

## 14-3 Smart type I/P positioner

### 14-3-1 AVP 300/301

#### SVP3000 Alphaplus Price List

|               |            |                          |
|---------------|------------|--------------------------|
| <b>AVP300</b> | <b>140</b> | <b>148 (Mount on CV)</b> |
|---------------|------------|--------------------------|

Analog Signal(4 to 20mA.DC.) without travel transmission.

|     |     |     |     |     |
|-----|-----|-----|-----|-----|
| (1) | (2) | (3) | (4) | (5) |
|-----|-----|-----|-----|-----|

|     |     |     |     |      |
|-----|-----|-----|-----|------|
| (6) | (7) | (8) | (9) | (10) |
|-----|-----|-----|-----|------|

|               |            |                          |
|---------------|------------|--------------------------|
| <b>AVP301</b> | <b>165</b> | <b>173 (Mount on CV)</b> |
|---------------|------------|--------------------------|

Analog Signal(4 to 20mA.DC.) with travel transmission.

#### Note

- \*1 1 set of JIS Flameproof cable gland shall be attached for AVP300 model. 2 sets are for AVP301 model.
- \*2 Standard finish is equal to previous Y138A. Corrosion proof is equal to previous Y138B.
- \*3 No domestic sales in Japan due to Non-SI unit.
- \*4 For JIS Flameproof model, these elbows should be put on the supplied cable gland.  
Code "A" and "C" can not be selected simultaneously.
- \*5 Code "E" and "N" can not be selected simultaneously.
- \*6 Code "F" and "G" can not be selected simultaneously.
- \*7 Select model AVP (integral type) only when the direction of drain of the pressure regulator with filter on the control valve is downward (ground).

|   |  |                       |                       | Code                  | Add.Price       | Delivery<br>(Week) |      |
|---|--|-----------------------|-----------------------|-----------------------|-----------------|--------------------|------|
| (1) Structure                                 | Connection   |                       | Air piping connection | Electrical connection | Mounting thread |                    |      |
|   | Water-proof  |                       | Rc1/4                 | G1/2                  | M8              | X                  | 0 3  |
|   | Water-proof  |                       | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18        | P                  | 5 8  |
|   | Water-proof  |                       | 1/4 NPT internal      | M20x1.5               | M8              | Q                  | 5 8  |
|   | JIS Flameproof with cable gland *1   |                       | Rc 1/4                | G1/2                  | M8              | E                  | 5 3  |
|   | FM Explosionproof and Flameproof   |                       | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18        | F                  | 15 8 |
|   | FM Intrinsically safe  |                       | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18        | M                  | 15 8 |
|   | ISSeP/CENELEC Flameproof   |                       | 1/4 NPT internal      | M20x1.5               | M8              | C                  | 15 8 |
|   | KEMA/CENELEC Intrinsically safe  |                       | 1/4 NPT internal      | M20X1.5               | M8              | L                  | 15 8 |
|   | CSA Exprosiionproof  |                       | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18        | A                  | 15 8 |
|   | NEPSI Flameproof   |                       | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18        | B                  | 15 8 |
|   | NEPSI Flameproof   |                       | 1/4 NPT internal      | M20x1.5               | M8              | N                  | 15 8 |
|   | NEPSI Intrinsically safe and Flameproof                                      |                       | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18        | R                  | 15 8 |
|   | NEPSI Intrinsically safe and Flameproof                                      |                       | 1/4 NPT internal      | M20x1.5               | M8              | W                  | 15 8 |
| (2) Finish                                    | Standard (Baked Acrylic)   |                       | *2                    |                       | S               | 0 3                |      |
|   | Corrosion proof (Baked Epoxy)  |                       | *2                    |                       | B               | 15 8               |      |
|   | Silver finish (Baked Acrylic)  |                       |                       |                       | D               | 8 8                |      |
| (3) Positioner<br>Action                      | Direct Action - Air pressure increases with Control signal increase          |                       |                       |                       | D               | 0 3                |      |
|   | Reverse Action - Airpressure decreases with Control signal increase          |                       |                       |                       | R               | 0 3                |      |
| (4) Supply Air-<br>pressure<br>classification | Air supply range   |                       | Pressure gauge scale  | Max regulator setting |                 |                    |      |
|   | 130<=Ps<=150kPa  | {1.3<=Ps<=1.5kgf/cm2} | 200kPa {2kgf/cm2}     | 400kPa {4kgf/cm2}     | 1               | 0 3                |      |
|   | 150<Ps<=300kPa   | {1.5<Ps<=3.0kgf/cm2}  | 400kPa {4kgf/cm2}     | 400kPa {4kgf/cm2}     | 2               | 0 3                |      |
|   | 300<Ps<=400kPa   | {3.0<Ps<=4.0kgf/cm2}  | 600kPa {6kgf/cm2}     | 400kPa {4kgf/cm2}     | 3               | 0 3                |      |
|   | 400<Ps<=450kPa   | {4.0<Ps<=4.5kgf/cm2}  | 600kPa {6kgf/cm2}     | 700kPa {7kgf/cm2}     | 4               | 0 3                |      |
| (5)Scale Unit<br>(Pressure<br>gauge)          | kPa  |                       |                       |                       | A               | 0 3                |      |
|   | kgf/cm2 *3   |                       |                       |                       | B               | 0 3                |      |
|   | MPa  |                       |                       |                       | C               | 0 3                |      |
|   | bar  |                       |                       |                       | D               | 5 8                |      |
|   | psi *3   |                       |                       |                       | E               | 5 8                |      |
| (6)Pressure<br>regulator with<br>filter       | No selection   |                       |                       |                       | X               | 0 3                |      |
|   | Model KZ03 Pressure Regulator with Filter (Mounted on Positioner *7          |                       |                       |                       | 1               | 20 3               |      |
|   | Model KZ03 Pressure Regulator with Filter (with bracket for separated mount) |                       |                       |                       | 2               | 20 3               |      |

(Refer to next page)

# Accessories

|               |            |                          |   |     |     |     |     |     |   |     |     |     |     |   |      |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|
| <b>AVP300</b> | <b>140</b> | <b>148 (Mount on CV)</b> | - | (1) | (2) | (3) | (4) | (5) | - | (6) | (7) | (8) | (9) | - | (10) |
| <b>AVP301</b> | <b>165</b> | <b>173 (Mount on CV)</b> |   |     |     |     |     |     |   |     |     |     |     |   |      |

|  |  |                 | Code                               | Add.Price   | Delivery (w) |
|--|--|-----------------|------------------------------------|---|--------------|
| (7) Material of Bracket Bolts            | No Selection   |                 | X                                  | 0   | 3            |
|  | Steel - Zinc plated  | Stainless Steel | C                                  | Refer to table 1 on Page 22-COP-5b or table 2 on Page 22-COP-5c |              |
|  | Stainless steel  | Stainless Steel | D                                  |   |              |
| (8)(9) Actuators (for bracket)           | No Selection   |                 | XX                                 | 0   | 3            |
|  | For Single acting actuator   |                 | Refer to table 1 on Page 22-COP-5b |   |              |
|  | For Double acting actuator   |                 | Refer to table 2 on Page 22-COP-5c |   |              |
| (10) Option (Plural selection available) | No selection   |                 | X                                  | 0   | 3            |
|  | Universal Elbow Explosion-proof (SUS304 G1/2) 1pc . For AVP300 *4                          |                 | A                                  | 2   | 3            |
|  | Universal Elbow Explosion-proof (SUS304 G1/2) 2pcs. For AVP301 *4                          |                 | C                                  | 4   | 3            |
|  | Stainless filter for KZ03 (pressure regulator with filter)                                 |                 | K                                  | 8   | 5            |
|  | 2 pcs of adapter for Air piping connection (Rc1/4 to 1/4NPT) for single acting actuator *5 |                 | E                                  | 8   | 3            |
|  | 3 pcs of Adapter for Air piping connection (Rc1/4 to 1/4NPT) for double acting actuator*5  |                 | N                                  | 12  | 3            |
|  | 1 pc of adapter for electric connection (G1/2 to 1/2NPT) for AVP300 *6                     |                 | F                                  | 10  | 3            |
|  | 2 pcs of adapter for electric connection (G1/2 to 1/2NPT) for AVP301*6                     |                 | G                                  | 20  | 3            |
|  | Filter (Screen for air-exhaust port)   |                 | H                                  | 10  | 7            |
|  | Reversing Relay for Double acting actuator   |                 | W                                  | Refer to table 3 on Page 22-COP-5c                              |              |
|  | Seal tape prohibited   |                 | J                                  | 5   | 3            |

Configuration      Following shows default and optional settings of each configurable parameter of Smart Valve Positioner.  
 Unless otherwise specified, the Smart Valve Positioner will be shipped in the following configuration.

- |  |                         |  |
|--|-------------------------|--|
| 1. Input control signal                    | 4 to 20mA               | The minimal span for custom range = 4mA                |
| 2. Output characteristic                   | Liner                   | EQ or QO can be ordered or set by user.                |
| 3. Valve action                            | Direct(Plug above seat) | Reverse(Plug below seat) can be ordered or set by user |
| 4. Output signal for position transmission | 4 to 20mA               | DE also selectable                                     |

**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

- \*1 Select "YW" or "YJ" for old-type motion connectors.(Produced on/before Apr. '83)
- \*2 Consult a sales representative in case of no mounting hole on the side of valve yoke.
- \*3 Select in the case of without manual handle or with manual handle mounted on top of the actuators.
- \*4 Additional support bracket is required.
- \*12 In case "VM" type actuator is required following conditions, 1.select model "VCT" for the body, 2.the existing positioner should be HEP or VPE, 3.yoke should be model HK. If another spec. is required, contact your sales representative.

| (8)(9)Mounting bracket for pneumatic actuators   | Code | (7) Material (Bracket/Bolt) | SS400 Zinc Plated /SUS304 |             | SUS304/SUS304 |             |
|--|------|-----------------------------|---------------------------|-------------|---------------|-------------|
|  |      |                             | C                         |             | D             |             |
|  |      |                             | Add. Price                | Deliv. (wk) | Add. Price    | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   |                             | 5                         | 3           | 10            | 3           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *1  | YQ   |                             | 5                         | 3           | 10            | 3           |
| PSA3, PSA4 for existing valves produced on/before 1999                                   | YY   |                             | 5                         | 3           | 10            | 3           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *1   | YL   |                             | 5                         | 3           | 10            | 3           |
| HA1  | YA   |                             | 5                         | 3           | 10            | 3           |
| HA2,HA3, HL2,HL3   | YT   |                             | 5                         | 3           | 10            | 3           |
| HA4, HL4   | YN   |                             | 5                         | 3           | 10            | 3           |
| HK1, VM1 *12   | YK   |                             | 5                         | 3           | 10            | 3           |
| VM12 for Model VSP *4  | YB   |                             | 5                         | 4           | 10            | 4           |
| VR1  | YV   |                             | 10                        | 3           | 15            | 3           |
| VR2,VR3  | YR   |                             | 10                        | 3           | 15            | 3           |
| RSA1   | YF   |                             | 5                         | 3           | 10            | 3           |
| RSA2   | YU   |                             | 5                         | 3           | 10            | 3           |
| GOM83S,GOM84S,GOM103S  | YG   |                             | 15                        | 3           | 20            | 3           |
| GOM124S  | YM   |                             | 20                        | 3           | 25            | 3           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *2 | YW   |                             | 7                         | 3           | 12            | 3           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *2   | YJ   |                             | 7                         | 3           | 12            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 Nihon Koso A100 Series 270,320 *3                  | TA   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L Nihon Koso A100 Series 400,500 *3                | TB   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800Series 650S,650L   | TC   |                             | 40                        | 4           | 40            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   |                             | 40                        | 4           | 40            | 3           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S                               | TJ   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   |                             | 20                        | 4           | 25            | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 2911-1M series 280, 330, 400                        | TG   |                             | 20                        | 4           | 25            | 3           |
| Nihon Koso 5100L series 240, 280 *3  | TP   |                             | 20                        | 4           | 25            | 4           |
| Nihon Koso 5200L series 218, 270, 350 *3   | TR   |                             | 20                        | 4           | 25            | 4           |
| Masoneilan 37,38 Series #9, #11 *3   | MA   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #13 *3   | MB   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #15,#18 *3   | MC   |                             | 40                        | 4           | 40            | 3           |
| Masoneilan 37,38 Series #15,#18 (w/side manual)  | MF   |                             | 40                        | 4           | 40            | 3           |
| Masoneilan type 35002 Camflex II #41/2,#6 (Valve size 1in.~4in.)                         | MG   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan type 35002 Camflex II #7 (Valve size 6in.~12in.)                              | MH   |                             | 20                        | 4           | 25            | 3           |
| Fisher controls 657,667 series size 50   | FB   |                             | 20                        | 4           | 25            | 3           |
| Fisher controls 657,667 series size 60   | FC   |                             | 20                        | 4           | 25            | 3           |
| Kitamura Valve AK09S,AK12S, AK15S  | KA   |                             | 20                        | 4           | 25            | 3           |
| Kitamura Valve AG06S   | KG   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG09S   | KH   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG13S   | KJ   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW13S   | KV   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW17S   | KW   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW20S   | KT   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-2, BSW-2  | B2   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-3, BSW-3, Hisaka TS-6   | B3   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-4, BSW-4  | B4   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-5, BSW-5  | B5   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-6, BSW-6  | B6   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E25, 40, 65, 100, 200, 350  | RA   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E600, 950, 1600, P2500, P4000   | RB   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-1  | H1   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-2  | H2   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-3  | H3   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-4, 5   | H4   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   |                             | 20                        | 4           | 25            | 4           |

