# Flange Control Valve 8621
## with integrated positioner
## GS3 series - 1/2“ to 8“

### Pneumatic control valve for the control of neutral and aggressive fluids with integrated positioner

- Flange connection acc. to ASME B16.5 in ANSI150 or ANSI300
- Construction in match with the ASME B16.34, API RP 553, API 598, ASME B31.1 (Power Piping) and ASME B31.3 (Process Piping)
- Low energy usage due to small actuating forces for the closing element
- Fast response due to small strokes
- Controllability of high differential pressures with small actuators
- Quiet operation
- High Cv-values
- Versions acc. to NACE MR0175, ASME B31.5 (Refrigeration Piping and Heat Transfer Components), ASME B31.8 (Transmission and Distribution Piping Systems) and ASME B31.9 (Building Services Piping) on request

### Technical data

| | | | |
|---|---|---|---|
| Design | flange design acc. ASME B16.5 RF | | |
| Nominal Sizes | 1/2" - 8" | | Class 150<br>Class 300 |
| Fluid Temperature | Stainless steel body<br>Carbon steel body | | -76°F up to +662°F<br>-20°F up to +662°F |
| Ambient Temperatur | -22°F up to +212°F | | |
| Rangeability / Characteristic<br>analog positioner<br>digital positioner | 30 : 1<br>40 : 1 linear / 80 : 1 equal percentage | | |
| Leakage<br><br>% of Kvs<br>IEC 60534-4<br>EN 12266-1 | Disc pair<br>Carbon-stainless steel<br>< 0.0001<br>IV-S1<br>E | Disc pair<br>SFC<br>< 0.0005<br>IV-S1<br>F | Disc pair<br>STN 2 / STN 3<br>< 0.001<br>IV<br>F |
| Spezific leckage rate<br>shaft and body sealing | ISO FE-BH-CC3-SSA0-t(-40°C/+350°C)-PN40-ISO 15848-1 | | |
| Marking ATEX non electric | II 2G Ex h IIC T6…T1 X Gb<br>II 2D Ex h IIIC 85°C…530°C X Db | | |

* Please consider the limitation of use of the positioner!
** With 1/2“ with reduction of less than 25%, different leakage rates possible.
Cvs-values see data sheet 8001.

### Options and Accessories

- Metal bellows
- Positioner

### Positioner

For technical information of our positioners please refer to the corresponding data sheets.

**Schubert & Salzer Inc.**, 4601 Corporate Drive N.W., Suite 100 Concord, NC 28027, Ph.: (704) 789 0169, Fax: (704) 792 9783
info@schubertsalzerinc.com, www.schubertsalzerinc.com

## Materials

| | stainless steel version | | | |
|---|---|---|---|---|
| Valve body | stainless steel, CF8M | | | |
| Endpiece | stainless steel, CF8M | | | |
| Valve stem | stainless steel 316T | | | |
| Coupling ring | stainless steel 1.4581 | | | |
| Packing tube | stainless steel CF8M | | | |
| Packing | PTFE carbon filled (spring SST 301) | | | |
| Body seal | Graphite with stainless foil | | | |
| Fixed disc | stainless steel coated | | STN2-disc | STN3-disc |
| Sliding disc | special carbon material | SFC-disc (max. +572°F) | STN2-disc | STN3-disc |

| | carbon steel version | | | |
|---|---|---|---|---|
| Valve body | carbon steel, WCC | | | |
| Endpiece | carbon steel, WCC | | | |
| Valve stem | stainless steel 316Ti | | | |
| Coupling ring | stainless steel 1.4581 | | | |
| Packing tube | stainless steel CF8M | | | |
| Packing | PTFE carbon filled (spring SST 301) | | | |
| Body seal | Graphite with stainless foil | | | |
| Fixed disc | stainless steel coated | | STN2-disc | STN3-disc |
| Sliding disc | special carbon material | SFC-disc (max. +572°F) | STN2-disc | STN3-disc |

| | For all versions |
|---|---|
| Diaphragm casing | aluminium KTL-coated or stainless steel |
| Actuator springs | stainless steel |
| Coupling | zinc die-cast or stainless steel |
| Mounting parts | stainless steel |

# Flange Control Valve 8621

**with integrated digital positioner, Type 8049**
**(also on-off valves and valves with other side-mounted positioner)**

SCHUBERT SALZER

## Admissible differential pressures

(For temperatures of up to 250°F with PN-rating
up to 100°F with ANSI-rating)

**For temperatures above 100°F:**
**obey application limits!**

## Disc pair:
## Carbon - stainless steel coated /
## SFC - stainless steel coated

| Actuator Size | 20 in² | | 40 in² | | 80 in² | |
|---|---|---|---|---|---|---|
| Supply Pressure (psi) | 65 | 80 | 44,0 | 58,0 | 44,0 | 65,0 |
| Size | maximum pressure psi | | maximum pressure psi | | maximum pressure psi | |
| 1/2" | 750 | 750 | 750 | 750 | - | - |
| 3/4" | 750 | 750 | 750 | 750 | - | - |
| 1" | 750 | 750 | 750 | 750 | - | - |
| 1 1/2" | 750 | 750 | 750 | 750 | - | - |
| 2" | 638 | 750 | 750 | 750 | 750 | 750 |
| 3" | 334 | 421 | 580 | 696 | 696 | 696 |
| 4" | 218 | 232 | 363 | 450 | 479 | 479 |
| 6" | 102 | 116 | 189 | 218 | 232 | 232 |
| 8" | 58 | 73 | 102 | 131 | 218 | 232 |
| Spring Configuration | Code 3 (Standard) | Code 4 | Code 3 (Standard) | Code 4 | Code 6 (Standard) | Code 8 |

