

Angle Bodied Flanged Valve 7031

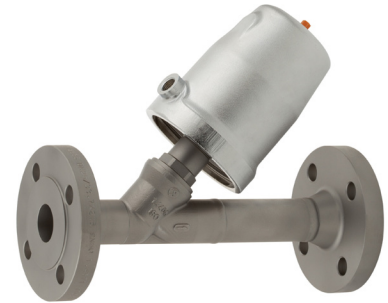


1/2" up to 2 1/2"

580 psi

Pneumatically operated angle bodied flanged valves for the control of neutral, slightly aggressive and highly aggressive media.

- Compact design
- Unaffected by lightly contaminated media
- For temperatures from -22°F up to +392°F
- Working pressure up to 580 psi
- Versatile actuator options



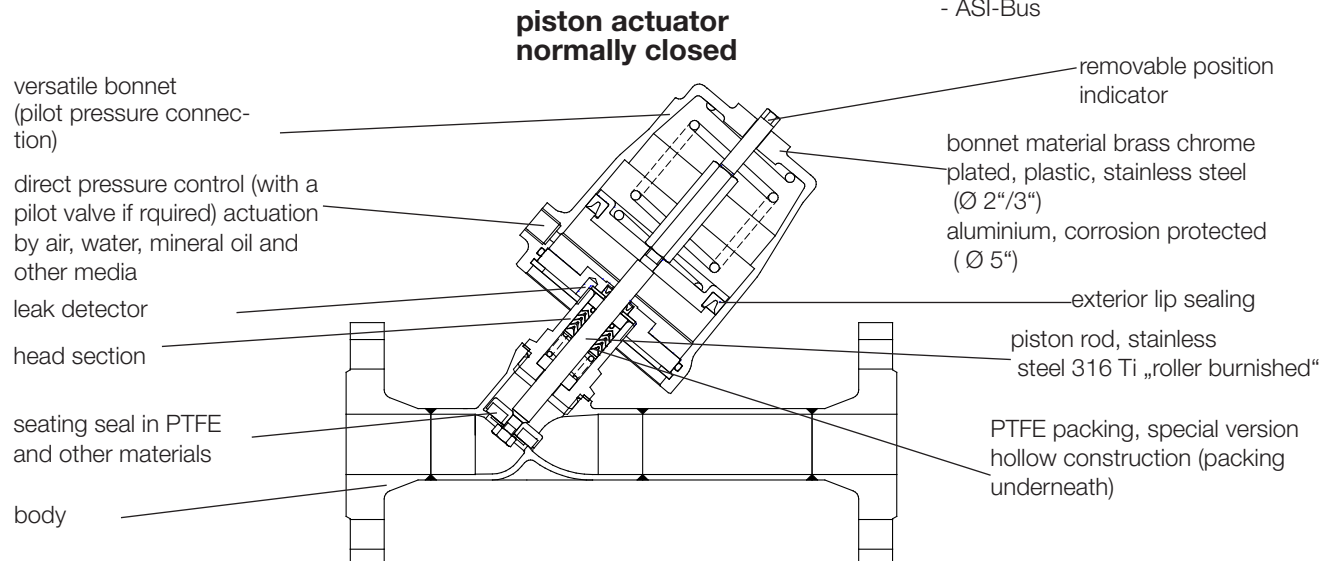
Technical Information

| | |
|--|--|
| Nominal size | 1/2" up to 2 1/2", 580 psi |
| Connections | flange acc. ANSI #150 flange acc. ANSI #300 |
| Nominal pressure | ANSI #150 / ANSI #300 |
| Max. fluid temperature: with metal bonnet | -22°F up to +392°F |
| with plastic bonnet | -22°F up to +275°F |
| with diaphragm actuator | -22°F up to +392°F |
| Ambient temperature | -22°F up to +140°F |
| Viscosity of the fluid | maximum 600cSt, 80°E (600 mm ² /s) |
| Vacuum | maximum 0.0295 mercury (Hg) |
| Working pressure for hollow construction | maximum 174 psi |

*: Please consider further temperature versions and limits in technical bulletin 32

Options

- e.g.:
- limit switches
 - inductive proximity switch
 - electrical switches
 - pneumatic switches
 - pilot valves
 - manual override
 - oil and grease free version
 - PTFE free version
 - ASI-Bus



