     |  | 90               |
|      |  | SUS316/SUS630                                       |   | J     |  | 100              |
|      |  | SUS316L/Carbon steel                                |   | K     |  | 100              |
|      |  | SUS316L/SUS304                                      |   | L     |  | 110              |
|      |  | SUS316L/SUS630                                      |   | M     |  | 120              |
| VIII | Length of Capillary tube                     | 2m  | 2 |       |  | 5                |
|      |  | 3m  | 3 |       |  | 10               |
|      |  | 4m *25  | 4 |       |  | 20               |
|      |  | 5m *25  | 5 |       |  | 30               |
|      |  | 2m  |   | B     |  | 25               |
|      | Length of capillary tube with Olefin coating | 3m  |   | C     |  | 30               |
|      |  | 4m *25  |   | H     |  | 40               |
|      |  | 5m *25  |   | D     |  | 50               |

Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- 4 The lowest output limit is -1.25%(3.8mA).
- 11 Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- 15 If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C
- 25 The performance is as follows. Temperature characteristics and static pressure effect becomes 1.5 x high temperature model. For details, refer to specification sheets.

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-32  |
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| Model   | Pressure range/style                               |                              | Service (Fill fluid)   | Process connection                                |
|---------|--|------------------------------|--|---|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH <sub>2</sub> O) | Medium differential pressure | High temperature and vacuum(Silicon oil),<br>High temperature and high vacuum(Silicon oil) | Extended flange type 3<br>in. (80mm)/2 in. (50mm) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm <sup>2</sup> )    | High differential pressure   | High temperature and vacuum(Silicon oil),<br>High temperature and high vacuum(Silicon oil) | Extended flange type 3<br>in. (80mm)/2 in. (50mm) |

Selections

Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic Model No. |  |  |         | Basic price |
|-----------------|--|--|---------|-------------|
| Measuring span  | 2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O) |  | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )  |  | JTE930A | 606         |

| Selections     |                              |  |   |        |     |  | Additional price |
|----------------|------------------------------|--|---|--------|-----|--|------------------|
| I              | Output                       | 4 to 20mA                                      | 1 |        |     |  | 0                |
|                |                              | Digital output (DE protocol)                   | 3 | *1, *2 |     |  | 0                |
|                |                              | 4 to 20mA (HART protocol)                      | 5 | *3, *4 |     |  | 5                |
| II             | Material of wetted part      | SUS316 (Diaphragm : SUS316L)                   | 2 |        |     |  | 0                |
|                |                              | SUS316L  | 8 |        |     |  | 120              |
| III            | Fill Fluid                   | For high temperature vacuum (Silicon oil)      | 4 |        |     |  | 506              |
|                |                              | For high temperature high vacuum (Silicon oil) | 7 |        |     |  | 906              |
| IV             | Flange rating                | JIS 10K  |   | A      |     |  | 0                |
|                |                              | JIS 20K  |   | C      |     |  | 50               |
|                |                              | JIS 30K  |   | D      |     |  | 70               |
|                |                              | ANSI 150                                       |   | G      |     |  | 0                |
|                |                              | ANSI 300                                       |   | H      |     |  | 50               |
|                |                              | JPI 150  |   | N      |     |  | 0                |
|                |                              | JPI 300  |   | P      |     |  | 50               |
| V              | Flange size                  | 3 in. /80 mm                                   |   | 2      |     |  | 0                |
|                |                              | 2 in./50 mm                                    |   | 3      |     |  | 0                |
| VI             | Flange type                  | Length of extended part 50mm                   |   | 2      |     |  | 123              |
|                |                              | Length of extended part 100mm                  |   | 3      |     |  | 136              |
|                |                              | Length of extended part 150mm                  |   | 4      |     |  | 150              |
| VII            | Flange material/bolt and nut | SUS304/Carbon steel                            |   | D      |     |  | 0                |
|                |                              | SUS304/SUS304                                  |   | E      |     |  | 10               |
|                |                              | SUS304/SUS630                                  |   | F      |     |  | 20               |
|                |                              | SUS316/Carbon steel                            |   | G      |     |  | 80               |
|                |                              | SUS316/SUS304                                  |   | H      |     |  | 90               |
|                |                              | SUS316/SUS630                                  |   | J      |     |  | 100              |
|                |                              | SUS316L/Carbon steel                           |   | K      |     |  | 100              |
|                |                              | SUS316L/SUS304                                 |   | L      |     |  | 110              |
| SUS316L/SUS630 |                              | M  |   |        | 120 |  |                  |
| VIII           | Length of Capillary tube     | 2m   |   |        | 2   |  | 5                |
|                |                              | 3m   |   |        | 3   |  | 10               |
|                |                              | 4m   |   |        | 4   |  | 20               |
|                |                              | 5m   |   |        | 5   |  | 30               |