Standard

## Disc pair:
## STN 2 / STN 3

| Actuator size | 20 in² | | 40 in² | | 80 in² | |
|---|---|---|---|---|---|---|
| Supply Pressure (psi) | 65 | 80 | 44 | 58 | 44 | 65 |
| Size | maximum pressure psi | | maximum pressure psi | | maximum pressure psi | |
| 1/2" | 750 | 750 | 750 | 750 | - | - |
| 3/4" | 750 | 750 | 750 | 750 | - | - |
| 1" ** | 870 | 1088 | 1276 (1480)* | 1276 (1480)* | 1276 (1480)* | 1276 (1480)* |
| 1 1/2" | 450 | 551 | 750 | 750 | 750 | 750 |
| 2" | 261 | 319 | 450 | 551 | 750 | 750 |
| 3" | 131 | 145 | 218 | 276 | 464 | 522 |
| 4" | 65 | 87 | 131 | 160 | 276 | 334 |
| 6" | 29 | 36 | 58 | 65 | 131 | 160 |
| 8“ | - | - | - | - | - | - |
| Spring Configuration | Code 3 (Standard) | Code 4 | Code 3 (Standard) | Code 4 | Code 6 (Standard) | Code 8 |

Standard

## Upper limits of the pressure rating

| | Pressure limits ANSI and DIN in psi | |
|---|---|---|
| | ANSI150 | ANSI 300 |
| P max. carbon steel | 284 | 750 |
| P max. stainless steel | 276 | 719 |

## Admissible differential pressures

(For temperatures of up to 250°F with PN-rating
up to 100°F with ANSI-rating)

**For temperatures above 100°F:
obey application limits!**

### Disc pair:
### Carbon - stainless steel coated /
### SFC - stainless steel coated

| Actuator size | 20 in² | | 40 in² | | 80 in² | |
|---|---|---|---|---|---|---|
| Spring range (psi) | 22 to 44 | 26 to 55 | 17 to 32 | 22 to 39 | 17 to 32 | 22 to 39 |
| Supply Pressure (psi) | 58 | 73 | 44 | 58 | 44 | 65 |
| | maximum pressure psi | | maximum pressure psi | | maximum pressure psi | |
| Size | Control | Control | Control | Control | Control | Control |
| 1/2" | 750 | 750 | 750 | 750 | - | - |
| 3/4" | 750 | 750 | 750 | 750 | - | - |
| 1" | 750 | 750 | 750 | 750 | 750 | 750 |
| 1 1/2" | 421 | 522 | 711 | 750 | 750 | 750 |
| 2" | 247 | 305 | 421 | 508 | 750 | 750 |
| 3" | 116 | 145 | 203 | 247 | 421 | 508 |
| 4" | 73 | 87 | 131 | 145 | 261 | 319 |
| 6" | 29 | 44 | 58 | 73 | 131 | 145 |
| 8" | 29 | 29 | 44 | 44 | 73 | 87 |
| Spring Configuration | Code 3 (Standard) | Code 4 | Code 3 (Standard) | Code 4 | Code 3 (Standard) | Code 4 |

Standard

### Disc pair:
### STN 2 / STN 3

| Actuator Size | 20 in² | | 40 in² | | 80 in² | |
|---|---|---|---|---|---|---|
| Spring Range (psi) | 22 to 44 | 26 to 55 | 17 to 32 | 22 to 39 | 17 to 32 | 22 to 39 |
| Supply Pressure (psi) | 58 | 73 | 44 | 58 | 44 | 65 |
| | maximum pressure psi | | maximum pressure psi | | maximum pressure psi | |
| Size | Control | Control | Control | Control | Control | Control |
| 1/2" | 750 | 750 | 750 | 750 | 750 | 750 |
| 3/4" | 537 | 667 | 750 | 750 | 750 | 750 |
| 1" | 363 | 450 | 624 | 750 | 750 | 750 |
| 1 1/2" | 160 | 203 | 276 | 348 | 580 | 696 |
| 2" | 87 | 116 | 160 | 189 | 334 | 392 |
| 3" | 44 | 51 | 73 | 87 | 160 | 189 |
| 4" | 22 | 29 | 44 | 58 | 87 | 116 |
| 6" | - | 15 | 22 | 26 | 44 | 51 |
| 8" | - | - | - | - | - | - |
| Spring Configuration | Code 3 (Standard) | Code 4 | Code 3 (Standard) | Code 4 | Code 6 (Standard) | Code 8 |

Standard

## Upper limits of the pressure rating

| | Pressure limits ANSI and DIN in psi | |
|---|---|---|
| | ANSI150 | ANSI 300 |
| P max. carbon steel | 284 | 750 |
| P max. stainless steel | 276 | 719 |

