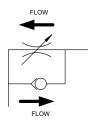


**NITRA** pneumatic push-to-connect **meter-in** flow control valve (speed controller) elbow with rotating thermoplastic (PBT) body, nickel-plated brass threads, stainless steel tube griping claws, and pre-applied Teflon thread sealant (#10-32, M5 and G threads have O-ring instead of thread sealant). For use with polyurethane or nylon tubing. Two fittings per package.







Inch/Metric Flow Control Valve

G-Thread (BSPP) Flow Control Valve

| NITRA Elbow Flow Control Valve Meter-In |          |                           |      |      |              |      |           |      |      |      |         |                         |                  |
|---|----------|---------------------------|------|------|--------------|------|-----------|------|------|------|---------|-------------------------|------------------|
| Inch Sizes - dimensions in inches (in.) |          |                           |      |      |              |      |           |      |      |      |         |                         |                  |
| Part No.                                | Price    | Size                      | øD   | øP   | т            | Min. | L<br>Max. | E    | A    | В    | H (Hex) | Package<br>Weight (lbs) | Qty. per<br>pack |
| <u>FVR18-10N</u>                        | \$0sb2:  | 1/8 in. x #10-32          | 1/8  | 0.30 | UNF<br>10-32 | 1.06 | 1.15      | 0.85 | 0.14 | 0.44 | 5/16    | 0.1                     | 2                |
| FVR532-10N                              | \$;06sf: | 5/32 in. (4 mm) x #10-32  | 5/32 | 0.41 | UNF<br>10-32 | 1.06 | 1.15      | 1.04 | 0.14 | 0.59 | 5/16    | 0.1                     | 2                |
| <u>FVR532-18N</u>                       | \$06sg:  | 5/32 in. (4 mm) x 1/8 NPT | 5/32 | 0.41 | NPT 1/8      | 1.37 | 1.57      | 1.21 | 0.32 | 0.59 | 7/16    | 0.1                     | 2                |
| <u>FVR14-10N</u>                        | \$06s7:  | 1/4 in. x #10-32          | 1/4  | 0.51 | UNF<br>10-32 | 1.06 | 1.15      | 1.13 | 0.14 | 0.66 | 5/16    | 0.1                     | 2                |
| <u>FVR14-18N</u>                        | \$06s9:  | 1/4 in. x 1/8 NPT         | 1/4  | 0.51 | NPT 1/8      | 1.37 | 1.57      | 1.26 | 0.32 | 0.66 | 7/16    | 0.1                     | 2                |
| <u>FVR14-14N</u>                        | \$06s8:  | 1/4 in. x 1/4 NPT         | 1/4  | 0.51 | NPT 1/4      | 1.60 | 1.85      | 1.41 | 0.43 | 0.66 | 19/32   | 0.2                     | 2                |
| <u>FVR516-18N</u>                       | \$0sa_:  | 5/16 in. (8 mm) x 1/8 NPT | 5/16 | 0.57 | NPT 1/8      | 1.37 | 1.56      | 1.31 | 0.32 | 0.72 | 7/16    | 0.1                     | 2                |
| <u>FVR516-14N</u>                       | \$0sa#:  | 5/16 in. (8 mm) x 1/4 NPT | 5/16 | 0.57 | NPT 1/4      | 1.59 | 1.85      | 1.47 | 0.43 | 0.72 | 19/32   | 0.2                     | 2                |
| <u>FVR516-38N</u>                       | \$;0sa!: | 5/16 in. (8 mm) x 3/8 NPT | 5/16 | 0.57 | NPT 3/8      | 1.88 | 2.16      | 1.59 | 0.52 | 0.72 | 3/4     | 0.3                     | 2                |
| <u>FVR38-14N</u>                        | \$06sb:  | 3/8 in. x 1/4 NPT         | 3/8  | 0.69 | NPT 1/4      | 1.60 | 1.85      | 1.57 | 0.43 | 0.79 | 19/32   | 0.2                     | 2                |
| <u>FVR38-38N</u>                        | \$06sc:  | 3/8 in. x 3/8 NPT         | 3/8  | 0.69 | NPT 3/8      | 1.89 | 2.16      | 1.65 | 0.52 | 0.79 | 3/4     | 0.4                     | 2                |
| <u>FVR38-12N</u>                        | \$06sa:  | 3/8 in. x 1/2 NPT         | 3/8  | 0.69 | NPT 1/2      | 2.12 | 2.41      | 1.86 | 0.65 | 0.79 | 15/16   | 0.4                     | 2                |
| <u>FVR12-38N</u>                        | \$06s4:  | 1/2 in. x 3/8 NPT         | 1/2  | 0.82 | NPT 3/8      | 1.89 | 2.16      | 1.78 | 0.52 | 0.90 | 3/4     | 0.4                     | 2                |
| <u>FVR12-12N</u>                        | \$06s3:  | 1/2 in. x 1/2 NPT         | 1/2  | 0.82 | NPT 1/2      | 2.12 | 2.41      | 1.99 | 0.65 | 0.90 | 15/16   | 0.4                     | 2                |