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-33  |
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| Model   | Pressure range/style                  | Service (Fill fluid)         | Process connection   |
|---------|---------------------------------------|------------------------------|--|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Regular service(Silicon oil), High temperature (Silicon oil), Oxygen service(Fluorine oil) |

Selections

Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic model No. | Measuring span                    | Pressure range | Model   | Basic price |
|-----------------|-----------------------------------|----------------|---------|-------------|
|                 | 2.5 to 100kPa(250 to 10,160mmH2O) |                | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kaf/cm2)  |                | JTE930A | 606         |

### Selections

|      |                              |  |          | Additional price |
|------|------------------------------|--|----------|------------------|
| I    | Output                       | 4 to 20mA  | 1        | 0                |
|      |                              | Digital output (DE protocol)   | 3 *1, *2 | 0                |
|      |                              | 4 to 20mA (HART protocol)  | 5 *3, *4 | 5                |
| II   | Material of wetted part      | SUS316 (Diaphragm : SUS316L)   | 2        | 0                |
|      |                              | SUS316L  | 8        | 120              |
| III  | Fill Fluid                   | Regular type (Silicone oil)  | 1        | 0                |
|      |                              | For oxygen service (Fluorine oil)  | 2        | 62               |
|      |                              | For High temperature service (Silicon oil)                               | 3        | 62               |
| IV   | Flange rating                | JIS 10K  | A        | 0                |
|      |                              | JIS 20K  | C        | 50               |
|      |                              | JIS 30K  | D        | 70               |
|      |                              | ANSI 150   | G        | 0                |
|      |                              | ANSI 300   | H        | 50               |
|      |                              | JPI 150  | N        | 0                |
|      |                              | JPI 300  | P        | 50               |
| V    | Flange size                  | 3 in. (80mm) flush diaphragm type/ 4 in. (100mm) extended diaphragm type | F        | 0                |
| VI   | Flange type                  | Length of extended part 50mm   | 2        | 123              |
|      |                              | Length of extended part 100mm  | 3        | 136              |
|      |                              | Length of extended part 150mm  | 4        | 150              |
|      |                              | Length of extended part 200mm  | 5        | 175              |
|      |                              | Length of extended part 250mm  | 6        | 189              |
|      |                              | Length of extended part 300mm  | 7        | 200              |
| VII  | Flange material/bolt and nut | SUS304/Carbon steel  | D        | 0                |
|      |                              | SUS304/SUS304  | E        | 10               |
|      |                              | SUS304/SUS630  | F        | 20               |
|      |                              | SUS316/Carbon steel  | G        | 80               |
|      |                              | SUS316/SUS304  | H        | 90               |
|      |                              | SUS316/SUS630  | J        | 100              |
|      |                              | SUS316L/Carbon steel   | K        | 100              |
|      |                              | SUS316L/SUS304   | L        | 110              |
| VIII | Length of Capillary tube     | 2m   | 2        | 5                |
|      |                              | 3m   | 3        | 10               |
|      |                              | 4m   | 4        | 20               |
|      |                              | 5m   | 5        | 30               |
|      |                              | 6m   | 6        | 40               |
|      |                              | 7m   | 7        | 50               |
|      |                              | 8m   | 8        | 60               |
|      |                              | 9m   | Q        | 70               |
|      |                              | 10m  | A        | 80               |
|      |                              | Length of capillary tube with Olefin coating                             | 2m       | B                |
|      | 3m                           |  | C        | 30               |
|      | 4m                           |  | H        | 40               |
|      | 5m                           |  | D        | 50               |
|      | 6m                           |  | J        | 60               |
|      | 7m                           |  | E        | 70               |
|      | 8m                           |  | F        | 80               |
|      | 10m                          |  | G        | 100              |

