

Data sheet

Externally operated valves

Type AV210



AV210 is an externally operated valve for use in demanding industrial applications. The valve can operate at very high medium temperatures and viscosities, and is insensitive to dirt particles in the medium; thus, it is often called a “troubleshooter” valve. The valve is available in bronze and stainless steel.

Features

- For all fluids and gases
- Flow range: 0 – 234 m³/h / 0 – 275 USgal/min
- Differential pressure: 0 – 16 bar / 232 psi
- Medium temperature: -30 – 180 °C / -22 – 356 °F
- Ambient temperature: -30 – 60 °C / -22 – 140 °F
- Thread connection:
G 3/8 – G 2 in (NC and NO)
NPT 1/2 – 2 in (NC)
- Orifice size: 15 - 50 mm
- Viscosity: Up to 600 cSt / 3000 SSU
- Bronze version for water, oil and compressed air
- Stainless steel version for neutral and aggressive liquid and gaseous media
- Unpressurized closed (NC) bidirectional versions and unpressurized opened (NO) version closing against the flow direction
- Operating pressure up to 16 bar / 232 psi, depending on valve type
- The valves can be used for rough vacuum
- Control connection G 1/8
- Valves comply with Pressure Equipment Directive 97/23/EC
- NC version: bi-directional, closing against or closing with the flow direction
- NO version: always closing against the flow direction

Data sheet | Externally operated valves, type AV210

Bronze valve body, NC
ISO thread connection
PTFE seal material



| Connection ISO 228/1 | Orifice size | Flow value | | Control head diameter | Differential pressure, min. to max. ¹⁾ | | Control pressure | | Code number |
|-------------------------|-----------------|------------------------------|--|-----------------------------|---|--|---------------------|--|----------------|
| | | K_v [m ³ /h] | | | [bar] | | [bar] | | |
| G 3/8 | 15 | 4.5 | | 40 ²⁾ | 0 – 16 | | 4.2 – 10 | | 042N4400 |
| G 3/8 | 15 | 4.9 | | 50 | 0 – 16 | | 4 – 10 | | 042N4401 |
| G 1/2 | 15 | 5.3 | | 40 ²⁾ | 0 – 16 | | 4.2 – 10 | | 042N4402 |
| G 1/2 | 15 | 5.7 | | 50 | 0 – 16 | | 4 – 10 | | 042N4403 |
| G 3/4 | 20 | 10 | | 50 | 0 – 10 | | 4 – 10 | | 042N4404 |
| G 3/4 | 20 | 10 | | 63 | 0 – 16 | | 4 – 10 | | 042N4405 |
| G 1 | 25 | 20 | | 63 | 0 – 11 | | 4 – 10 | | 042N4406 |
| G 1 | 25 | 20 | | 90 | 0 – 16 | | 4 – 8 | | 042N4407 |
| G 1 1/4 | 32 | 29 | | 90 | 0 – 14 | | 4 – 8 | | 042N4408 |
| G 1 1/2 | 40 | 46 | | 90 | 0 – 11 | | 4 – 8 | | 042N4409 |
| G 1 1/2 | 40 | 46 | | 110 | 0 – 16 | | 4 – 8 | | 042N4410 |
| G 2 | 50 | 67 | | 110 | 0 – 10 | | 4 – 8 | | 042N4411 |

¹⁾ Pressure range can be extended for use in rough vacuum, typically up to 99% vacuum (10 mbar), depending on the application

Mounting: Bi-directional

Closing *against* or closing *with* the flow direction.

Closing *against* is recommended to avoid water hammer.

Bronze valve body, NC
NPT thread connection
PTFE seal material



| Connec- tion NPT | Orifice size | Flow value | | Control head diameter | Differential pressure, min. to max. ¹⁾ | | Control pressure | | Code number |
|------------------------|-----------------|------------------------------|--------------------------|-----------------------------|---|---------|---------------------|----------|----------------|
| | | K_v [m ³ /h] | C_v [USgal/ min] | | [bar] | [psi] | [bar] | [psi] | |
| 1/2 | 15 | 5.7 | 6.5 | 50 | 0 – 16 | 0 – 232 | 4 – 10 | 58 – 145 | 042N4503 |
| 3/4 | 20 | 10 | 11.5 | 50 | 0 – 10 | 0 – 140 | 4 – 10 | 58 – 145 | 042N4504 |
| 1 | 25 | 20 | 23 | 63 | 0 – 11 | 0 – 160 | 4 – 10 | 58 – 145 | 042N4506 |
| 1 1/4 | 32 | 29 | 33 | 90 | 0 – 14 | 0 – 203 | 4 – 8 | 58 – 116 | 042N4508 |
| 1 1/2 | 40 | 46 | 53 | 90 | 0 – 11 | 0 – 160 | 4 – 8 | 58 – 116 | 042N4509 |
| 2 | 50 | 67 | 77 | 110 | 0 – 10 | 0 – 140 | 4 – 8 | 58 – 116 | 042N4511 |

¹⁾ Pressure range can be extended for use in rough vacuum, typically up to 99% vacuum (10 mbar), depending on the application

Mounting: Bi-directional

Closing *against* or closing *with* the flow direction.

Closing *against* is recommended to avoid water hammer.