# Flange Control Valve 8621

## with integrated positioner

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8 | 6 | 2 | 1 | / | | | | V | N | | | | | M | | | | | | | | Z | | | S |
| | Type | | | | | Size | | | Symbol: "V": Valve<br>"R": Repair kit (sealings) | | | | | | | | | | | | | | | | | | |

1 - 5 : Please quote all 5 sections.
6 - 12: Quote only if required.

| 1. | Function | 2. | Body design | 3. | Body material | 4. | Safety function | 5. | Actuator |
|---|---|---|---|---|---|---|---|---|---|
| N | Flange Control Valve with pneumatic actuator | E | GS3-flangeless design acc. ASME B16.5 ANSI 150 | 0 | Carbon steel WCC/1.0619 | 0 | Spring closes | 6 | Diaphragm actuator 19.4 in² NPT |
| | | F | GS3-flangeless design acc. ASME B16.5 ANSI 300 | 1 | Stainless steel CF8M/1.4408 | 1 | Spring opens | 7 | Diaphragm actuator 38.8 in² NPT |
| | | | | | | | | 8 | Diaphragm actuator 77.5 in² NPT |

| 6. | Special version | 7. | Springs | 8. | Steam sealing | 9. | Moved disc | 10. | Fixed disc |
|---|---|---|---|---|---|---|---|---|---|
| M | To state, if further sections are quoted | - | Standard | - | PTFE-packing, selaf adjusting (Standard) | - | Carbon material | - | Stainless steel 1.4571 coated |
| | | | | | | 9 | STN2 | 1 | STN2 (only in combination with pos. „9“ STN2) |
| | | | | | | S | SFC | 2 | STN3 |

| 11. | Kvs-Values | 12. | Flow characteristic | 13. | Accesories | 14. | Positioner | 15. | Signaling equipment |
|---|---|---|---|---|---|---|---|---|---|
| - | 100 %(Stand.) | - | linear | Z | To state if further sections are quoted | - | without | - | without |
| A | red. up to 63 % | 1 | equal-% | | | 1 | p/p-positioner Type 8047 | 0 | 2 limit switches M12x1 DC 10-30V PNP |
| 1 | red. up to 40 % | | | | | 3 | i/p-positioner Type 8047 | | |
| B | red. up to 25 % | | | | | 6 | i/p-positioner type 8047 Eex ib IIC T6 with plug M12x1 | | |
| 2 | red. up to 16 % | | | | | 8 | i/p-positioner + connector M12x1 | | |
| C | red. up to 10 % | | | | | C | dig. positioner, type 8049, 4-wire | | |
| 3 | red. up to 6.3 % | | | | | R | dig. positioner, type 8049, 2-wire | | |
| 4 | red. up to 2.5 % | | | | | W | dig. positioner, type 8049, 2-wire, ex-version | | |
| 5 | red. up to 1 % | | | | | | | | |
| 6 | red. up to 20 % | | | | | | | | |
| 7 | red. up to 12 % | | | | | | | | |
| 8 | red. up to 2 % | | | | | | | | |
| 9 | red. up to 0.4 % | | | | | | | | |

| 16. | Further versions |
|---|---|
| S | Other special versions have to be quoted in letters! |

| | |
|---|---|
| Ordering excample: | 8621/050VNF106M------ZC<br>GS3-Flange Control Valve Type 8621 with integrated pneumatic actuator, DN 50, flange ANSI Class 300, body material stainless steel, spring closes, actuator 38.8 in², PTFE-packing, moving disc: carbon steel-stainless steel 1.4571 coated, flow characteristic, positioner 8049-4 |

## Application limitations for GS3 valves in stainless steel

These pressure must not be exceeded for GS-valves from the GS3-series made of stainless steel, even though the actuator power might allow it.

**ANSI150**

| Size | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | | | |
| | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F |
| 1/2"-4" | 275 | 265 | 230 | 210 | 195 | 175 | 145 | 120 | 275 | 265 | 230 | 210 | 195 | 175 | 145 | 120 |
| 6" | 230 | 230 | 230 | 210 | 195 | 175 | 145 | 120 | 230 | 230 | 230 | 210 | 195 | 170 | 140 | 120 |
| 8" | 230 | 230 | 230 | 210 | 195 | 175 | 145 | 120 | - | - | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 570°F

**ANSI300**

| Size | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | max. admissible pressures for GS3-valves in stainless steel | | | | | | | | max. admissible pressures for GS3-valves in stainless steel | | | | | | | |
| | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F |
| 1/2"-4" | 715 | 695 | 610 | 555 | 515 | 480 | 455 | 435 | 715 | 695 | 610 | 555 | 515 | 480 | 455 | 435 |
| 3" | 695 | 695 | 610 | 555 | 515 | 480 | 455 | 435 | 530 | 530 | 530 | 500 | 475 | 385 | 315 | 275 |
| 4" | 475 | 475 | 475 | 475 | 475 | 475 | 455 | 435 | 475 | 475 | 475 | 455 | 435 | 350 | 290 | 250 |
| 6" | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 210 | 195 | 170 | 140 | 120 |
| 8" | 230 | 230 | 230 | 210 | 195 | 175 | 145 | 120 | - | - | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 570°F

## Application limitations for GS3 valves in carbon steel

These pressure must not be exceeded for GS-valves from the GS3-series made of carbon steel, even though the actuator power might allow it.

