## 4. Model KFDB differential pressure indicating controller

### 4-1. KFDB standard type

Model No. : KFDB [Basic No.: ☐☐] - [Selection: I | II | III | IV | V | VI | VII | VIII | IX] - [Option: X]

Model No. Ex. KFDB22 -332244A1T -M67

**Selection I II Element Type (Range)**

| Model No. | Element | Range | Price |
|---|---|---|---|
| 11 | High | 25 to 500kPa {2,500 to 50,000 mm H2O} | 0 |
| 22 | Med | 2.5 to 53.9kPa {250 to 5,500 mm H2O} | 0 |
| 33 | Low | 0.5 to 6kPa {50 to 600 mm H2O} | 0 |
| 44 | Lowest | 0.1 to 1.2kPa {10 to 120 mm H2O} | 0 |
| 81 | High Press | 25 to 500 kPa {2500 to 50,000 mm H2O} | 0 |
| 82 | High Press | 2.5 to 53.0kPa {250 to 5,500 mm H2O} | 0 |

**Selection III to VI Cover & Diaphragm**

III HP Cover Material / IV LP Cover Material / V HP Diaph. Material / VI LP Diaph. Material

1 : SF45, 2 : SUS316, 3 : Monel, 4 : Tantalum, 5 : Rigid PVC, 8 : SUS316L

III HP Cover Material 1 : SF45, 2 : SUS316; IV LP Cover Material 3 : Monel; V HP Diaph. Material 4 : Tantalum, 5 : Rigid PVC; VI LP Diaph. Material 8 : SUS316L

**VII Air piping connect:** A : Rc 1/4 internal (0); B : 1/4 NPT internal (0)

**VIII Pneumatic Signal *1:** 1 : 0.2 to 1.0kgf/cm² (0); 2 : 3 to 15psi. (0); 3 : 0.2 to 1.0 bar (20); 4 : 20 to 100 kPa (0); 8 : 19.6 to 98.1kPa (equality to 0.2 to 1.0kgf / cm²) (0); A : Dual Scale main: Pa (20 to 100 kpa) sub: Kgf/cm2(0.2 to 1.0kgf/cm²); D : Dual Scale main: kgf/cm² (0.2 to 1.0kgf/cm²) sub: pa (20 to 100 kpa) (A, D: 20)

**IX Mounting:** P : Panel (0); T : 2 -inch Pipe (0)

**X Option:** X : No Option (0); K : With External Sp Manual Setting knob (8); M : With Built -in Manual Controller With Auto/Manual Switch (67); 5 : Elevation (17); 6 : Suppression (17); 7 : Pressure regulator with filter (31); H : For high accuracy (5)

**Y -Spec:** 23 : Vacuum Service *9 (27); 29 : With Steam Block *2 (33); 66 : Stainless steel Bolt *3 (16, 27); 138[ ] : Corrosion proof/Silver coating *5 (*4); 169 : With Adjustable Damper *13 (8); 171 : Rear Process Pipe Connec. *5 (14); 182 : Degreasing for Oxygen Service *6 (46, 58); 183 : Chlorine Service *7 (46, 58); 186 : Measuring Controller for Small -Flow *10 (46)

**Type / Control Model / Basic No. / Price**

| Type | Control Model | Basic No. | Price |
|---|---|---|---|
| Indicating Transmitter | Non -Control | KFDB00 | 910 |
| Indicating Controller [ ] =1 Indicating Transmitting Controller [ ] = 2 (Local Type) | P+Manual Reset | KFDB[ ]1 | 906 |
| | PI | KFDB[ ]2 | 914 |
| | PID | KFDB[ ]3 | 962 |
| | PD+Manual Reset | KFDB[ ]4 | 954 |
| | PI + Batch | KFDB[ ]5 | 995 |
| | On -Off | KFDB[ ]6 | 902 |
| | Differential Gap | KFDB[ ]7 | 901 |
| | P + External Reset | KFDB[ ]8 | 911 |
| | PD+External Reset | KFDB[ ]9 | 962 |
| Indicating Controller [ ] =3 Indicating Transmitting Controller [ ] = 4 (Cascade Type) | P+Manual Reset | KFDB[ ]1 | 1,054 |
| | PI | KFDB[ ]2 | 1,037 |
| | PID | KFDB[ ]3 | 1,086 |
| | PD+Manual Reset | KFDB[ ]4 | 1,027 |
| | PI + Batch | KFDB[ ]5 | 1,119 |
| | On -Off | KFDB[ ]6 | 1,026 |
| | Differential Gap | KFDB[ ]7 | 1,027 |
| | P + External Reset | KFDB[ ]8 | 1,037 |
| | PD+External Reset | KFDB[ ]9 | 1,086 |

