

Angle Seat Motor Valve 7110



1/2" up to 3"; 230 psi - 580 psi

Motor valve for on/off- and control operation for neutral and aggressive media.

- Compact design
- For temperatures from -22°F up to +428°F
- Working pressure up to 580 psi
- Versatile actuators
- ANSI Class VI shut off
- Straight through flow path



Technical Data Valve

| Body material | Brass | Bronze | Stainless steel |
|---|--|--------------------------------|---------------------------------|
| Nominal sizes | 2 1/2" - 3" | 1/2" - 2" | 1/2" - 3" |
| Connections: | | | |
| NPT thread | 2 1/2" - 3" | 1/2" - 2" | 1/2" - 3" |
| Welding ends | - | - | 1/2" - 3" |
| Clamp connections | - | - | 1/2" - 3" |
| Pressure class | 230 psi | 230 psi | 580 psi |
| Media temperature | -22°F to 338°F | -22°F to 392°F opt.up to 428°F | -22°F to 392°F opt. up to 428°F |
| Ambient temp. | +32°F up to +140°F, with heating resitance -4°F up to +140°F | | |
| Viscosity | maximum 600 cps | | |
| Vacuum | maximum 0,0295 inches mercury (Hg) | | |
| Operating pressure packing underneath | maximum 170 psi | | |
| Working pressure for Tri-Clamp connection | maximum 230 psi | | |

Technical Data Motor Actuator

| | |
|------------------------------|--|
| Actuator Force | 200 lbf, 450 lbf |
| Type of Duty acc. VDE 0530 | S1 - 100 % ED |
| Power | 110/120 VAC, 50/60 Hz |
| Power Consumption | 200 lbf: 4,8W; 450 lbf: 6.6W |
| Amb. Temperature | +32°F up to +140°F |
| Mounting Position | Motor not hanging downwards; (0.9 kN any) |
| Protection Class (DIN 40050) | IP65 |

Stroking Times

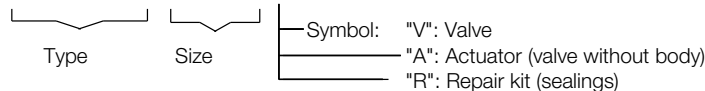
| Actuator [lbf] | 200 | 450 | Stroke [inch] |
|-------------------------|------|------|---------------|
| Stroking speed inch/min | 0.41 | 0.52 | |
| Nominal size | | | |
| 1/2" | 40 | 32 | 0.28 |
| 3/4" | 69 | 55 | 0.47 |
| 1" | 91 | 73 | 0.63 |
| 1 1/4" | 114 | 91 | 0.79 |
| 1 1/2" | 131 | 105 | 0.91 |
| 2" | 137 | 109 | 0.94 |
| 2" | 166 | 132 | 1.14 |
| 2 1/2" | 137 | 109 | 0.94 |
| 2 1/2" | 166 | 132 | 1.14 |
| 3" | 137 | 109 | 0.94 |
| 3" | 166 | 132 | 1.14 |

Additional Stroking Times

| Actuator [lbf] | 200 | | | | | | 450 | | Stroke [inch] |
|-------------------------|-------------------------------------|------|------|------|------|------|------|--|---------------|
| | 0,53 | 0,31 | 0,20 | 0,11 | 0,60 | 0,30 | | | |
| Stroking speed inch/min | Stroking time (sec) for full stroke | | | | | | | | |
| Nominal size | | | | | | | | | |
| 1/2" | 31 | 53 | 82 | 145 | 28 | 56 | 0.28 | | |
| 3/4" | 53 | 90 | 141 | 248 | 47 | 96 | 0.47 | | |
| 1" | 71 | 120 | 188 | 331 | 63 | 128 | 0.63 | | |
| 1 1/4" | 89 | 150 | 235 | 414 | 79 | 160 | 0.79 | | |
| 1 1/2" | 102 | 173 | 271 | 476 | 91 | 184 | 0.91 | | |
| 2" | 107 | 180 | 282 | 497 | 95 | 192 | 0.94 | | |
| 2" | 129 | 218 | 341 | 600 | 114 | 232 | 1.14 | | |
| 2 1/2" | 107 | 180 | 282 | 497 | 95 | 192 | 0.94 | | |
| 2 1/2" | 129 | 218 | 341 | 600 | 114 | 232 | 1.14 | | |
| 3" | 107 | 180 | 282 | 497 | 95 | 192 | 0.94 | | |
| 3" | 129 | 218 | 341 | 600 | 114 | 232 | 1.14 | | |

