



# S.7241 NPT 3-way 4 seats (diverting)

# Female/Female/Female 1/2" - 1"

The *RuB* s.7641 is the right choice for fluid diversion and is designed with robust maintenance-free components ensuring ease of operation and safety. With a simple 90° turn, you can divert flow from one downstream outlet to the other. It combines traditional manual operation with modern automation. It is also very easy to convert from its sturdy lever handle to ISO 5211 actuator flange assembly. It features low operating torque and a special wear reducing self-compensating valve seat design that meets our 100,000 cycle life test requirement. The valve can be purchased separately, with handle or with a *RuB* actuator already mounted.







#### QUALITY

- · Electronic 100% seal test guaranteed
- No metal-to-metal moving parts
- · No maintenance ever required
- · Silicone-free lubricant on all seals
- · Chrome plated brass ball for longer life
- · Each valve is seal tested for maximum safety
- · Performs well in any orientation
- Strong configuration

#### **BODY**

- Hot forged sand blasted, unplated brass body and cap sealed with Loctite® or equivalent thread sealant
- Integrated ISO5211 / DIN3337 mounting flange for universal connection to actuator
- Finest brass according to EN 12165 and EN 12164 specifications
- 3-way L- port design for flow diversion

#### **STEM**

- Blowout-proof nickel plated brass stem
- ${}^{\centerdot}$  Maintenance-free, double FPM O-rings at the stem for maximum safety
- Stem slot shows ball position

## **SEALING**

- · Four seats design for mixing of various fluids in the system
- · Pure PTFE self-lubricating seats with flexible-lip design

#### **THREADS**

NPT taper ANSI B.1.20.1 female threads

# **FLOW**

100% full port for maximum flow

#### HANDLE

• Integrated sturdy ISO 5211 flange allows direct mounting of actuators. See *RuB* line of electric and pneumatic actuators.

### **WORKING PRESSURE & TEMPERATURE**

- 300 PSI (20 bar) non-shock cold working pressure
- -4°F to +302°F (-20°C to +150°C)
- WARNING: freezing of the fluid in the installation may severely damage the valve

# **UPON REQUEST**

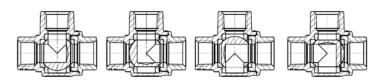
- · Custom design
- Stainless steel stem
- Configurations with 4 seats & T-port (s.7341) or 2 seats & L-port (s.7641)

## APPROVED BY OR IN COMPLIANCE WITH

- RoHS Compliant (EU)
- EAC Declaration of conformity (Russia, Kazakhstan, Belarus)

NOTE: approvals apply to specific configurations/sizes only.

# S.72 3-way "L" port operating positions



#### **OPTIONS**

- · Rack and pinion pneumatic actuator (spring return or double acting)
- · Lockable handle as accessory or already mounted (s.7241L)
- Various actuator linkage kit



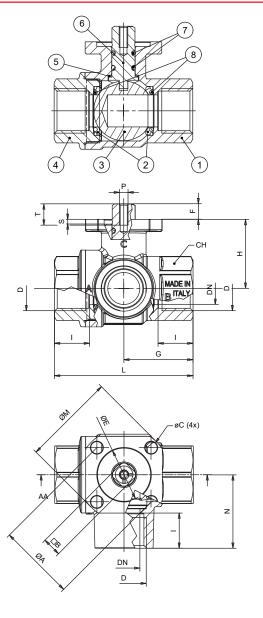


Each user should perform his own tests to find out the suitability for his particular application. RuB, Inc makes no warranty, express or implied, as to the shape, fit or function of a product for any application. Contact us or consult with your supplier for additional information on the suitability of the RuB, Inc products with your specific field of use.



|   | Part description                 | Q.ty | Material               |
|---|----------------------------------|------|------------------------|
| 1 | Sand blasted unplated body       | 1    | CW617N                 |
| 2 | Seat                             | 2    | PTFE                   |
| 3 | Seat                             | 2    | PTFE                   |
| 4 | Chrome plated ball               | 1    | CW617N                 |
| 5 | Sand blasted unplated end cap    | 1    | CW617N                 |
| 6 | Washer                           | 1    | PTFE carbon filled 25% |
| 7 | Nickel plated stem O-ring design | 1    | CW617N                 |
| 8 | O-Ring                           | 2    | FPM                    |

| Code  | S72D41       | S72E41       | S72F41       |
|---|--------------|--------------|--------------|
| D (inch)                                      | 1/2"         | 3/4"         | 1"           |
| DN (inch)                                     | 0.591        | 0.787        | 0.984        |
| l (inch)                                      | 0.610        | 0.709        | 0.827        |
| L (inch)                                      | 2.559        | 3.110        | 3.642        |
| G (inch)                                      | 1.280        | 1.555        | 1.831        |
| H (inch)                                      | 1.820        | 1.555        | 1.673        |
| N (inch)                                      | 1.358        | 1.654        | 1.949        |
| ØA (inch)                                     | 1.417        | 1.417        | 1.417        |
| ØC (inch)                                     | Ø 0.205 (M6) | Ø 0.205 (M6) | Ø 0.205 (M6) |
| ØE (inch)                                     | 0.984        | 0.984        | 0.984        |
| Square B (inch)                               | 0.354        | 0.354        | 0.354        |
| ØM (inch)                                     | 1.709        | 1.709        | 1.709        |
| S (inch)                                      | 0.087        | 0.087        | 0.087        |
| T (inch)                                      | 0.394        | 0.394        | 0.394        |
| F (inch)                                      | 0.287        | 0.327        | 0.327        |
| CH (inch)                                     | 1.063        | 1.260        | 1.614        |
| Flange connection<br>DIN ISO 5211<br>DIN 3337 | F03          | F03          | F03          |



# TORQUE FOR ACTUATOR SIZING LB-IN

| Delta P>   | 0÷230 PSI |          |
|------------|-----------|----------|
| Valve size | to open   | to close |
| 1/2"       | 93        | 93       |
| 3/4"       | 115       | 115      |
| 1"         | 261       | 261      |

# **TORQUE CORRECTION FACTORS**

Valve torque can vary according to operating frequency, temperature and friction characteristics of the media.

If media has more or less friction than water, multiply torque by the following factors:

| Lubricating oils or liquids                    | 0.8     |
|--|---------|
| Dry gases, natural gas                         | 1.5     |
| Slurries or liquids bearing abrasive particles | 1.5÷2.5 |