Data sheet | Externally operated valves, type AV210

Stainless steel valve body, NC
ISO thread connection
PTFE seal material



| Connection ISO 228/1 | Orifice size | Flow value | | Control head diameter | Differential pressure, min. to max. ¹⁾ | | Control pressure | Code number |
|----------------------------|-----------------|------------------------------|--|-----------------------------|---|-------|---------------------|-----------------|
| | | K_v [m ³ /h] | | | [bar] | [bar] | | |
| [in] | [mm] | | | [mm] | | | | |
| G 3/8 | 15 | 4.9 | | 50 | 0 – 16 | | 4 – 10 | 042N4450 |
| G 1/2 | 15 | 5.7 | | 50 | 0 – 16 | | 4 – 10 | 042N4451 |
| G 3/4 | 20 | 10 | | 50 | 0 – 10 | | 4 – 10 | 042N4452 |
| G 3/4 | 20 | 10 | | 63 | 0 – 16 | | 4 – 10 | 042N4453 |
| G 1 | 25 | 20 | | 63 | 0 – 11 | | 4 – 10 | 042N4454 |
| G 1 | 25 | 20 | | 90 | 0 – 16 | | 4 – 8 | 042N4455 |
| G 1 1/4 | 32 | 29 | | 90 | 0 – 14 | | 4 – 8 | 042N4456 |
| G 1 1/2 | 40 | 46 | | 90 | 0 – 11 | | 4 – 8 | 042N4457 |
| G 1 1/2 | 40 | 46 | | 110 | 0 – 16 | | 4 – 8 | 042N4458 |
| G 2 | 50 | 67 | | 110 | 0 – 10 | | 4 – 8 | 042N4459 |

¹⁾ Pressure range can be extended for use in rough vacuum, typically up to 99% vacuum (10 mbar), depending on the application

Mounting: Bi-directional

Closing *against* or closing *with* the flow direction.

Closing *against* is recommended to avoid water hammer.

Stainless steel valve body, NC
NPT thread connection
PTFE seal material



| Connec- tion NPT | Orifice size | Flow value | | Control head diameter | Differential pressure, min. to max. ¹⁾ | | Control pressure | | Code number |
|------------------------|-----------------|------------------------------|--------------------------|-----------------------------|---|---------|---------------------|----------|-----------------|
| | | K_v [m ³ /h] | C_v [USgal/ min] | | [bar] | [psi] | [bar] | [psi] | |
| [in] | [mm] | | | [mm] | | | | | |
| 1/2 | 15 | 5.7 | 6.5 | 50 | 0 – 16 | 0 – 232 | 4 – 10 | 58 – 145 | 042N4551 |
| 3/4 | 20 | 10 | 11.5 | 50 | 0 – 10 | 0 – 140 | 4 – 10 | 58 – 145 | 042N4552 |
| 1 | 25 | 20 | 23 | 63 | 0 – 11 | 0 – 160 | 4 – 10 | 58 – 145 | 042N4554 |
| 1 1/2 | 40 | 46 | 53 | 90 | 0 – 11 | 0 – 160 | 4 – 8 | 58 – 116 | 042N4557 |
| 2 | 50 | 67 | 77 | 110 | 0 – 10 | 0 – 140 | 4 – 8 | 58 – 116 | 042N4559 |

¹⁾ Pressure range can be extended for use in rough vacuum, typically up to 99% vacuum (10 mbar), depending on the application

Mounting: Bi-directional

Closing *against* or closing *with* the flow direction.

Closing *against* is recommended to avoid water hammer.

Data sheet | Externally operated valves, type AV210

**Bronze valve body, NO
ISO thread connection
PTFE seal material**



| Connection ISO 228/1 | Orifice size | Flow value | Control head diameter | Differential pressure, min. to max. [bar] ¹⁾ | Control pressure [bar] | | Code number |
|-------------------------|-----------------|------------|-----------------------------|--|---------------------------|------|-----------------|
| | | | | | Min. | Max. | |
| G 1/2 | 15 | 5.7 | 50 | See diagram, page 11 | 10 | | 042N4431 |
| G 3/4 | 20 | 10 | 50 | See diagram, page 11 | 10 | | 042N4432 |
| G 1 | 25 | 20 | 63 | See diagram, page 11 | 10 | | 042N4433 |
| G 1 1/2 | 40 | 46 | 90 | See diagram, page 11 | 8 | | 042N4435 |
| G 2 | 50 | 67 | 110 | See diagram, page 11 | 8 | | 042N4436 |

¹⁾ Pressure range can be extended for use in rough vacuum, typically up to 99% vacuum (10 mbar), depending on the application

Mounting

Always closing *against* the flow direction.

**Stainless steel valve body, NO
ISO thread connection
PTFE seal material**



| Connection ISO 228/1 | Orifice size | Flow value | Control head diameter | Differential pressure, min. to max. [bar] ¹⁾ | Control pressure [bar] | | Code number |
|-------------------------|-----------------|------------|-----------------------------|--|---------------------------|------|-----------------|
| | | | | | Min. | Max. | |
| G 1/2 | 15 | 5.7 | 50 | See diagram, page 11 | 10 | | 042N4481 |
| G 3/4 | 20 | 10 | 50 | See diagram, page 11 | 10 | | 042N4482 |
| G 1 | 25 | 20 | 63 | See diagram, page 11 | 10 | | 042N4483 |
| G 1 1/2 | 40 | 46 | 90 | See diagram, page 11 | 8 | | 042N4485 |
| G 2 | 50 | 67 | 110 | See diagram, page 11 | 8 | | 042N4486 |

¹⁾ Pressure range can be extended for use in rough vacuum, typically up to 99% vacuum (10 mbar), depending on the application

Mounting

Always closing *against* the flow direction.