**Table 2. Price and delivery of mounting bracket for double acting actuator**

Note to quotation

- \*1 In case of double acting actuator, a reversing relay unit required.
- \*2 Contact a sales representative if a bracket for model VFR (Flowing) or butterfly valve is required.

| (8)(9)Mounting bracket for pneumatic actuators      | Code | (7) Material (Bracket/Bolt) | SS400 Zinc Plated /SUS304 |             | SUS304/SUS304 |             |
|---|------|-----------------------------|---------------------------|-------------|---------------|-------------|
|   |      |                             | C                         |             | D             |             |
|   |      |                             | Add. Price                | Deliv. (wk) | Add. Price    | Deliv. (wk) |
| VP5,6 *1  | Y1   |                             | 5                         | 4           | 10            | 4           |
| VP7 *1  | Y7   |                             | 5                         | 4           | 10            | 4           |
| SLOP560, 1000, 1000X *1 *2                          | Y2   |                             | 15                        | 4           | 20            | 4           |
| SLOP1500, 1500X *1 *2                               | Y3   |                             | 35                        | 4           | 40            | 4           |
| DAP560, 1000, 1000X *1 *2                           | Y4   |                             | 15                        | 4           | 20            | 4           |
| DAP1500, 1500X *1 *2                                | Y5   |                             | 35                        | 4           | 40            | 4           |
| Kitamura Valve AK09, AK12, AK15 *1                  | KA   |                             | 20                        | 4           | 25            | 3           |
| Kitamura Valve AG06 *1                              | KG   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG09 *1                              | KH   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG13 *1                              | KJ   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW13 *1                              | KV   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW17 *1                              | KW   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW20 *1                              | KT   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-2 *1                                | B2   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-3 *1                                | B3   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-4 *1                                | B4   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-5 *1                                | B5   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-6 *1                                | B6   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E25, 40, 65, 100, 200, 350 *1    | RA   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E600, 950, 1600, P2500, P4000 *1 | RB   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-80 *1                               | V1   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-100 *1                              | V2   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-120 *1                              | V3   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-150 *1                              | V4   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-180 *1                              | V5   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve Z series Z-06, 08, 11, 13 *1            | EA   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve T-matic 3I-1, 2, 3, 4 *1                | E3   |                             | 20                        | 4           | 25            | 4           |

**Table 3. Price and delivery of reversing-relay for double acting actuator**

| The additional price goes with "Finish" of selection (2) | Code (2) | Add. Price 1000 yen | Deliv (Wk) |
|--|----------|---------------------|------------|
| Standard   | S        | 45                  | 4          |
| Corrosion resistant                                      | B        | 49                  | 8          |
| Corrosion resistant silver                               | D        | 47                  | 10         |

For air-piping connection between the SVP and reversing-relay, a vinyl-covered copper cable with Sanko's double joint (SV0602-001) is used. Other cases are subject to factory referral.

## 14-3-2 Smart type I/P Positioner AVP with HART communication protocol

### SVP3000 Alphaplus Price List

|               |            |                          |   |     |     |     |     |     |   |     |     |     |     |   |      |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|
| <b>AVP302</b> | <b>153</b> | <b>161 (Mount on CV)</b> | - | (1) | (2) | (3) | (4) | (5) | - | (6) | (7) | (8) | (9) | - | (10) |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|

Analog Signal (4 to 20mA.DC.) with HART communication protocol

#### Notes

- \*1 No domestic sales in Japan due to Non-SI unit.
- \*2 Standard finish is equivalent to paint specifications Y138A. Corrosion proof is equivalent to paint specifications Y138B.
- \*3 Select model AVP (integral type) only when the direction of drain of the pressure regulator with filter on the control valve is downward (ground).
- \*4 One set of JIS Flameproof cable gland shall be attached.
- \*5 For JIS Flameproof model, this elbow should be put on the supplied cable gland.

|  |  |                       |                       | Code                            | Add.Price   | Delivery (Week) |   |
|--|--|-----------------------|-----------------------|---------------------------------|---|-----------------|---|
| (1)Structure                             |  | Air piping connection | Electrical connection | Bracket                         |   |                 |   |
|  | Water-proof  | Rc1/4                 | G1/2                  | M8                              | X   | 0               | 6 |
|  | Water-proof  | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18                        | P   | 5               | 6 |
|  | JIS Flameproof with cable gland *4   | Rc 1/4                | G1/2                  | M8                              | E   | 5               | 6 |
|  | FM Explosionproof and Flameproof   | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18                        | F   | 15              | 6 |
|  | FM Intrinsically safe  | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18                        | M   | 15              | 6 |
|  | ISSEP/CENELEC Flameproof   | 1/4 NPT internal      | M20x1.5               | M8                              | C   | 15              | 6 |
|  | KEMA/CENELEC Intrinsically safe  | 1/4NPT internal       | M20X1.5               | M8                              | L   | 15              | 6 |
| CSA Explosionproof                       | 1/4NPT internal  | 1/2 NPT internal      | 5/ 16-18              | A                               | 15  | 6               |   |
| (2)Finish                                | Standard (Baked Acrylic) *2  |                       |                       | S                               | 0   | 4               |   |
|  | Corrosion proof (Baked Epoxy) *2   |                       |                       | B                               | 15  | 8               |   |
|  | Silver finish (Baked Acrylic) *2   |                       |                       | D                               | 8   | 8               |   |
| (3)Positioner Action                     | Direct Action - Air pressure increases with Control signal increase          |                       |                       | D                               | 0   | 4               |   |
|  | Reverse Action - Airpressure decreases with Control signal increase          |                       |                       | R                               | 0   | 4               |   |
| (4)Supply Air-pressure classification    | Air supply range   |                       | Pressure gauge scale  | Max regulator setting           |   |                 |   |
|  | 130<=Ps<=150kPa {1.3<=Ps<=1.5kgf/cm2}  |                       | 200kPa {2kgf/cm2}     | 400kPa {4kgf/cm2}               | 1   | 0               | 4 |
|  | 150<Ps<=300kPa {1.5<Ps<=3.0kgf/cm2}  |                       | 400kPa {4kgf/cm2}     | 400kPa {4kgf/cm2}               | 2   | 0               | 4 |
|  | 300<Ps<=400kPa {3.0<Ps<=4.0kgf/cm2}  |                       | 600kPa {6kgf/cm2}     | 400kPa {4kgf/cm2}               | 3   | 0               | 4 |
|  | 400<Ps<=450kPa {4.0<Ps<=4.50kgf/cm2}   |                       | 600kPa {6kgf/cm2}     | 700kPa {7kgf/cm2}               | 4   | 0               | 4 |
| 450<Ps<=700kPa {4.5<Ps<=7.0kgf/cm2}      |  | 1000kPa {10kgf/cm2}   | 700kPa {7kgf/cm2}     | 5                               | 0   | 4               |   |
| (5)Scale Unit (Pressure gauge)           | kPa  |                       |                       | A                               | 0   | 4               |   |
|  | kgf/cm2 *1   |                       |                       | B                               | 0   | 4               |   |
|  | MPa  |                       |                       | C                               | 0   | 4               |   |
|  | bar  |                       |                       | D                               | 5   | 8               |   |
|  | psi *1   |                       |                       | E                               | 5   | 8               |   |
| (6)Pressure regulator with filter        | No selection   |                       |                       | X                               | 0   | 4               |   |
|  | Model KZ03 Pressure Regulator with Filter (Mounted on Positioner) *3         |                       |                       | 1                               | 20  | 4               |   |
|  | Model KZ03 Pressure Regulator with Filter (with bracket for separated mount) |                       |                       | 2                               | 20  | 4               |   |
| (7) Material of Bracket Bolts            | No Selection   |                       |                       | X                               | 0   | 4               |   |
|  | Steel - Zinc plated  | Stainless Steel       |                       | C                               | Refer to table 1 on Page 22-COP-6a or table 2 on Page 22-COP-6b |                 |   |
|  | Stainless steel  | Stainless Steel       |                       | D                               |   |                 |   |
| (8)(9) Actuators (for bracket)           | No Selection   |                       |                       | XX                              | 0   | 4               |   |
|  | For Single acting actuator   |                       |                       | Refer to table 1 Page 22-COP-6a |   |                 |   |
|  | For Double acting actuator   |                       |                       | Refer to table 2 Page 22-COP-6b |   |                 |   |
| (10) Option (Plural selection available) | No selection   |                       |                       | X                               | 0   | 4               |   |
|  | Reversing Relay for Double acting actuator                                   |                       |                       | W                               | Refer to table 3 Page 22-COP-6b                                 |                 |   |
|  | Universal Elbow Explosion-proof (sus304 G1/2) *5                             |                       |                       | A                               | 2   | 5               |   |
|  | Stainless filter for KZ03 (pressure regulator with filter)                   |                       |                       | K                               | 8   | 5               |   |
|  | Filter (Screen for air-exhaust port)   |                       |                       | H                               | 10  | 6               |   |

Configuration Following shows default and optional settings of each configurable parameter of SVP.

- |                          |                          |   |
|--------------------------|--------------------------|---|
| 1. Input control signal  | 4 to 20mA                | The minimal span for custom range = 4mA         |
| 2. Output characteristic | Linear                   | EQ or QO can be ordered or set by user.         |
| 3. Valve action          | Direct (Plug above seat) | Reverse (Plug below seat) can be ordered or set |

# Accessories

**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

- \*3 Select in the case of without manual handle or with manual handle mounted on top of the actuators. \*8
- Select "YW" or "YJ" for old-type motion connectors. (Produced on/before Apr. '83)
- \*9 Consult a sales representative in case of no mounting hole on the side of valve yoke.
- \*12 In case "VM" type actuator is required following conditions, 1.select model "VCT" for the body, 2.the existing positioner should be HEP or VPE, 3.yoke should be model HK. If another spec. is required, contact your sales representative.
- \*15 For model VSP (PVC body), an additional support bracket is required for the AVP.