Angle Bodied Flanged Motor Valve 7031



standard design

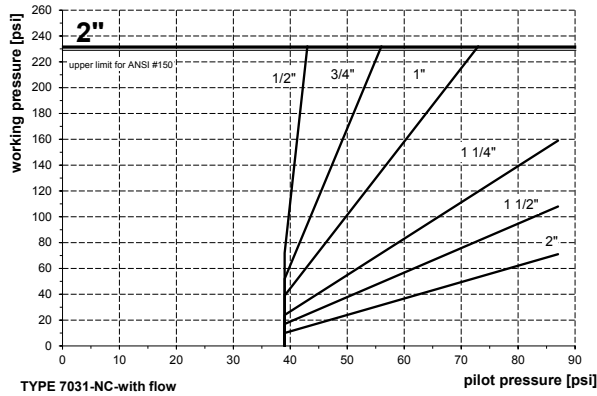
Spring closes NC (closing with flow)

Flanged valves, closing with flow, NO, preferred usage with gaseous media, with liquids closure strokes may occur.

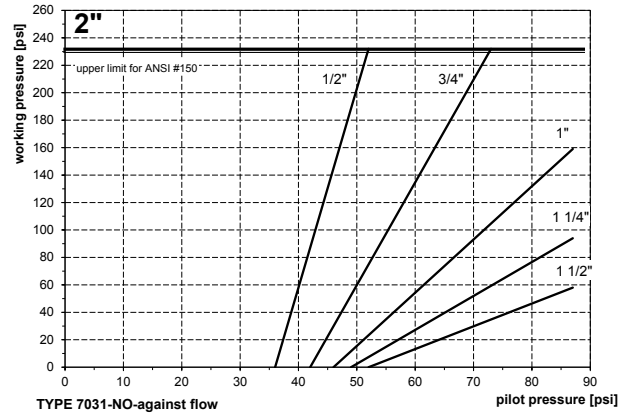
Spring opens NO (closing against flow)

Normally open flanged valves, closing against the flow.

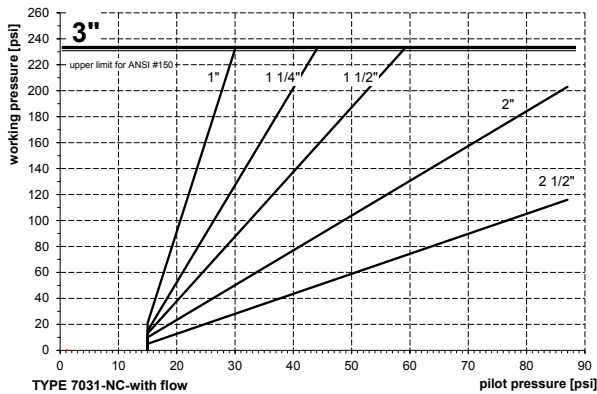
Actuator diameter 2"



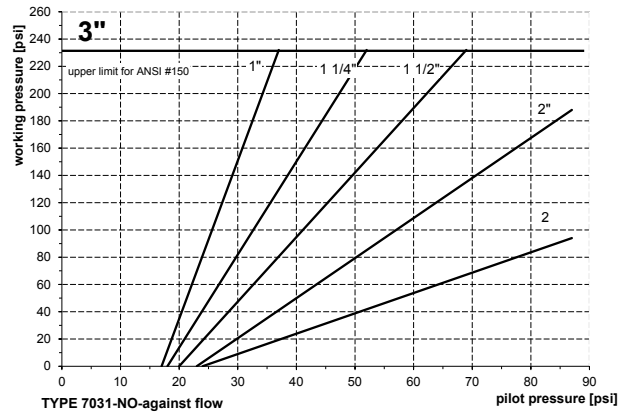
Actuator diameter 2"



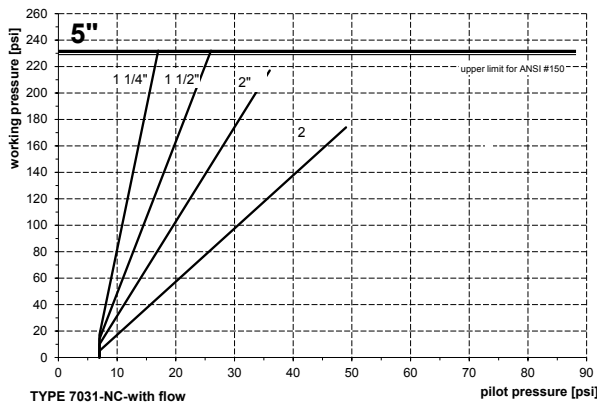
Actuator diameter 3"