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-34  |
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| Model   | Pressure range/style                               | Service (Fill fluid)         | Process connection   |
|---------|--|------------------------------|--|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH <sub>2</sub> O) | Medium differential pressure | Regular service(Silicon oil),<br>High temperature (Silicon oil),<br>Oxygen service(Fluorine oil) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm <sup>2</sup> )    | High differential pressure   | Regular service(Silicon oil),<br>High temperature (Silicon oil),<br>Oxygen service(Fluorine oil) |

Selections Options 1

Options 1, 2 : Refer to page 1-4-35

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic model No. | Measuring span                                 | Pressure range | Model   | Basic price |
|-----------------|--|----------------|---------|-------------|
|                 | 2.5 to 100kPa(250 to 10,160mmH <sub>2</sub> O) |                | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm <sup>2</sup> )  |                | JTE930A | 606         |

### Selections

| Selections                       | Options   | Additional price |       |     |
|----------------------------------|---|------------------|-------|-----|
| I Output                         | 4 to 20mA   | 1                | 0     |     |
|                                  | Digital output (DE protocol)  | 3                | *1,*2 | 0   |
|                                  | 4 to 20mA (HART protocol)   | 5                | *3,*4 | 5   |
|                                  |   | 8                |       | 120 |
| II Material of wetted part       | SUS316 (Diaphragm : SUS316L)  | 2                | 0     |     |
|                                  | SUS316L   | 8                |       | 0   |
| III Fill Fluid                   | Regular type (Silicone oil)   | 1                | 0     |     |
|                                  | For oxygen service (Fluorine oil)                                       | 2                | 62    |     |
|                                  | For High temperature service (Silicon oil)                              | 3                | 62    |     |
| IV Flange rating                 | JIS 10K   | A                | 0     |     |
|                                  | JIS 20K   | C                | 50    |     |
|                                  | JIS 30K   | D                | 70    |     |
|                                  | ANSI 150  | G                | 0     |     |
|                                  | ANSI 300  | H                | 50    |     |
|                                  | JPI 150   | N                | 0     |     |
|                                  | JPI 300   | P                | 50    |     |
| V Flange size                    | 2in. (50mm) flush diaphragm type/ 2in. (50mm) extended diaphragm type   | H                | 0     |     |
|                                  | 2in. (50mm) flush diaphragm type/ 3in. (80mm) extended diaphragm type   | O                | 0     |     |
|                                  | 1.5in. (40mm) flush diaphragm type/ 2in. (50mm) extended diaphragm type | Y                | 0     |     |
| VI Flange type                   | Length of extended part 50mm  | 2                | 123   |     |
|                                  | Length of extended part 100mm   | 3                | 136   |     |
|                                  | Length of extended part 150mm   | 4                | 150   |     |
|                                  | Length of extended part 200mm   | 5                | 175   |     |
|                                  | Length of extended part 250mm   | 6                | 189   |     |
|                                  | Length of extended part 300mm   | 7                | 200   |     |
| VII Flange material/bolt and nut | SUS304/Carbon steel   | D                | 0     |     |
|                                  | SUS304/SUS304   | E                | 10    |     |
|                                  | SUS304/SUS630   | F                | 20    |     |
|                                  | SUS316/Carbon steel   | G                | 80    |     |
|                                  | SUS316/SUS304   | H                | 90    |     |
|                                  | SUS316/SUS630   | J                | 100   |     |
|                                  | SUS316L/Carbon steel  | K                | 100   |     |
|                                  | SUS316L/SUS304  | L                | 110   |     |
| SUS316L/SUS630                   | M   | 120              |       |     |
| VIII Length of Capillary tube    | 2m  | 2                | 5     |     |
|                                  | 3m  | 3                | 10    |     |
|                                  | 4m *25  | 4                | 20    |     |
|                                  | 5m *25  | 5                | 30    |     |
|                                  | 2m  | B                | 25    |     |
|                                  | 3m  | C                | 30    |     |
|                                  | 4m *25  | H                | 40    |     |
|                                  | 5m *25  | D                | 50    |     |
|                                  | Length of capillary tube with Olefin coating                            | 2m               | B     | 25  |
|                                  |   | 3m               | C     | 30  |
| 4m *25                           |   | H                | 40    |     |
| 5m *25                           |   | D                | 50    |     |