| (8)(9)Mounting bracket for pneumatic actuators   | Code | (7) Material (Bracket/Bolt) | SS400 Zinc Plated /SUS304 |             | SUS304/SUS304 |             |
|--|------|-----------------------------|---------------------------|-------------|---------------|-------------|
|  |      |                             | C                         |             | D             |             |
|  |      |                             | Add. Price                | Deliv. (wk) | Add. Price    | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   |                             | 5                         | 3           | 10            | 3           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *8  | YQ   |                             | 5                         | 3           | 10            | 3           |
| PSA3, PSA4 for existing valves produced on/before 1999                                   | YY   |                             | 5                         | 3           | 10            | 3           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *8   | YL   |                             | 5                         | 3           | 10            | 3           |
| HA1  | YA   |                             | 5                         | 3           | 10            | 3           |
| HA2,HA3, HL2,HL3   | YT   |                             | 5                         | 3           | 10            | 3           |
| HA4, HL4   | YN   |                             | 5                         | 3           | 10            | 3           |
| HK1, VM1 *12   | YK   |                             | 5                         | 3           | 10            | 3           |
| VM12 for Model VSP *13   | YB   |                             | 5                         | 4           | 10            | 4           |
| VR1  | YV   |                             | 10                        | 3           | 15            | 3           |
| VR2,VR3  | YR   |                             | 10                        | 3           | 15            | 3           |
| RSA1   | YF   |                             | 5                         | 3           | 10            | 3           |
| RSA2   | YU   |                             | 5                         | 3           | 10            | 3           |
| GOM83S,GOM84S,GOM103S  | YG   |                             | 15                        | 3           | 20            | 3           |
| GOM124S  | YM   |                             | 20                        | 3           | 25            | 3           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *9 | YW   |                             | 7                         | 3           | 12            | 3           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *9   | YJ   |                             | 7                         | 3           | 12            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 Nihon Koso A100 Series 270,320 *3                  | TA   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L Nihon Koso A100 Series 400,500 *3                | TB   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800Series 650S,650L *3  | TC   |                             | 40                        | 4           | 40            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   |                             | 40                        | 4           | 40            | 3           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S                               | TJ   |                             | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   |                             | 20                        | 4           | 25            | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 2911-1M series 280, 330, 400                        | TG   |                             | 20                        | 4           | 25            | 3           |
| Nihon Koso 5100L series 240, 280 *3  | TP   |                             | 20                        | 4           | 25            | 4           |
| Nihon Koso 5200L series 218, 270, 350 *3   | TR   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #9, #11 *3   | MA   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #13 *3   | MB   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #15,#18 *3   | MC   |                             | 40                        | 4           | 40            | 3           |
| Masoneilan 37,38 Series #15,#18 (w/side manual)  | MF   |                             | 40                        | 4           | 40            | 3           |
| Masoneilan type 35002 Camflex II #41/2,#6 (Valve size 1in.~4in.)                         | MG   |                             | 20                        | 4           | 25            | 3           |
| Masoneilan type 35002 Camflex II #7 (Valve size 6in.~12in.)                              | MH   |                             | 20                        | 4           | 25            | 3           |
| Kitamura Valve AK09S,AK12S, AK15S  | KA   |                             | 20                        | 4           | 25            | 3           |
| Kitamura Valve AG06S   | KG   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG09S   | KH   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG13S   | KJ   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW13S   | KV   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW17S   | KW   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW20S   | KT   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-2, BSW-2  | B2   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-3, BSW-3, Hisaka TS-6   | B3   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-4, BSW-4  | B4   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-5, BSW-5  | B5   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series BS-6, BSW-6  | B6   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E25, 40, 65, 100, 200, 350  | RA   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E600, 950, 1600, P2500, P4000   | RB   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-1  | H1   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-2  | H2   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-3  | H3   |                             | 20                        | 4           | 25            | 4           |
| Hisaka TS-4, 5   | H4   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   |                             | 20                        | 4           | 25            | 4           |

**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

\*3 Select in the case of without manual handle or with manual handle mounted on top of the actuators.

| (8)(9)Mounting bracket for pneumatic actuators   | Code | *8<br>(7) Material (Bracket/Body) | /SUS304<br>Zinc<br>Plated<br>SS400 |             | SUS304/SUS304 |             |
|--|------|-----------------------------------|------------------------------------|-------------|---------------|-------------|
|  |      |                                   | C                                  |             | D             |             |
|  |      |                                   | Add. Price                         | Deliv. (wk) | Add. Price    | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   |                                   | 5                                  | 3           | 10            | 3           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *8  | YQ   |                                   | 5                                  | 3           | 10            | 3           |
| PSA3, PSA4 for existing valves produced on/before 1999                                   | YY   |                                   | 5                                  | 3           | 10            | 3           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *8   | YL   |                                   | 5                                  | 3           | 10            | 3           |
| HA1  | YA   |                                   | 5                                  | 3           | 10            | 3           |
| HA2,HA3, HL2,HL3   | YT   |                                   | 5                                  | 3           | 10            | 3           |
| HA4, HL4   | YN   |                                   | 5                                  | 3           | 10            | 3           |
| HK1, VM1 *12   | YK   |                                   | 5                                  | 3           | 10            | 3           |
| VM12 for Model VSP *13   | YB   |                                   | 5                                  | 4           | 10            | 4           |
| VR1  | YV   |                                   | 10                                 | 3           | 15            | 3           |
| VR2,VR3  | YR   |                                   | 10                                 | 3           | 15            | 3           |
| RSA1   | YF   |                                   | 5                                  | 3           | 10            | 3           |
| RSA2   | YU   |                                   | 5                                  | 3           | 10            | 3           |
| GOM83S,GOM84S,GOM103S  | YG   |                                   | 15                                 | 3           | 20            | 3           |
| GOM124S  | YM   |                                   | 20                                 | 3           | 25            | 3           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *9 | YW   |                                   | 7                                  | 3           | 12            | 3           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *9   | YJ   |                                   | 7                                  | 3           | 12            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 Nihon Koso A100 Series 270,320 *3                  | TA   |                                   | 20                                 | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L Nihon Koso A100 Series 400,500 *3                | TB   |                                   | 20                                 | 4           | 25            | 3           |
| Motoyama Mfg. 2800Series 650S,650L *3  | TC   |                                   | 40                                 | 4           | 40            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   |                                   | 20                                 | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   |                                   | 20                                 | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   |                                   | 40                                 | 4           | 40            | 3           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S                               | TJ   |                                   | 20                                 | 4           | 25            | 3           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   |                                   | 20                                 | 4           | 25            | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 2911-1M series 280, 330, 400                        | TG   |                                   | 20                                 | 4           | 25            | 3           |
| Nihon Koso 5100L series 240, 280 *3  | TP   |                                   | 20                                 | 4           | 25            | 4           |
| Nihon Koso 5200L series 218, 270, 350 *3   | TR   |                                   | 20                                 | 4           | 25            | 3           |
| Masoneilan 37,38 Series #9, #11 *3   | MA   |                                   | 20                                 | 4           | 25            | 3           |
| Masoneilan 37,38 Series #13 *3   | MB   |                                   | 20                                 | 4           | 25            | 3           |
| Masoneilan 37,38 Series #15,#18 *3   | MC   |                                   | 40                                 | 4           | 40            | 3           |
| Masoneilan 37,38 Series #15,#18 (w/side manual)  | MF   |                                   | 40                                 | 4           | 40            | 3           |
| Masoneilan type 35002 Camflex II #41/2,#6 (Valve size 1in.~4in.)                         | MG   |                                   | 20                                 | 4           | 25            | 3           |
| Masoneilan type 35002 Camflex II #7 (Valve size 6in.~12in.)                              | MH   |                                   | 20                                 | 4           | 25            | 3           |
| Fisher controls 657,667 series size 50   | FB   |                                   | 20                                 | 4           | 25            | 3           |
| Fisher controls 657,667 series size 60   | FC   |                                   | 20                                 | 4           | 25            | 3           |
| Kitamura Valve AK09S,AK12S, AK15S  | KA   |                                   | 20                                 | 4           | 25            | 3           |
| Kitamura Valve AG06S   | KG   |                                   | 20                                 | 4           | 25            | 4           |
| Kitamura Valve AG09S   | KH   |                                   | 20                                 | 4           | 25            | 4           |
| Kitamura Valve AG13S   | KJ   |                                   | 20                                 | 4           | 25            | 4           |
| Kitamura Valve AW13S   | KV   |                                   | 20                                 | 4           | 25            | 4           |
| Kitamura Valve AW17S   | KW   |                                   | 20                                 | 4           | 25            | 4           |
| Kitamura Valve AW20S   | KT   |                                   | 20                                 | 4           | 25            | 4           |
| KITZ B series BS-2, BSW-2  | B2   |                                   | 20                                 | 4           | 25            | 4           |
| KITZ B series BS-3, BSW-3, Hisaka TS-6   | B3   |                                   | 20                                 | 4           | 25            | 4           |
| KITZ B series BS-4, BSW-4  | B4   |                                   | 20                                 | 4           | 25            | 4           |
| KITZ B series BS-5, BSW-5  | B5   |                                   | 20                                 | 4           | 25            | 4           |
| KITZ B series BS-6, BSW-6  | B6   |                                   | 20                                 | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E25, 40, 65, 100, 200, 350  | RA   |                                   | 20                                 | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E600, 950, 1600, P2500, P4000   | RB   |                                   | 20                                 | 4           | 25            | 4           |
| Hisaka TS-1  | H1   |                                   | 20                                 | 4           | 25            | 4           |
| Hisaka TS-2  | H2   |                                   | 20                                 | 4           | 25            | 4           |
| Hisaka TS-3  | H3   |                                   | 20                                 | 4           | 25            | 4           |
| Hisaka TS-4, 5   | H4   |                                   | 20                                 | 4           | 25            | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   |                                   | 20                                 | 4           | 25            | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   |                                   | 20                                 | 4           | 25            | 4           |

### 14-3-3. Smart type I/P Positioner AVP Remote type

#### SVP3000 Alphaplus Price List

|               |            |                          |     |     |     |     |     |     |     |     |     |      |
|---------------|------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| <b>AVP200</b> | <b>177</b> | <b>185 (mount on CV)</b> | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---------------|------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|

Analog Signal (4 to 20mA.DC.) without travel transmission.

|               |            |                          |
|---------------|------------|--------------------------|
| <b>AVP201</b> | <b>202</b> | <b>210 (mount on CV)</b> |
|---------------|------------|--------------------------|

Analog Signal (4 to 20mA.DC.) with travel transmission.

**Note**

- \*1 1 set of JIS Flameproof cable gland shall be attached for AVP200 model. 2 sets are for AVP201 model.
- \*2 Standard finish is equal to previous Y138A. Corrosion proof is equal to previous Y138B.
- \*3 No domestic sales in Japan due to Non-SI unit.
- \*4 For JIS Flameproof model, these elbows should be put on the supplied cable gland. Code "A" and "C" can not be selected simultaneously.
- \*5 Select model AVP (integral type) only when the direction of drain of the pressure regulator with filter on the control valve is downward (ground).
- \*6 This option can be selected only when code "1" is selected for (6) Pressure regulator with filter.
- \*7 Reversing relay is mandatory for double acting actuators.
- \*12 Select the option with the restoration feedback lever, if GOM manufactured before April, 1988. Select the option '8' (Accessory bracket for GOM actuator -Use the case of existing GOP) if the existing control valve assembled with GOP and the accessories such as the Lock-Up valves and solenoid valves.

