



# Cost Effective and Reliable Source For Instrumentation Rising Stem Plug Valves

SERIES - RSV111



[www.sealexcel.com](http://www.sealexcel.com)

*Advanced Technology in design, development and production of world class quality Fittings and Valves for Instrumentation, Process Tubing etc. ensure  
A TOTAL CUSTOMER SATISFACTIONS*



Unit-II, Gujarat (Plant-1)



Unit-II, Gujarat (Plant-2)

SEALEXCEL (INDIA) PVT. LTD. A fast growing manufacturing company having over 35 years of experience and expertise with advanced technology in Design, Development and Manufacturing World Class consistent and reliable quality Tube Fitting and Valves used in Fluid/Gas Control System in Industries like Automobile, Chemicals, Petrochemicals, Oil & Gas, Marine, Food, Biotechnology, Pharmaceutical, Packaging and Printing Industries etc.

We have two well-equipped modern manufacturing plant including in-house product performance testing facilities to check and verify the maximum safety and consistent reliable performance under adverse, harsh, stressful environments like vibrations, high pressure, deep vacuum and thermal shock etc.

## RESEARCH & DEVELOPMENT

By continuous Research & Development with advanced technology and high tech cutting edge machineries. SEALEXCEL produce best quality products for its customers.

## QUALITY

SEALEXCEL's total quality system and control from incoming raw material inspection through ongoing quality assurance during production, final inspection, assembly, testing, packing and dispatch ensure high standard quality products which has earned us various quality certifications such as

- ISO 9001:2015
- PED 2014/68/EU
- ATEX
- OHSAS 18001 (Safety)
- ISO 14001 (Environment)

SEALEXCEL products are validated by type testing in accordance with

- ASTM F 1387-99(2012)
- ECE R110, ISO 15500
- BS4368:4:1984
- MSS SP-99-2016a
- Helium Leak Test
- ARAI Test Report

## CUSTOMER SATISFACTION

We strive for Total Customer Satisfaction and continuously work to set of goals to provide the best quality and delivery of products and services in the best interest of our customers.

## FEATURES / BENEFITS

- Available in material SS316, all wetted parts in accordance with NACE MR01-75
- Heat Code Traceable to certified material test report
- Bar Stock Body Straight Patterns
- Straight through orifice hence roddable for easy cleaning
- Replaceable seals and seats
- Stem dust seal protect stem from external contamination.
- Rolled and plated thread for greater strength and smoother operation
- Packing below the threads prevents lubricant washout.
- Panel mounted feature optional
- Gauge ports available
- Variety of end configuration includes SEALEXCEL<sup>®</sup> Well-Lok<sup>®</sup> Tube Fittings, Male / Female NPT, BSPT and BSPP pipe connection.
- Orifice size : 0.187" (4.8mm) and 0.250" (6.4mm)
- Every valve is factory tested



## OPERATING PARAMETERS

Pressure Rating : upto 6000 psig (413 bar) at CWP  
 Temperature Rating : -29°C to 204°C with PEEK or Acetal seat material and Viton<sup>®</sup> O-Rings

## APPLICATIONS

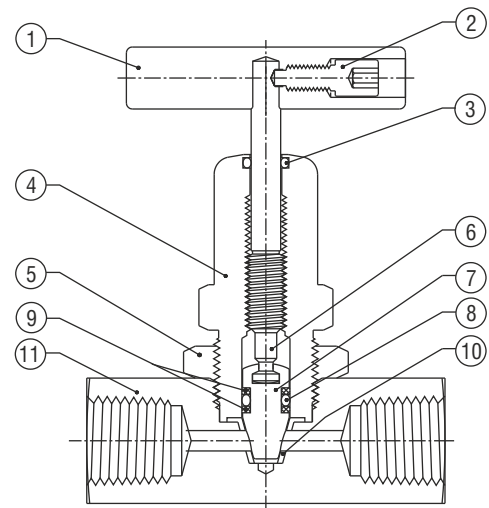
- General Plant Service
- Instrumentation
- Pressure measurement devices
- Venting

## STEM TYPE

SEALEXCEL<sup>®</sup> Rising Stem Plug Valves are available with non-rotating stem tips which provides positive sealing and maximum soft seat life.