Technical data NC/NO

| Main type | ø50 – 63 mm / 2 – 2 1/2 in control head Closing with the flow direction | ø50 – 63 mm / 2 – 2 1/2 in control head Closing against the flow direction | ø90 – 110 mm / 3 1/2 – 4 1/3 in control head Closing with the flow direction | ø90 – 110 mm / 3 1/2 – 4 1/3 in control head Closing against the flow direction |
|----------------------------------|---|--|--|---|
| Time to open [ms] ¹⁾ | 40 – 180 | 50 – 350 | 80 – 780 | 100 – 460 |
| Time to close [ms] ¹⁾ | 160 – 500 | 120 – 350 | 580 – 1270 | 360 – 790 |

¹⁾ The times are indicative.

| | | | | |
|---------------------|-------------------------------|--|-----------------|-------------|
| Type | AV210 NC / NO | | | |
| Design | Piston-operated; angle-seated | | | |
| Installation | Optional | | | |
| Tightness | Internally / Externally: | Better than 0.4 mbar l/sec (25 ccm air per min.) | | |
| Pressure range | See ordering | | | |
| Ambient temperature | -30 – 60 °C / -22 – 140 °F | | | |
| Medium temperature | -30 – 180 °C / -22 – 356 °F | | | |
| Viscosity | Max. 600 cSt / 3000 SSU | | | |
| Control medium | Air | | | |
| Materials | Valve body: | | Bronze | RG 5 |
| | | | Stainless steel | AISI 316 |
| | Intermediate piece: | Bronze body: | Brass | W.no.2.0402 |
| | | Stainless steel body: | Stainless steel | AISI 316 |
| | Seat control and nut: | | Stainless steel | AISI 316 |
| | Spindle: | | Stainless steel | AISI 316 |
| | Spindle gasket: | | PTFE | – |
| | Gasket: | | Graphite | – |
| | Valve plate unit: | | PTFE | – |
| Control head: | | PA66 | – | |

| Type | Approval ¹⁾ |
|---------------------------|--|
| AV210 15-25 | The products are not allowed to carry CE mark, according to PED 97/23/EC |
| AV210 32 - 40 - 50 Bronze | CE marked and covered by PED 97/23/EC, fluid group 1, class I |
| AV210 32 - 40 SS | CE marked and covered by PED 97/23/EC, fluid group 1, class I |
| AV210 50 SS | CE marked and covered by PED 97/23/EC, fluid group 1, class II |

¹⁾ Approvals only apply for ISO versions.