### Notes

- Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- Digital output (DE protocol) can not be combined with an external zero adjustment function.
- HART Communication can not be combined with TIIIS intrinsically safe and Special burn-out feature.
- The lowest output limit is -1.25%(3.8mA).
- Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- If the fill fluid is for high temperature service and wetted part material is Tantalum, the applicable temperature range of wetted part is from -10 to 180 deg.C
- The performance is as follows. Temperature characteristics and static pressure effect becomes 1.5 x high temperature model. For details, refer to specification sheets.

# ST3000 New Ace Electric Differential Pressure Transmitter

## Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
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| Effective : Apr. 1, 2007 | UNIT : 1000YEN |

### Selections

### Options 1

### -Options 2

| Basic model No.  | - I II III IV V VI VII VIII             | - IX X XI XII XIII XIV                                     | -Options 2 | Additional price |
|------------------|---|--|------------|------------------|
| <b>Options 1</b> |   |  |            |                  |
| IX               | Electrical connection / explosion-proof | G1/2, Watertight   | X          | 0                |
|                  |   | G1/2, TIIS Flameproof with 1 pc. Of cable gland attached.  | 2          | 14               |
|                  |   | G1/2, TIIS Flameproof with 2 pcs. Of cable gland attached. | 3          | 23               |
|                  |   | G1/2, intrinsically safe *3                                | 6          | 5                |
|                  |   | 1/2 NPT, Watertight  | A          | 0                |
| X                | Building indicating smart meter         | None   | X          | 0                |
|                  |   | 0 to 100 % linear scales                                   | 1          | 25               |
|                  |   | Engineering unit scales                                    | 2          | 30               |
| XI               | Finish                                  | Standard   | X          | 0                |
|                  |   | Corrosion-resistant  | A          | 11               |
|                  |   | Corrosion-proof  | B          | 14               |
|                  |   | Corrosion-resistant (Silver coating)                       | D          | 16               |
| XII              | Finish of gasket face                   | Standard (JISRa3.2(12.5S))                                 | X          | 0                |
| XIII             | Burnout feature *1                      | None   | X          | 0                |
|                  |   | Upper limit of output at abnormal condition                | U          | 7                |
|                  |   | Lower limit of output at abnormal condition                | D          | 7                |
| XIV              | Mounting bracket                        | None   | X          | 0                |
|                  |   | Carbon steel   | 1          | 3                |
|                  |   | Direct mounting  | P          | 30               |
|                  |   | SUS304   | 2          | 10               |