|  |  |                                  |                                |                                |                                |      | Delivery                             |       |
|--|--|----------------------------------|--------------------------------|--------------------------------|--------------------------------|------|--------------------------------------|-------|
|  |  | Connection                       | Air piping                     | Electrical connection          | Mounting thread                | Code | Add. Price                           | weeks |
| (1)Structure                                     | Water-proof  |                                  | RC 1/4                         | G1/2                           | M8                             | X    | 0                                    | 4     |
|  | Water-proof  |                                  | 1/4 NPT internal               | 1/2 NPT interna                | 5/ 16-18                       | P    | 5                                    | 8     |
|  | JIS Flameproof with cable gland *1   |                                  | Rc 1/4                         | G1/2                           | M8                             | E    | 22                                   | 4     |
| (2)Finish  | Standard (Baked Acrylic)   |                                  | *2                             |                                |                                | S    | 0                                    | 4     |
|  | Corrosion proof (Baked Epoxy)  |                                  | *2                             |                                |                                | B    | 15                                   | 8     |
|  | Silver finish (Baked Acrylic)  |                                  |                                |                                |                                | D    | 8                                    | 10    |
| (3)Positioner Action                             | Direct Action - Air pressure increases with Control signal increase            |                                  |                                |                                |                                | D    | 0                                    | 4     |
|  | Reverse Action - Air pressure decreases with Control signal increase           |                                  |                                |                                |                                | R    | 0                                    | 4     |
| (4)Supply Air-pressure classification            | Air supply range   |                                  | Pressure gauge scale           |                                | Max regulator setting          |      |                                      |       |
|  | 130<=Ps<=150kPa {1.3<=Ps<=1.5kgf/cm <sup>2</sup> }                             |                                  | 200kPa {2kgf/cm <sup>2</sup> } |                                | 400kPa {4kgf/cm <sup>2</sup> } | 1    | 0                                    | 4     |
|  | 150<Ps<=300kPa {1.5<Ps<=3.0kgf/cm <sup>2</sup> }                               |                                  | 400kPa {4kgf/cm <sup>2</sup> } |                                | 400kPa {4kgf/cm <sup>2</sup> } | 2    | 0                                    | 4     |
|  | 300<Ps<=400kPa {3.0<Ps<=4.0kgf/cm <sup>2</sup> }                               |                                  | 600kPa {6kgf/cm <sup>2</sup> } |                                | 400kPa {4kgf/cm <sup>2</sup> } | 3    | 0                                    | 4     |
|  | 400<Ps<=450kPa {4.0<Ps<=4.5kgf/cm <sup>2</sup> }                               |                                  | 600kPa {6kgf/cm <sup>2</sup> } |                                | 700kPa {7kgf/cm <sup>2</sup> } | 4    | 0                                    | 4     |
| 450<Ps<=700kPa {4.5<Ps<=7.0kgf/cm <sup>2</sup> } |  | 1000kPa {10kgf/cm <sup>2</sup> } |                                | 700kPa {7kgf/cm <sup>2</sup> } | 5                              | 0    | 4                                    |       |
| (5)Scale Unit (Pressure gauge)                   | kPa  |                                  |                                |                                |                                | A    | 0                                    | 4     |
|  | kgf/cm <sup>2</sup>  | *3                               |                                |                                |                                | B    | 0                                    | 4     |
|  | MPa  |                                  |                                |                                |                                | C    | 0                                    | 4     |
|  | bar  |                                  |                                |                                |                                | D    | 5                                    | 8     |
|  | psi  | *3                               |                                |                                |                                | E    | 5                                    | 8     |
| (6)Pressure regulator with filter                | No selection   |                                  |                                |                                |                                | X    | 0                                    | 4     |
|  | Model KZ03 Pressure Regulator with Filter (Mounted on Positioner) *5           |                                  |                                |                                |                                | 1    | 20                                   | 4     |
| (7) Cable length                                 | 3 m (For ambient temperature -40 to +80 deg.C)                                 |                                  |                                |                                |                                | 3    | 0                                    | 4     |
|  | 5 m (For ambient temperature -40 to 80 deg.C)                                  |                                  |                                |                                |                                | 5    | 2                                    | 4     |
|  | 10 m (For ambient temperature -40 to 80 deg.C)                                 |                                  |                                |                                |                                | T    | 7                                    | 4     |
|  | 20 m (For ambient temperature -40 to +80 dig. C)                               |                                  |                                |                                |                                | W    | 17                                   | 4     |
| (8)(9) Actuators (for bracket)                   | No Selection   |                                  |                                |                                |                                | XX   | 0                                    | 4     |
|  | For Single acting actuator   |                                  |                                |                                |                                |      | Refer to table 1<br>Page 22-COP-7a   |       |
|  | For Double acting actuator   |                                  |                                |                                |                                |      | Refer to table 2<br>Page 22-COP-7b   |       |
| (10) Option                                      | No selection   |                                  |                                |                                |                                | X    | 0                                    | 4     |
|  | Universal Elbow Explosion-proof (SUS304 G1/2) 1pc . For AVP200 *4              |                                  |                                |                                |                                | A    | 2                                    | 4     |
|  | Universal Elbow Explosion-proof (SUS304 G1/2) 2pcs. For AVP201 *4              |                                  |                                |                                |                                | C    | 4                                    | 4     |
|  | Stainless filter for KZ03 (pressure regulator with filter) *6                  |                                  |                                |                                |                                | K    | 8                                    | 5     |
|  | Stainless mounting kit of a positioner side and pressure regulator with filter |                                  |                                |                                |                                | U    | 20                                   | 5     |
|  | Reversing Relay for Double acting actuator *7                                  |                                  |                                |                                |                                | W    | Refer to table3 on<br>page 22-COP-7b |       |
|  | Seal tape prohibited   |                                  |                                |                                |                                | J    | 5                                    | 4     |
|  | Mounting bracket for accesories on GOM actuator (in case of replace GOP) *12   |                                  |                                |                                |                                | 8    | 20                                   | 4     |
|  | Terminal box connection of designated cable for travel detector                |                                  |                                |                                |                                | M    | 20                                   | 5     |

**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

- \*2 If no suitable mounting bracket can be found, contact a sales representative.
- \*5 Select in the case of without manual handle or with manual handle mounted on top of the actuators.
- \*8 Select "YW" or "YJ" for old-type motion connectors.(Produced on/before Apr. '83)
- \*9 Consult a sales representative in case of no mounting hole on the side of valve yoke.
- \*10 In case "VM" type actuator is required following conditions, 1.select model "VCT" for the body, 2.the existing positioner should be HEP or VPE, 3.yoke should be model HK. If another spec. is required, contact your sales representative.
- \*13 For model VSP (PVC body), an additional support bracket is required for the AVP.

SUS304/SUS304

| (8)(9)Mounting bracket for pneumatic actuators   | Code | D          |             |
|--|------|------------|-------------|
|  |      | Add. Price | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   | 15         | 4           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *8  | YQ   | 15         | 4           |
| PSA3,PSA4 for existing valves produced on/before 1999                                    | YY   | 15         | 4           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *8   | YL   | 15         | 4           |
| HA1  | YA   | 15         | 4           |
| HA2,HA3, HL2,HL3   | YT   | 15         | 4           |
| HA4, HL4   | YN   | 15         | 4           |
| HK1, VM1 *10 (material SS400 zinc plated)  | YK   | 15         | 4           |
| VR1  | YV   | 20         | 4           |
| VR2,VR3  | YR   | 20         | 4           |
| RSA1   | YF   | 20         | 4           |
| RSA2   | YU   | 20         | 4           |
| GOM83S,GOM84S,GOM103S  | YG   | 25         | 4           |
| GOM124S  | YM   | 25         | 4           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *9 | YW   | 15         | 4           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *9   | YJ   | 15         | 4           |
| Motoyama Mfg. 2800 Series 240,280,330, Nihon Koso A100 Series 270,320 *5                 | TA   | 25         | 4           |
| Motoyama Mfg. 2800 Series 400,500S,500L, Nihon Koso A100 Series 400,500 *5               | TB   | 25         | 4           |
| Motoyama Mfg. 2800Series 650S,650L *5  | TC   | 40         | 4           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   | 25         | 4           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   | 25         | 4           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   | 40         | 4           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S *5                            | TJ   | 25         | 4           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   | 20         | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 280,330,400, 2911-1M series 280H, 330H, 400H        | TG   | 20         | 4           |
| Maseoilan 37,38 Series #9, #11 *5  | MA   | 25         | 4           |
| Maseoilan 37,38 Series #13 *5  | MB   | 25         | 4           |
| Maseoilan 37,38 Series #15,#18 *5  | MC   | 40         | 4           |
| Maseoilan 37,38 Series #15,#18 (w/side manual)   | MF   | 40         | 4           |
| Maseoilan type 35002 Camflex II #4-1/2, #6, #7   | MG   | 25         | 4           |
| Nihon Koso TC-500 series TC520S  | TP   | 25         | 4           |
| Nihon Koso TC-700 series TC-713S   | TS   | 25         | 4           |
| Nihon Koso TC-700 series TC-722SS  | TT   | 25         | 4           |
| Kitamura Valve AK05S, AK09S,AK12S, AK15S   | KA   | 15         | 4           |
| Kitamura Valve AG06S   | KG   | 15         | 4           |
| Kitamura Valve AG09S   | KH   | 15         | 4           |
| Kitamura Valve AG13S   | KJ   | 15         | 4           |
| Kitamura Valve AW13S   | KV   | 15         | 4           |
| Kitamura Valve AW17S   | KW   | 15         | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   | 15         | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   | 15         | 4           |
| Fisher 657,667 series 50   | FC   | 25         | 4           |
| Fisher 657,667 series 60   | FD   | 25         | 4           |

**Table 2. Price and delivery of mountig bracket for double acting actuator**

Note to quotation

- \*7 For the double acting actuator, a reversing relay unit is required.
- \*14 If the valve body is for VFR (FloWing) or a butterfly valve, for the mounting bracket requirement consult to our sales.
- \*15 Select the option with the restoration feedback lever, if GOM manufactured before April, 1988.  
 Select the option '8' (Accessory bracket for GOM actuator -Use the case of existing GOP) if the existing control valve assembled with GOP and the accessories such as the Lock-Up valves and solenoid valves.
- \*16 Confirm that boss's pitch of the actuator side is 69mm, if it is required to assemble the mounting bracket to the actuator.

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| (8)(9)Mounting bracket for pneumatic actuators   | Code | Add. Price | Deliv. (wk) |
|--|------|------------|-------------|
| VP5, 6 *7  | Y1   | 15         | 4           |
| SLOP560, 1000, 1000X *14   | Y2   | 25         | 4           |
| SLOP1500, 1500X *14  | Y3   | 45         | 4           |
| DAP560, 1000, 1000X *14  | Y4   | 25         | 4           |
| DAP560, 1500, 1500X *14  | Y5   | 45         | 4           |
| GOM44L, 44LM (Springless horizontal) *7  | G1   | 35         | 4           |
| GOM410L, 410LM (Springless horizontal) *7  | G2   | 35         | 4           |
| GOM64L, 64LM (Springless horizontal) *7  | G3   | 35         | 4           |
| GOM66L, 66LM (Springless horizontal) *7  | G4   | 35         | 4           |
| GOM610L, 610LM (Springless horizontal) *7  | G5   | 35         | 4           |
| GOM84L, 84LM (Springless horizontal) *7  | G6   | 35         | 4           |
| GOM86L, 86LM (Springless horizontal) *7  | G7   | 35         | 4           |
| GOM810L, 810LM (Springless horizontal) *7  | G8   | 35         | 4           |
| GOM1210L, 1210LM (Springless horizontal) *7  | GT   | 35         | 4           |
| GOM1510L, 1510LM (Springless horizontal) *7  | GU   | 35         | 4           |
| GOM44L, 44LM (Springless horizontal) with restoration feedback lever *7 *15                | GE   | 45         | 4           |
| GOM410L, 410LM (Springless horizontal) with restoration feedback lever *7 *15              | GF   | 45         | 4           |
| GOM64L, 64LM (Springless horizontal) with restoration feedback lever *7 *15                | GG   | 45         | 4           |
| GOM66L, 66LM (Springless horizontal) with restoration feedback lever *7 *15                | GH   | 45         | 4           |
| GOM610L, 610LM (Springless horizontal) with restoration feedback lever *7 *15              | GJ   | 45         | 4           |
| GOM84L, 84LM (Springless horizontal) with restoration feedback lever *7 *15                | GK   | 45         | 4           |
| GOM86L, 86LM (Springless horizontal) with restoration feedback lever *7 *15                | GL   | 45         | 4           |
| GOM810L, 810LM (Springless horizontal) with restoration feedback lever *7 *15              | GM   | 45         | 4           |
| GOM1210L, 1210LM (Springless horizontal) with restoration feedback lever *7 *15            | GN   | 45         | 4           |
| GOM1510L, 1510LM (Springless horizontal) with restoration feedback lever *7 *15            | GP   | 55         | 4           |
| GOM84LM (Springless vertical) in case of valve body is not butterfly valve of Yamatake *7  | GA   | 25         | 4           |
| GOM84LM (Springless vertical) in case of valve body is butterfly valve of Yamatake *7      | GB   | 25         | 4           |
| GOM124LM (Springless vertical) in case of valve body is not butterfly valve of Yamatake *7 | GC   | 25         | 4           |
| GOM124LM (Springless vertical) in case of valve body is butterfly valve of Yamatake *7     | GD   | 25         | 4           |
| Nihon Koso 6300 series 63A2, AT series AT20 *7   | T2   | 25         | 4           |
| Nihon Koso 6300 series 63A3, B2, BA, B3, BB, B5, AT series AT-30, 200, 250, 300, 350, 500  | T3   | 25         | 4           |
| Nihon Koso 6300 series 63A4, A5, A6, AT series AT40, AT50, AT60 *7                         | T4   | 25         | 4           |
| Nihon Koso 6300 series AT series AT25 *7   | T5   | 25         | 4           |
| Nihon Koso TC-500 series TC-520W *7 *16  | TP   | 25         | 4           |
| Nihon Koso TC-700 series TC-713W *7  | TS   | 25         | 4           |
| Kitamura Valve AK05, AK09, AK12, AK15 *7   | KA   | 15         | 4           |
| Kitamura Valve AG06 *7   | KG   | 15         | 4           |
| Kitamura Valve AG09 *7   | KH   | 15         | 4           |
| Kitamura Valve AG13 *7   | KJ   | 15         | 4           |
| Kitamura Valve AW13 *7   | KV   | 15         | 4           |
| Kitamura Valve AW17 *7   | KW   | 15         | 4           |
| KITZ B series BS-2, BSW-2, B-2 *7  | B2   | 15         | 4           |
| KITZ B series BS-3, BSW-3, B-3 *7  | B3   | 15         | 4           |
| KITZ B series BS-4, BSW-4, B-4 *7  | B4   | 15         | 4           |
| KITZ B series BS-5, BSW-5, B-5 *7  | B5   | 15         | 4           |
| KITZ B series BS-6, BSW-6, B-6 *7  | B6   | 15         | 4           |
| Tomoe Valve Z series Z-06, 08, 11, 13 *7   | EA   | 15         | 4           |
| Tomoe Valve T-matic 3I-1, 2, 3, 4 *7   | E3   | 15         | 4           |
| NELES BC series BC/BIC11 *7  | NB   | 15         | 4           |

**Table 3. Price and delivery of reversing-relay for double acting actuator**

| The additional price goes with "Finish" of selection (2) | Code (2) | Add. Price (1000) | Deliv. (wk) |
|--|----------|-------------------|-------------|
| Standard   | S        | 45                | 4           |
| Corrosion resistant                                      | B        | 49                | 8           |
| Corrosion resistant silver                               | D        | 47                | 10          |

For air-piping connection between the SVP and reversing-relay, a vinyl-covered copper cable with Sanko's double joint (SV0602-001) is used. Other cases are subject to factory referral.