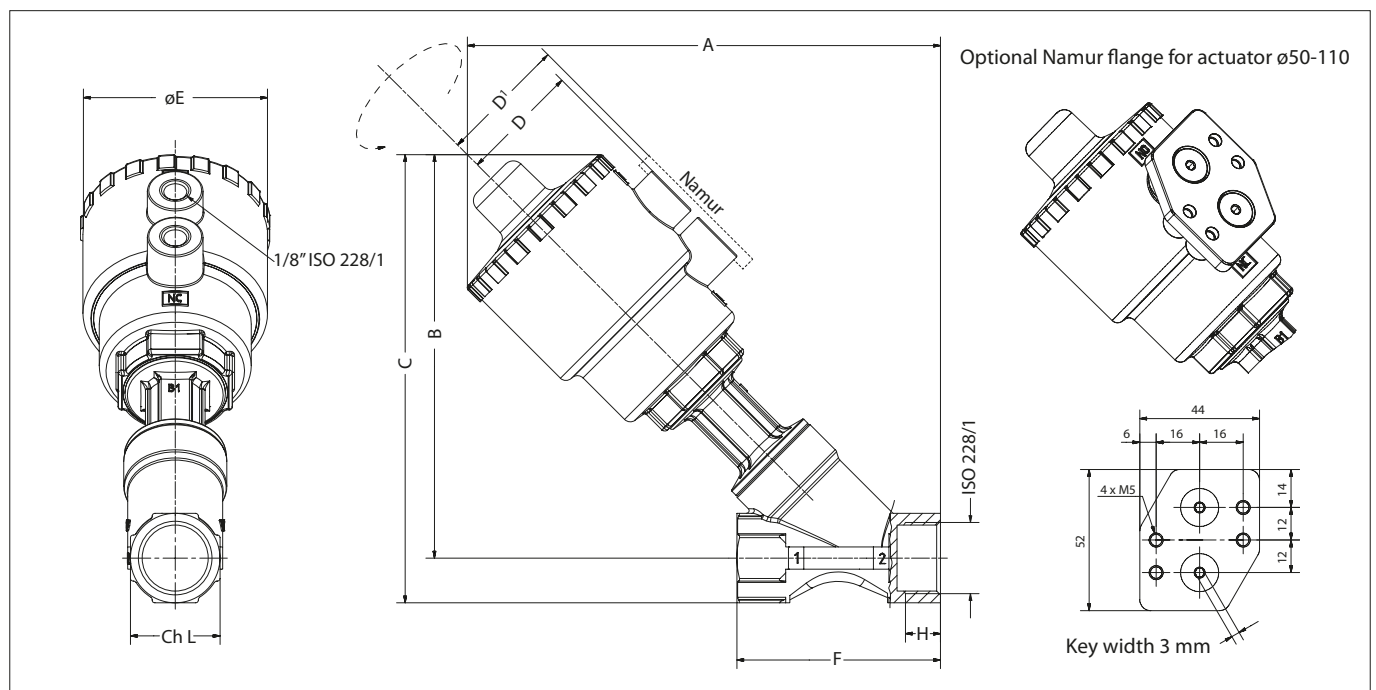
Dimensions and weight
Bronze valve body

ISO Connection

| Connection ISO 228/1 | Orifice size | Control head diameter | A | B | C | D | D' | øE | F | H | ch.L | Weight |
|----------------------|--------------|-----------------------|------|------|------|------|------|-------|------|------|------|--------|
| [in] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [kg] |
| G 3/8 | 15 | 40 | 144 | 121 | 134 | 35 | – | 61 | 65 | 12 | 27 | 1.1 |
| G 3/8 | 15 | 50 | 163 | 140 | 153 | 44 | 50.5 | 70 | 65 | 12 | 27 | 1.1 |
| G 1/2 | 15 | 40 | 144 | 121 | 134 | 35 | – | 61 | 65 | 13 | 27 | 1.0 |
| G 1/2 | 15 | 50 | 163 | 140 | 153 | 44 | 50.5 | 70 | 65 | 13 | 27 | 1.0 |
| G 3/4 | 20 | 50 | 173 | 147 | 163 | 44 | 50.5 | 70 | 75 | 14.3 | 27.5 | 1.2 |
| G 3/4 | 20 | 63 | 191 | 165 | 181 | 50.5 | 57 | 84.4 | 75 | 14.3 | 27.5 | 1.2 |
| G 1 | 25 | 63 | 206 | 176 | 196 | 50.5 | 57 | 84.4 | 90 | 17.5 | 41 | 1.6 |
| G 1 | 25 | 90 | 246 | 216 | 236 | 66.2 | 72.7 | 116.4 | 90 | 17.5 | 41 | 1.7 |
| G 1 1/4 | 32 | 90 | 255 | 220 | 245 | 66.2 | 72.7 | 116.4 | 110 | 19 | 50 | 3.0 |
| G 1 1/2 | 40 | 90 | 270 | 235 | 264 | 66.2 | 72.7 | 116.4 | 120 | 18 | 58 | 3.4 |
| G 1 1/2 | 40 | 110 | 306 | 271 | 300 | 77.4 | 83.9 | 140.6 | 120 | 18 | 58 | 4.0 |
| G 2 | 50 | 110 | 316 | 276 | 311 | 77.4 | 83.9 | 140.6 | 150 | 20 | 70 | 5.3 |

NPT Connection

| Conn. NPT | Orifice size | | Control head diameter | | A | | B | | C | | D | | D' | | øE | | F | | H | | ch.L | | Weight | |
|-----------|--------------|-------|-----------------------|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|--------|-------|
| [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [kg] | [lbs] |
| 1/2 | 15 | 1/2 | 50 | 2 | 163 | 6.4 | 140 | 5.5 | 153 | 6.0 | 44 | 1.7 | 50.5 | 1.99 | 70 | 2.8 | 65 | 2.6 | 13 | 0.5 | 27 | 1.1 | 1.0 | 2.2 |
| 3/4 | 15 | 3/4 | 50 | 2 | 173 | 6.8 | 147 | 5.8 | 163 | 6.4 | 44 | 1.7 | 50.5 | 1.99 | 70 | 2.8 | 75 | 3.0 | 14.3 | 0.6 | 27.5 | 1.1 | 1.2 | 2.6 |
| 1 | 25 | 1 | 63 | 2 1/2 | 206 | 8.1 | 176 | 6.9 | 196 | 7.7 | 50.5 | 2.0 | 57 | 2.24 | 84.4 | 3.3 | 90 | 3.5 | 17.5 | 0.7 | 41 | 1.6 | 1.6 | 3.5 |
| 1 1/4 | 32 | 1 1/4 | 90 | 3 1/2 | 255 | 10.0 | 220 | 8.7 | 245 | 9.6 | 66.2 | 2.6 | 72.7 | 2.86 | 116.4 | 4.6 | 110 | 4.3 | 19 | 0.7 | 50 | 2.0 | 3.0 | 6.6 |
| 1 1/2 | 40 | 1 1/2 | 90 | 3 1/2 | 270 | 10.6 | 235 | 9.3 | 264 | 10.4 | 66.2 | 2.6 | 72.7 | 2.86 | 116.4 | 4.6 | 120 | 4.7 | 18 | 0.7 | 58 | 2.3 | 3.4 | 7.5 |
| 2 | 50 | 2 | 110 | 4 1/3 | 316 | 12.4 | 276 | 10.9 | 311 | 12.2 | 77.4 | 3.0 | 83.9 | 3.30 | 140.6 | 5.5 | 150 | 5.9 | 20 | 0.8 | 70 | 2.8 | 5.3 | 11.7 |