| Option 2 | Additional prices                               |                     |
|----------|---|---------------------|
| XX       | No options                                      | 0                   |
| A2       | External Zero adjustment *2                     | 30                  |
| A4       | Lightning arrestor                              | 18                  |
| A5       | Long vent/drain plugs                           | 10                  |
| A6       | 1/2 in. remote mounting kit                     | Refer to page 2-180 |
| B7       | For mounting a high load resistance smart meter | 0                   |
| C1       | Color : Red (Munsell 5R4/13)                    | 20                  |
| C2       | Color : Yellow (Munsell 2.5Y8/16))              | 20                  |
| C3       | Color : Blue (Munsell 7.5BG7/2)                 | 20                  |
| C7       | Process connection : reverse                    | 0                   |
| D1       | Water free finish (included oil free finish)    | 29                  |
| D2       | Oil free finish *16                             | 19                  |
| E4       | Dingham Tickness 0.1mm *41                      | 50                  |
| G1       | One elbow (left)                                | 2                   |
| G2       | One elbow (right)                               | 2                   |
| G3       | 2 elbows  | 4                   |
| G6       | Adapter for dual diaphragm                      | Refer to Next pages |
| J8       | Special burn-out feature (3.2mA) *18            | 20                  |
| T1       | Test report                                     | 2                   |
| T2       | Material certificate *19                        | 21                  |
| T5       | Strength calculation sheet                      | 15                  |
| T6       | Withstand pressure and airtight test *21        | 40                  |
| T8       | Traceability certificate                        | 10                  |
| U2       | Non-SI unit conformance                         | 0                   |
| E4       | Diaphragm tickness 0.1mm (3in.)                 | 50                  |
| E4       | Diaphragm tickness 0.1mm (4in.)                 | 50                  |
| D3       | FFP Protect cover                               | 21                  |

### Notes

- 1 Digital output (DE protocol) should be selected with upper/lower direction of burn out feature.
- 2 Digital output (DE protocol) can not be combined with an external zero adjustment function.
- 3 HART Communication can not be combined with TIIS intrinsically safe and Special burn-out feature.
- 11 Dual diaphragm is not available for JIS63K, ANSI600 and JPI600 for a flange rating.
- 14 This selection is not available for high temperature service/high temperature vacuum service/high temperature high vacuum service
- 16 When the fill fluid is for oxygen or chroline service, there is not needed to select this.
- 18 "Lower limit of output at abnormal condition" - code D must be selected for Options 1 "V", Burnout feature.
- 19 Available only for material of wetted part.
- 20 When ordering, designed pressure and designed temperature are required.
- 21 When ordering, withstand pressure and airtight test pressure are required.
- 41 Available only for wetted part material "SUS316,SUS316L".

# ST3000 New Ace Electric Differential Pressure Transmitter Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-36  |
| Effective : Apr. 1, 2007 | UNIT : 1000YEN |

Dual diaphragm adapter (Flush flange 3 in.),

For regular service (fill fluid : silicon oil), oxygen service and chlorine service(fill fluid : Florine oil)

Selections Options

HH -I II III IV V VI VII - VIII

Basic Model No.

| Basic Model No.            |  | Basic price |
|----------------------------|--|-------------|
| Adpater for dual diaphragm |  | 144         |

Additional price

Selections

| Selections |                          |                                     |   | Basic price |
|------------|--------------------------|-------------------------------------|---|-------------|
| I          | Transmitter model number | JTE with 2 adapters                 | E | 0           |
| II         | Material of wetted part  | SUS316(Diaphragm:SUS316L)           | 2 | 0           |
|            |                          | Tantalum                            | 4 | 136         |
|            |                          | Hasterlloy C                        | H | 76          |
|            |                          | SUS316L                             | 8 | 6           |
| III        | Fill fluid               | Regular type (Silicone oil)         | 1 | 0           |
|            |                          | For oxygen service (Fluorine oil)   | 2 | 0           |
|            |                          | For Chlorine service (Fluorine oil) | 5 | 0           |
| IV         | Flange rating            | JIS 10K                             | A | 0           |
|            |                          | JIS 20K                             | C | 0           |
|            |                          | JIS 30K                             | D | 0           |
|            |                          | ANSI 150                            | G | 0           |
|            |                          | ANSI 300                            | H | 0           |
|            |                          | JPI 150                             | N | 0           |
|            |                          | JPI 300                             | P | 0           |
| V          | Flange size              | 3 in. /80 mm                        | 2 | 0           |
| VI         | Flange type              | Standard (Flush diaphragm)          | 1 | 0           |
| VII        | Finish of gasket face    | Standard                            | X | 0           |