BSPT = British Standard Pipe Taper

BSPP = British Standard Pipe Parallel



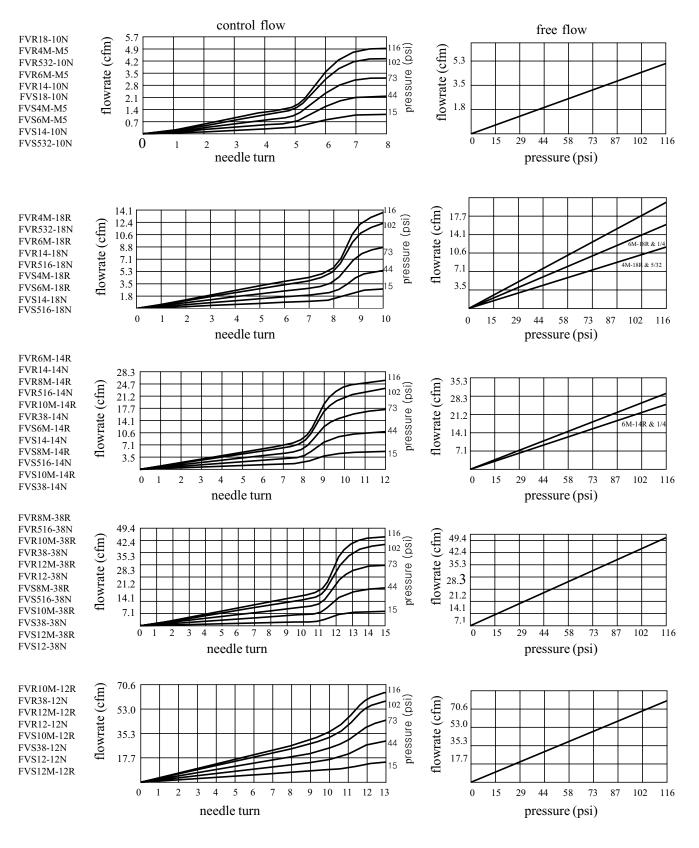
| NITRA Elbow Flow Control Valve Meter-In                       |          |                        |    |      |         |      |           |      |      |      |         |                         |                  |
|---|----------|------------------------|----|------|---------|------|-----------|------|------|------|---------|-------------------------|------------------|
| R-Thread (BSPT) Metric Sizes - dimensions in millimeters (mm) |          |                        |    |      |         |      |           |      |      |      |         |                         |                  |
| Part No.  | Price    | Size                   | øD | øP   | Т       | Min. | L<br>Max. | E    | A    | В    | H (Hex) | Package<br>Weight (lbs) | Qty. per<br>pack |
| <u>FVR4M-M5</u>   | \$06se:  | 4 mm (5/32 in.) x M5   | 4  | 10.5 | M5*0.8p | 27.1 | 29.1      | 25.4 | 3.6  | 14.9 | 8       | 0.1                     | 2                |
| <u>FVR4M-18R</u>  | \$06sd:  | 4 mm (5/32 in.) x R1/8 | 4  | 10.5 | R 1/8   | 35.5 | 40.7      | 30.5 | 8.2  | 14.9 | 11      | 0.1                     | 2                |
| <u>FVR6M-M5</u>   | \$-06sj: | 6 mm x M5              | 6  | 12.5 | M5*0.8p | 27.1 | 29.1      | 27.8 | 3.6  | 16.4 | 8       | 0.1                     | 2                |
| <u>FVR6M-18R</u>  | \$-06si: | 6 mm x R1/8            | 6  | 12.5 | R 1/8   | 35.5 | 40.7      | 31.3 | 8.2  | 16.4 | 11      | 0.1                     | 2                |
| <u>FVR6M-14R</u>  | \$06sh:  | 6 mm x R1/4            | 6  | 12.5 | R 1/4   | 40.3 | 46.6      | 35.3 | 11.0 | 16.4 | 15      | 0.2                     | 2                |
| <u>FVR8M-14R</u>  | \$06sk:  | 8 mm (5/16 in.) x R1/4 | 8  | 14.5 | R 1/4   | 40.3 | 46.6      | 37.4 | 11.0 | 18.7 | 15      | 0.2                     | 2                |
| <u>FVR8M-38R</u>  | \$-06sl: | 8 mm (5/16 in.) x R3/8 | 8  | 14.5 | R 3/8   | 46.9 | 54.9      | 40.4 | 12.2 | 18.7 | 19      | 0.1                     | 2                |
| <u>FVR10M-14R</u>   | \$06s1:  | 10 mm x R1/4           | 10 | 17.5 | R 1/4   | 40.3 | 46.6      | 38.8 | 11.0 | 20.1 | 15      | 0.1                     | 2                |
| <u>FVR10M-38R</u>   | \$06s2:  | 10 mm x R3/8           | 10 | 17.5 | R 3/8   | 46.9 | 54.9      | 42.1 | 12.2 | 20.1 | 19      | 0.2                     | 2                |
| <u>FVR10M-12R</u>   | \$06s0:  | 10 mm x R1/2           | 10 | 17.5 | R 1/2   | 54.0 | 60.1      | 47.3 | 16.5 | 20.1 | 24      | 0.4                     | 2                |
| <u>FVR12M-38R</u>   | \$06s6:  | 12 mm x R3/8           | 12 | 20.5 | R 3/8   | 46.9 | 54.9      | 45.2 | 12.2 | 22.8 | 19      | 0.4                     | 2                |
| G-Thread (BSPP) Metric Sizes - dimensions in millimeters (mm) |          |                        |    |      |         |      |           |      |      |      |         |                         |                  |
| <u>FVR4M-18G</u>  | \$10ae:  | 4 mm (5/32 in.) x G1/8 | 4  | 10.5 | G 1/8   | 34.6 | 39.8      | 30.3 | 6.0  | 15.3 | 8       | 0.2                     | 2                |
| <u>FVR6M-18G</u>  | \$;10af: | 6 mm x G1/8            | 6  | 12.5 | G 1/8   | 34.6 | 39.8      | 31.2 | 6.0  | 16.4 | 8       | 0.2                     | 2                |
| <u>FVR6M-14G</u>  | \$10ag:  | 6 mm x G1/4            | 6  | 12.5 | G 1/4   | 39.8 | 46.1      | 35.2 | 8.0  | 16.4 | 12      | 0.3                     | 2                |
| <u>FVR6M-38G</u>  | \$10ah:  | 6 mm x G3/8            | 6  | 12.5 | G 3/8   | 47.7 | 54.9      | 38.7 | 8.0  | 16.4 | 14      | 0.4                     | 2                |
| <u>FVR8M-14G</u>  | \$-10ai: | 8 mm (5/16 in.) x G1/4 | 8  | 14.5 | G 1/4   | 39.8 | 46.1      | 36.9 | 8.0  | 18.3 | 12      | 0.2                     | 2                |
| <u>FVR8M-38G</u>  | \$-10aj: | 8 mm (5/16 in.) x G3/8 | 8  | 14.5 | G 3/8   | 47.7 | 54.9      | 39.9 | 8.0  | 18.3 | 14      | 0.3                     | 2                |
| <u>FVR8M-12G</u>  | \$10ak:  | 8 mm (5/16 in.) x G1/2 | 8  | 14.5 | G 1/2   | 54.5 | 61.7      | 45.8 | 9.0  | 18.3 | 17      | 0.4                     | 2                |
| <u>FVR10M-38G</u>   | \$-10al: | 10 mm x G3/8           | 10 | 17.5 | G 3/8   | 47.7 | 54.9      | 42.2 | 8.0  | 19.7 | 14      | 0.4                     | 2                |