**ANSI150**

| Size | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | | | |
| | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F |
| 1/2"-4" | 285 | 280 | 255 | 225 | 200 | 175 | 145 | 120 | 280 | 275 | 255 | 225 | 200 | 175 | 145 | 120 |
| 6" | 230 | 230 | 230 | 225 | 200 | 175 | 145 | 120 | 230 | 230 | 230 | 220 | 200 | 170 | 140 | 115 |
| 8" | 230 | 230 | 230 | 210 | 195 | 175 | 145 | 120 | - | - | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 570°F

**ANSI300**

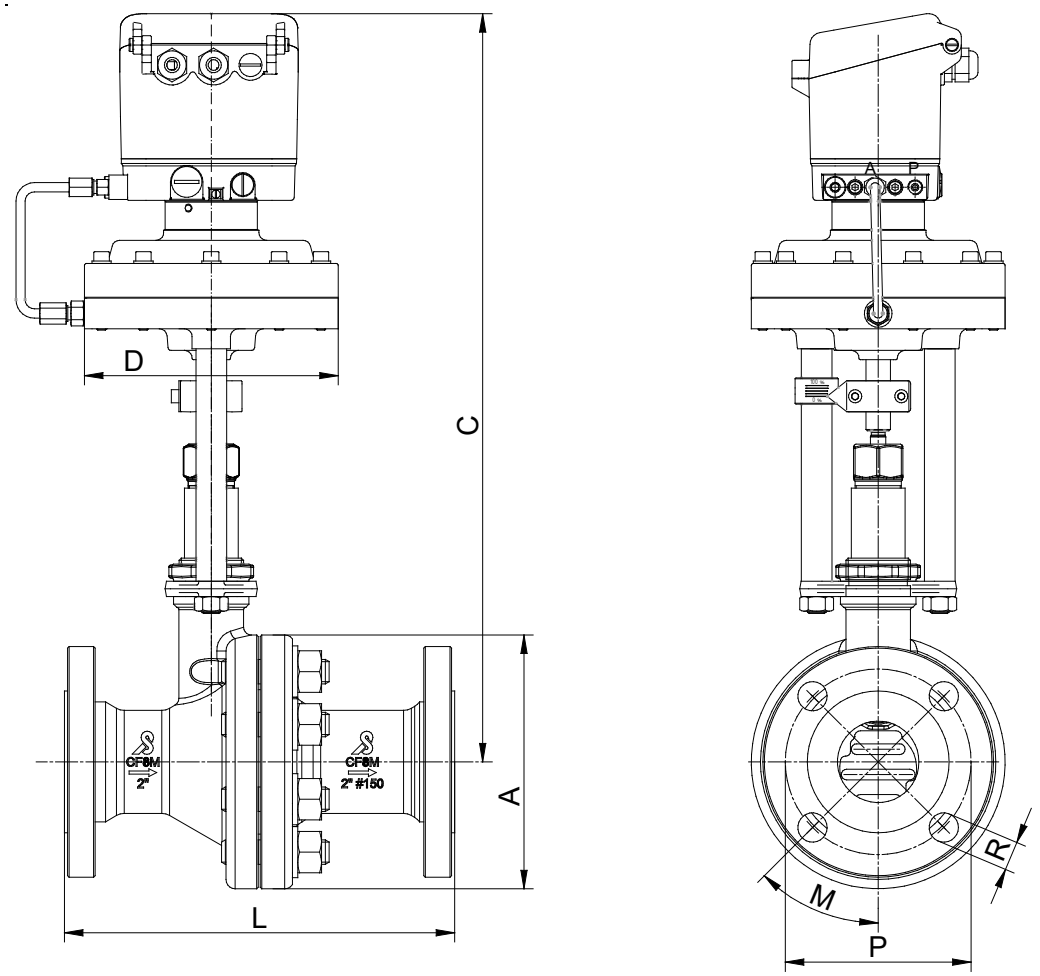
| Size | Sliding unit: carbon/SFC - stainless steel, coated | | | | | | | | Sliding unit: STN2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | max. admissible pressures for GS3-valves in carbon steel | | | | | | | | max. admissible pressures for GS3-valves in carbon steel | | | | | | | |
| | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F | 100°F | 150°F | 200°F | 300°F | 400°F | 500°F | 600°F | 650°F |
| 1/2"-2" | 745 | 745 | 745 | 725 | 700 | 670 | 620 | 580 | 745 | 745 | 745 | 725 | 700 | 670 | 620 | 580 |
| 3" | 695 | 695 | 675 | 650 | 635 | 605 | 575 | 580 | 530 | 530 | 530 | 500 | 475 | 385 | 315 | 275 |
| 4" | 475 | 475 | 475 | 475 | 475 | 475 | 475 | 475 | 475 | 475 | 475 | 455 | 435 | 350 | 290 | 245 |
| 6" | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | - | - | - | - | - | - | - | - |
| 8" | 230 | 230 | 230 | 210 | 195 | 175 | 145 | 120 | - | - | - | - | - | - | - | - |