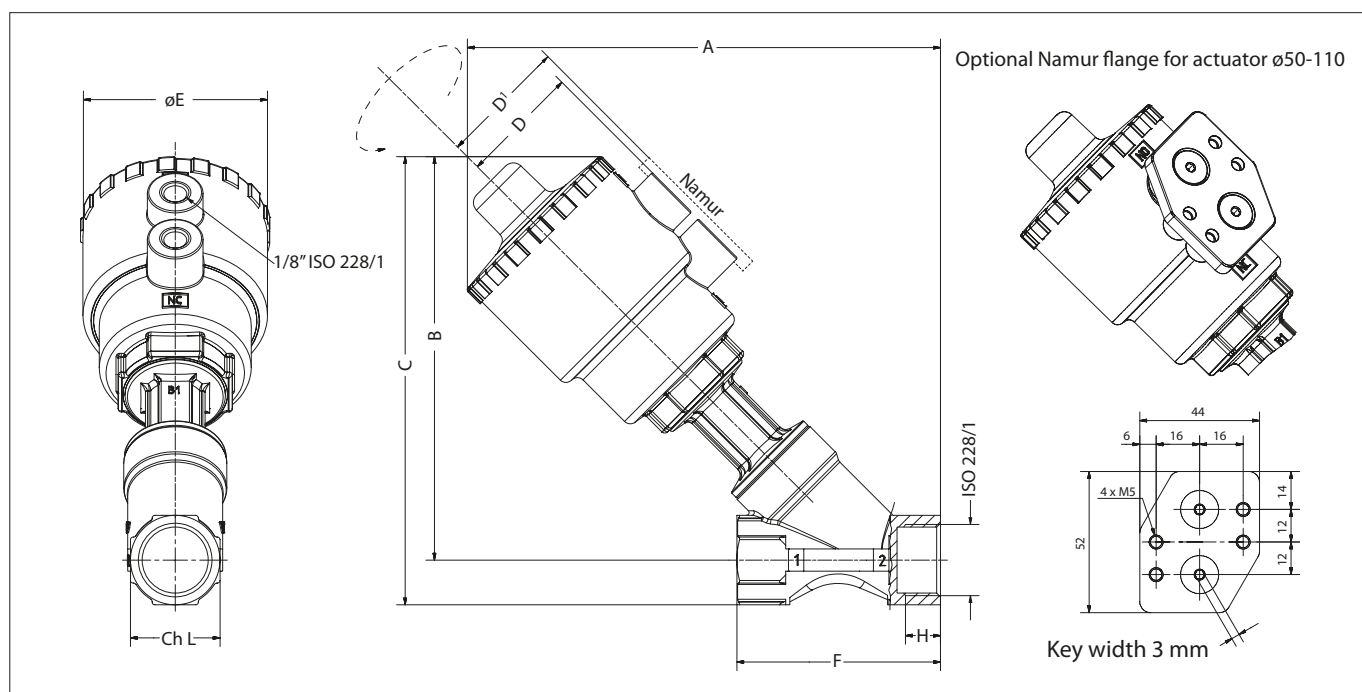
Dimensions and weight
Stainless steel valve body

ISO Connection

| Connection ISO 228/1 | Orifice size | Control head diameter | A | B | C | D | D' | øE | F | H | ch.L | Weight |
|----------------------|--------------|-----------------------|------|------|-------|------|------|-------|------|------|------|--------|
| [in] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [kg] |
| G 3/8 | 15 | 40 | 190 | 156 | 169 | 44 | – | 70 | 85 | 12 | 25 | 1.1 |
| G 1/2 | 15 | 50 | 190 | 156 | 169 | 44 | 50.5 | 70 | 85 | 15 | 25 | 1.0 |
| G 3/4 | 20 | 50 | 195 | 160 | 176 | 44 | 50.5 | 70 | 95 | 16.3 | 31 | 1.2 |
| G 3/4 | 20 | 63 | 213 | 178 | 194.4 | 50.5 | 70 | 84.4 | 95 | 16.3 | 31 | 1.2 |
| G 1 | 25 | 63 | 219 | 182 | 202 | 50.5 | 70 | 84.4 | 105 | 19.5 | 38 | 1.6 |
| G 1 | 25 | 90 | 259 | 222 | 242 | 66.2 | 72.7 | 116.4 | 105 | 19.5 | 38 | 1.7 |
| G 1 1/4 | 32 | 90 | 266 | 226 | 249 | 66.2 | 72.7 | 116.4 | 120 | 19 | 47 | 3.0 |
| G 1 1/2 | 40 | 90 | 271 | 230 | 258 | 66.2 | 72.7 | 116.4 | 130 | 18 | 54 | 3.4 |
| G 1 1/2 | 40 | 110 | 307 | 266 | 294 | 77.4 | 83.9 | 140.6 | 130 | 18 | 54 | 4.0 |
| G 2 | 50 | 110 | 321 | 276 | 310 | 77.4 | 83.9 | 140.6 | 150 | 20 | 66 | 5.3 |

NPT Connection

| Conn. NPT | Orifice size | | Control head diameter | | A | | B | | C | | D | | D' | | øE | | F | | H | | ch.L | | Weight | |
|-----------|--------------|-------|-----------------------|-------|------|------|------|------|-------|------|------|------|------|------|-------|------|------|------|------|------|------|------|--------|-------|
| [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [mm] | [in] | [kg] | [lbs] |
| 1/2 | 15 | 1/2 | 50 | 2 | 190 | 7.5 | 156 | 6.1 | 169 | 6.7 | 44 | 1.7 | 50.5 | 1.99 | 70 | 2.8 | 85 | 3.3 | 15 | 0.6 | 25 | 1.0 | 1.0 | 2.2 |
| 3/4 | 15 | 3/4 | 50 | 2 | 195 | 7.7 | 160 | 6.3 | 176 | 6.9 | 44 | 1.7 | 50.5 | 1.99 | 70 | 2.8 | 95 | 3.7 | 16.3 | 0.6 | 31 | 1.2 | 1.2 | 2.6 |
| 3/4 | 15 | 3/4 | 63 | 2 1/2 | 213 | 8.4 | 178 | 7.0 | 194.4 | 7.7 | 50.5 | 2.0 | 57 | 2.24 | 84.4 | 3.3 | 95 | 3.7 | 16.3 | 0.6 | 31 | 1.2 | 1.2 | 2.6 |
| 1 | 25 | 1 | 63 | 2 1/2 | 219 | 8.6 | 182 | 7.2 | 202 | 8.0 | 50.5 | 2.0 | 57 | 2.24 | 84.4 | 3.3 | 105 | 4.1 | 19.5 | 0.8 | 38 | 1.5 | 1.6 | 3.5 |
| 1 1/4 | 32 | 1 1/4 | 90 | 3 1/2 | 266 | 10.5 | 226 | 8.9 | 249 | 9.8 | 66.2 | 2.6 | 72.7 | 2.86 | 116.4 | 4.6 | 120 | 4.7 | 19 | 0.7 | 47 | 1.9 | 3.0 | 6.6 |
| 1 1/2 | 40 | 1 1/2 | 90 | 3 1/2 | 271 | 10.7 | 230 | 9.1 | 258 | 10.2 | 66.2 | 2.6 | 72.7 | 2.86 | 116.4 | 4.6 | 130 | 5.1 | 18 | 0.7 | 54 | 2.1 | 3.4 | 7.5 |
| 2 | 50 | 2 | 110 | 4 1/3 | 321 | 12.6 | 276 | 10.9 | 310 | 12.2 | 77.4 | 3.0 | 83.9 | 3.30 | 140.6 | 5.5 | 150 | 5.9 | 20 | 0.8 | 66 | 2.6 | 5.3 | 11.7 |



