



JV-P

Pneumatic 1/4 Turn Actuator
Single Acting (Spring Return)
2.4Nm - 9665Nm
Double Acting
2.9Nm - 12502.2Nm



The JV-P range of rack and pinion pneumatic actuators are designed for quarter turn applications on ball, butterfly, plug valves and dampers. They can be supplied single (spring return) or double acting with a wide range of output torques offering a complete valve automation solution.

All actuators have travel stops for both the open and close positions. All components are of a high quality materials, precision engineered and lubricated to ensure long service life of 1,000,000 operations.

The bodies are manufactured from extruded aluminium alloy and are hard anodized to protect against internal and external corrosion.

Approvals, Features & Benefits

- ATEX, CE, SIL3 rated
- Base to ISO 5211 & DIN 3337 standards
- Air connections to Namur VDI/VDE 3845
- Lightweight aluminium alloy housing
- Wide range of torques & options to meet the demands of any site specification
- All springs are preloaded, to ensure safety when removing end covers
- Machined shaft and pistons
- Shaft has an anti blowout ring

Pressure & Temperature

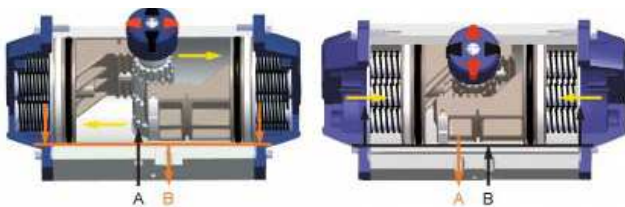
Air pressure range:-

Single Acting : 2.5 to 8 bar
Double Acting : 2.5 to 8 bar

Air temperature range:-

Standard : -15 to 80°C
Low Option : -40 to 80°C
High Option : -15 to 150°C

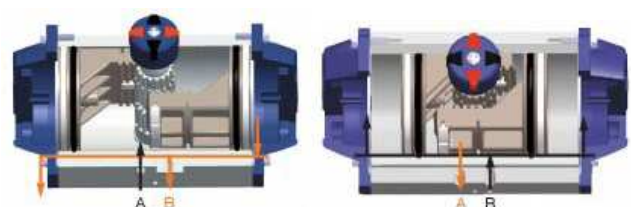
Single Acting (Spring Return) Operation



Counter Clockwise
Air input A
Air output B

Clockwise
Air input B
Air output A

Double Acting Operation



Counter Clockwise
Air input A
Air output B

Clockwise
Air input B
Air output A

STANDARD SPECIFICATIONS

| | | | |
|---------------------|--|----------------------|--|
| Movement | Standard adjustable 90° ± 5% | Springs | High tensile spring sets of alloy steel |
| Lubrication | All moving parts are lubricated for life-long cycle | Piston Shaft | Nickel plated alloy steel reduces friction |
| Cycle Life | 1,000,000 Operations | Piston Guides | Self lubricating (Polypropylene +GF) |
| Body | Hard anodized extruded Aluminium alloy | Piston Seals | Nitrile** |
| Indicator | Open / Close Disc | Piston | Die casted aluminium dual piston |
| Travel Stops | External adjustable ±5% in both open/closed position | End Caps | Polyester coated die cast aluminium |

** Fluororubber for low & Silastic for high temperature duty

OPTIONAL ANCILLARY PRODUCTS



Valve Position Monitor - JV241007 Limit Switchboxes
The JV241007 switchboxes are reliable, solidly built and of a compact design. IP68 enclosure as standard.



Solenoid Spool Valve
The JV231001 have 1/4" threaded ports connections and NUMAR interfaces. They can be adapted for 3/2 NC or 5/2 functions for controlling double and single acting actuators. JV231001-EXD (explosion proof) version is also available.



Brackets
For mounting valves to actuators. Also to prevent heat transfer from valve media.

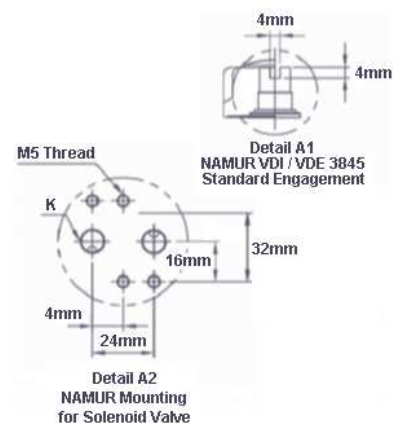
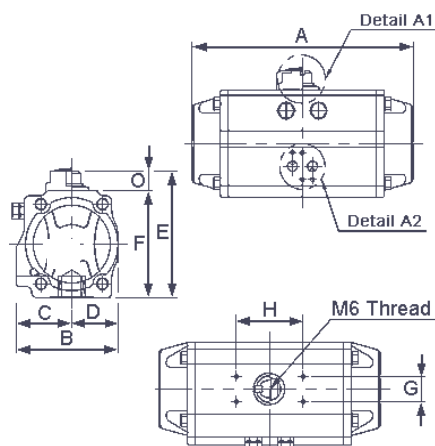


Pinion Shaft Star Adapters
Available from 9mm to 46mm square.