## MATERIAL OF CONSTRUCTIONS

| No. | Component    | Material           |
|-----|--------------|--------------------|
| 1   | Bar Handle   | SS316              |
| 2   | Set Screw    | SS316              |
| 3   | Dust Seal    | Viton <sup>®</sup> |
| 4   | Bonnet       | SS316              |
| 5   | Lock Nut     | SS316              |
| 6   | Stem Shank   | SS316              |
| 7   | Stem Tip     | SS316              |
| 8   | O-Ring       | Viton <sup>®</sup> |
| 9   | Back-up Ring | PTFE               |
| 10  | Valve Seat   | Acetal             |
| 11  | Body         | SS316              |



## TESTING

- Standard Test : Each valve is factory tested with nitrogen at 1000 psig (69 bar) for leakage at the seat. Stem and body seals are tested to a requirements of no detectable leakage using a liquid leak detector.

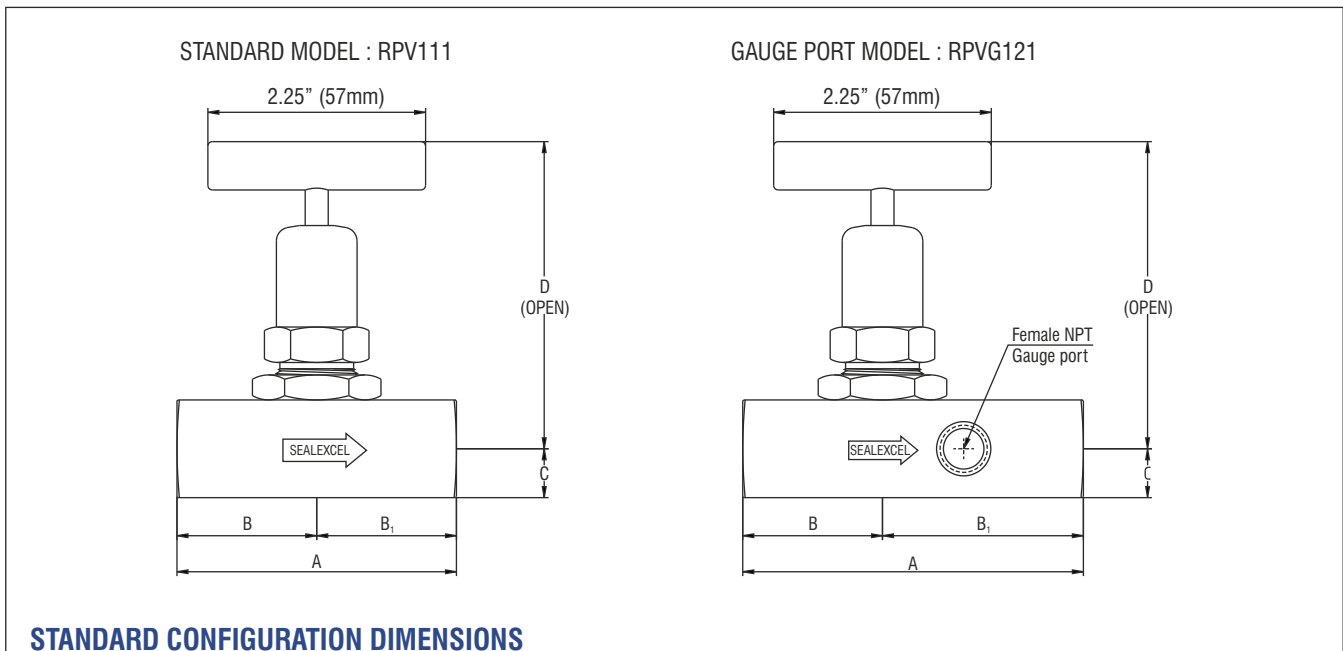
## TECHNICAL DATA

Pressure-Temperature Ratings are based on standard stem tip of Viton O-ring and PTFE back-up rings.