Limitation for SFC-sliding discs: 570°F

# Flange Control Valve 8621

## with integrated digital positioner type 8049

### Dimensions and weights



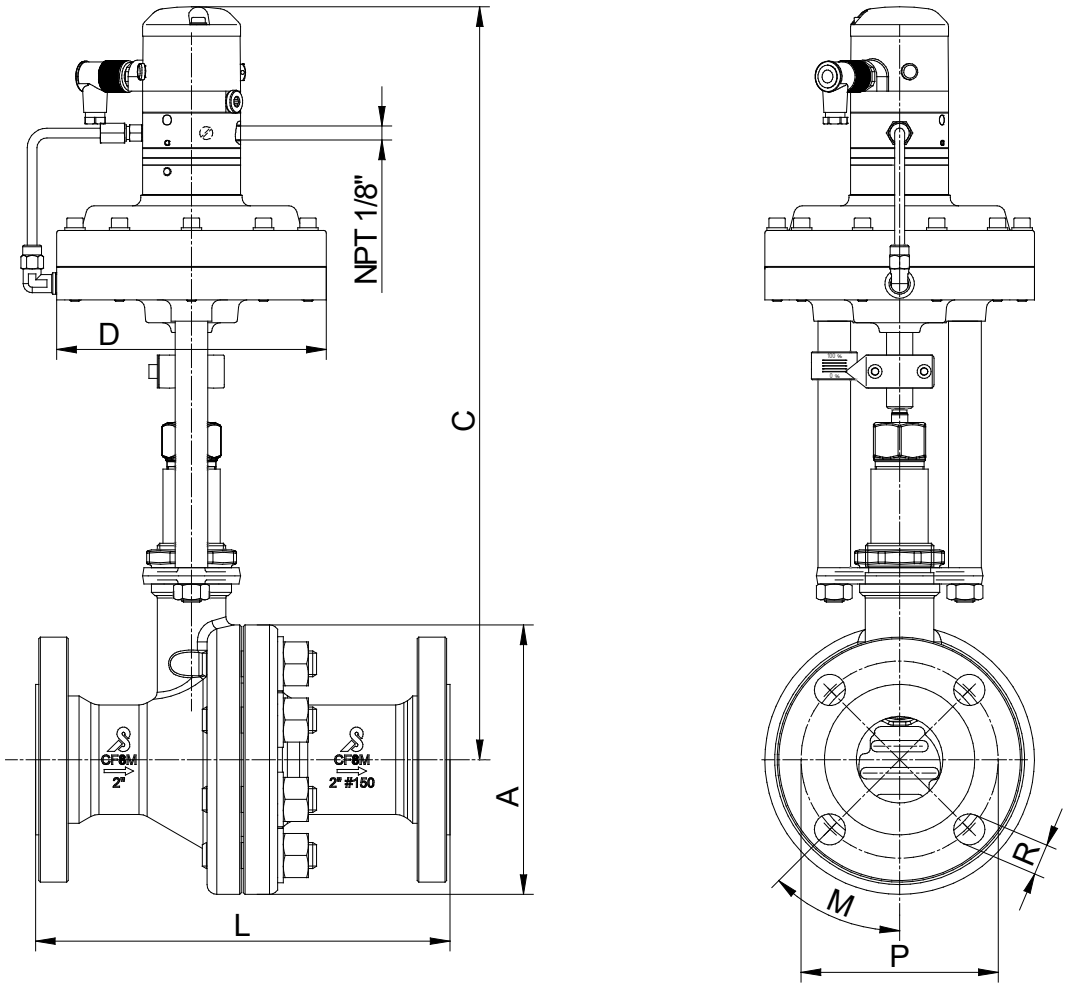

| Size | Ø A | ØC actuator size | | ØD actuator size | | ANSI 150 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D125/ D250 | D500 | D 125 | D250/ D500 | P | M | numbers | L | R | weight (lbs) D125 | weight (lbs) D250 | weight (lbs) D500 |
| 1/2“ | 3.74 | 18.11 | 20.08 | 6.5 | 8.74 | 2.37 | 45 | 4 | 7.24 | 0.63 | 22 | 26.9 | 35.1 |
| 3/4“ | 4.53 | 18.31 | 20.28 | 6.5 | 8.74 | 2.75 | 45 | 4 | 7.24 | 0.63 | 26 | 30.9 | 39 |
| 1“ | 4.92 | 18.5 | 20.47 | 6.5 | 8.74 | 3.13 | 45 | 4 | 7.24 | 0.63 | 29.3 | 34.2 | 42.3 |
| 1 1/2“ | 6.1 | 18.9 | 20.87 | 6.5 | 8.74 | 3.87 | 45 | 4 | 8.74 | 0.63 | 39.5 | 44.3 | 52.5 |
| 2“ | 6.5 | 19.29 | 21.26 | 6.5 | 8.74 | 4.75 | 45 | 4 | 10 | 0.75 | 45.9 | 50.7 | 58.9 |
| 3“ | 8.27 | 20.08 | 22.05 | 6.5 | 8.74 | 6 | 45 | 4 | 11.73 | 0.75 | 77.4 | 82.2 | 90.4 |
| 4“ | 9.76 | 20.47 | 22.44 | 6.5 | 8.74 | 7.5 | 22,5 | 8 | 13.86 | 0.75 | 105.6 | 110.5 | 118.6 |
| 6“ | 12.6 | 21.65 | 23.62 | 6.5 | 8.74 | 9.5 | 22,5 | 8 | 17.99 | 0.87 | 175 | 179.9 | 188.1 |
| 8“ | 14.96 | 21.5 | 22.44 | 6.5 | 8.74 | 11.77 | 15 | 12 | 21.38 | 1 | 288.8 | 295.4 | 304.2 |