### 14-3-4. Smart type I/P Positioner AVP Remote type with HART communication protocol

#### SVP3000 Alphaplus Price List

|               |            |                          |   |     |     |     |     |     |   |     |     |     |     |   |      |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|
| <b>AVP202</b> | <b>190</b> | <b>198 (Mount on CV)</b> | - | (1) | (2) | (3) | (4) | (5) | - | (6) | (7) | (8) | (9) | - | (10) |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|

Analog Signal(4 to 20mA.DC.) with HART communication protocol

#### Note

- \*1 1 set of JIS Flameproof cable gland shall be attached.
- \*2 Standard finish is equal to previous Y138A. Corrosion finish equal to previous Y138B.
- \*3 No domestic sales in Japan due to Non-SI unit.
- \*4 For JIS Flameproof model, these elbows should be put on the supplied cable gland.
- \*5 Select "YW" or "YJ" for old-type motion connectors.
- \*6 Code "W" of option (10) must be selected.
- \*7 Select model AVP (integral type) only when the direction of drain of the pressure regulator with filter on the control valve is downward (ground).
- \*15 Select the option with the restoration feedback lever, if GOM manufactured before April, 1988. Select the option '8' (Accessory bracket for GOM actuator -Use the case of existing GOP) if the existing control valve assembled with GOP and the accessories such as the Lock-Up valves and solenoid valves.

|                                       |  | Air piping connection | Electrical connection | Mounting thread       | Code                             | Add.Price                        | Delivery (Week) |
|---------------------------------------|--|-----------------------|-----------------------|-----------------------|----------------------------------|----------------------------------|-----------------|
| (1)Structure                          | Water-proof  | Rc1/4                 | G1/2                  | M8                    | X                                | 0                                | 8               |
|                                       | Water-proof  | 1/4 NPT internal      | 1/2 NPT internal      | 5/16-18               | P                                | 5                                | 8               |
|                                       | JIS Flameproof with cable gland *1   | Rc1/4                 | G1/2                  | M8                    | E                                | 22                               | 8               |
| (2)Finish                             | Standard (Baked Acrylic) *2  |                       |                       |                       | S                                | 0                                | 4               |
|                                       | Corrosion proof (Baked Epoxy) *2   |                       |                       |                       | B                                | 15                               | 8               |
|                                       | Silver finish (Baked Acrylic)  |                       |                       |                       | D                                | 8                                | 10              |
| (3)Positioner Action                  | Direct Action - Air pressure increases with Control signal increase            |                       |                       |                       | D                                | 0                                | 4               |
|                                       | Reverse Action - Air pressure decreases with Control signal increase           |                       |                       |                       | R                                | 0                                | 4               |
| (4)Supply Air-pressure classification | Air supply range   |                       | Pressure gauge scale  | Max regulator setting |                                  |                                  |                 |
|                                       | 130≤Ps≤150kPa  | {1.3≤Ps≤1.5kgf/cm2}   | 200kPa {2kgf/cm2}     | 400kPa {4kgf/cm2}     | 1                                | 0                                | 4               |
|                                       | 150<Ps≤300kPa  | {1.5<Ps≤3.0kgf/cm2}   | 400kPa {4kgf/cm2}     | 400kPa {4kgf/cm2}     | 2                                | 0                                | 4               |
|                                       | 300<Ps≤400kPa  | {3.0<Ps≤4.0kgf/cm2}   | 600kPa {6kgf/cm2}     | 400kPa {4kgf/cm2}     | 3                                | 0                                | 4               |
|                                       | 400<Ps≤450kPa  | {4.0<Ps≤4.5kgf/cm2}   | 600kPa {6kgf/cm2}     | 700kPa {7kgf/cm2}     | 4                                | 0                                | 4               |
| (5)Scale Unit (Pressure gauge)        | kPa  |                       |                       |                       | A                                | 0                                | 4               |
|                                       | kgf/cm2  | *3                    |                       |                       | B                                | 0                                | 4               |
|                                       | MPa  |                       |                       |                       | C                                | 0                                | 4               |
|                                       | bar  |                       |                       |                       | D                                | 5                                | 8               |
|                                       | psi  | *3                    |                       |                       | E                                | 5                                | 8               |
| (6) Pressure regulator with filter    | No selection   |                       |                       |                       | X                                | 0                                | 4               |
|                                       | Model KZ03 Pressure Regulator with Filter (Mounted on Positioner) *7           |                       |                       |                       | 1                                | 20                               | 4               |
| (7) Cable length                      | 3m (For ambient temperature -40 to +80 deg.C)                                  |                       |                       |                       | 3                                | 0                                | 4               |
|                                       | 5m (For ambient temperature -40 to +80 deg.C)                                  |                       |                       |                       | 5                                | 2                                | 4               |
|                                       | 10m (For ambient temperature -40 to +80 deg.C)                                 |                       |                       |                       | T                                | 7                                | 4               |
|                                       | 20m (For ambient temperature -40 to +80 deg.C)                                 |                       |                       |                       | W                                | 17                               | 4               |
| (8)(9) Actuators (for bracket)        | No Selection   |                       |                       |                       | XX                               | 0                                | 4               |
|                                       | For Single acting actuator   |                       |                       |                       | Refer to table 1, page 22-COP-8a |                                  |                 |
|                                       | For Double acting actuator   |                       |                       |                       | Refer to table 2, page 22-COP-8b |                                  |                 |
| (10) Option                           | No selection   |                       |                       |                       | X                                | 0                                | 4               |
|                                       | Universal Elbow Explosion-proof (SUS304 G1/2) 1pc. *4                          |                       |                       |                       | A                                | 2                                | 5               |
|                                       | Stainless filter for KZ03 (pressure regulator with filter)                     |                       |                       |                       | K                                | 8                                | 5               |
|                                       | Stainless mounting kit of a positioner side and pressure regulator with filter |                       |                       |                       | U                                | 20                               | 5               |
|                                       | Reversing Relay for Double acting actuator                                     |                       |                       |                       | W                                | Refer to table 3, Page 22-COP-8b |                 |
|                                       | Mounting bracket for accessories on GOM actuator (in case of replace GOP) *15  |                       |                       |                       | 8                                | 20                               | 4               |
|                                       | Terminal box connection of designated cable for travel detector                |                       |                       |                       | M                                | 20                               | 5               |

Configuration Following shows default and optional settings of each configurable parameter of SVP.

- |                          |                          |   |
|--------------------------|--------------------------|---|
| 1. Input control signal  | 4 to 20mA                | The minimal span for custom range = 4mA         |
| 2. Output characteristic | Linear                   | EQ or QO can be ordered or set by user.         |
| 3. Valve action          | Direct (Plug above seat) | Reverse (Plug below seat) can be ordered or set |

# Accessories

**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

- \*2 If no suitable mounting bracket can be found, contact a sales representative.
- \*5 Select in the case of without manual handle or with manual handle mounted on top of the actuators.
- \*8 Select "YW" or "YJ" for old-type motion connectors.(Produced on/before Apr. '83)
- \*9 Consult a sales representative in case of no mounting hole on the side of valve yoke.
- \*10 In case "VM" type actuator is required following conditions, 1.select model "VCT" for the body, 2.the existing positioner should be HEP or VPE, 3.yoke should be model HK. If another spec. is required, contact your sales representative.
- \*13 For model VSP (PVC body), an additional support bracket is required for the AVP.

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| (8)(9)Mounting bracket for pneumatic actuators   | Code | D          |             |
|--|------|------------|-------------|
|  |      | Add. Price | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   | 15         | 4           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *8  | YQ   | 15         | 4           |
| PSA3,PSA4 for existing valves produced on/before 1999                                    | YY   | 15         | 4           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *8   | YL   | 15         | 4           |
| HA1  | YA   | 15         | 4           |
| HA2,HA3, HL2,HL3   | YT   | 15         | 4           |
| HA4, HL4   | YN   | 15         | 4           |
| HK1, VM1 *10 (material SS400 zinc plated)  | YK   | 15         | 4           |
| VR1  | YV   | 20         | 4           |
| VR2,VR3  | YR   | 20         | 4           |
| RSA1   | YF   | 20         | 4           |
| RSA2   | YU   | 20         | 4           |
| GOM83S,GOM84S,GOM103S  | YG   | 25         | 4           |
| GOM124S  | YM   | 25         | 4           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *9 | YW   | 15         | 4           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *9   | YJ   | 15         | 4           |
| Motoyama Mfg. 2800 Series 240,280,330, Nihon Koso A100 Series 270,320 *5                 | TA   | 25         | 4           |
| Motoyama Mfg. 2800 Series 400,500S,500L, Nihon Koso A100 Series 400,500 *5               | TB   | 25         | 4           |
| Motoyama Mfg. 2800Series 650S,650L *5  | TC   | 40         | 4           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   | 25         | 4           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   | 25         | 4           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   | 40         | 4           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S *5                            | TJ   | 25         | 4           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   | 20         | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 280,330,400, 2911-1M series 280H, 330H, 400H        | TG   | 20         | 4           |
| Masoneilan 37,38 Series #9, #11 *5   | MA   | 25         | 4           |
| Masoneilan 37,38 Series #13 *5   | MB   | 25         | 4           |
| Masoneilan 37,38 Series #15,#18 *5   | MC   | 40         | 4           |
| Masoneilan 37,38 Series #15,#18 (w/side manual)  | MF   | 40         | 4           |
| Masoneilan type 35002 Camflex II #4-1/2, #6, #7  | MG   | 25         | 4           |
| Nihon Koso TC-500 series TC520S  | TP   | 25         | 4           |
| Nihon Koso TC-700 series TC-713S   | TS   | 25         | 4           |
| Nihon Koso TC-700 series TC-722SS  | TT   | 25         | 4           |
| Kitamura Valve AK05S, AK09S,AK12S, AK15S   | KA   | 15         | 4           |
| Kitamura Valve AG06S   | KG   | 15         | 4           |
| Kitamura Valve AG09S   | KH   | 15         | 4           |
| Kitamura Valve AG13S   | KJ   | 15         | 4           |
| Kitamura Valve AW13S   | KV   | 15         | 4           |
| Kitamura Valve AW17S   | KW   | 15         | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   | 15         | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   | 15         | 4           |
| Fisher 657,667 series 50   | FC   | 25         | 4           |
| Fisher 657,667 series 60   | FD   | 25         | 4           |

**AVP202**

**Table 2. Price and delivery of mountig bracket for double acting actuator**

Note to quotation

- \*7 For the double acting actuator, a reversing relay unit is required.
- \*14 If the valve body is for VFR (FloWing) or a butterfly valve, for the mounting bracket requirement consult to our sales.
- \*15 Select the option with the restoration feedback lever, if GOM manufactured before April, 1988.  
 Select the option '8' (Accessory bracket for GOM actuator -Use the case of existing GOP) if the existing control valve assembled with GOP and the accessories such as the Lock-Up valves and solenoid valves.
- \*16 Confirm that boss's pitch of the actuator side is 69mm, if it is required to assemble the mounting bracket to the actuator.