**Selection I II / III to VI (Model No. / Price)**

| Type | I II | Control Model | 1122 (0) | 1122 (39) | 1122 (58) | 1122 (97) | 1188 (8) | 1188 (46) | 1188 (102) | 2222 (20) | 2222 (72) | 2222 (102) | 2233 (90) | 2233 (166) | 2233 (179) | 2244 (229) | 2244 (339) | 2244 (351) | 2288 (27) | 2288 (77) | 2288 (141) | 3333 (281) | 3333 (326) | 5533 (102) | 5533 (154) | 5544 (224) | 5544 (306) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Indicating Transmitter | 11 ✓ | Non -Control | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | |
| Indicating Transmitter | 22 ✓ | Non -Control | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | |
| Indicating Transmitter | 33 ✓ | Non -Control | | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ |
| Indicating Transmitter | 44 ✓ | Non -Control | | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | |
| Indicating Transmitter | 81 ✓ | Non -Control | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | |
| Indicating Transmitter | 82 ✓ | Non -Control | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | |
| Local Type | 11 ✓ | P+Manual Reset, PI | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | |
| Local Type | 22 ✓ | PID | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | |
| Local Type | 33 ✓ | PD+Manual Reset, PI + Batch | | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ |
| Local Type | 44 ✓ | | | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | |
| Local Type | 81 ✓ | On -Off, Differential Gap | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | |
| Local Type | 82 ✓ | P + External Reset, PD+External Reset | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | |
| Cascade Type | 11 ✓ | P+Manual Reset, PI | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | |
| Cascade Type | 22 ✓ | PID | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ | |
| Cascade Type | 33 ✓ | PD+Manual Reset, PI + Batch | | ✓ | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | ✓ | | ✓ |
| Cascade Type | 44 ✓ | | | | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | |
| Cascade Type | 81 ✓ | On -Off, Differential Gap | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | |
| Cascade Type | 82 ✓ | P + External Reset, PD+External Reset | | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | ✓ | | | | | | |

**Selection VII, VIII and Y -Spec**

| Type | I II | VII A, B (0) | VIII 1, 2 (0) | 3 (20) | 4 (0) | 8 (0) | A, D (20) | 23 (27) | 29 (33) | 66 (16) | 66 (27) | 138[ ] (*4) | 169 (8) | 171 (14) | 182 (46) | 182 (58) | 183 (46) | 183 (58) | 186 (46) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Indicating Transmitter | 11 | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Indicating Transmitter | 22 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Indicating Transmitter | 33 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | | ✓ | | ✓ | ✓ |
| Indicating Transmitter | 44 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | ✓ | | | ✓ |
| Indicating Transmitter | 81 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Indicating Transmitter | 82 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Local Type | 11 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Local Type | 22 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Local Type | 33 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | ✓ | ✓ |
| Local Type | 44 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | ✓ | | | ✓ |
| Local Type | 81 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Local Type | 82 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Cascade Type | 11 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Cascade Type | 22 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Cascade Type | 33 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | | ✓ | | ✓ | ✓ |
| Cascade Type | 44 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | ✓ | | | ✓ |
| Cascade Type | 81 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Cascade Type | 82 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |

**Selection IX and X Option** (each element row is divided into a Panel (P) sub-row and a 2-inch Pipe (T) sub-row)

| Type | I II | IX P (0) | IX T (0) | X (0) | K (8) | M (67) | 5 (17) | 6 (17) | 7 (31) | H (5) |
|---|---|---|---|---|---|---|---|---|---|---|
| Indicating Transmitter | 11 | ✓ | | ✓ | | | ✓ | ✓ | | ✓ |
| | 11 | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| | 22, 33, 44, 81, 82 (each) | ✓ | | ✓ | | | ✓ | ✓ | | |
| | 22, 33, 44, 81, 82 (each) | | ✓ | ✓ | | | ✓ | ✓ | ✓ | |
| Local Type | 11 | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| | 11 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | 22, 33, 44, 81, 82 (each) | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | 22, 33, 44, 81, 82 (each) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Cascade Type | 11 | ✓ | | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| | 11 | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | 22, 33, 44, 81, 82 (each) | ✓ | | ✓ | | ✓ | ✓ | ✓ | | |
| | 22, 33, 44, 81, 82 (each) | | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | |

Note * 1. Contact YAMATAKE when engineering units are different between input range pressure and output signal pressure.