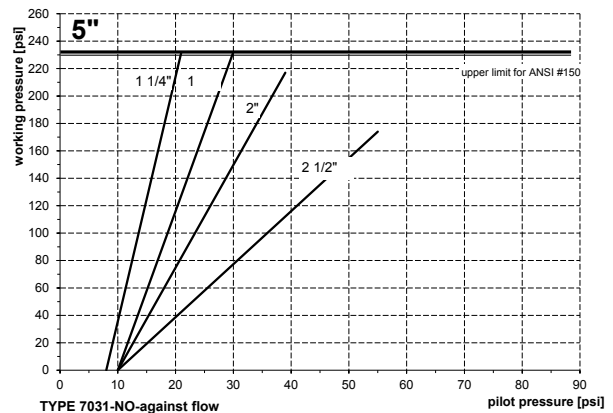
Actuator diameter 3"



Actuator diameter 5"



Actuator diameter 5"



Angle Bodied Flanged Motor Valve 7031



standard design

NC (closing against flow)

| Orifice Size | Working pressure (i.e. differential) psi | Pilot Pressure psi | Piston Actuator inch | Springs |
|--------------|--|--------------------|----------------------|---------|
| 1/2" (15) | 320 | 51 - 145 | 2" | 1 |
| 3/4" (20) | 100 | 51 - 145 | 2" | 1 |
| 3/4" (20) | 190 | 65 - 145 | 2" | 2 |
| 3/4" (20) | 275 | 83 - 145 | 2" | 3 |
| 1" (25) | 35 | 51 - 145 | 2" | 1 |
| 1" (25) | 85 | 65 - 145 | 2" | 2 |
| 1" (25) | 130 | 83 - 145 | 2" | 3 |
| 1" (25) | 320 | 51 - 145 | 3" | 1 |
| 1 1/4" (32) | 15 | 51 - 145 | 2" | 1 |
| 1 1/4" (32) | 45 | 65 - 145 | 2" | 2 |
| 1 1/4" (32) | 75 | 83 - 145 | 2" | 3 |
| 1 1/4" (32) | 175 | 51 - 145 | 3" | 1 |
| 1 1/4" (32) | 245 | 64 - 145 | 3" | 2 |
| 1 1/4" (32) | 320 | 81 - 145 | 3" | 3 |
| 1 1/4" (32) | 160 | 19 - 145 | 5" | 1 |
| 1 1/4" (32) | 335 | 32 - 145 | 5" | 2 |

| Orifice Size | Working pressure (i.e. differential) psi | Pilot pressure psi | Piston Ø inch | Springs |
|--------------|--|--------------------|---------------|---------|
| 1 1/2" (40) | 30 | 65 - 145 | 2" | 2 |
| 1 1/2" (40) | 50 | 83 - 145 | 2" | 3 |
| 1 1/2" (40) | 100 | 51 - 145 | 3" | 1 |
| 1 1/2" (40) | 145 | 64 - 145 | 3" | 2 |
| 1 1/2" (40) | 190 | 81 - 145 | 3" | 3 |
| 1 1/2" (40) | 100 | 19 - 145 | 5" | 1 |
| 1 1/2" (40) | 220 | 32 - 145 | 5" | 2 |
| 1 1/2" (40) | 305 | 45 - 145 | 5" | 3 |
| 2" (50) | 60 | 51 - 145 | 3" | 1 |
| 2" (50) | 85 | 64 - 145 | 3" | 2 |
| 2" (50) | 110 | 81 - 145 | 3" | 3 |
| 2" (50) | 125 | 32 - 145 | 5" | 2 |
| 2" (50) | 190 | 45 - 145 | 5" | 3 |
| 2 1/2" (65) | 60 | 81 - 145 | 3" | 3 |
| 2 1/2" (65) | 75 | 32 - 145 | 5" | 2 |
| 2 1/2" (65) | 100 | 3,1 - 145 | 5" | 3 |