| (8)(9)Mounting bracket for pneumatic actuators   | Code | D          |             |
|--|------|------------|-------------|
|  |      | Add. Price | Deliv. (wk) |
| VP5, 6 *7  | Y1   | 15         | 4           |
| SLOP560, 1000, 1000X *14   | Y2   | 25         | 4           |
| SLOP1500, 1500X *14  | Y3   | 45         | 4           |
| DAP560, 1000, 1000X *14  | Y4   | 25         | 4           |
| DAP560, 1500, 1500X *14  | Y5   | 45         | 4           |
| GOM44L, 44LM (Springless horizontal) *7  | G1   | 35         | 4           |
| GOM410L, 410LM (Springless horizontal) *7  | G2   | 35         | 4           |
| GOM64L, 64LM (Springless horizontal) *7  | G3   | 35         | 4           |
| GOM66L, 66LM (Springless horizontal) *7  | G4   | 35         | 4           |
| GOM610L, 610LM (Springless horizontal) *7  | G5   | 35         | 4           |
| GOM84L, 84LM (Springless horizontal) *7  | G6   | 35         | 4           |
| GOM86L, 86LM (Springless horizontal) *7  | G7   | 35         | 4           |
| GOM810L, 810LM (Springless horizontal) *7  | G8   | 35         | 4           |
| GOM1210L, 1210LM (Springless horizontal) *7  | GT   | 35         | 4           |
| GOM1510L, 1510LM (Springless horizontal) *7  | GU   | 35         | 4           |
| GOM44L, 44LM (Springless horizontal) with restoration feedback lever *7 *15                | GE   | 45         | 4           |
| GOM410L, 410LM (Springless horizontal) with restoration feedback lever *7 *15              | GF   | 45         | 4           |
| GOM64L, 64LM (Springless horizontal) with restoration feedback lever *7 *15                | GG   | 45         | 4           |
| GOM66L, 66LM (Springless horizontal) with restoration feedback lever *7 *15                | GH   | 45         | 4           |
| GOM610L, 610LM (Springless horizontal) with restoration feedback lever *7 *15              | GJ   | 45         | 4           |
| GOM84L, 84LM (Springless horizontal) with restoration feedback lever *7 *15                | GK   | 45         | 4           |
| GOM86L, 86LM (Springless horizontal) with restoration feedback lever *7 *15                | GL   | 45         | 4           |
| GOM810L, 810LM (Springless horizontal) with restoration feedback lever *7 *15              | GM   | 45         | 4           |
| GOM1210L, 1210LM (Springless horizontal) with restoration feedback lever *7 *15            | GN   | 45         | 4           |
| GOM1510L, 1510LM (Springless horizontal) with restoration feedback lever *7 *15            | GP   | 55         | 4           |
| GOM84LM (Springless vertical) in case of valve body is not butterfly valve of Yamatake *7  | GA   | 25         | 4           |
| GOM84LM (Springless vertical) in case of valve body is butterfly valve of Yamatake *7      | GB   | 25         | 4           |
| GOM124LM (Springless vertical) in case of valve body is not butterfly valve of Yamatake *7 | GC   | 25         | 4           |
| GOM124LM (Springless vertical) in case of valve body is butterfly valve of Yamatake *7     | GD   | 25         | 4           |
| Nihon Koso 6300 series 63A2, AT series AT20 *7   | T2   | 25         | 4           |
| Nihon Koso 6300 series 63A3, B2, BA, B3, BB, B5, AT series AT-30, 200, 250, 300, 350, 500  | T3   | 25         | 4           |
| Nihon Koso 6300 series 63A4, A5, A6, AT series AT40, AT50, AT60 *7                         | T4   | 25         | 4           |
| Nihon Koso 6300 series AT series AT25 *7   | T5   | 25         | 4           |
| Nihon Koso TC-500 series TC-520W *7 *16  | TP   | 25         | 4           |
| Nihon Koso TC-700 series TC-713W *7  | TS   | 25         | 4           |
| Kitamura Valve AK05, AK09, AK12, AK15 *7   | KA   | 15         | 4           |
| Kitamura Valve AG06 *7   | KG   | 15         | 4           |
| Kitamura Valve AG09 *7   | KH   | 15         | 4           |
| Kitamura Valve AG13 *7   | KJ   | 15         | 4           |
| Kitamura Valve AW13 *7   | KV   | 15         | 4           |
| Kitamura Valve AW17 *7   | KW   | 15         | 4           |
| KITZ B series BS-2, BSW-2, B-2 *7  | B2   | 15         | 4           |
| KITZ B series BS-3, BSW-3, B-3 *7  | B3   | 15         | 4           |
| KITZ B series BS-4, BSW-4, B-4 *7  | B4   | 15         | 4           |
| KITZ B series BS-5, BSW-5, B-5 *7  | B5   | 15         | 4           |
| KITZ B series BS-6, BSW-6, B-6 *7  | B6   | 15         | 4           |
| Tomoe Valve Z series Z-06, 08, 11, 13 *7   | EA   | 15         | 4           |
| Tomoe Valve T-matic 3I-1, 2, 3, 4 *7   | E3   | 15         | 4           |
| NELES BC series BC/BIC11 *7  | NB   | 15         | 4           |

**Table 3. Price and delivery of reversing-relay for double acting actuator**

| The additional price goes with "Finish" of selection (2) | Code (2) | 1000 yen | (wk) |
|--|----------|----------|------|
| Standard   | S        | 45       | 4    |
| Corrosion resistant                                      | B        | 49       | 8    |
| Corrosion resistant silver                               | D        | 47       | 10   |

For air-piping connection between the SVP and reversing-relay, a vinyl-covered copper cable with Sanko's double joint (SV0602-001) is used. Other cases are subject to factory referral.

## 14-3 Smart type I/P positioner 14-3-5 AVP 303

## Fieldbus

### SVP3000 Alphaplus Price List

|               |            |                          |   |     |     |     |     |     |   |     |     |     |     |   |      |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|
| <b>AVP303</b> | <b>185</b> | <b>193 (Mount on CV)</b> | - | (1) | (2) | (3) | (4) | (5) | - | (6) | (7) | (8) | (9) | - | (10) |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|

FOUNDATION fieldbus signal

Notes on quotation

The price for the mounting bracket shall be added if the CV needs to be equipped with an AVP.

\*1 1 set of JIS Flameproof cable glands will be attached for AVP303 model.

\*2 No domestic sales in Japan due to Non-SI unit.

\*5 Code "E" and "N" can not be selected simultaneously.

\*6 Code "F" and "G" can not be selected simultaneously.

In case of JIS explosion-proof, the conduit adaptor shall be provided on the top of the flameproof cable gland.

\*7 In case of double acting actuator, a reversing relay unit is required.

\*11 Standard finish is equivalent to previous Y138A. Corrosion-proof is equivalent to previous Y138B.

\*13 Select model AVP (integral type) only when the direction of drain of the pressure regulator with filter on the control valve is downward (ground)

\*14 If a mounting bracket is not required, selected "XX".

|  |  |                                    |                                | Code                           | Add.Price                          | Delivery (wk)   |
|--|--|------------------------------------|--------------------------------|--------------------------------|------------------------------------|---|
| (1)Structure                             | Connection   |                                    | Air piping connection          | Electrical connection          | Mounting thread                    |   |
|  | Waterproof   |                                    | Rc1/4                          | G1/2                           | M8                                 | X 0 3   |
|  | Waterproof   |                                    | 1/4 NPT internal               | 1/2 NPT internal               | 5/ 16-18                           | P 5 8   |
|  | JIS Flameproof with cable gland *1   |                                    | Rc 1/4                         | G1/2                           | M8                                 | E 5 3   |
|  | FM Explosionproof and Flameproof   |                                    | 1/4 NPT                        | 1/2 NPT                        | 5/ 16-18                           | F 15 8  |
| (2)Finish                                | Standard (Baked Acrylic)   |                                    | *11                            |                                | S                                  | 0 3   |
|  | Corrosion-proof (Baked Epoxy)  |                                    | *11                            |                                | B                                  | 15 8  |
|  | Silver finish (Baked Acrylic)  |                                    |                                |                                | D                                  | 8 8   |
| (3)Positioner action                     | Direct Action - Air pressure increases with Control signal increase                        |                                    |                                |                                | D                                  | 0 3   |
|  | Reverse Action - Airpressure decreases with Control signal increase                        |                                    |                                |                                | R                                  | 0 3   |
| (4)Supply Air-pressure classification    | Air supply range   |                                    | Pressure gauge scale           | Max regulator setting          |                                    |   |
|  | 130<=Ps<=150kPa  | {1.3<=Ps<=1.5kgf/cm <sup>2</sup> } | 200kPa {2kgf/cm <sup>2</sup> } | 400kPa {4kgf/cm <sup>2</sup> } | 1                                  | 0 3   |
|  | 150<Ps<=300kPa   | {1.5<Ps<=3.0kgf/cm <sup>2</sup> }  | 400kPa {4kgf/cm <sup>2</sup> } | 400kPa {4kgf/cm <sup>2</sup> } | 2                                  | 0 3   |
|  | 300<Ps<=400kPa   | {3.0<Ps<=4.0kgf/cm <sup>2</sup> }  | 600kPa {6kgf/cm <sup>2</sup> } | 400kPa {4kgf/cm <sup>2</sup> } | 3                                  | 0 3   |
|  | 400<Ps<=450kPa   | {4.0<Ps<=4.5kgf/cm <sup>2</sup> }  | 600kPa {6kgf/cm <sup>2</sup> } | 700kPa {7kgf/cm <sup>2</sup> } | 4                                  | 0 3   |
| (5)Scale Unit (Pressure gauge)           | kPa  |                                    |                                |                                | A                                  | 0 3   |
|  | kgf/cm <sup>2</sup> *2   |                                    |                                |                                | B                                  | 0 3   |
|  | MPa  |                                    |                                |                                | C                                  | 0 3   |
|  | bar  |                                    |                                |                                | D                                  | 5 8   |
|  | psi *2   |                                    |                                |                                | E                                  | 5 8   |
| (6)Pressure regulator with filter        | No selection   |                                    |                                |                                | X                                  | 0 3   |
|  | Model KZ03 Pressure Regulator with Filter (Mounted on Positioner) *13                      |                                    |                                |                                | 1                                  | 20 3  |
|  | Model KZ03 Pressure Regulator with Filter (with bracket for separated mount)               |                                    |                                |                                | 2                                  | 20 3  |
| (7) Material of Bracket Bolts            | No Selection *14   |                                    |                                |                                | X                                  | 0 3   |
|  | Steel - Zinc plated  |                                    | Stainless Steel                |                                | C                                  | Refer to table 1 on Page 22-COP-9a or table 2 on Page 22-COP-9b |
|  | Stainless steel  |                                    | Stainless Steel                |                                | D                                  |   |
| (8)(9) Actuators (for bracket)           | No Selection *14   |                                    |                                |                                | XX                                 | 0 3   |
|  | For Single acting actuator   |                                    |                                |                                | Refer to table 1 on Page 22-COP-9a |   |
|  | For Double acting actuator   |                                    |                                |                                | Refer to table 2 on Page 22-COP-9b |   |
| (10) Option (Plural selection available) | No selection   |                                    |                                |                                | X                                  | 0 3   |
|  | Universal Elbow Explosion-proof (SUS304 G1/2) 1 pc.  |                                    |                                |                                | A                                  | 2 3   |
|  | Reversing Relay for Double acting actuator *7  |                                    |                                |                                | W                                  | Refer to table 3 on Page 22-COP-9b                              |
|  | Stainless filter for KZ03 (pressure regulator with filter)                                 |                                    |                                |                                | K                                  |   |
|  | 2 pcs of adapter for Air piping connection (Rc1/4 to 1/4NPT) for single acting actuator *5 |                                    |                                |                                | E                                  | 8 3   |
|  | 3 pcs of Adapter for Air piping connection (Rc1/4 to 1/4NPT) for double acting actuator*5  |                                    |                                |                                | N                                  | 12 3  |
|  | 1 pc of adapter for electric connection (G1/2 to 1/2NPT) *6                                |                                    |                                |                                | F                                  | 10 3  |
|  | 2 pcs of adapter for electric connection (G1/2 to 1/2NPT) *6                               |                                    |                                |                                | G                                  | 20 3  |
|  | Sealing tape not permitted   |                                    |                                |                                | J                                  | 5 3   |
|  | Filter (Screen for air-exhaust port)   |                                    |                                |                                | H                                  | 10 6  |

AVP303

Fieldbus

**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

\*3 Select in the case of without manual handle or with manual handle mounted on top of the actuators.

\*8 Select "YW" or "YJ" for old-type motion connectors.(Produced on/before Apr. '83)

\*9 Consult a sales representative in case of no mounting hole on the side of valve yoke.

\*12 In case "VM" type actuator is required following conditions, 1.select model "VCT" for the body, 2.the existing positioner should be HEP or VPE, 3.yoke should be model HK. If another spec. is required, contact your sales representative.