* 2 Cannot be featured in the case of Monel and PVC cover for Selection III and IV ; I.e. KFDB[ ][ ] -3333,5533,5544
* 3 Maximum working pressures for stainless steel bolt are as shown in the table below.

| Model No. | Cover Material (Selection III, IV) SF45 | SUS316 | Monel | PVC |
|---|---|---|---|---|
| KFDB[ ][ ] -11,22 | 60kgf / cm² | 60kgf / cm² | 60kgf / cm² | 15kgf / cm² |
| KFDB[ ][ ] -33 | 25kgf / cm² | 25kgf / cm² | 25kgf / cm² | 10kgf / cm² |
| KFDB[ ][ ] -81,82 | 230kgf / cm² | 230kgf / cm² | - | - |

* 4 Refer to Common Data on KF Series.
* 13 Time constant (continuously adjustable ) is as follows.
  (1) KFDB[ ][ ] -11,22,81, 82 : 0.5 sec. or less min., 30 sec. or more max.
  (2) KFDB[ ][ ] -33 : 1.5 sec. or less min., or more max.
  (3) KFDB[ ][ ] -44 : With adjustable damper as standard. 2 sec. Or less min., 25 sec. Or more max.
* 7 Available for diaphragm material only in Tantalum Fill liquid : Fluoric oil Wetted part : Degreased
  Working temperature (fluid, ambient) : -10 to 80□ I.e., KFDB[ ][ ] -[ ][ ]2244, [ ][ ] -5544
* 9 Vacuum Service is not available with Y182, Y183 and Y169.
*10 Applicable Model : KFDB[ ][ ] -22,38,82

## 4. Model KFDB differential pressure indicating controller

### 4-2. KFDB flange type, remote seal diaphragm type

Model No. KFDB [Basic No.: ☐☐] - [Selection: I | II | III | IV | V | VI | VII | VIII | IX | X | XI | XII] - [Option: XIII]

Model No. Ex.

KFDB22 -611122100A1F -M7
KFDB42 -721122503A1T -M7

Selection (I II Element; III to VI Cover & Diaphragm – Standard Flange Type)