Accessories
Position indicator



Features

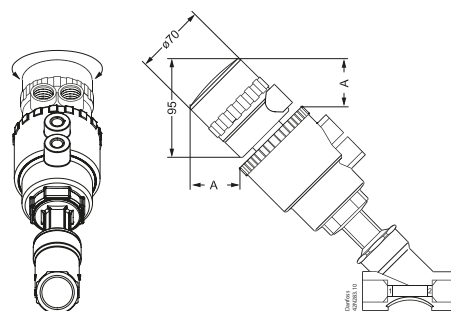
The control box to check the open/closed positions with two mechanical limit switches is suitable for assembling on the whole range of valves.

Level of protection : IP65

Ambient temperature:
from -20 – 70 °C (-4 – 158 °F)

Access lead nr.2 PG11

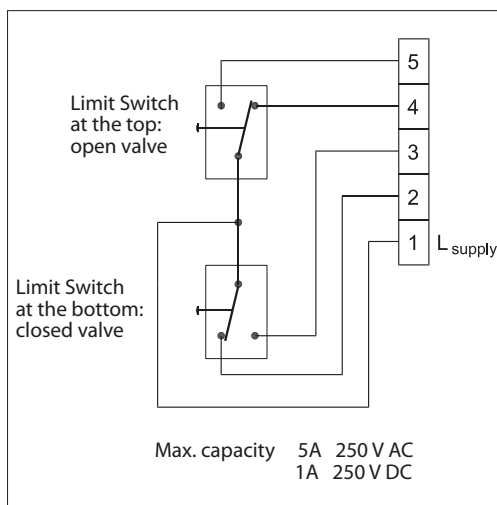
Body material:
Polyamide (cap in Lexan/polycarbonate)



| Actuator size | | A | | Code number |
|---------------|-------|------|------|-----------------|
| [mm] | [in] | [mm] | [in] | |
| ø50 | 2 | 52.1 | 2.1 | 042N4820 |
| ø63 | 2 1/2 | 47.5 | 1.9 | 042N4821 |
| ø90 | 3 1/2 | 37.7 | 1.5 | 042N4822 |
| ø110 | 4 1/3 | 29.5 | 1.2 | 042N4823 |

* Limit Switch Box incl. 2 switches

Wiring diagram
for position indicator



Accessories - continued
Namur flange



Namur flange for actuator ø50-110:
- for assembly of 3/2 solenoid valves
- according to EN 15714-3

Ordering

| Actuator size | Code number |
|---------------|-------------|
| ø50-110 | 042N4811 |

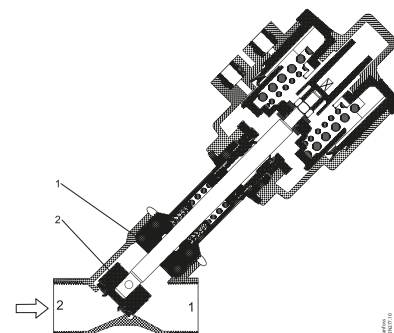
Repair kit



The repair kit contains :

1. Two gaskets (1)
(On actuator size 40 (diameter control head) only one gasket included).
2. One complete valve plate unit (plug and pin) (2).

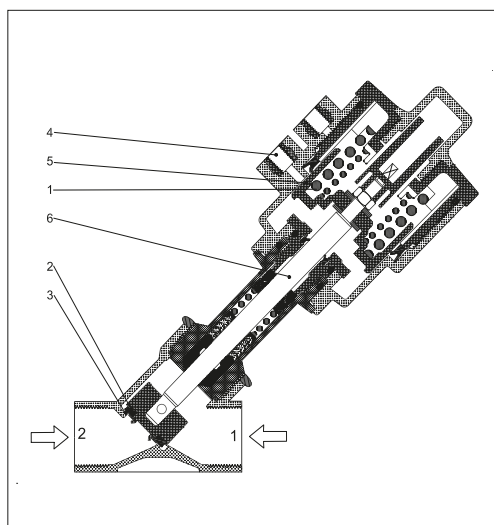
Note: One gasket is for bronze, and one is for stainless steel.