Options

|      |                                       |    |   |
|------|---------------------------------------|----|---|
| VIII | No options                            | XX | 0 |
|      | *13 Water free and oil free treatment | D1 | 0 |
|      | *13 Oil free treatment                | D2 | 0 |
|      | *13 Material certificate              | T2 | 0 |
|      | *13 Pressure test                     | T7 | 0 |

Notes

13 When this option is selected, the same option for transmitter must be selected.

# ST3000 New Ace Electric Differential Pressure Transmitter Remote-sealed diaphragm style

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-37  |
| Effective : Apr. 1, 2007 | UNIT : 1000YEN |

Dual diaphragm adapter (Flush flange 2 in.),

For regular service (fill fluid : silicon oil), oxygen service and chlorine service(fill fluid : Fluorine oil)

Selections Options

HH - I II III IV V VI VII - VIII

Basic Model No.

| Basic Model No.            |                          |                                     |   | Basic price      |
|----------------------------|--------------------------|-------------------------------------|---|------------------|
| Adpater for dual diaphragm |                          |                                     |   | 144              |
|                            |                          |                                     |   | Additional price |
| Selections                 |                          |                                     |   |                  |
| I                          | Transmitter model number | JTE with 2 adapters                 | E | 0                |
| II                         | Material of wetted part  | SUS316 (Diaphragm:SUS316L)          | 2 | 0                |
|                            |                          | Tantalum                            | 4 | 176              |
|                            |                          | SUS316L                             | 8 | 6                |
| III                        | Fill fluid               | Regular type (Silicone oil)         | 1 | 0                |
|                            |                          | For oxygen service (Fluorine oil)   | 2 | 0                |
|                            |                          | For Chlorine service (Fluorine oil) | 5 | 0                |
| IV                         | Flange rating            | JIS 10K                             | A | 0                |
|                            |                          | JIS 20K                             | C | 0                |
|                            |                          | JIS 30K                             | D | 0                |
|                            |                          | ANSI 150                            | G | 0                |
|                            |                          | ANSI 300                            | H | 0                |
|                            |                          | JPI 150                             | N | 0                |
|                            |                          | JPI 300                             | P | 0                |
| V                          | Flange size              | 2 in. /50 mm                        | 3 | 0                |
| VI                         | Flange type              | Standard (Flush diaphragm)          | 1 | 0                |
| VII                        | Finish of gasket face    | Standard                            | X | 0                |

Options

|      |                                       |    |   |
|------|---------------------------------------|----|---|
| VIII | No options                            | XX | 0 |
|      | *13 Water free and oil free treatment | D1 | 0 |
|      | *13 Oil free treatment                | D2 | 0 |
|      | *13 Material certificate              | T2 | 0 |
|      | *13 Pressure test                     | T7 | 0 |

Notes

13 When this option is selected, the same option for transmitter must be selected.

**ST3000 New Ace Electric Differential Pressure Transmitter**  
**Remote-sealed diaphragm style**

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-38  |
| Effective : Apr. 1, 2007 | UNIT : 1000YEN |

| Model   | Pressure range/style                  | Service (Fill fluid)         | Process connection         |
|---------|---------------------------------------|------------------------------|----------------------------|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Sanitary (Propyleneglycol) |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Sanitary (Propyleneglycol) |