| Type | Control Model | Basic No. | Price | I II Element | | | | III to VI Cover & Diaphragm: Standard Flange Type | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Flange | | Remote Seal Diaphragm | | III HP side Flange material; IV LP side Cover material; V HP side Diaph. material; VI LP side Diaph. material — 1 : SF45, 2 : SUS316, 3 : Monel Lining, 4 : Tantalum, 5 : Rigid PVC, 7 : SUS304, 8 : SUS316L | | | | | | | | | | | | | | | | | |
| | | | | High Range 25 to 500kPa {2,500 to 50,000mmH2O} | Middle Range 2.5 to 53.0kPa {250 to 5,500mmH2O} | High Range 25 to 500kPa {2,500 to 50,000mmH2O} | Middle Range 2.5 to 53.9kPa {250 to 5,500mmH2O} | | | | | | | | | | | | | | | | | | |
| | | Model No. | | 61 | 62 | 71 | 72 | 1122 | 1122 | 1133 | 1144 | 1188 | 1188 | 1222 | 7222 | 7233 | 7244 | 7288 | 7333 | 7533 | 7544 | 7722 | 7733 | 7744 | 7788 |
| Type | Control Model | Basic No. | Price | 0 | 0 | 0 | 0 | 0 | 262 | 331 | 466 | 0 | 255 | 8 | 46 | 173 | 242 | 46 | 229 | 160 | 224 | 306 | 439 | 593 | 312 |
| Indicating Transmitter | Non -Control | KFDB 00 | 892 | | | | | ✓ | | | | ✓ | | ✓ | | | | | | | | | | | |
| | | | | ✓ | ✓ | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | ✓ | ✓ | ✓ | | ✓ | | | | | | | | | | | | |
| | | | | | | ✓ | ✓ | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Indicating Controller [ ] =1 Indicating Transmitting Controller [ ] = 2 (Local Type) | P+Manual Reset | KFDB[ ]1 | 897 | | | | | ✓ | | | | ✓ | | ✓ | | | | | | | | | | | |
| | PI | KFDB[ ]2 | 905 | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| | PID | KFDB[ ]3 | 952 | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | |
| | PD+Manual Reset | KFDB[ ]4 | 945 | | | | | | | | | | | | | | | | | | | | | | |
| | PI + Batch | KFDB[ ]5 | 987 | | | | | | | | | | | | | | | | | | | | | | |
| | On -Off | KFDB[ ]6 | 898 | | | | | | ✓ | ✓ | ✓ | | ✓ | | | | | | | | | | | | |
| | Differential Gap | KFDB[ ]7 | 892 | | | ✓ | ✓ | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| | P + External Reset | KFDB[ ]8 | 905 | | | | | | | | | | | | | | | | | | | | | | |
| | PD+External Reset | KFDB[ ]9 | 952 | | | | | | | | | | | | | | | | | | | | | | |
| Indicating Controller [ ] =3 Indicating Transmitting Controller [ ] = 4 (Cascade Type) | P+Manual Reset | KFDB[ ]1 | 1,005 | | | | | ✓ | | | | ✓ | | ✓ | | | | | | | | | | | |
| | PI | KFDB[ ]2 | 1,013 | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| | PID | KFDB[ ]3 | 1,058 | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | |
| | PD + Manual Reset | KFDB[ ]4 | 1,056 | | | | | | | | | | | | | | | | | | | | | | |
| | PI + Batch | KFDB[ ]5 | 1,091 | | | | | | | | | | | | | | | | | | | | | | |
| | On -Off | KFDB[ ]6 | 1,009 | | | | | | ✓ | ✓ | ✓ | | ✓ | | | | | | | | | | | | |
| | Differential Gap | KFDB[ ]7 | 1,002 | | | ✓ | ✓ | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| | P + External Reset | KFDB[ ]8 | 1,013 | | | | | | | | | | | | | | | | | | | | | | |
| | PD + External Reset | KFDB[ ]9 | 1,058 | | | | | | | | | | | | | | | | | | | | | | |

Selection (III to VI Cover & Diaphragm – Extended Flange; VII Flange Rating)