Standard

Angle Bodied Flanged Valve 7031, reinforced design

2" up to 2 1/2" 580 psi

NC (closing against flow)

| Nominal size | max. Working pressure (differential pressure) psi stainless steel | Pilot pressure (psi) | Diaphragm area D inch | Springs number |
|--------------|---|----------------------|-----------------------|----------------|
| 2" | 175 | 45 - 145 | 5" | 3 |
| 2" | 275 | 40 - 90 | 10" | 8 |
| 2" | 365 | 55 - 90 | 10" | 12 |
| 2 1/2" | 100 | 45 - 145 | 5" | 3 |
| 2 1/2" | 145 | 40 - 90 | 10" | 8 |
| 2 1/2" | 205 | 55 - 90 | 10" | 12 |

Standard

Angle Bodied Flanged Motor Valve 7031

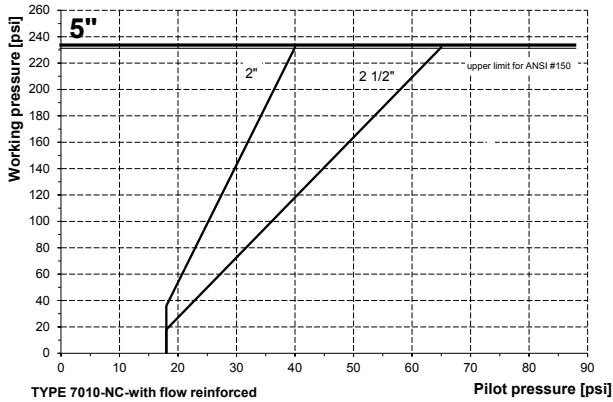


reinforced design

Spring closes NC (closing with flow)

Flanged valves, closing with flow, NO, preferred usage with gaseous media, with liquids closure strokes may occur.

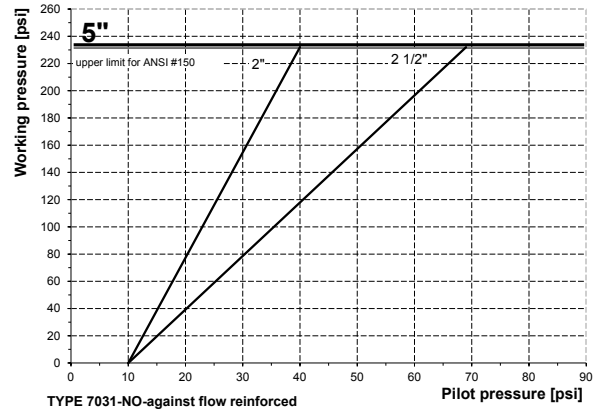
Actuator diameter 5" - a strong spring



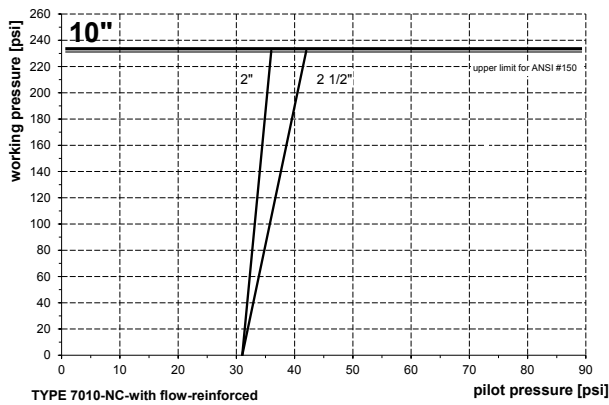
Spring opens NO (closing against flow)

Normally open flanged valves, closing against the flow.

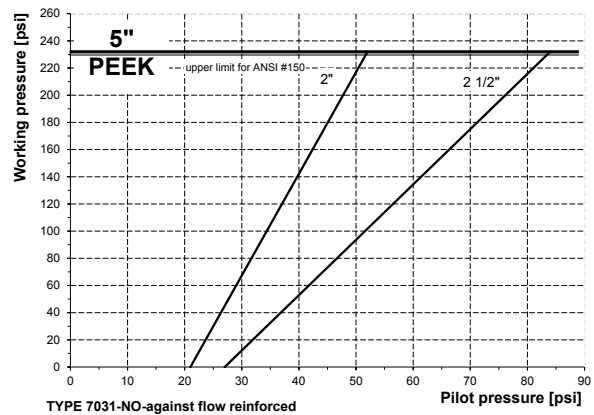
Actuator diameter 5"