Ordering
Bronze/Stainless steel

| Connection | | Control head diameter [mm] | Material | | Code number |
|-------------------|-------------|-------------------------------|------------------|----------|-------------|
| ISO 228/1 [in] | NPT [in] | | Valve plate unit | Gasket | |
| G 3/8 | - | 40 | PTFE | Graphite | 042N4800 |
| G 3/8 | - | 50 | PTFE | Graphite | 042N4801 |
| G 1/2 | - | 40 | PTFE | Graphite | 042N4802 |
| G 1/2 | 1/2 | 50 | PTFE | Graphite | 042N4803 |
| G 3/4 | 3/4 | 50 - 63 | PTFE | Graphite | 042N4804 |
| G 1 | 1 | 63 | PTFE | Graphite | 042N4805 |
| G 1 | - | 90 | PTFE | Graphite | 042N4806 |
| G 1 1/4 | 1 1/4 | 90 | PTFE | Graphite | 042N4807 |
| G 1 1/2 | 1 1/2 | 90 - 110 | PTFE | Graphite | 042N4808 |
| G 2 | 2 | 110 | PTFE | Graphite | 042N4809 |

Function, NC
ISO / NPT Connection

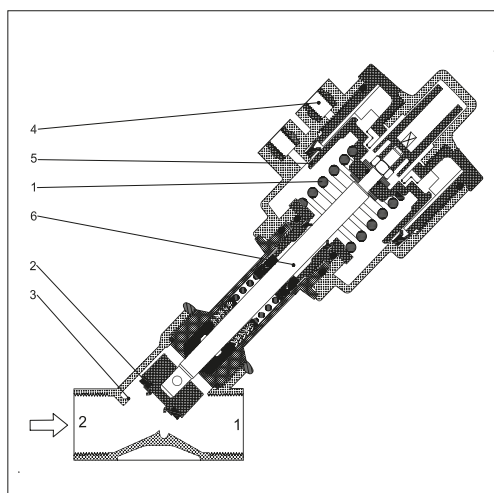


AV210 unpressurized closed version (NC) bidirectional.

The valve is kept closed by the spring (1), which presses the seat gasket (2) against the valve seat (3). When the pressure is applied to the control connection (4), the control piston (5), the spindle (6) and thus the seat gasket (2) are raised, and the valve opens with or against the pressure of the medium.

- 1. Spring
- 2. Seat gasket
- 3. Valve seat
- 4. Control connection
- 5. Control piston
- 6. Spindle

Function, NO
ISO Connection

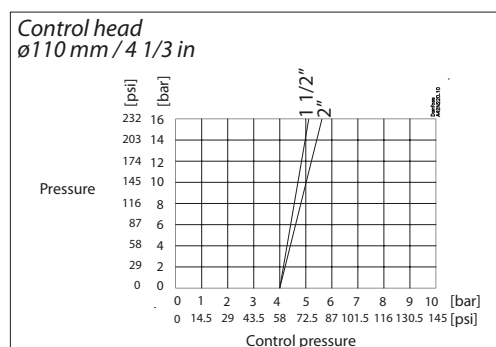
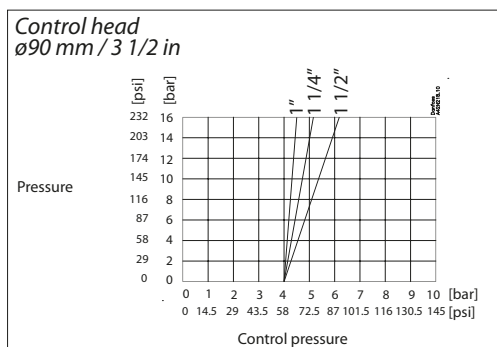
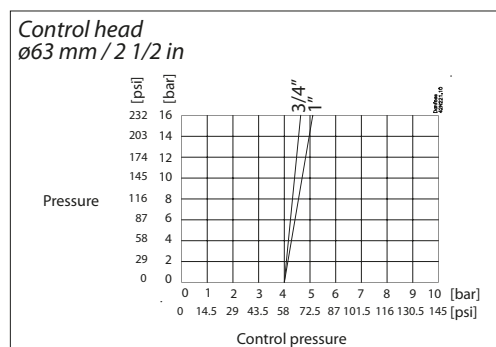
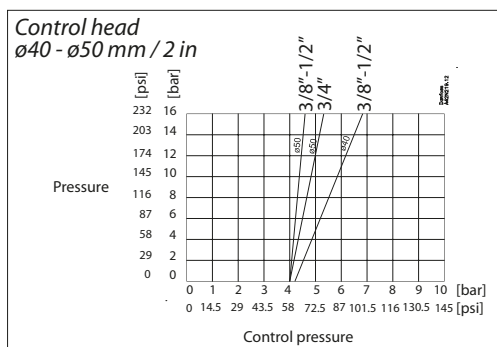
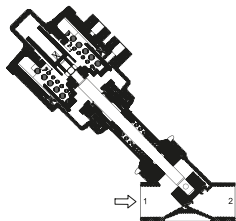


AV210 unpressurized open version (NO):

The valve is kept open by the spring (1), which keeps the seat gasket (2) away from the valve seat (3). When pressure is applied to the control connection (4), the control piston (5), the spindle (6) and thus the seat gasket (2) are lowered, and the valve closes against the pressure of the medium.