\*15 For model VSP (PVC body), an additional support bracket is required for the AVP.

| (8)(9)Mounting bracket for pneumatic actuators   | Code | (7) Material (Bracket / Bolt) | SS400 Zinc Plated /SUS304 |             | SUS304/SUS304 |             |
|--|------|-------------------------------|---------------------------|-------------|---------------|-------------|
|  |      |                               | C                         |             | D             |             |
|  |      |                               | Add. Price                | Deliv. (wk) | Add. Price    | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   |                               | 5                         | 3           | 10            | 3           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *8  | YQ   |                               | 5                         | 3           | 10            | 3           |
| PSA3, PSA4 for existing valves produced on/before 1999                                   | YY   |                               | 5                         | 3           | 10            | 3           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *8   | YL   |                               | 5                         | 3           | 10            | 3           |
| HA1  | YA   |                               | 5                         | 3           | 10            | 3           |
| HA2,HA3, HL2,HL3   | YT   |                               | 5                         | 3           | 10            | 3           |
| HA4, HL4   | YN   |                               | 5                         | 3           | 10            | 3           |
| HK1, VM1 *12   | YK   |                               | 5                         | 3           | 10            | 3           |
| VM12 for Model VSP *13   | YB   |                               | 5                         | 4           | 10            | 4           |
| VR1  | YV   |                               | 10                        | 3           | 15            | 3           |
| VR2,VR3  | YR   |                               | 10                        | 3           | 15            | 3           |
| RSA1   | YF   |                               | 10                        | 3           | 15            | 3           |
| RSA2   | YU   |                               | 5                         | 3           | 10            | 3           |
| GOM83S,GOM84S,GOM103S  | YG   |                               | 15                        | 3           | 20            | 3           |
| GOM124S  | YM   |                               | 20                        | 3           | 25            | 3           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *9 | YW   |                               | 7                         | 3           | 12            | 3           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *9   | YJ   |                               | 7                         | 3           | 12            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 Nihon Koso A100 Series 270,320 *3                  | TA   |                               | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L Nihon Koso A100 Series 400,500 *3                | TB   |                               | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800Series 650S,650L *3  | TC   |                               | 40                        | 4           | 40            | 3           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   |                               | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   |                               | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   |                               | 40                        | 4           | 40            | 3           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S                               | TJ   |                               | 20                        | 4           | 25            | 3           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   |                               | 20                        | 4           | 25            | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 2911-1M series 280, 330, 400                        | TG   |                               | 20                        | 4           | 25            | 3           |
| Nihon Koso 5100L series 240, 280 *3  | TP   |                               | 20                        | 4           | 25            | 4           |
| Nihon Koso 5200L series 218, 270, 350 *3   | TR   |                               | 20                        | 4           | 25            | 4           |
| Masoneilan 37,38 Series #9, #11 *3   | MA   |                               | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #13 *3   | MB   |                               | 20                        | 4           | 25            | 3           |
| Masoneilan 37,38 Series #15,#18 *3   | MC   |                               | 40                        | 4           | 40            | 3           |
| Masoneilan 37,38 Series #15,#18 (w/side manual)  | MF   |                               | 40                        | 4           | 40            | 3           |
| Masoneilan type 35002 Camflex II #41/2,#6 (Valve size 1in.~4in.)                         | MG   |                               | 20                        | 4           | 25            | 3           |
| Masoneilan type 35002 Camflex II #7 (Valve size 6in.~12in.)                              | MH   |                               | 20                        | 4           | 25            | 3           |
| Fisher controls 657,667 series size 50   | FB   |                               | 20                        | 4           | 25            | 3           |
| Fisher controls 657,667 series size 60   | FC   |                               | 20                        | 4           | 25            | 3           |
| Kitamura Valve AK09S,AK12S, AK15S  | KA   |                               | 20                        | 4           | 25            | 3           |
| Kitamura Valve AG06S   | KG   |                               | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG09S   | KH   |                               | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG13S   | KJ   |                               | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW13S   | KV   |                               | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW17S   | KW   |                               | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW20S   | KT   |                               | 20                        | 4           | 25            | 4           |
| KITZ B series BS-2, BSW-2  | B2   |                               | 20                        | 4           | 25            | 4           |
| KITZ B series BS-3, BSW-3, Hisaka TS-6   | B3   |                               | 20                        | 4           | 25            | 4           |
| KITZ B series BS-4, BSW-4  | B4   |                               | 20                        | 4           | 25            | 4           |
| KITZ B series BS-5, BSW-5  | B5   |                               | 20                        | 4           | 25            | 4           |
| KITZ B series BS-6, BSW-6  | B6   |                               | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E25, 40, 65, 100, 200, 350  | RA   |                               | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E600, 950, 1600, P2500, P4000   | RB   |                               | 20                        | 4           | 25            | 4           |
| Hisaka TS-1  | H1   |                               | 20                        | 4           | 25            | 4           |
| Hisaka TS-2  | H2   |                               | 20                        | 4           | 25            | 4           |
| Hisaka TS-3  | H3   |                               | 20                        | 4           | 25            | 4           |
| Hisaka TS-4, 5   | H4   |                               | 20                        | 4           | 25            | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   |                               | 20                        | 4           | 25            | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   |                               | 20                        | 4           | 25            | 4           |

**AVP 303**

**Fieldbus**

**Table 2. Price and delivery of mounting bracket for double acting actuator**

Note to quotation

\*7 For the double acting actuator, a reversing relay unit is required.

\*16 Contact a sales representative if a bracket for model VFR (Flowing) or butterfly valve is required.

| (8)(9)Mounting bracket for pneumatic actuators      | Code | (7) Material (Bracket/Bolt) | SS400 Zinc Plated /SUS304 |             | SUS304/SUS304 |             |
|---|------|-----------------------------|---------------------------|-------------|---------------|-------------|
|   |      |                             | C                         |             | D             |             |
|   |      |                             | Add. Price                | Deliv. (wk) | Add. Price    | Deliv. (wk) |
| VP5, 6 *7   | Y1   |                             | 5                         | 4           | 10            | 4           |
| VP7 *7  | Y7   |                             | 5                         | 4           | 10            | 4           |
| SLOP560, 1000, 1000X *7 *16                         | Y2   |                             | 15                        | 4           | 20            | 4           |
| SLOP1500, 1500X *7 *16                              | Y3   |                             | 35                        | 4           | 40            | 4           |
| DAP560, 1000, 1000X *7 *16                          | Y4   |                             | 15                        | 4           | 20            | 4           |
| DAP1500, 1500X *7 *16                               | Y5   |                             | 35                        | 4           | 40            | 4           |
| Kitamura Valve AK09, AK12, AK15 *7                  | KA   |                             | 20                        | 4           | 25            | 3           |
| Kitamura Valve AG06 *7                              | KG   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG09 *7                              | KH   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AG13 *7                              | KJ   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW13 *7                              | KV   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW17 *7                              | KW   |                             | 20                        | 4           | 25            | 4           |
| Kitamura Valve AW20 *7                              | KT   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-2 *7                                | B2   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-3 *7                                | B3   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-4 *7                                | B4   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-5 *7                                | B5   |                             | 20                        | 4           | 25            | 4           |
| KITZ B series B-6 *7                                | B6   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E25, 40, 65, 100, 200, 350 *7    | RA   |                             | 20                        | 4           | 25            | 4           |
| Xomox (EL-O-MATIC) E600, 950, 1600, P2500, P4000 *7 | RB   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-80 *7                               | V1   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-100 *7                              | V2   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-120 *7                              | V3   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-150 *7                              | V4   |                             | 20                        | 4           | 25            | 4           |
| T. V. VALVE AT4-180 *7                              | V5   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve Z series Z-06, 08, 11, 13 *7            | EA   |                             | 20                        | 4           | 25            | 4           |
| Tomoe Valve T-matic 3I-1, 2, 3, 4 *7                | E3   |                             | 20                        | 4           | 25            | 4           |

**Table 3. Price and delivery of reversing-relay for double acting actuator**

| The additional price goes with "Finish" of selection (2) | Code (2) | Add. Price 1000 yen | Deliv (Wk) |
|--|----------|---------------------|------------|
| Standard   | S        | 45                  | 4          |
| Corrosion resistant                                      | B        | 49                  | 8          |
| Corrosion resistant silver                               | D        | 47                  | 10         |

For air-piping connection between the SVP and reversing-relay, a vinyl-covered copper cable with Sanko's double joint (SV0602-001) is used. Other cases are subject to factory referral.

# Accessories

Smart valve positioner with Fieldbus remote type

**Fieldbus**

**14-3-6 AVP203**

**SVP3000 Alphaplus Price List**

|               |            |                          |   |     |     |     |     |     |   |     |     |     |     |   |      |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|
| <b>AVP203</b> | <b>222</b> | <b>230 (Mount on CV)</b> | - | (1) | (2) | (3) | (4) | (5) | - | (6) | (7) | (8) | (9) | - | (10) |
|---------------|------------|--------------------------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|---|------|

FOUNDATION fieldbus signal

Notes on quotation

The price for the mounting bracket shall be added if the CV needs to be equipped with an AVP.

\*1 No domestic sales in Japan due to Non-SI unit.

\*3 Select model AVP (integral type) only when the direction of drain of the pressure regulator with filter on the control valve is downward (ground).

\*6 Can be selected if the code selection is "1" for air set (option 6).

\*7 In case of double acting actuator, a reversing relay unit is required.

\*8 Standard finish is equivalent to the previous Y138A. Corrosion-proof certification is equivalent to previous Y138B.

\*15 Select the option with the restoration feedback lever, if GOM manufactured before April, 1988. Select the option '8' (Accessory bracket for GOM actuator - Use the case of existing GOP) if the existing control valve assembled with GOP and the accessories such as the Lock-Up valves and solenoid valves.

| Connection  |  | Air piping connection | Electrical connection | Mounting thread       | Code                                | Add.Price                           | Delivery (week) |
|---|--|-----------------------|-----------------------|-----------------------|-------------------------------------|-------------------------------------|-----------------|
| (1)Structure  | Waterproof   | Rc1/4                 | G1/2                  | M8                    | X                                   | 0                                   | 4               |
|   | Waterproof   | 1/4 NPT internal      | 1/2 NPT internal      | 5/ 16-18              | P                                   | 5                                   | 8               |
|   | JIS Flameproof with cable gland  | Rc 1/4                | G1/2                  | M8                    | E                                   | 22                                  | 4               |
| (2)Finish   | Standard (Baked Acrylic)   | *8                    |                       |                       | S                                   | 0                                   | 4               |
|   | Corrosion-proof (Baked Epoxy)  | *8                    |                       |                       | B                                   | 15                                  | 8               |
|   | Silver finish (Baked Acrylic)  |                       |                       |                       | D                                   | 8                                   | 10              |
| (3)Positioner action  | Direct Action - Air pressure increases with control signal increase            |                       |                       |                       | D                                   | 0                                   | 4               |
|   | Reverse Action - Air pressure decreases with control signal increase           |                       |                       |                       | R                                   | 0                                   | 4               |
| (4)Supply Air-pressure classification                           | Air supply range   |                       | Pressure gauge scale  | Max regulator setting |                                     |                                     |                 |
|   | 130<=Ps<=150kPa {1.3<=Ps<=1.5kgf/cm2}  |                       | 200kPa {2kgf/cm2}     | 400kPa {4kgf/cm2}     | 1                                   | 0                                   | 4               |
|   | 150<Ps<=300kPa {1.5<Ps<=3.0kgf/cm2}  |                       | 400kPa {4kgf/cm2}     | 400kPa {4kgf/cm2}     | 2                                   | 0                                   | 4               |
|   | 300<Ps<=400kPa {3.0<Ps<=4.0kgf/cm2}  |                       | 600kPa {6kgf/cm2}     | 400kPa {4kgf/cm2}     | 3                                   | 0                                   | 4               |
|   | 400<Ps<=450kPa {4.0<Ps<=4.5kgf/cm2}  |                       | 600kPa {6kgf/cm2}     | 700kPa {7kgf/cm2}     | 4                                   | 0                                   | 4               |
| (5)Scale Unit (Pressure gauge)                                  | 450<Ps<=700kPa {4.5<Ps<=7.0kgf/cm2}  |                       | 1000kPa {10kgf/cm2}   | 700kPa {7kgf/cm2}     | 5                                   | 0                                   | 4               |
|   | kPa  |                       |                       |                       | A                                   | 0                                   | 4               |
|   | kgf/cm2  | *1                    |                       |                       | B                                   | 0                                   | 4               |
|   | MPa  |                       |                       |                       | C                                   | 0                                   | 4               |
|   | bar  |                       |                       |                       | D                                   | 5                                   | 8               |
|   | psi  | *1                    |                       |                       | E                                   | 5                                   | 8               |
| (6)Pressure regulator with filter                               | No selection   |                       |                       |                       | X                                   | 0                                   | 4               |
|   | Model KZ03 Pressure Regulator with Filter (Mounted on Positioner)              |                       | *3                    |                       | 1                                   | 20                                  | 4               |
| (7) Cable length  | 3m (For ambient temperature -40 to +80 deg.C)                                  |                       |                       |                       | 3                                   | 0                                   | 4               |
|   | 5m (For ambient temperature -40 to +80 deg.C)                                  |                       |                       |                       | 5                                   | 2                                   | 4               |
|   | 10m (For ambient temperature -40 to +80 deg.C)                                 |                       |                       |                       | T                                   | 7                                   | 4               |
|   | 20m (For ambient temperature -40 to +80 deg.C)                                 |                       |                       |                       | W                                   | 17                                  | 4               |
| (8)(9) Actuators (for bracket)                                  | No Selection   |                       |                       |                       | XX                                  | 0                                   | 4               |
|   | For Single acting actuator   |                       |                       |                       | Refer to table 1 on Page 22-COP-10a |                                     |                 |
|   | For Double acting actuator   |                       |                       |                       | Refer to table 2 on Page 22-COP-10b |                                     |                 |
| (10) Option (Plural selection available)                        | No selection   |                       |                       |                       | X                                   | 0                                   | 4               |
|   | Universal Elbow Explosion-proof (SUS304 G1/2) 1 pc.                            |                       |                       |                       | A                                   | 2                                   | 4               |
|   | Stainless filter for KZ03 (pressure regulator with filter)                     |                       | *6                    |                       | K                                   | 8                                   | 5               |
|   | Stainless mounting kit of a positioner side and pressure regulator with filter |                       |                       |                       | U                                   | 20                                  | 5               |
|   | Sealing tape not permitted   |                       |                       |                       | J                                   | 5                                   | 4               |
|   | Reversing Relay for Double acting actuator                                     |                       | *7                    |                       | W                                   | Refer to table 3 on Page 22-COP-10b |                 |
|   | Mounting bracket for accessories on GOM actuator (in case of replace GOP) *15  |                       |                       |                       | 8                                   | 20                                  | 4               |
| Terminal box connection of designated cable for travel detector |  |                       |                       | M                     | 20                                  | 5                                   |                 |