Temperature Range For O-ring materials

| Body Material          | SS316                          |             |            |
|------------------------|--------------------------------|-------------|------------|
| Seat                   | Acetal                         | PEEK        | PTFE       |
| Temperature °F(°C)     | Working Pressure, (psig (bar)) |             |            |
| -20 to 100 (-28 to 37) | 6000 (413)                     | 6000 (413)  | 750 (51.6) |
| 200 (93)               | 2650 (182)                     | 3000 (206)  | 625 (43.0) |
| 250 (121)              | 1000 (68.9)                    | 1600 (110)  | 450 (31.0) |
| 300 (148)              | -                              | 1300 (89.5) | 300 (20.6) |
| 350 (176)              | -                              | 1200 (82.6) | 200 (13.7) |
| 400 (204)              | -                              | 1000 (68.9) | 100 (6.8)  |

| O-ring Material    | Temperature Range °F(°C) |
|--------------------|--------------------------|
| Buna-N             | -20 to 250(-28 to 121)   |
| EPDM               | -20 to 250 (-28 to 121)  |
| Viton <sup>a</sup> | -20 to 400 (-28 to 204)  |



## STANDARD CONFIGURATION DIMENSIONS

| End Connections |                 | Orifice      | Cv   | Dimensions inch (mm) |            |                |            |            | Ordering Number |
|-----------------|-----------------|--------------|------|----------------------|------------|----------------|------------|------------|-----------------|
| Inlet           | Outlet          |              |      | A                    | B          | B <sub>1</sub> | C          | D          |                 |
| 1/4" Female NPT | 1/4" Female NPT | 0.187" (4.8) | 0.63 | 2.24(56.9)           | 1.12(28.4) | 1.12(28.4)     | 0.44(11.2) | 3.77(95.8) | RPV111-FF4N     |
| 1/4" Female NPT | 1/4" Female NPT | 0.187" (4.8) | 0.63 | 2.87(72.9)           | 1.12(28.4) | 1.75(44.4)     | 0.50(12.7) | 3.77(95.8) | RPVG121-FF4N    |
| 1/2" Female NPT | 1/2" Female NPT | 0.250" (6.4) | 1.80 | 2.66(67.6)           | 1.33(33.8) | 1.33(33.8)     | 0.56(14.2) | 3.83(97.3) | RPV111-FF8N     |
| 1/2" Female NPT | 1/2" Female NPT | 0.250" (6.4) | 1.80 | 3.58(90.9)           | 1.33(33.8) | 2.25(57.2)     | 0.56(14.2) | 3.83(97.3) | RPVG121-FF8N    |
| 1/4" Male NPT   | 1/4" Female NPT | 0.187" (4.8) | 0.63 | 2.90(73.4)           | 1.78(45.2) | 1.12(28.4)     | 0.44(11.2) | 3.77(95.8) | RPV111-MF4N     |
| 1/2" Male NPT   | 1/4" Female NPT | 0.187" (4.8) | 0.63 | 3.01(76.5)           | 1.89(48.0) | 1.12(28.4)     | 0.44(11.2) | 3.77(95.8) | RPV111-M8F4N    |
| 1/2" Male NPT   | 1/4" Female NPT | 0.187" (4.8) | 0.63 | 4.87(124)            | 3.12(79.2) | 1.75(44.4)     | 0.50(12.7) | 3.77(95.8) | RPVG121-M8F4N   |
| 1/2" Male NPT   | 1/2" Female NPT | 0.250" (6.4) | 1.80 | 3.49(88.6)           | 2.16(54.9) | 1.33(33.8)     | 0.56(14.2) | 3.83(97.3) | RPV111-M8F8N    |
| 1/2" Male NPT   | 1/2" Female NPT | 0.250" (6.4) | 1.80 | 5.58(142)            | 3.33(84.6) | 2.25(57.2)     | 0.56(14.2) | 3.83(97.3) | RPVG121-M8F8N   |
| 3/4" Male NPT   | 1/2" Female NPT | 0.250" (6.4) | 1.80 | 3.49(88.6)           | 2.16(54.9) | 1.33(33.8)     | 0.56(14.2) | 3.83(97.3) | RPV111-M12F8N   |
| 3/4" Male NPT   | 1/2" Female NPT | 0.250" (6.4) | 1.80 | 5.58(142)            | 3.33(84.6) | 2.25(57.2)     | 0.56(14.2) | 3.83(97.3) | RPVG121-M12F8N  |