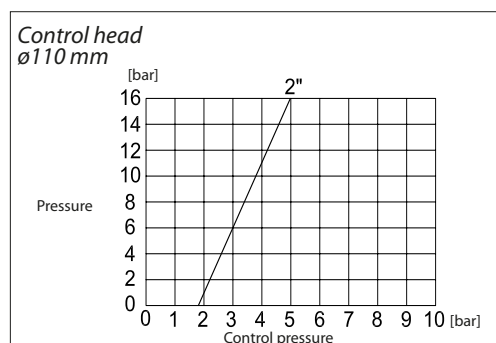
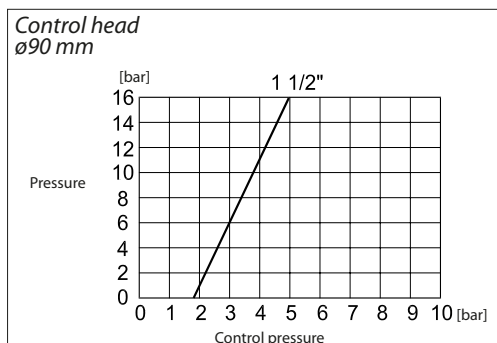
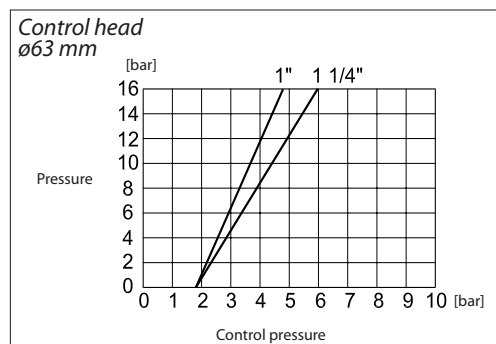
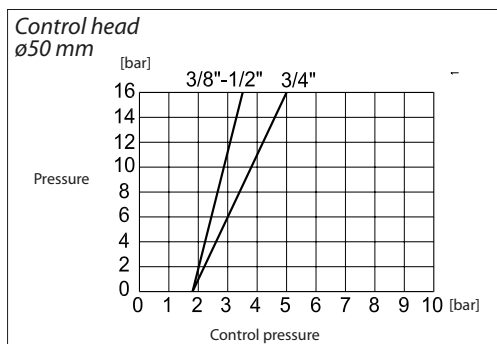
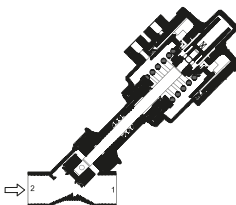
- 1. Spring
- 2. Seat gasket
- 3. Valve seat
- 4. Control connection
- 5. Control piston
- 6. Spindle

Diagrams, NC
ISO / NPT Connection

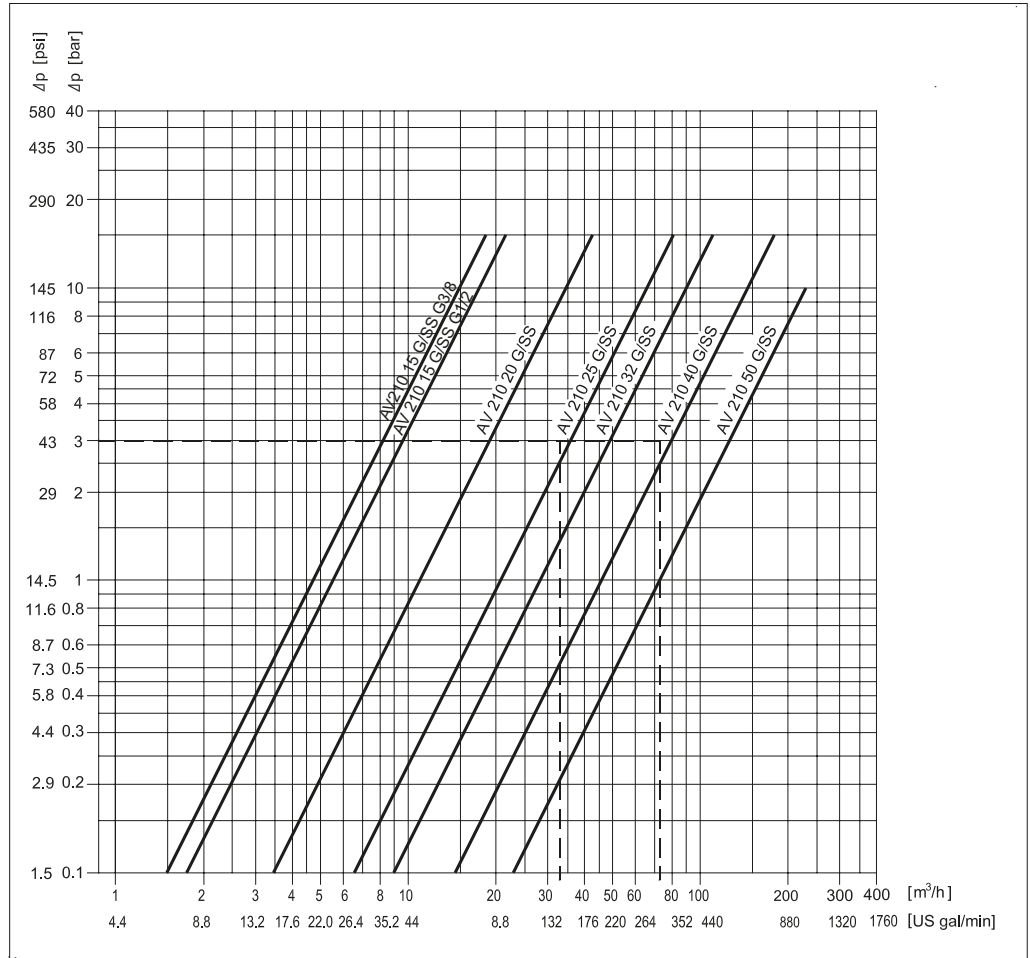


Mounting: closing with the flow direction
Recommended only for compressible media for extended pressure range

Diagrams, NO
ISO Connection



Capacity diagram, Water



Control valves, types
EV310A and EV310B



- Valves for industrial applications
- Available in de-energized closed and de-energized open versions
- Available with or without manual operation

See separate data sheets regarding code numbers, technical data and coil options for Danfoss EV310A and EV310B valves.