Ordering Number System

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|--|--|---|--|--|--|--|--|--|--|--|--|---|
| 7 | 1 | 1 | 0 | / | | | V | | | | | | | | | | S |
|---|---|---|---|---|--|--|---|--|--|--|--|--|--|--|--|--|---|



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

| 1. Design | 2. Connection | 3. Material | 4. Seating seal | 5. Function | 6. Motor actuator |
|--------------|---|--|-----------------|--|--|
| 1 Angle body | 5 NPT-thread H Welding ends similar ISO (drawing R0089) Z Tri clamp connection (inch) | 1 Bronze (Rg 5) 2 Stainless steel CF8M | 0 PTFE (Teflon) | A On/off R Control (only stainless steel valve) | 4 200 lbf (0,9 kN) -IP65 1 450 lbf (2,0 kN) -IP65 7 100 lbf (0,45kN) -IP43 |

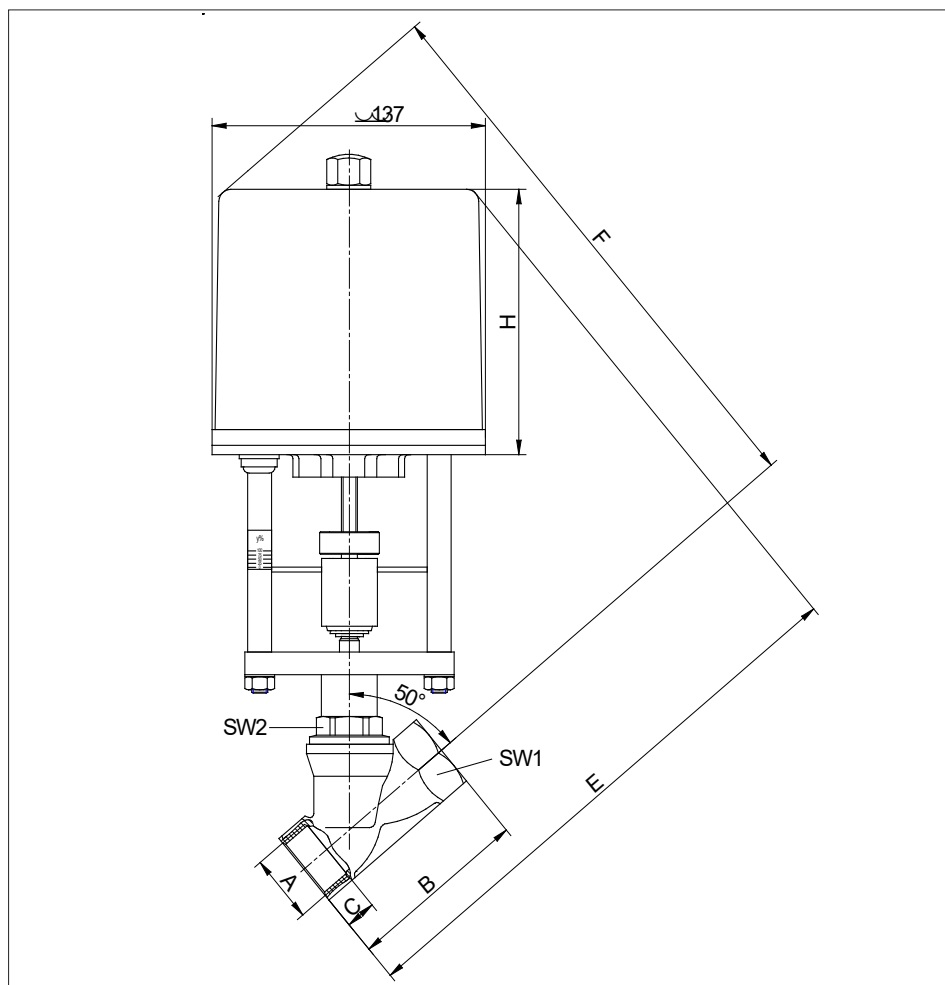
| 7. Voltage | 8. Stroking speed | 9. Positioner | 10. Limit switches | 11. Feedback | 12. Special versions | 13. Control plug |
|--|-------------------|---|---|--|--------------------------------------|--|
| - 230VAC (Standard) 3 24 VDC 4 110/120 VAC | - Standard | - without 3 0 - 10 V M 0 - 20mA N 4 - 20mA | - without 1 1 stroke dependent 2 limit switch 2 stroke dependent limit switches | - without 1 Potentiometer 1000 Ohm | S Quote for further special versions | - without 1 linear 100% 2 equal percentage 3 100% 4 linear 40% 5 equal percentage 40% 6 linear 25% equal percentage 25% |

Ordering Example:

7110/025V1520R4--N1-S1

Angle seat motor valve, 1", NPT-thread, stainless steel body, seating seal PTFE, control function, actuator 200 lbf, 120 VAC, positioner 4-20 mA, one limit switch, linear flow characteristic, Cv-value 100 % (10).

