

Series W-942-16/25Q

Electrical Two-way Control Valve

Size: DN15-DN500

The Series W-942-16/25Q Electrical Two-way Control Valves are used with Series W-A11 actuators. They are extensively applied to HVAC water systems, to regulate the flow rates of fluids in these systems.

Features

- Equal percentage control characteristic achieves high control precision
- Electronic presetting function facilitates on-site commissioning
- Automatic fault detection and alarm functions
- Overload protection function for the power supply
- V-shaped (cone) sealing ring and spring self-compensation structure result in higher abrasion resistance and longer service life

Pressure-Temperature

- Nominal Pressure: PN16 / PN25 (Water Valve)
- Temperature Range: -20°C~82°C (Water Valve)
2°C~180°C (Steam Valve)
2°C~220°C (High-temperature Steam Valve)

Material

| Component | Material |
|------------|-----------------|
| Valve Body | Ductile Iron |
| Valve Core | Stainless Steel |
| Valve Stem | Stainless Steel |
| Spring | Stainless Steel |
| Sealing | FPM |

Operating Principles

Once the valve's actuator receives a control signal from the BA System, it will regulate the valve's opening rate by moving the valve stem, and thus change the system's flow rate.

Technical Parameters

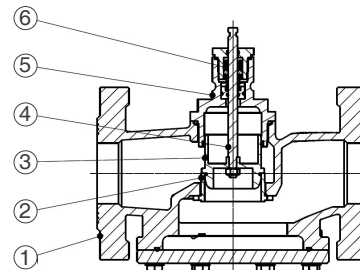
Water Valve

| Type | Size | Kvs | Stroke (mm) | Actuator Force(N) | Shutoff ΔP (KPa) |
|----------------|-------|------|-------------|-------------------|--------------------------|
| W-942AW015-16Q | DN15 | 2 | 20 | 500 | ≤ 1600 |
| W-942AW020-16Q | DN20 | 3 | 20 | 500 | ≤ 1100 |
| W-942AW025-16Q | DN25 | 5 | 20 | 500 | ≤ 700 |
| W-942AW032-16Q | DN32 | 8 | 20 | 500 | ≤ 400 |
| W-942AW040-16Q | DN40 | 20 | 20 | 500 | ≤ 250 |
| W-942BW050-16Q | DN50 | 31 | 20 | 1000 | ≤ 300 |
| W-942BW065-16Q | DN65 | 39 | 20 | 1000 | ≤ 400 |
| W-942BW080-16Q | DN80 | 62 | 20 | 1000 | ≤ 400 |
| W-942CW100-16Q | DN100 | 96 | 40 | 1000 | ≤ 400 |
| W-942CW125-16Q | DN125 | 161 | 40 | 1800 | ≤ 400 |
| W-942CW150-16Q | DN150 | 227 | 40 | 1800 | ≤ 400 |
| W-942EW200-16Q | DN200 | 520 | 40 | 5000 | ≤ 1600 |
| W-942EW250-16Q | DN250 | 750 | 40 | 5000 | ≤ 1600 |
| W-942FW300-16Q | DN300 | 1200 | 100 | 16000 | ≤ 1600 |
| W-942FW350-16Q | DN350 | 1800 | 100 | 16000 | ≤ 1600 |
| W-942FW400-16Q | DN400 | 2200 | 100 | 16000 | ≤ 1600 |
| W-942FW450-16Q | DN450 | 2600 | 100 | 16000 | ≤ 1600 |
| W-942FW500-16Q | DN500 | 3200 | 100 | 16000 | ≤ 1600 |



Specification

- Connection Standard: ISO7005
- Connection Type: Flange Connection
- Flow Deviation: $\pm 5\%$
- Function: Two-way Control
- Control Characteristic: Equal Percentage
- Leak Rate: $\leq 0.02\%$ Kvs
- Working Medium: Water / Ethylene Glycol / Propylene Glycol