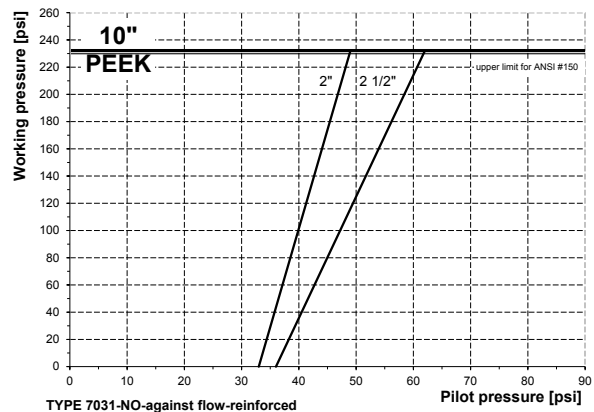
Actuator diameter 10"



Actuator diameter 5" - PEEK seating seal



Actuator diameter 10" - PEEK seating seal



Angle Bodied Flanged Motor Valve 7031



Ordering Number System

| | | | | | | | | | | | | | | | | | | | |
|-------|---|---|---|------|--|--|--|---------|--|------------------------------------|--|--|--|--|--|--|---|--|--|
| 7 | 0 | 3 | 1 | / | | | | V | | | | | | | | | S | | |
| Model | | | | Size | | | | Symbol: | | | | | | | | | | | |
| | | | | | | | | | | "V": Valve | | | | | | | | | |
| | | | | | | | | | | "A": Actuator (valve without body) | | | | | | | | | |
| | | | | | | | | | | "R": Repair kit (sealings) | | | | | | | | | |

1 - 6 : Please quote all 6 sections.
7 - 12: Quote only if required.

| 1. Body type | | 2. Connection | | 3. Body material | | 4. Seating seal | | 5. Pilot function | | 6. Actuator | |
|--------------|--------------------------|---------------|----------------|------------------|-----------------------|-----------------|-------------|-------------------|---------------------------|-------------|------------------------------------|
| 2 | angle body flanged valve | C | acc. ANSI #150 | 2 | stainless steel 316 L | 0 | PTFE | 0 | NC (closing with flow) | 7 | piston 2" (NPT) |
| | | F | acc. ANSI #300 | | | 1 | FKM (Viton) | 1 | NO (closing against flow) | 8 | piston 3" (NPT) |
| | | | | | | 2 | EPDM | 2 | NC (closing against flow) | 9 | piston 5" (NPT) |
| | | | | | | 3 | NBR | 3 | Universal, double acting | D | diaphragm Ø10" (NPT) |
| | | | | | | | | | | P | plastic bonnet for piston 2" (NPT) |
| | | | | | | | | | | S | plastic bonnet for piston 3" (NPT) |

| 7. Springs | | 8. Head section material | | 9. Packing | | 10. Temperature version | | 11. Accessories | | 12. Special versions | |
|------------|--------------------|--------------------------|-------------------|------------|--------------------|-------------------------|--------------------------|-----------------|--|----------------------|---|
| - | standard | - | standard | - | standard | - | standard | - | no accessories | S | special versions |
| 1 | 1 spring | | | 2 | packing underneath | H | high temperature version | 1 | electrical position indicator with one switch | M | position indicator with cable bushing |
| 2 | 2 springs | K | reinforced design | | | | | 2 | electrical position indicator with two switches | N | position indicator with plug connection |
| 3 | 3 springs | | | | | | | 3 | manual emergency operation | | |
| W | 8 springs (D 10") | | | | | | | 4 | additional manual operation | | |
| Y | 12 springs (D 10") | | | | | | | 5 | stroke limitation | | |
| | | | | | | | | 6 | pilot valve DN 2, 230 V AC | | |
| | | | | | | | | 7 | pilot valve DN 2, 24 V DC | | |
| | | | | | | | | K | electr. position indicator compact | | |
| | | | | | | | | M | position indicator with two ind. switch 10 - 36 V DC (PNP) | | |
| | | | | | | | | P | position indicator with one ind. switch 10 - 36 V DC (PNP) | | |
| | | | | | | | | T | position indicator compact, inductive 10 - 30 V DC (PNP) | | |

Ordering example: 7031/050V2920282 - - - 5
angle bodied flanged valve 7031, 2", connection DIN-flange PN40, body material stainless steel, seating seal PTFE, spring to close -closing against the flow, actuator 3", two springs, stroke limitation

reinforced design (from DN50):