| Size | ANSI 300 | | | | | | | | stroke |
|---|---|---|---|---|---|---|---|---|---|
| | P | M | numbers | L | R | weight (lbs) D125 | weight (lbs) D250 | weight (lbs) D500 | |
| 1/2“ | 2.63 | 45 | 4 | 7.48 | 0.63 | 22.9 | 27.8 | 35.9 | 0.24 |
| 3/4“ | 3.25 | 45 | 4 | 7.64 | 0.75 | 28.7 | 33.5 | 41.7 | 0.24 |
| 1“ | 3.5 | 45 | 4 | 7.76 | 0.75 | 31.7 | 36.6 | 44.8 | 0.24 |
| 1 1/2“ | 4.5 | 45 | 4 | 9.25 | 0.87 | 45.6 | 50.5 | 58.6 | 0.24 |
| 2“ | 5 | 22.5 | 8 | 10.51 | 0.75 | 50.5 | 55.3 | 63.5 | 0.31 |
| 3“ | 6.63 | 22.5 | 8 | 12.52 | 0.87 | 86.4 | 91.3 | 99.4 | 0.31 |
| 4“ | 7.87 | 22.5 | 8 | 14.49 | 0.87 | 124.6 | 129.4 | 137.6 | 0.33 |
| 6“ | 10.63 | 15 | 12 | 18.62 | 0.87 | 216.9 | 221.8 | 229.9 | 0.33 |
| 8“ | 12.99 | 15 | 13 | 22.36 | 1 | 352.7 | 357.1 | 366 | 0.33 |