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic Model No. | Measuring span                    | Pressure range | Model   | Basic price |
|-----------------|-----------------------------------|----------------|---------|-------------|
|                 | 2.5 to 100kPa(250 to 10,160mmH2O) |                | JTE929A | 594         |
|                 | 35 to 3500kPa(0.35 to 35kgf/cm2)  |                | JTE930A | 606         |

| Selections |  |                                 |   | Additional price |
|------------|--|---------------------------------|---|------------------|
| I          | Output                                       | 4 to 20mA                       | 1 | 0                |
| II         | Material of wetted part                      | SUS316L                         | 8 | 0                |
| III        | Fill Fluid                                   | Propyleneglycol (Food additive) | B | 80               |
| IV         | Ferrule standard                             | IDF                             | U | 0                |
| V          | Clamp size                                   | Clamp 4S                        | A | 0                |
|            |  | Clamp 3S                        | B | 5                |
|            |  | Clamp 2S                        | C | 10               |
| VI         | Ferrule type                                 | Standard (Flush diaphragm)      | 1 | 0                |
|            |  | Length of extended part 50mm    | 2 | 153              |
|            |  | Length of extended part 100mm   | 3 | 163              |
| VII        | Material of bolt and nut                     | Carbon steel                    | N | 0                |
|            |  | SUS304                          | P | 10               |
|            |  | SUS630                          | Q | 20               |
| VIII       | Length of capillary tube with Olefin coating | 2m                              | B | 25               |
|            |  | 3m                              | C | 30               |
|            |  | 5m                              | D | 50               |

| Options1 |   |  |   | Additional price |
|----------|---|--|---|------------------|
| IX       | Electrical connection / explosion-proof | G1/2, Watertight   | X | 0                |
|          |   | G1/2, TIIS Flameproof with 1 pc. Of cable gland attached.  | 2 | 14               |
|          |   | G1/2, TIIS Flameproof with 2 pcs. Of cable gland attached. | 3 | 23               |
| X        | Building indicating smart meter         | None   | X | 0                |
|          |   | 0 to 100 % linear scales                                   | 1 | 25               |
|          |   | Engineering unit scales                                    | 2 | 30               |
| XI       | Finish                                  | Standard   | X | 0                |
|          |   | Corrosion-proof  | B | 14               |
| XII      | Finish of gasket face                   | Standard (JISRa3.2(12.5S))                                 | X | 0                |
|          |   | Electro-polishing  | A | 30               |
|          |   | Passivation  | B | 30               |
| XIII     | Burnout feature *2                      | None   | X | 0                |
|          |   | Upper limit of output at abnormal condition                | U | 7                |
|          |   | Lower limit of output at abnormal condition                | D | 7                |
| XIV      | Mounting braket                         | None   | X | 0                |
|          |   | Carbon steel   | 1 | 3                |

| Options 2 |   |    | Additional price |       |
|-----------|---|----|------------------|-------|
|           | No options  | XX |                  | 0     |
|           | External Zero/span adjustment *1                          | A2 |                  | 30    |
|           | Water free finish (included oil free finish)              | D1 |                  | 29    |
|           | Oil free finish *2  | D2 |                  | 19    |
|           | Food additive certificate                                 | N8 |                  | 3     |
|           | Special burn-out feature (3.2mA) *18                      | J8 |                  | 20    |
|           | Test report   | T1 |                  | 2     |
|           | Material certificate                                      | T2 |                  | 21    |
|           | Traceability certificate                                  | T8 |                  | 10    |
|           | 2 sets of IDF clamp with gaskets for Flush diaphragm type | S1 |                  | 30    |
|           | 2 sets of IDF clamp                                       | S2 |                  | 20    |
|           | 2 sets of gaskets for Flush diaphragm type                | S3 |                  | 10    |
|           | Extended type Tank spud                                   |    | 50mm             | 100mm |
|           | 1 pc. For 4S clamp  | S4 | 120              | 160   |
|           | 1 pc. For 3S clamp  | S4 | 95               | 110   |
|           | 1 pc. For 2S clamp  | S4 | 60               | 80    |
|           | 2 pcs. For 4S clamp                                       | S5 | 240              | 320   |
|           | 2 pcs. For 3S clamp                                       | S5 | 190              | 220   |
|           | 2 pcs. For 2S clamp                                       | S5 | 120              | 160   |