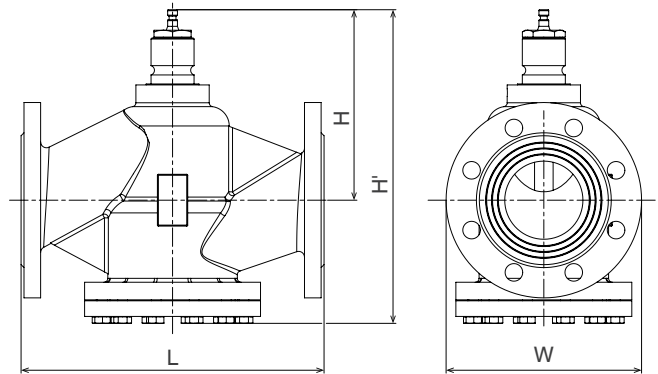


Steam Valve

| Type | Size | Kvs | Stroke (mm) | Actuator Force(N) | Shutoff ΔP (KPa) |
|----------------|-------|------|-------------|-------------------|--------------------------|
| W-942AS015-16Q | DN15 | 2 | 20 | 500 | ≤ 1000 |
| W-942AS020-16Q | DN20 | 3 | 20 | 500 | ≤ 1000 |
| W-942AS025-16Q | DN25 | 5 | 20 | 1000 | ≤ 1000 |
| W-942BS032-16Q | DN32 | 8 | 20 | 1000 | ≤ 600 |
| W-942CS040-16Q | DN40 | 20 | 20 | 1800 | ≤ 1600 |
| W-942CS050-16Q | DN50 | 31 | 20 | 1800 | ≤ 1600 |
| W-942DS065-16Q | DN65 | 50 | 20 | 3000 | ≤ 1600 |
| W-942DS080-16Q | DN80 | 80 | 20 | 3000 | ≤ 1600 |
| W-942DS100-16Q | DN100 | 125 | 40 | 3000 | ≤ 1600 |
| W-942DS125-16Q | DN125 | 200 | 40 | 3000 | ≤ 1600 |
| W-942DS150-16Q | DN150 | 300 | 40 | 3000 | ≤ 1600 |
| W-942ES200-16Q | DN200 | 520 | 40 | 5000 | ≤ 1600 |
| W-942ES250-16Q | DN250 | 750 | 40 | 5000 | ≤ 1600 |
| W-942FS300-16Q | DN300 | 1200 | 100 | 16000 | ≤ 1600 |
| W-942FS350-16Q | DN350 | 1800 | 100 | 16000 | ≤ 1600 |
| W-942FS400-16Q | DN400 | 2200 | 100 | 16000 | ≤ 1600 |
| W-942FS450-16Q | DN450 | 2600 | 100 | 16000 | ≤ 1600 |
| W-942FS500-16Q | DN500 | 3200 | 100 | 16000 | ≤ 1600 |

High-Temperature Steam Valve

| Type | Size | Kvs | Stroke (mm) | Actuator Force(N) | Shutoff $\Delta P(KPa)$ |
|----------------|-------|------|-------------|-------------------|-------------------------|
| W-942CT015-16Q | DN15 | 2 | 20 | 1800 | ≤ 1600 |
| W-942CT020-16Q | DN20 | 3 | 20 | 1800 | ≤ 1600 |
| W-942CT025-16Q | DN25 | 5 | 20 | 1800 | ≤ 1600 |
| W-942CT032-16Q | DN32 | 8 | 20 | 1800 | ≤ 1600 |
| W-942CT040-16Q | DN40 | 20 | 20 | 1800 | ≤ 1600 |
| W-942CT050-16Q | DN50 | 31 | 20 | 1800 | ≤ 1600 |
| W-942DT065-16Q | DN65 | 50 | 20 | 3000 | ≤ 1600 |
| W-942DT080-16Q | DN80 | 80 | 20 | 3000 | ≤ 1600 |
| W-942DT100-16Q | DN100 | 125 | 40 | 3000 | ≤ 1600 |
| W-942DT125-16Q | DN125 | 200 | 40 | 3000 | ≤ 1600 |
| W-942DT150-16Q | DN150 | 300 | 40 | 3000 | ≤ 1600 |
| W-942ET200-16Q | DN200 | 520 | 40 | 5000 | ≤ 1600 |
| W-942ET250-16Q | DN250 | 750 | 40 | 5000 | ≤ 1600 |
| W-942FT300-16Q | DN300 | 1200 | 100 | 16000 | ≤ 1600 |
| W-942FT350-16Q | DN350 | 1800 | 100 | 16000 | ≤ 1600 |
| W-942FT400-16Q | DN400 | 2200 | 100 | 16000 | ≤ 1600 |
| W-942FT450-16Q | DN450 | 2600 | 100 | 16000 | ≤ 1600 |
| W-942FT500-16Q | DN500 | 3200 | 100 | 16000 | ≤ 1600 |



DN65-DN150

Installation Dimensions

The valve must be installed vertically. The arrow head on the valve body should be in line with the direction of the flow. The connection of the valves' flanges and the pipe ought to be coaxial with all the bolts equally fastened. As for the electronic actuator, its wiring should be correct, and it cannot be exposed to water.

| Size | L(mm) | H(mm) | H'(mm) | W(mm) | H-1(mm) | H-2(mm) | H-3(mm) | H-4(mm) | Weight(Kg) |
|-------|-------|-------|--------|-------|---------|---------|---------|---------|------------|
| DN15 | 130 | 107 | 177 | 95 | 269 | 378 | 407 | / | 3.7 |
| DN20 | 150 | 107 | 177 | 105 | 269 | 378 | 407 | / | 4.3 |
| DN25 | 160 | 112 | 187 | 115 | 274 | 383 | 412 | / | 5.4 |
| DN32 | 180 | 121 | 201 | 140 | 283 | 392 | 421 | / | 7.7 |
| DN40 | 200 | 126 | 208 | 150 | 288 | 397 | 426 | / | 9.2 |
| DN50 | 230 | 136 | 234 | 165 | 298 | 407 | 436 | / | 12.5 |
| DN65 | 290 | 166 | 271 | 185 | 328 | 437 | 466 | / | 20 |
| DN80 | 310 | 170 | 277 | 200 | 332 | 441 | 470 | / | 24.5 |
| DN100 | 350 | 213 | 337 | 220 | / | 484 | 513 | / | 35 |
| DN125 | 400 | 214 | 359 | 250 | / | 485 | 514 | / | 51 |
| DN150 | 480 | 247 | 402 | 285 | / | 502 | 531 | / | 75.5 |
| DN200 | 500 | 339 | 575 | 340 | / | 610 | 639 | / | 112.7 |
| DN250 | 600 | 391 | 681 | 405 | / | 662 | 691 | / | 202 |
| DN300 | 700 | 485 | 807 | 460 | / | / | / | 1084 | 340 |
| DN350 | 788 | 565 | 965 | 520 | / | / | / | 1164 | 467 |
| DN400 | 912 | 615 | 1037 | 580 | / | / | / | 1214 | 589 |
| DN450 | 980 | 586 | 1006 | 640 | / | / | / | 1187 | 712 |
| DN500 | 978 | 650 | 1170 | 715 | / | / | / | 1247 | 878 |

*H-1: when connected to a 500N/1000N actuator

H-2: when connected to an 1800N/3000N/5000N actuator without manual lever

H-3: when connected to an 1800N/3000N/5000N actuator with manual lever

H-4: when connected to a 16000N actuator