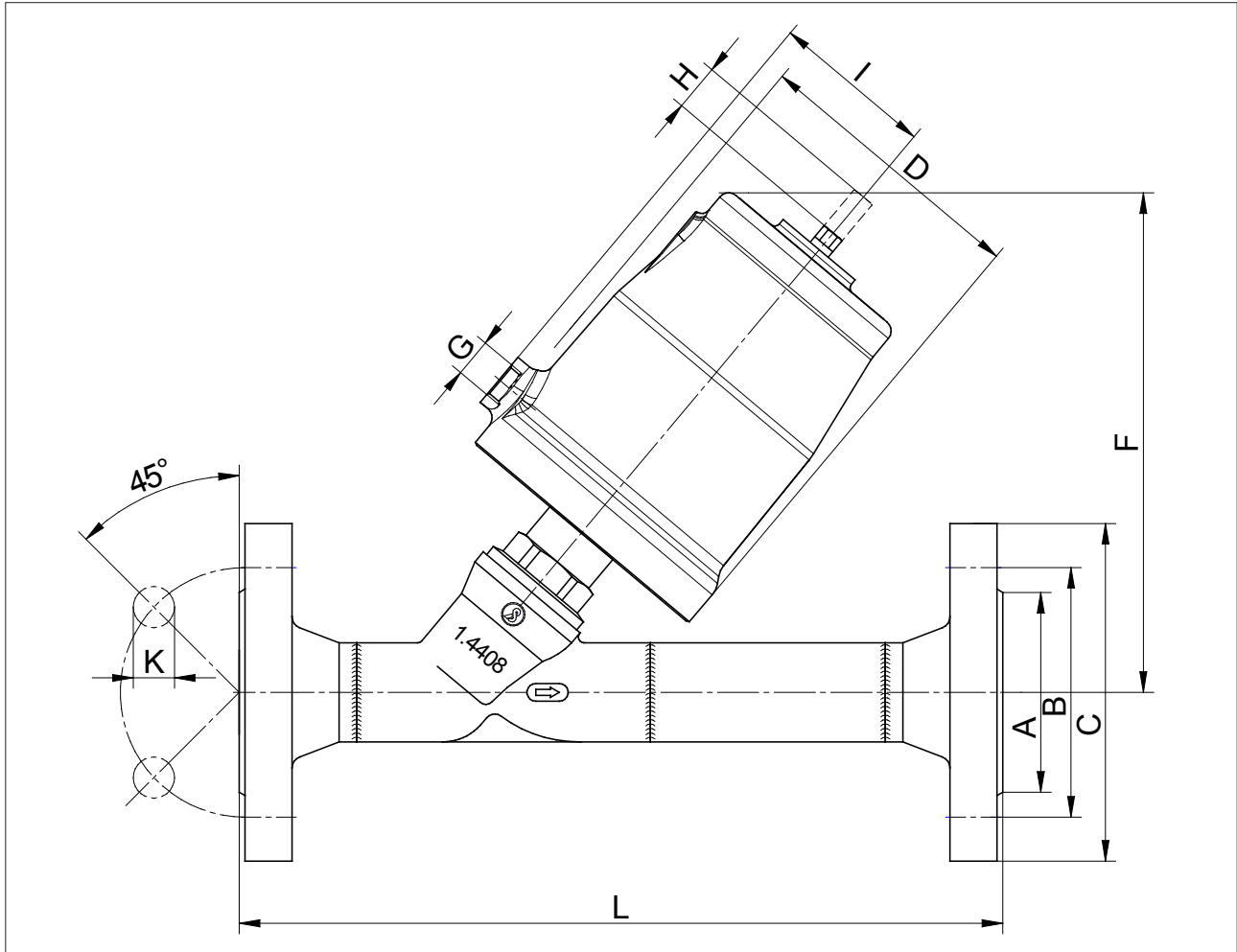
Ordering example: 7031/050V29202D-K
angle bodied flanged valve 7031, 2", connection DIN-flange PN40, body material stainless steel, seating seal PTFE, spring to close - closing against the flow, actuator 10", 8 springs (standard), reinforced design