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| | A | B | C | E | F | G | H | O | K | Shaft | | | ISO 5211 Mounting | | | | | | | | Weight Kg | |
|---------|-----|-------|-------|-----|-----|----|-----|----|-----|-------|------|-------|-------------------|-----|-----|-----|-----|-----|-----|-----|-----------|--------|
| | | | | | | | | | | BSP | Star | Depth | F03 | F05 | F07 | F10 | F12 | F14 | F16 | F25 | Single | Double |
| JV-P050 | 154 | 70.5 | 41.5 | 90 | 70 | 30 | 80 | 20 | 1/4 | 11 | 12 | ✓ | ✓ | | | | | | | | 1.25 | 1.13 |
| JV-P065 | 189 | 89.5 | 51.5 | 109 | 89 | 30 | 80 | 20 | 1/4 | 14 | 16 | | ✓ | ✓ | | | | | | | 2.21 | 1.97 |
| JV-P075 | 210 | 102.5 | 59 | 120 | 100 | 30 | 80 | 20 | 1/4 | 14 | 16 | | ✓ | ✓ | | | | | | | 3.29 | 2.93 |
| JV-P085 | 229 | 112.5 | 63.5 | 133 | 113 | 30 | 80 | 20 | 1/4 | 17 | 19 | | ✓ | ✓ | | | | | | | 4.26 | 3.78 |
| JV-P095 | 264 | 126 | 71 | 143 | 123 | 30 | 80 | 20 | 1/4 | 17 | 19 | | ✓ | ✓ | | | | | | | 5.86 | 5.14 |
| JV-P110 | 266 | 138.5 | 76.5 | 156 | 136 | 30 | 80 | 20 | 1/4 | 17 | 19 | | | ✓ | ✓ | | | | | | 7.17 | 6.09 |
| JV-P125 | 337 | 157 | 85 | 191 | 161 | 30 | 80 | 30 | 1/4 | 22 | 25 | | | ✓ | ✓ | | | | | | 12.54 | 10.86 |
| JV-P140 | 377 | 178 | 97 | 208 | 178 | 30 | 80 | 30 | 1/4 | 27 | 31 | | | | ✓ | ✓ | | | | | 15.93 | 13.77 |
| JV-P160 | 412 | 196 | 106 | 230 | 200 | 30 | 130 | 30 | 1/4 | 27 | 31 | | | | ✓ | ✓ | | | | | 23.75 | 20.15 |
| JV-P190 | 488 | 216.5 | 112 | 262 | 232 | 30 | 130 | 30 | 1/4 | 36 | 41 | | | | ✓ | | ✓ | | | | 33.81 | 28.41 |
| JV-P210 | 550 | 235.5 | 120 | 285 | 255 | 30 | 130 | 30 | 1/4 | 36 | 40 | | | | | | ✓ | | | | 48.43 | 40.03 |
| JV-P240 | 602 | 262 | 131 | 322 | 292 | 30 | 130 | 30 | 1/2 | 46 | 50 | | | | | | | ✓ | | | 77.76 | 52.6 |
| JV-P270 | 672 | 295 | 147.5 | 361 | 331 | 30 | 130 | 30 | 1/2 | 46 | 50 | | | | | | | ✓ | | | 90.6 | 73.64 |
| JV-P300 | 784 | 335 | 173 | 384 | 354 | 30 | 130 | 30 | 1/2 | 46 | 50 | | | | | | | ✓ | | | 135.6 | 108 |
| JV-P350 | 845 | 385 | 195 | 440 | 410 | 30 | 130 | 30 | 1/2 | 46 | 50 | | | | | | | ✓ | ✓ | | 188.1 | 146.7 |
| JV-P400 | 956 | 520 | 260 | 496 | 466 | 30 | 130 | 30 | 1/2 | 55 | 60 | | | | | | | | ✓ | | 283.5 | 220.5 |

| Max torques based on 5.5 bar supply pressure* | JV-P050 | JV-P065 | JV-P075 | JV-P085 | JV-P095 | JV-P110 | JV-P125 | JV-P140 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Single Acting - Air (Nm) | 11.4 | 19.2 | 36.6 | 51.7 | 75.4 | 99 | 177 | 244.6 |
| Single Acting - Spring (Nm) | 12.4 | 31.4 | 40.4 | 62.5 | 83.6 | 110 | 193.3 | 293.6 |
| Double Acting (Nm) | 19.8 | 40.1 | 62.3 | 91.4 | 128.5 | 167.6 | 299.4 | 442 |

| Max torques based on 5.5 bar supply pressure* | JV-P160 | JV-P190 | JV-P210 | JV-P240 | JV-P270 | JV-P300 | JV-P350 | JV-P400 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Single Acting - Air (Nm) | 249.1 | 528.4 | 757.7 | 1103.5 | 1594.4 | 2120.2 | 3221.9 | 4763 |
| Single Acting - Spring (Nm) | 389.4 | 628.8 | 861.8 | 1329.6 | 1886.4 | 2476.6 | 3541.1 | 5522 |
| Double Acting (Nm) | 613.1 | 964.6 | 1346.6 | 2089 | 2937 | 3778.9 | 5608.2 | 8545.8 |

*Contact sales for other torque values when supply pressure differs.