


Operating pressure:
For high pressure: $0.98 \mathrm{MPa}\left(10 \mathrm{kgf} / \mathrm{cm}^{2}\right)$ or lower
For medium pressure: $0.49 \mathrm{MPa}\left(5 \mathrm{kgf} / \mathrm{cm}^{2}\right.$ ) or lower
Negative pressure: $-0.1 \mathrm{MPa}\left(-1.0 \mathrm{kgf} / \mathrm{cm}^{2}\right)$ or higher
Operating temperature: $-20^{\circ} \mathrm{C} \sim+80^{\circ} \mathrm{C}$ (Cooling and heating water)

- Before use, check that maximum working pressure and maximum working temperature are within operational ranges.

Standard dimensions and allowable displacements (M100 • H100)

| Nominal diameter | Unit dimensions |  |  |  | Allowable displacement |  |  |  | Allowable displacement upon installation |  |  |  | Weight |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\phi \mathrm{d}$ | ¢g | L | t | Expansion | Contraction | Eccentricity | Declination | Expansion | Contraction | Eccentricity | Declination | Refere | ce(kg) |
|  | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | ( ) | (mm) | (mm) | (mm) | ( ) | Above-ground | Underground |
| 15 | 20 | 53 | 300 | 3 | 55 | 20 | 100 | 30 | 19 | 7 | 35 | 6 | 3.5 | 3.5 |
| $20 \cdot 25$ | 25 | 58 | 300 | 3 | 55 | 20 | 100 | 30 | 19 | 7 | 35 | 6 | 3.5 | 3.5 |
| 32 | 32 | 78 | 300 | 8 | 55 | 20 | 100 | 30 | 19 | 7 | 35 | 6 | 3.5 | 3.5 |
| 40 | 40 | 84 | 300 | 8 | 55 | 20 | 100 | 30 | 19 | 7 | 35 | 6 | 4.0 | 4.0 |
| 50 | 50 | 98 | 300 | 8 | 55 | 20 | 100 | 30 | 19 | 7 | 35 | 6 | 4.0 | 6.0 |
| 65 | 65 | 115 | 350 | 8 | 55 | 20 | 100 | 25 | 19 | 7 | 35 | 5 | 7.0 | 7.0 |
| 80 | 75 | 122 | 350 | 8 | 55 | 20 | 100 | 25 | 19 | 7 | 35 | 5 | 9.0 | 9.0 |
| 100 | 100 | 152 | 400 | 8 | 65 | 30 | 100 | 20 | 23 | 11 | 35 | 4 | 13.0 | 13.0 |
| 125 | 125 | 183 | 400 | 8 | 65 | 30 | 100 | 20 | 23 | 11 | 35 | 4 | 17.0 | 18.0 |
| 150 | 150 | 213 | 450 | 8 | 65 | 40 | 100 | 20 | 23 | 14 | 35 | 4 | 23.0 | 24.0 |
| 200 | 200 | 262 | 450 | 8 | 65 | 40 | 100 | 20 | 23 | 14 | 35 | 4 | 32.0 | 35.0 |
| 250 | 250 | 324 | 500 | 8 | 75 | 40 | 100 | 15 | 26 | 14 | 35 | 3 | 45.0 | 50.0 |
| 300 | 300 | 372 | 500 | 8 | 75 | 40 | 100 | 15 | 26 | 14 | 35 | 3 | 60.0 | 67.0 |

Standard dimensions and allowable displacements (M200 • H200)

| Nominal diameter | Unit dimensions |  |  |  | Allowable displacement |  |  |  | Allowable displacement upon installation |  |  |  | Weight |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\phi d$ | $\phi g$ | $L$ | $\mathrm{t}$ | Expansion | Contraction | Eccentricity | Declination | Expansion | Contraction | Eccentricity | Declination | Referen | ce(kg) |
|  | $(\mathrm{mm})$ | $(\mathrm{mm})$ | $(\mathrm{mm})$ | $(\mathrm{mm})$ | $(\mathrm{mm})$ | $(\mathrm{mm})$ | $(\mathrm{mm})$ | $\text { ( }{ }^{\circ} \text { ) }$ | $(\mathrm{mm})$ | (mm) | (mm) | $\left.0^{\circ}\right)$ | Above-ground | Underground |
| 15 | 20 | 53 | 400 | 3 | 75 | 20 | 200 | 30 | 26 | 7 | 70 | 6 | 4.5 | 4.5 |
| $20 \cdot 25$ | 25 | 58 | 400 | 3 | 75 | 20 | 200 | 30 | 26 | 7 | 70 | 6 | 4.5 | 4.5 |
| 32 | 32 | 78 | 400 | 8 | 75 | 20 | 200 | 30 | 26 | 7 | 70 | 6 | 4.5 | 4.5 |
| 40 | 40 | 84 | 400 | 8 | 75 | 20 | 200 | 30 | 26 | 7 | 70 | 6 | 5.0 | 5.0 |
| 50 | 50 | 98 | 400 | 8 | 75 | 20 | 200 | 30 | 26 | 7 | 70 | 6 | 7.0 | 7.0 |
| 65 | 65 | 115 | 450 | 8 | 75 | 20 | 200 | 25 | 26 | 7 | 70 | 5 | 9.0 | 9.0 |
| 80 | 75 | 122 | 450 | 8 | 75 | 20 | 200 | 25 | 26 | 7 | 70 | 5 | 11.0 | 11.0 |
| 100 | 100 | 152 | 500 | 8 | 80 | 30 | 200 | 20 | 28 | 11 | 70 | 4 | 15.0 | 16.0 |
| 125 | 125 | 183 | 500 | 8 | 80 | 30 | 200 | 20 | 28 | 11 | 70 | 4 | 19.0 | 21.0 |
| 150 | 150 | 213 | 550 | 8 | 80 | 40 | 200 | 20 | 28 | 14 | 70 | 4 | 26.0 | 28.0 |
| 200 | 200 | 262 | 550 | 8 | 80 | 40 | 200 | 20 | 28 | 14 | 70 | 4 | 38.0 | 41.0 |
| 250 | 250 | 324 | 600 | 8 | 90 | 40 | 200 | 15 | 32 | 14 | 70 | 3 | 50.0 | 56.0 |
| 300 | 300 | 372 | 600 | 8 | 90 | 40 | 200 | 15 | 32 | 14 | 70 | 3 | 65.0 | 74.0 |


-Weights with SS400 water supply specification flanges mounted (JIS10K flange for 65A or lower) are indicated. - Dimension allowances on installation are included in allowable displacements (Allowable displacement = Dimension allowances on installation + Displacement under operation)