„K“ reinforced design

Angle Bodied Flanged Motor Valve 7031



Dimensions and Weights



| Size | piston Ø | A ANSI #150 | B ANSI #150 | C ANSI #150 | D | F | G | H (stroke) | I | K ANSI #150 | L* | M | N number of borings | Cv- value | Weight (lbs) |
|--------|-------------|-------------------|-------------------|-------------------|------|------|------|---------------|------|-------------------|-------|------|------------------------------|--------------|-----------------|
| 1/2" | 2" | 1.38 | 2.38 | 3.5 | 2.44 | 4.92 | G1/8 | 0.28 | 1.36 | 0.62 | 9.06 | 2.56 | 4 | 4.1 | 6 |
| 3/4" | 2" | 1.69 | 2.75 | 3.88 | 2.44 | 4.92 | G1/8 | 0.47 | 1.36 | 0.62 | 10.24 | 2.95 | 4 | 10.4 | 7.5 |
| 1" | 2" | 2 | 3.12 | 4.25 | 2.44 | 5.12 | G1/8 | 0.63 | 1.36 | 0.62 | 10.24 | 3.35 | 4 | 17.4 | 9 |
| 1" | 3" | 2 | 3.12 | 4.25 | 3.86 | 6.69 | G1/4 | 0.63 | 2.17 | 0.62 | 10.24 | 3.35 | 4 | 19.7 | 12.5 |
| 1 1/4" | 2" | 2.5 | 3.5 | 4.62 | 2.44 | 5.71 | G1/8 | 0.63 | 1.36 | 0.62 | 11.81 | 3.94 | 4 | 24.4 | 12.5 |
| 1 1/4" | 3" | 2.5 | 3.5 | 4.62 | 3.86 | 7.28 | G1/4 | 0.79 | 2.17 | 0.62 | 11.81 | 3.94 | 4 | 27.8 | 16 |
| 1 1/4" | 5" | 2.5 | 3.5 | 4.62 | 5.75 | 8.46 | G1/4 | 0.79 | 3.15 | 0.62 | 11.81 | 3.94 | 4 | 27.8 | 20.5 |
| 1 1/2" | 2" | 2.88 | 3.88 | 5 | 2.44 | 5.91 | G1/8 | 0.63 | 1.36 | 0.62 | 11.81 | 4.33 | 4 | 34.8 | 14 |
| 1 1/2" | 3" | 2.88 | 3.88 | 5 | 3.86 | 7.48 | G1/4 | 0.91 | 2.17 | 0.62 | 11.81 | 4.33 | 4 | 42.9 | 17.5 |
| 1 1/2" | 5" | 2.88 | 3.88 | 5 | 5.75 | 8.66 | G1/4 | 0.91 | 3.15 | 0.62 | 11.81 | 4.33 | 4 | 42.9 | 22 |
| 2" | 2" | 3.62 | 4.75 | 6 | 2.44 | 6.3 | G1/8 | 0.63 | 1.36 | 0.75 | 13.78 | 4.92 | 4 | 46.4 | 19 |
| 2" | 3" | 3.62 | 4.75 | 6 | 3.86 | 7.68 | G1/4 | 1.14 | 2.17 | 0.75 | 13.78 | 4.92 | 4 | 67.3 | 22 |
| 2" | 5" | 3.62 | 4.75 | 6 | 5.75 | 8.86 | G1/4 | 1.14 | 3.15 | 0.75 | 13.78 | 4.92 | 4 | 67.3 | 27.5 |
| 2 1/2" | 3" | 4.12 | 5.49 | 7 | 3.86 | 8.46 | G1/4 | 1.14 | 2.17 | 0.75 | 15.75 | 4.92 | 4 | 92.8 | 30.5 |
| 2 1/2" | 5" | 4.12 | 5.49 | 7 | 5.75 | 9.65 | G1/4 | 1.14 | 3.15 | 0.75 | 15.75 | 4.92 | 4 | 92.8 | 32 |