# Flange Control Valve 8621

## with integrated i/p-positioner type 8047

### Dimensions and weights



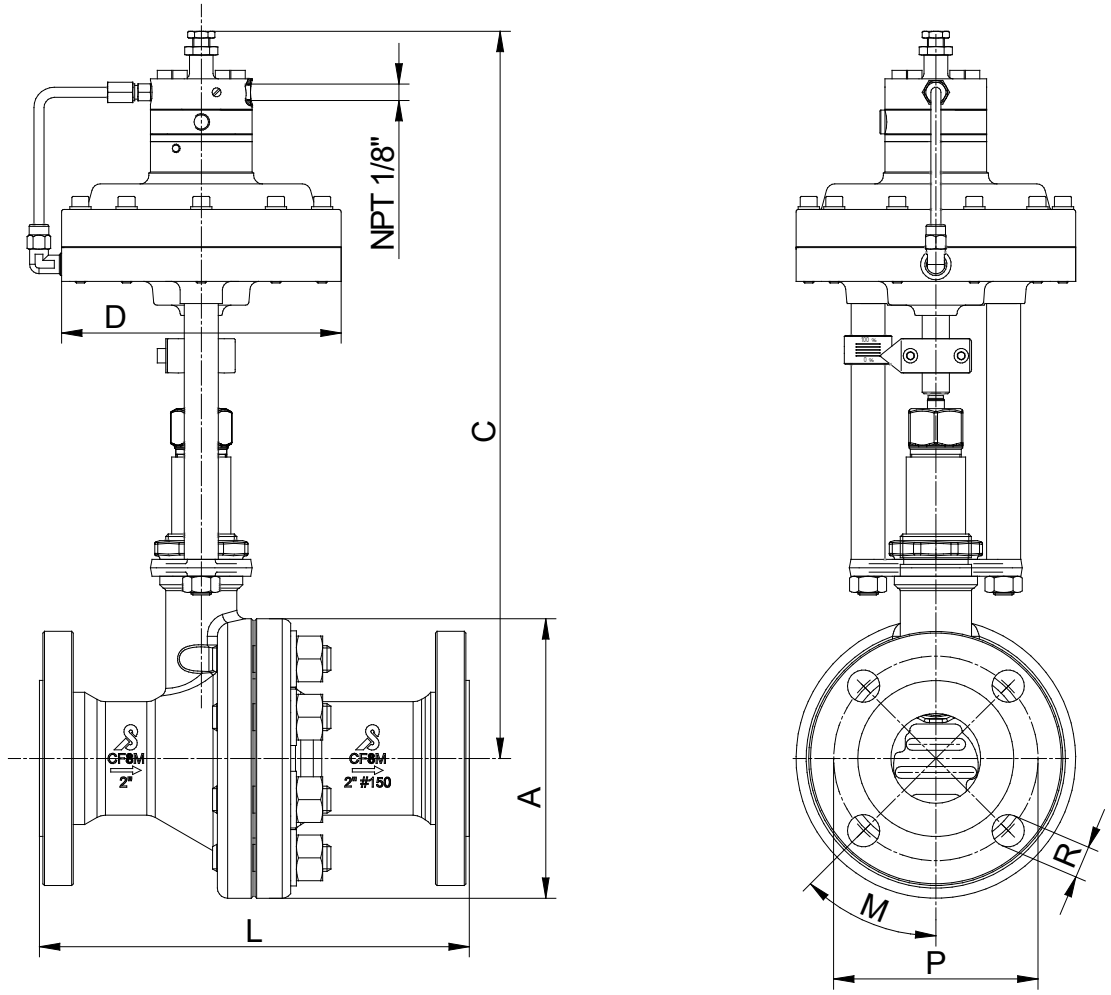

| Size | Ø A | ØC actuator size | | ØD actuator size | | ANSI 150 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D125/ D250 | D500 | D 125 | D250/D500 | P | M | numbers | L | R | weight (lbs) D125 | weight (lbs) D250 | weight (lbs) D500 |
| 1/2“ | 3.74 | 16.93 | 18.9 | 6.5 | 8.74 | 2.37 | 45 | 4 | 7.24 | 0.63 | 22 | 26.9 | 35.1 |
| 3/4“ | 4.53 | 17.13 | 19.09 | 6.5 | 8.74 | 2.75 | 45 | 4 | 7.24 | 0.63 | 26 | 30.9 | 39 |
| 1“ | 4.92 | 17.32 | 19.29 | 6.5 | 8.74 | 3.13 | 45 | 4 | 7.24 | 0.63 | 29.3 | 34.2 | 42.3 |
| 1 1/2“ | 6.1 | 17.72 | 19.69 | 6.5 | 8.74 | 3.87 | 45 | 4 | 8.74 | 0.63 | 39.5 | 44.3 | 52.5 |
| 2“ | 6.5 | 18.11 | 20.08 | 6.5 | 8.74 | 4.75 | 45 | 4 | 10 | 0.75 | 45.9 | 50.7 | 58.9 |
| 3“ | 8.27 | 18.9 | 20.87 | 6.5 | 8.74 | 6 | 45 | 4 | 11.73 | 0.75 | 77.4 | 82.2 | 90.4 |
| 4“ | 9.76 | 19.88 | 21.85 | 6.5 | 8.74 | 7.5 | 22.5 | 8 | 13.86 | 0.75 | 105.6 | 110.5 | 118.6 |
| 6“ | 12.6 | 20.47 | 22.44 | 6.5 | 8.74 | 9.5 | 22.5 | 8 | 17.99 | 0.87 | 175 | 179.9 | 188.1 |
| 8“ | 14.96 | 21.65 | 23.62 | 6.5 | 8.74 | 11.75 | 15 | 12 | 21.38 | 1 | 289.7 | 294.5 | 304.2 |

| Size | ANSI 300 | | | | | | | | stroke |
|---|---|---|---|---|---|---|---|---|---|
| | P | M | numbers | L | R | weight (lbs) D125 | weight (lbs) D250 | weight (lbs) D500 | |
| 1/2“ | 2.63 | 45,00 | 4 | 7.48 | 0.63 | 22.9 | 27.8 | 35.9 | 0.24 |
| 3/4“ | 3.25 | 45,00 | 4 | 7.64 | 0.75 | 28.7 | 33.5 | 41.7 | 0.24 |
| 1“ | 3.5 | 45,00 | 4 | 7.76 | 0.75 | 31.7 | 36.6 | 44.8 | 0.24 |
| 1 1/2“ | 4.5 | 45,00 | 4 | 9.25 | 0.87 | 45.6 | 50.5 | 58.6 | 0.24 |
| 2“ | 5 | 22,50 | 8 | 10.51 | 0.75 | 50.5 | 55.3 | 63.5 | 0.31 |
| 3“ | 6.63 | 22,50 | 8 | 12.52 | 0.87 | 86.4 | 91.3 | 99.4 | 0.31 |
| 4“ | 7.87 | 22,50 | 8 | 14.49 | 0.87 | 124.6 | 129.4 | 137.6 | 0.33 |
| 6“ | 10.63 | 15,00 | 12 | 18.62 | 0.87 | 216.9 | 221.8 | 229.9 | 0.33 |
| 8“ | 13 | 15,00 | 12 | 22.36 | 1 | 352.7 | 357.1 | 366 | 0.33 |

# Flange Control Valve 8621

## with integrated p/p-positioner type 8047

### Dimensions and weights




| Size | Ø A | ØC actuator size | | ØD actuator size | | ANSI 150 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | D125/ D250 | D500 | D 125 | D250/ D500 | P | M | numbers | L | R | weight (lbs) D125 | D250 | D500 |
| 1/2“ | 3.74 | 15.75 | 17.72 | 6.5 | 8.74 | 2.37 | 45 | 4 | 7.24 | 0.63 | 22 | 26.9 | 35.1 |
| 3/4“ | 4.53 | 15.94 | 17.91 | 6.5 | 8.74 | 2.75 | 45 | 4 | 7.24 | 0.63 | 26 | 30.9 | 39 |
| 1“ | 4.92 | 16.14 | 18.11 | 6.5 | 8.74 | 3.13 | 45 | 4 | 7.24 | 0.63 | 29.3 | 34.2 | 42.3 |
| 1 1/2“ | 6.1 | 16.54 | 18.5 | 6.5 | 8.74 | 3.87 | 45 | 4 | 8.74 | 0.63 | 39.5 | 44.3 | 52.5 |
| 2“ | 6.5 | 16.93 | 18.9 | 6.5 | 8.74 | 4.75 | 45 | 4 | 10 | 0.75 | 45.9 | 50.7 | 58.9 |
| 3“ | 8.27 | 17.72 | 19.69 | 6.5 | 8.74 | 6 | 45 | 4 | 11.73 | 0.75 | 77.4 | 82.2 | 90.4 |
| 4“ | 9.76 | 18.11 | 20.08 | 6.5 | 8.74 | 7.5 | 22,5 | 8 | 13.86 | 0.75 | 105.6 | 110.5 | 118.6 |
| 6“ | 12.6 | 19.29 | 21.26 | 6.5 | 8.74 | 9.5 | 22,5 | 8 | 17.99 | 0.87 | 175 | 179.9 | 188.1 |
| 8“ | 14.96 | 21.5 | 22.44 | 6.5 | 8.74 | 11.75 | 15 | 12 | 21.38 | 1 | 289.7 | 294.5 | 304.2 |