BSPT = British Standard Pipe Taper

BSPP = British Standard Pipe Parallel



### **Flowrate Charts**



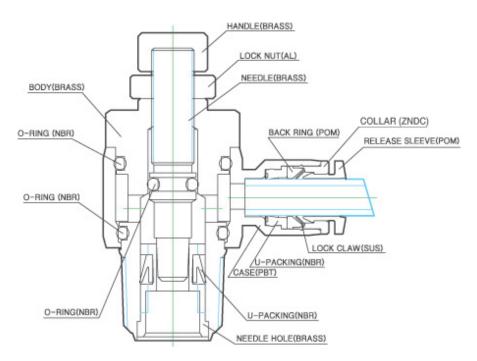


**NITRA** Pneumatic Push-to-Connect Flow Control (Speed Controller) Valves provide accurate airflow regulation for precise speed control of pneumatic cylinders. **NITRA** flow control valve bodies are made of a strong thermoplastic (PBT) and have stainless steel tube gripping claws. Threaded

components are made of nickel-plated brass and have pre-applied Teflon thread sealant (O-ring on #10-32, M5 and G threads). Flow control valve bodies can be rotated after installation to allow for variations in piping direction. **NITRA** Polyurethane and Nylon 12 tubing is easily connected by simply inserting the tubing end into the fitting. To release the tubing, press the circular release ring and the tubing can be easily pulled out.

#### **Features**

- Meter-in , meter-out and in-line configurations
- Inch and metric sizes available
- NPT, BSPT (R) and BSPP (G) threads available
- Tough thermoplastic bodies, stainless steel tube gripping claws, nickel-plated threads with pre-applied Teflon sealant (O-ring on #10-32, M5 and G threads)
- Bodies can be rotated after installation
- Release rings are color coded to differentiate between meter-in and meter-out
- For use with air only.
- Working pressure: -29.5" Hg to 150 psi.
- Working Temperature 32 to 140°F (0 to 60°C)



Flow Control Valve Cut-away Diagram