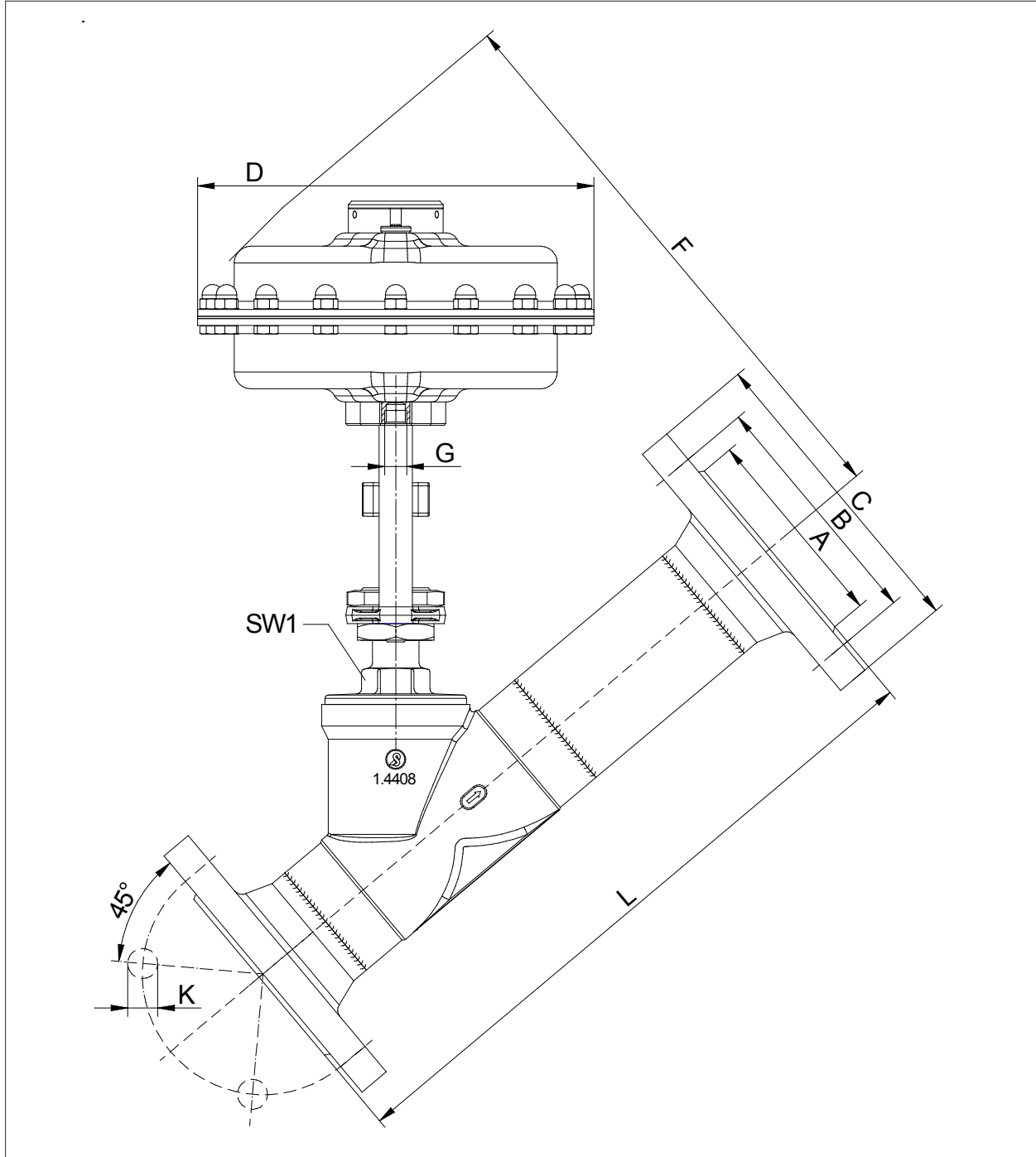
Dimensions in inch

Angle Bodied Flanged Motor Valve 7031



reinforced design

Dimensions and Weights



Text and pictures are not binding. We reserve the right to alter the equipment.

| Size | Piston Ø | A | | B | | C | | L | D | F | G | K | | N number of borings | SW1 | Angle | Cv- value | Weight (lbs) |
|--------|-------------|-----------------------------|--------------|--------|--------------|--------|--------------|-------|------|-------|------|--------|--------------|------------------------------|------|-------|--------------|-----------------|
| | | 580psi 2 1/2" 235 psi | ANSI #150 | 580psi | ANSI #150 | 580psi | ANSI #150 | | | | | 580psi | ANSI #150 | | | | | |
| 2" | 10" | 4.02 | 3.62 | 4.92 | 4.75 | 6.5 | 6 | 13.78 | 9.37 | 13.27 | G1/4 | 0.71 | 0.75 | 4 | 1.61 | 1.97 | 67.3 | 44.5 |
| 2 1/2" | 10" | 4.8 | 4.12 | 5.71 | 5.49 | 7.28 | 7 | 15.75 | 9.37 | 13.58 | G1/4 | 0.71 | 0.75 | 8 | 1.61 | 1.77 | 92.8 | 50.5 |

Dimensions in inch