**ST3000 New Ace Electric Differential Pressure Transmitter**  
**Remote-sealed diaphragm style**

|                          |                |
|--------------------------|----------------|
| Issued : Spt. 15, 2001   | Page : 1-4-39  |
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| Model   | Pressure range/style                  |                              | Service (Fill fluid)       | Process connection |
|---------|---------------------------------------|------------------------------|----------------------------|--------------------|
| JTE929A | 2.5 to 100kPa<br>(250 to 10,160mmH2O) | Medium differential pressure | Sanitary (Propyleneglycol) | 2S cap nut         |
| JTE930A | 35 to 700kPa<br>(0.35 to 7kgf/cm2)    | High differential pressure   | Sanitary (Propyleneglycol) | 2S cap nut         |

**Selections**

**Options 1**

Basic model No. - I II III IV V VI VII VIII - IX X XI XII XIII XIV -Options 2

| Basic Model No.                   | Basic price |
|-----------------------------------|-------------|
| Measuring span                    | 594         |
| 2.5 to 100kPa(250 to 10,160mmH2O) | JTE929A     |
| 35 to 350kPa(0.35 to 35kgf/cm2)   | JTE930A     |
|                                   | 606         |

**Additional price**

| Selections  | Additional price |
|---|------------------|
| I Output  | 0                |
| 4 to 20mA   | 1                |
| II Material of wetted part                        | 0                |
| SUS316L   | 8                |
| III Fill Fluid                                    | 80               |
| Propyleneglycol (Food additive)                   | B                |
| IV Ferrule standard                               | 0                |
| IDF   | U                |
| V Nut size  | 10               |
| Cap nut 2S  | 8                |
| VI Ferrule type                                   | 0                |
| Standard (Flush diaphragm)                        | 1                |
| Length of extended part 50mm                      | 2                |
| Length of extended part 100mm                     | 3                |
| VII Material of bolt and nut                      | 0                |
| Carbon steel                                      | N                |
| SUS304  | P                |
| SUS630  | Q                |
| VIII Length of capillary tube with Olefin coating | 25               |
| 2m  | B                |
| 3m  | C                |
| 5m  | D                |

**Options1**

|  |   |
|--|---|
| IX Electrical connection /                                 | 0 |
| G1/2, Watertight   | X |
| G1/2, TIIS Flameproof with 1 pc. Of cable gland attached.  | 2 |
| G1/2, TIIS Flameproof with 2 pcs. Of cable gland attached. | 3 |
| X Building indicating smart meter                          | 0 |
| None   | X |
| 0 to 100 % linear scales                                   | 1 |
| Engineering unit scales                                    | 2 |
| XI Finish  | 0 |
| Standard   | X |
| Corrosion-proof  | B |
| XII Finish of gasket face                                  | 0 |
| Standard (JISRa3.2(12.5S))                                 | X |
| Electro-polishing  | A |
| Passivation  | B |
| XIII Burnout feature *2                                    | 0 |
| None   | X |
| Upper limit of output at abnormal condition                | U |
| Lower limit of output at abnormal condition                | D |
| XIV Mounting braket  | 0 |
| None   | X |
| Carbon steel   | 1 |

**Options 2**

| Options 2                                    | Additional price |
|--|------------------|
| No options                                   | XX               |
| External Zero adjustment *1                  | A2               |
| Water free finish (included oil free finish) | D1               |
| Oil free finish *2                           | D2               |
| Food additive certificate                    | N8               |
| Test report                                  | T1               |
| Material certificate                         | T2               |
| Traceability certificate                     | T8               |
| 2 sets of IDF gaskets                        | S3               |