| Type | Control Model | Basic No. | Price | III to VI Cover & Diaphragm: Extended Flange | | | | | | | | | VII Flange Rating: Standard Flange | | | | | | | | VII Flange Rating: Extended Flange | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 : SF45, 2 : SUS316, 3 : Monel, 4 : Tantalum, 5 : Rigid PVC, 7 : SUS304, 8 : SUS316L | | | | | | | | | 80mm JIS 10K (RF) | 80mm JIS 30K (RF) | | | 3in. ANSI 150 (RF) | 3in. ANSI 300 (RF) | | | 100mm JIS 10K (RF) | 100mm JIS 30K (RF) | | | 4in. ANSI 150 (RF) | 4in. ANSI 300 (RF) | | |
| | | Model No. | | 1122 | 1122 | 1188 | 1188 | 1222 | 7222 | 7288 | 7722 | 7788 | 1 | 2 | | | 3 | 4 | | | 5 | 6 | | | 7 | 8 | | |
| Type | Control Model | Basic No. | Price | 65 | 395 | 65 | 402 | 97 | 135 | 135 | 439 | 439 | 0 | 20 | 33 | 46 | 0 | 20 | 33 | 46 | 0 | 20 | 39 | 52 | 0 | 20 | 39 | 52 |
| Indicating Transmitter | Non -Control | KFDB 00 | 892 | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | | | | | | | | | |
| | | | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ | | | | | | | | |
| | | | | ✓ | | ✓ | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | |
| | | | | | | | | | ✓ | ✓ | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ |
| | | | | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | | | | |
| | | | | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | | | | | | | | | |
| | | | | | ✓ | | ✓ | | | | | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | |
| | | | | | | | | | | | ✓ | ✓ | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | |
| Indicating Controller [ ] =1 Indicating Transmitting Controller [ ] = 2 (Local Type) | P+Manual Reset | KFDB[ ]1 | 897 | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | | | | | | | | | |
| | PI | KFDB[ ]2 | 905 | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ | | | | | | | | |
| | PID | KFDB[ ]3 | 952 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PD+Manual Reset | KFDB[ ]4 | 945 | ✓ | | ✓ | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | |
| | PI + Batch | KFDB[ ]5 | 987 | | | | | | ✓ | ✓ | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ |
| | On -Off | KFDB[ ]6 | 898 | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | | | | |
| | Differential Gap | KFDB[ ]7 | 892 | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | | | | | | | | | |
| | P + External Reset | KFDB[ ]8 | 905 | | ✓ | | ✓ | | | | | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | |
| | PD+External Reset | KFDB[ ]9 | 952 | | | | | | | | ✓ | ✓ | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | |
| Indicating Controller [ ] =3 Indicating Transmitting Controller [ ] = 4 (Cascade Type) | P+Manual Reset | KFDB[ ]1 | 1,005 | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | | | | | | | | | |
| | PI | KFDB[ ]2 | 1,013 | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ | | | | | | | | |
| | PID | KFDB[ ]3 | 1,058 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PD + Manual Reset | KFDB[ ]4 | 1,056 | ✓ | | ✓ | | ✓ | | | | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | |
| | PI + Batch | KFDB[ ]5 | 1,091 | | | | | | ✓ | ✓ | | | | | | | | | | | ✓ | | | ✓ | ✓ | | | ✓ |
| | On -Off | KFDB[ ]6 | 1,009 | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | | | | |
| | Differential Gap | KFDB[ ]7 | 1,002 | | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | | | | | | | | | |
| | P + External Reset | KFDB[ ]8 | 1,013 | | ✓ | | ✓ | | | | | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | |
| | PD + External Reset | KFDB[ ]9 | 1,058 | | | | | | | | ✓ | ✓ | | | | | | | | | ✓ | | ✓ | | ✓ | | ✓ | |

Selection (VIII to XII), XIII Option, Y -Spec

| Type | Control Model | Basic No. | Price | VIII Capillary Length | | | IX Extended Flange Length | | | X Air Piping connection | | XI Pneumatic Signal *1 | | | | | | | XII Mounting | | | XIII Option | | | | | | Y -Spec | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2m | 3m | 5m | None | 100mm | 150mm | Rc 1 / 4 internal | 1 / 4 NPT internal | 0.2 to 1.0kgf/cm2 | 3 to 15psi. | 0.2 to 1.0 bar | 20 to 100 kPa | 19.6 to 98.1kPa (equality to 0.2 to 1.0kgf / cm2 ) | Dual Scale main: Pa (20 to 100 kpa) sub: Kgf/cm2(0.2 to 1.0 kgf/cm2) | Dual Scale main: $kgf/cm^2$ (0.2 to 1.0$kgf/cm^2$) sub: pa (20 to 100 kpa) | Flange | 2 -inch Pipe | Panel | No Option | Manual setting Knob With External SP | With Built -in Manual Controller With Auto/Manual Switch | Elevation | Suppression | Pressure regulator with filter | Vacuum Service * 7 | High Temp. Service * 2 | High Temp. -Vacuum Service * 7 | Stainless steel Bolt * 3 | Corrosion -resistant Silver coating | Adjustable Damper *10 | Degreasing for Oxygen Service * 5 | Chlorine Service * 6 |
| | | Model No. | | 02 | 03 | 05 | 00 | 10 | 15 | A | B | 1 | 2 | 3 | 4 | 8 | A | D | F | T | P | X | K | M | 5 | 6 | 7 | 23 | 62 | 62+ Y23 | 66 | 138[ ] | 169 | 182 | 183 |
| Type | Control Model | Basic No. | Price | 0 | 0 | 27 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | | 0 | 0 | 0 | 0 | 8 | 67 | 17 | 17 | 31 | 27 | 39 | 39 | 16 | * 4 | 8 | 77 | 77 |
| Indicating Transmitter | Non -Control | KFDB 00 | 892 | | | | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | | | | | | | | | | | | | | | | | | | | | ✓ | | | ✓ | ✓ | ✓ | | | | | | | | |
| | | | | | | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | |
| | | | | | | | | | | | | | | | | | | | | | | ✓ | | | ✓ | ✓ | ✓ | | | | | | | | |
| | | | | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| | | | | | | | | | | | | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | | | |
| | | | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| | | | | | | | | | | | | | | | | | | | | | ✓ | ✓ | | | ✓ | ✓ | | | | | | | | | |
| Indicating Controller [ ] =1 Indicating Transmitting Controller [ ] = 2 (Local Type) | P+Manual Reset | KFDB[ ]1 | 897 | | | | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | PI | KFDB[ ]2 | 905 | | | | | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| | PID | KFDB[ ]3 | 952 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PD+Manual Reset | KFDB[ ]4 | 945 | | | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | |
| | PI + Batch | KFDB[ ]5 | 987 | | | | | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| | On -Off | KFDB[ ]6 | 898 | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| | Differential Gap | KFDB[ ]7 | 892 | | | | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | |
| | P + External Reset | KFDB[ ]8 | 905 | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| | PD+External Reset | KFDB[ ]9 | 952 | | | | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | |
| Indicating Controller [ ] =3 Indicating Transmitting Controller [ ] = 4 (Cascade Type) | P+Manual Reset | KFDB[ ]1 | 1,005 | | | | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | PI | KFDB[ ]2 | 1,013 | | | | | | | | | | | | | | | | | | | ✓ | | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| | PID | KFDB[ ]3 | 1,058 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PD + Manual Reset | KFDB[ ]4 | 1,056 | | | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | |
| | PI + Batch | KFDB[ ]5 | 1,091 | | | | | | | | | | | | | | | | | | | ✓ | | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| | On -Off | KFDB[ ]6 | 1,009 | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| | Differential Gap | KFDB[ ]7 | 1,002 | | | | | | | | | | | | | | | | | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | | | | | |
| | P + External Reset | KFDB[ ]8 | 1,013 | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| | PD + External Reset | KFDB[ ]9 | 1,058 | | | | | | | | | | | | | | | | | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | | | | | | |

Note :
* 1 For Signal in bar or kPa, refer to Common Data
* 2 Working temperature : Fluid : -10 to +200 deg.C, Ambient : -10 to + 80 deg.C
Fill Liquid : Special Silicone Oil
* 3 Maximum working pressures for stainless steel bolt are as shown in the table below.

| Model No. | Material (Selection VI) | |
|---|---|---|
| | SF45,SUS | PVC |
| KFDB[ ][ ] -61,62 | 60 $kgf / cm^2$ | 15 $kgf / cm^2$ |

* 4 Refer to Common Data.
*5 Available for diaphragm material only in SUS316, SUS316L,
Fill Liquid : Fluoric Oil, Wetted part : Degreased Working temperature (fluid, ambient) : - 10 to 60 deg.C
* 6 Available for diaphragm material only in Tantalum.
Fill Liquid : Fluoric Oil, Wetted part : Degreased
Working temperature (fluid, ambient) : - 10 to +80 deg.C
*10 Time constant (continuously adjustable) : 0.5 sec. Or less min, 30 sec. Or more max.

* 2 Working temperature : Fluid : -10 to +200 deg.C, Ambient : -10 to + 80 deg.C
Fill Liquid : Special Silicone Oil
* 3 Maximum working pressures for stainless steel bolt are as shown in the table below.

| Model No. | Cover Material (Selection VI) | | | | |
|---|---|---|---|---|---|
| | SF45,SUS | PVC | | | |
| KFDB[ ][ ] -61,62 | 60 $kgf / cm^2$ | 15 $kgf / cm^2$ | | | |

* 4 Refer to Common Data.
*5 Available for diaphragm material only in SUS316, SUS316L,
Fill Liquid : Fluoric Oil, Wetted part : Degreased Working temperature (fluid, ambient) : - 10 to 60 deg.C
* 6 Available for diaphragm material only in Tantalum.
Fill Liquid : Fluoric Oil, Wetted part : Degreased
Working temperature (fluid, ambient) : - 10 to +80 deg.C
*10 Time constant (continuously adjustable) : 0.5 sec. Or less min, 30 sec. Or more max.
* 7 Vacuum Service is not available with Y182, Y183 and Y169.