| Size | ANSI 300 | | | | | | | | stroke |
|---|---|---|---|---|---|---|---|---|---|
| | P | M | numbers | L | R | weight (lbs) D125 | D250 | D500 | |
| 1/2“ | 2.63 | 45 | 4 | 7.48 | 0.63 | 22.9 | 27.8 | 35.9 | 0.24 |
| 3/4“ | 3.25 | 45 | 4 | 7.64 | 0.75 | 28.7 | 33.5 | 41.7 | 0.24 |
| 1“ | 3.5 | 45 | 4 | 7.76 | 0.75 | 31.7 | 36.6 | 44.8 | 0.24 |
| 1 1/2“ | 4.5 | 45 | 4 | 9.25 | 0.87 | 45.6 | 50.5 | 58.6 | 0.24 |
| 2“ | 5 | 22,5 | 4 | 10.51 | 0.75 | 50.5 | 55.3 | 63.5 | 0.31 |
| 3“ | 6.63 | 22,5 | 4 | 12.52 | 0.87 | 86.4 | 91.3 | 99.4 | 0.31 |
| 4“ | 7.87 | 22,5 | 8 | 14.49 | 0.87 | 124.6 | 129.4 | 137.6 | 0.33 |
| 6“ | 10.63 | 15 | 8 | 18.62 | 0.87 | 216.9 | 221.8 | 229.9 | 0.33 |
| 8“ | 13 | 15 | 12 | 22.36 | 1 | 352.7 | 357.1 | 366 | 0.33 |

# Flange Control Valve 8621

## Flow Coefficients - Cv-values

| Ordering code | | - | A | 1 | B | 6 | 2 | 7 | C | 3 | 4 | 8 | 5 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | Charact. | 100 % | 63 % | 40 % | 25 % | 20% | 16 % | 12 % | 10 % | 6,3 % | 2,5 % | 2 % | 1 % | 0,4% |
| 1/2“ | (mod.) linear | 4.6 | 3 | 2 | 1.6 | - | 0.82 | 0.57 | 0.51 | 0.3 | 0.16 | 0.09 | 0.05 | 0.021 |
| | eq. perc. | 2 | - | 1.3 | - | 0.4 | - | - | - | 0.12 | - | - | - | - |
| 3/4“ | (mod.) lin. | 7.4 | - | - | - | - | 1.16 | - | - | - | - | 0.15 | - | - |
| | eq. perc. | 3.5 | - | 1.7 | - | - | - | - | - | - | - | - | - | - |
| 1“ | (mod.) linear | 13 | 7.4 | 4.6 | - | - | 1.9 | - | 1.08 | 0.72 | 0.3 | - | 0.16 | 0.05 |
| | eq. perc. | 5.8 | - | 2.8 | - | 1.3 | - | - | - | 0.41 | - | - | - | - |
| 1 1/4“ | (mod.) linear | 19 | 12 | - | - | - | - | | | | | | | |
| | eq. perc. | 9.3 | 5.45 | - | - | - | - | | | | | | | |
| 1 1/2“ | (mod.) lin. | 30 | 19 | 13 | 8.1 | - | - | | | | | | | |
| | eq. perc. | 13 | 9.9 | - | 3.2 | - | - | | | | | | | |
| 2“ | (mod.) linear | 52 | 32 | 23 | 14 | 12 | - | | | | | | | |
| | eq. perc. | 22 | 14 | - | - | - | 3.5 | | | | | | | |
| 2 1/2“ | (mod.) linear | 60 | 41 | - | 17 | | | | | | | | | |
| | eq. perc. | 35 | - | - | 9.3 | | | | | | | | | |
| 3“ | (mod.) linear | 107 | 67 | 46 | | | | | | | | | | |
| | eq.perc. | 56 | 41 | - | | | | | | | | | | |
| 4“ | (mod.) linear | 179 | 110 | 72 | | | | | | | | | | |
| | eq.perc. | 89 | 56 | - | | | | | | | | | | |
| 5“ | (mod.) linear | 275 | - | 110 | | | | | | | | | | |
| | eq.perc. | 135 | - | - | | | | | | | | | | |
| 6“ | (mod.) linear | 392 | 246 | - | | | | | | | | | | |
| | eq.perc. | 171 | 104 | - | | | | | | | | | | |
| 8“ | (mod.) linear | 650 | 408 | - | | | | | | | | | | |
| | eq.perc. | 329 | - | - | | | | | | | | | | |