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**Table 1. Price and Delivery of Mounting Bracket for Single acting actuator**

Note to quotation

- \*2 If no suitable mounting bracket can be found, contact a sales representative.
- \*5 Select in the case of without manual handle or with manual handle mounted on top of the actuators.
- \*8 Select "YW" or "YJ" for old-type motion connectors.(Produced on/before Apr. '83)
- \*9 Consult a sales representative in case of no mounting hole on the side of valve yoke.
- \*10 In case "VM" type actuator is required following conditions, 1.select model "VCT" for the body, 2.the existing positioner should be HEP or VPE, 3.yoke should be model HK. If another spec. is required, contact your sales representative.
- \*13 For model VSP (PVC body), an additional support bracket is required for the AVP.

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| (8)(9)Mounting bracket for pneumatic actuators   | Code | D          |             |
|--|------|------------|-------------|
|  |      | Add. Price | Deliv. (wk) |
| PSA1,PSA2,PSK1   | YS   | 15         | 4           |
| PSA3,PSA4 / VA1~VA3 Produced after Apr. '83. *8  | YQ   | 15         | 4           |
| PSA3, PSA4 for existing valves produced on/before 1999                                   | YY   | 15         | 4           |
| PSA6 / VA4~VA6 Produced after Apr. '83. *8   | YL   | 15         | 4           |
| HA1  | YA   | 15         | 4           |
| HA2,HA3, HL2,HL3   | YT   | 15         | 4           |
| HA4, HL4   | YN   | 15         | 4           |
| HK1, VM1 *10 (material SS400 zinc plated)  | YK   | 15         | 4           |
| VR1  | YV   | 20         | 4           |
| VR2,VR3  | YR   | 20         | 4           |
| RSA1   | YF   | 20         | 4           |
| RSA2   | YU   | 20         | 4           |
| GOM83S,GOM84S,GOM103S  | YG   | 25         | 4           |
| GOM124S  | YM   | 25         | 4           |
| VA1 - VA3 (for old-model motion connectors) Produced on/before Apr. '83, 800-1, 800-3 *9 | YW   | 15         | 4           |
| VA4,VA5 (for old-model motion connectors) Produced on/before Apr. '83, 800-4, 800-5 *9   | YJ   | 15         | 4           |
| Motoyama Mfg. 2800 Series 240,280,330, Nihon Koso A100 Series 270,320 *5                 | TA   | 25         | 4           |
| Motoyama Mfg. 2800 Series 400,500S,500L, Nihon Koso A100 Series 400,500 *5               | TB   | 25         | 4           |
| Motoyama Mfg. 2800Series 650S,650L *5  | TC   | 40         | 4           |
| Motoyama Mfg. 2800 Series 240,280,330 (w/side manual)                                    | TD   | 25         | 4           |
| Motoyama Mfg. 2800 Series 400,500S,500L (w/side manual)                                  | TE   | 25         | 4           |
| Motoyama Mfg. 2800 Series 650S,650L (w/side manual)                                      | TF   | 40         | 4           |
| Motoyama Mfg. 3800 Series (multi-spring type) N24,N28,N33S *5                            | TJ   | 25         | 4           |
| Motoyama Mfg. 2922 series (Gyrol-I) G.R.I 280H, 330H, 400HS, 400H, 500H                  | TL   | 20         | 4           |
| Motoyama Mfg. 3993 Series (Gyrol-II) 280,330,400, 2911-1M series 280H, 330H, 400H        | TG   | 20         | 4           |
| Masoneilan 37,38 Series #9, #11 *5   | MA   | 25         | 4           |
| Masoneilan 37,38 Series #13 *5   | MB   | 25         | 4           |
| Masoneilan 37,38 Series #15,#18 *5   | MC   | 40         | 4           |
| Masoneilan 37,38 Series #15,#18 (w/side manual)  | MF   | 40         | 4           |
| Masoneilan type 35002 Camflex II #4-1/2, #6, #7  | MG   | 25         | 4           |
| Nihon Koso TC-500 series TC520S  | TP   | 25         | 4           |
| Nihon Koso TC-700 series TC-713S   | TS   | 25         | 4           |
| Nihon Koso TC-700 series TC-722SS  | TT   | 25         | 4           |
| Kitamura Valve AK05S, AK09S,AK12S, AK15S   | KA   | 15         | 4           |
| Kitamura Valve AG06S   | KG   | 15         | 4           |
| Kitamura Valve AG09S   | KH   | 15         | 4           |
| Kitamura Valve AG13S   | KJ   | 15         | 4           |
| Kitamura Valve AW13S   | KV   | 15         | 4           |
| Kitamura Valve AW17S   | KW   | 15         | 4           |
| Tomoe Valve Z series Z-06S, 08S, 11S, 13S  | EA   | 15         | 4           |
| Tomoe Valve T-matic 3Q-1, 2, 3, 4  | E3   | 15         | 4           |
| Fisher 657,667 series 50   | FC   | 25         | 4           |
| Fisher 657,667 series 60   | FD   | 25         | 4           |

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**Table 2. Price and delivery of mounting bracket for double acting actuator**

Note to quotation

- \*7 For the double acting actuator, a reversing relay unit is required.
- \*14 If the valve body is for VFR (FloWing) or a butterfly valve, for the mounting bracket requirement consult to our sales.
- \*15 Select the option with the restoration feedback lever, if GOM manufactured before April, 1988.  
 Select the option '8' (Accessory bracket for GOM actuator -Use the case of existing GOP) if the existing control valve assembled with GOP and the accessories such as the Lock-Up valves and solenoid valves.
- \*16 Confirm that boss's pitch of the actuator side is 69mm, if it is required to assemble the mounting bracket to the actuator.

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| (8)(9)Mounting bracket for pneumatic actuators   | Code | D          |             |
|--|------|------------|-------------|
|  |      | Add. Price | Deliv. (wk) |
| VP5, 6 *7  | Y1   | 15         | 4           |
| SLOP560, 1000, 1000X *14   | Y2   | 25         | 4           |
| SLOP1500, 1500X *14  | Y3   | 45         | 4           |
| DAP560, 1000, 1000X *14  | Y4   | 25         | 4           |
| DAP560, 1500, 1500X *14  | Y5   | 45         | 4           |
| GOM44L, 44LM (Springless horizontal) *7  | G1   | 35         | 4           |
| GOM410L, 410LM (Springless horizontal) *7  | G2   | 35         | 4           |
| GOM64L, 64LM (Springless horizontal) *7  | G3   | 35         | 4           |
| GOM66L, 66LM (Springless horizontal) *7  | G4   | 35         | 4           |
| GOM610L, 610LM (Springless horizontal) *7  | G5   | 35         | 4           |
| GOM84L, 84LM (Springless horizontal) *7  | G6   | 35         | 4           |
| GOM86L, 86LM (Springless horizontal) *7  | G7   | 35         | 4           |
| GOM810L, 810LM (Springless horizontal) *7  | G8   | 35         | 4           |
| GOM1210L, 1210LM (Springless horizontal) *7  | GT   | 35         | 4           |
| GOM1510L, 1510LM (Springless horizontal) *7  | GU   | 35         | 4           |
| GOM44L, 44LM (Springless horizontal) with restoration feedback lever *7 *15                | GE   | 45         | 4           |
| GOM410L, 410LM (Springless horizontal) with restoration feedback lever *7 *15              | GF   | 45         | 4           |
| GOM64L, 64LM (Springless horizontal) with restoration feedback lever *7 *15                | GG   | 45         | 4           |
| GOM66L, 66LM (Springless horizontal) with restoration feedback lever *7 *15                | GH   | 45         | 4           |
| GOM610L, 610LM (Springless horizontal) with restoration feedback lever *7 *15              | GJ   | 45         | 4           |
| GOM84L, 84LM (Springless horizontal) with restoration feedback lever *7 *15                | GK   | 45         | 4           |
| GOM86L, 86LM (Springless horizontal) with restoration feedback lever *7 *15                | GL   | 45         | 4           |
| GOM810L, 810LM (Springless horizontal) with restoration feedback lever *7 *15              | GM   | 45         | 4           |
| GOM1210L, 1210LM (Springless horizontal) with restoration feedback lever *7 *15            | GN   | 45         | 4           |
| GOM1510L, 1510LM (Springless horizontal) with restoration feedback lever *7 *15            | GP   | 55         | 4           |
| GOM84LM (Springless vertical) in case of valve body is not butterfly valve of Yamatake *7  | GA   | 25         | 4           |
| GOM84LM (Springless vertical) in case of valve body is butterfly valve of Yamatake *7      | GB   | 25         | 4           |
| GOM124LM (Springless vertical) in case of valve body is not butterfly valve of Yamatake *7 | GC   | 25         | 4           |
| GOM124LM (Springless vertical) in case of valve body is butterfly valve of Yamatake *7     | GD   | 25         | 4           |
| Nihon Koso 6300 series 63A2, AT series AT20 *7   | T2   | 25         | 4           |
| Nihon Koso 6300 series 63A3, B2, BA, B3, BB, B5, AT series AT-30, 200, 250, 300, 350, 500  | T3   | 25         | 4           |
| Nihon Koso 6300 series 63A4, A5, A6, AT series AT40, AT50, AT60 *7                         | T4   | 25         | 4           |
| Nihon Koso 6300 series AT series AT25 *7   | T5   | 25         | 4           |
| Nihon Koso TC-500 series TC-520W *7 *16  | TP   | 25         | 4           |
| Nihon Koso TC-700 series TC-713W *7  | TS   | 25         | 4           |
| Kitamura Valve AK05, AK09, AK12, AK15 *7   | KA   | 15         | 4           |
| Kitamura Valve AG06 *7   | KG   | 15         | 4           |
| Kitamura Valve AG09 *7   | KH   | 15         | 4           |
| Kitamura Valve AG13 *7   | KJ   | 15         | 4           |
| Kitamura Valve AW13 *7   | KV   | 15         | 4           |
| Kitamura Valve AW17 *7   | KW   | 15         | 4           |
| KITZ B series BS-2, BSW-2, B-2 *7  | B2   | 15         | 4           |
| KITZ B series BS-3, BSW-3, B-3 *7  | B3   | 15         | 4           |
| KITZ B series BS-4, BSW-4, B-4 *7  | B4   | 15         | 4           |
| KITZ B series BS-5, BSW-5, B-5 *7  | B5   | 15         | 4           |
| KITZ B series BS-6, BSW-6, B-6 *7  | B6   | 15         | 4           |
| Tomoe Valve Z series Z-06, 08, 11, 13 *7   | EA   | 15         | 4           |
| Tomoe Valve T-matic 3I-1, 2, 3, 4 *7   | E3   | 15         | 4           |
| NELES BC series BC/BIC11 *7  | NB   | 15         | 4           |

**Table 3. Price and delivery of reversing-relay for double acting actuator**

| The additional price goes with "Finish" of selection (2) | Code (2) | Price | (wk) |
|--|----------|-------|------|
| Standard   | S        | 45    | 4    |
| Corrosion resistant                                      | B        | 49    | 8    |
| Corrosion resistant silver                               | D        | 47    | 10   |

For air-piping connection between the SVP and reversing-relay, a vinyl-covered copper cable with Sanko's double joint (SV0602-001) is used. Other cases are subject to factory referral.