Dimensions are for reference only and subject to change

| VALVE DESCRIPTION       | ORDERING NUMBER FOR TUBE CONNECTIONS  | ORDERING NUMBER FOR PIPE END CONNECTIONS  |
|-------------------------|---|---|
| RISING STEM PLUG VALVES | RPV111-TT $\frac{8-E}{1}$ $\frac{V}{2}$ $\frac{C}{3}$ $\frac{C}{4}$ $\frac{C}{5}$ $\frac{C}{6}$ $\frac{C}{7}$ | RPV111-MF $\frac{4}{1}$ $\frac{N-E}{2}$ $\frac{V}{3}$ $\frac{C}{4}$ $\frac{C}{5}$ $\frac{C}{6}$ $\frac{C}{7}$ |

### 1. VALVE SERIES CODE DESCRIPTION

RISING STEM PLUG VALVES SERIES : STRAIGHT MODEL - RPV111  
 : GAUGE PORT MODEL - RPVG121

### 2. END CONNECTION TYPE CODE DESCRIPTION

- TT - SEALEXCEL<sup>®</sup> Well-Lok<sup>®</sup> Tube Fittings
- MM - Male pipe thread
- FF - Female pipe thread
- MT - Male pipe thread to SEALEXCEL<sup>®</sup> Well-Lok<sup>®</sup> Tube Fittings
- MF - Male pipe thread to Female pipe thread
- TSW - Tube Socket Weld Pipe

### 3. END CONNECTION SIZE CODE DESCRIPTION TUBE OD SIZE

| FRACTIONAL |      | METRIC   |      |
|------------|------|----------|------|
| SIZE       | CODE | SIZE     | CODE |
| 1/4"ODT    | 4    | 6mm ODT  | 6M   |
| 3/8"ODT    | 6    | 8mm ODT  | 8M   |
| 1/2" ODT   | 8    | 10mm ODT | 10M  |
| 3/4"ODT    | 12   | 12m ODT  | 12M  |
| 1" ODT     | 16   | 16mm ODT | 16M  |

### PIPE THREAD SIZE

| SIZE | CODE | SIZE | CODE |
|------|------|------|------|
| 1/8" | 2    | 1/2" | 8    |
| 1/4" | 4    | 3/4" | 12   |
| 3/8" | 6    | 1"   | 16   |

### 4. PIPE THREAD TYPE CODE DESCRIPTION

- N - Male / Female NPT
- RT - Male / Female BSPT
- RG - Female BSP
- SE - SAE Straight Thread

### 5. MATERIAL OF CONSTRUCTIONS

- E - SS316
- EL - SS316 to NACE MR01-75

### 6. O-RING SEAL MATERIAL

- B - Buna-N
- P - EPDM
- V - Viton<sup>®</sup>

### 7. VALVE SEAT MATERIAL

- K - Peek
- C - Acetal

Viton<sup>®</sup> is the registered trademark of Dupont

*SEALEXCEL's commitment to upgrading it's product range by way of continuous research and development programme with advance technology and cutting edge solutions to ensure best quality products at competitive price and also best delivery schedule for it's customer with objective of*

**A TOTAL CUSTOMER  
SATISFACTIONS**

# PRODUCT RANGE



|  |  |  |  |   |
|--|--|--|--|---|
|  <p>Twin/Single Ferrule Tube Fittings</p> |  <p>37° Flare Tube Fittings To SAE J514</p> |  <p>Instrument Threaded &amp; Welded Pipe Fittings</p>      |  <p>Tube Fittings With Integral Flange</p> |  <p>Low /Medium PressureBall Valves</p>          |
|  <p>High Pressure Ball Valve</p>          |  <p>High Pressure 2/3 Way Ball Valve</p>    |  <p>Needle Valve</p>  |  <p>Needle Valves (Panel Mountable)</p>    |  <p>High Pressure Needle Valve</p>               |
|  <p>Rising Stem Plug Valves</p>           |  <p>Gauge/Root Valves</p>                   |  <p>Instrument 2/3/5 Manifold Valves</p>                    |  <p>Monoflange Valves</p>                  |  <p>Single / Double Block &amp; Bleed Valves</p> |
|  <p>Purge Valves</p>                    |  <p>Bleed Valves</p>                      |  <p>Toggle Valves</p>                                     |  <p>Relief Valves</p>                    |  <p>Check Valves</p>                           |
|  <p>Micron In-line Filters</p>          |  <p>Quick Connect Couplings</p>           |  <p>Stainless Steel Pneumatics Fittings &amp; Valves</p> |  |   |



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