Dimensions and Weights



| Size | Actuator lbf | A G / NPT | B | C | E | | F | | Stroke | SW1 | SW2 | Cv-values | Weight lbs*** | Running times sec. |
|--------|--------------|-----------|------|------|--------------------|-----------------|--------------------|-----------------|-------------|------|------|-----------|---------------|--------------------|
| | | | | | without positioner | with positioner | without positioner | with positioner | | | | | | |
| 1/2" | 200 | 1/2" | 2.55 | 0.45 | 9.95 | 11 | 10.3 | 11.5 | 0.37 | 1 | 1.2 | 4.1 | 5.5 | 54 |
| 3/4" | 200 | 3/4" | 2.95 | 0.5 | 10.35 | 11.4 | 10.4 | 11.6 | 0.55 | 1.2 | 1.2 | 9.3 | 6 | 80 |
| 1" | 200 | 1" | 3.55 | 0.6 | 10.5 | 11.5 | 10.55 | 11.75 | 0.75 | 1.55 | 1.2 | 17.4 | 6.5 | 109 |
| 1 1/4" | 200 | 1 1/4" | 4.35 | 0.65 | 11.65 | 12.65 | 10.7 | 11.9 | 0.83 | 1.9 | 1.2 | 27.8 | 7.5 | 120 |
| 1 1/2" | 200 | 1 1/2" | 4.7 | 0.75 | 11.75 | 12.75 | 11.1 | 12.3 | 0.94 | 2.15 | 1.2 | 40.6 | 8 | 137 |
| 2" | 200 | 2" | 5.9 | 0.85 | 12.3 | 13.3 | 11.65 | 12.85 | 1.14 (0.94) | 2.7 | 1.25 | 63.8 | 9.5 | 166/137 |
| 2 1/2" | 200 | 2 1/2" | 7.1 | 1 | 13.05 | 14.05 | 12.35 | 13.55 | 1.14 (0.94) | 3.35 | 1.4 | 107.9 | 13.5 | 166/137 |
| 3" | 200 | 3" | 8.45 | 1.3 | 14.8 | 15.85 | 12.15 | 13.35 | 1.14 (0.94) | 3.95 | 1.6 | 129.9 | 0 | 166 |
| 3/4" | 450 | 3/4" | 2.95 | 0.5 | 11.05 | 12.1 | 11.25 | 12.45 | 0.55 | 1.2 | 1.2 | 9.3 | 6.5 | 62 |
| 1" | 450 | 1" | 3.55 | 0.6 | 11.25 | 12.3 | 11.25 | 12.5 | 0.75 | 1.55 | 1.2 | 17.4 | 7 | 84 |
| 1 1/4" | 450 | 1 1/4" | 4.35 | 0.65 | 12.2 | 13.25 | 11.85 | 13.05 | 0.83 | 1.9 | 1.2 | 27.8 | 8 | 93 |
| 1 1/2" | 450 | 1 1/2" | 4.7 | 0.75 | 12.55 | 13.6 | 12 | 13.2 | 0.94 | 2.15 | 1.2 | 40.6 | 8.5 | 107 |
| 2" | 450 | 2" | 5.9 | 0.85 | 13.15 | 14.15 | 12.2 | 13.4 | 1.14 (0.94) | 2.7 | 1.25 | 63.8 | 10 | 129/107 |
| 2 1/2" | 450 | 2 1/2" | 7.1 | 1 | 13.65 | 14.7 | 13.1 | 14.3 | 1.14 (0.94) | 3.35 | 1.4 | 107.9 | 14 | 129/107 |
| 3" | 450 | 3" | 8.45 | 1.3 | 15.45 | 16.45 | 12.9 | 14.1 | 1.14 (0.94) | 3.95 | 1.6 | 129.9 | 0 | 129 |

Dimensions in inch

*** Weight with positioner: + 1.1 lbs
() Values with positioner

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