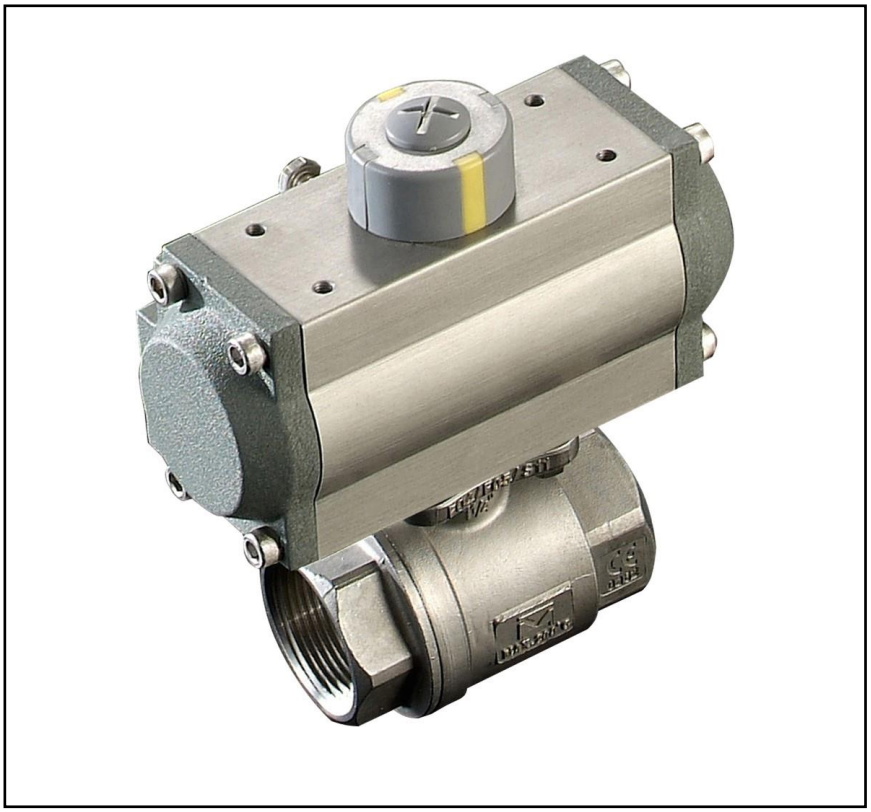
## Features

- Full Port, 3/4"with Double Acting pneumatic actuator
- Working Pressure: 1000 WOG(PN63)
- Working Tempertuare: -20℃~200℃
- Investment Casting
- Blow-out proof stem
- Live-loading design
- Anti-static device
- Locking device
- ISO 5211 Direct mounting pad Thread Type: BSP

# RS PRO 316 2 pieces Ball Valve, 3/4" with Double Acting pneumatic actuator 5.5 Bar

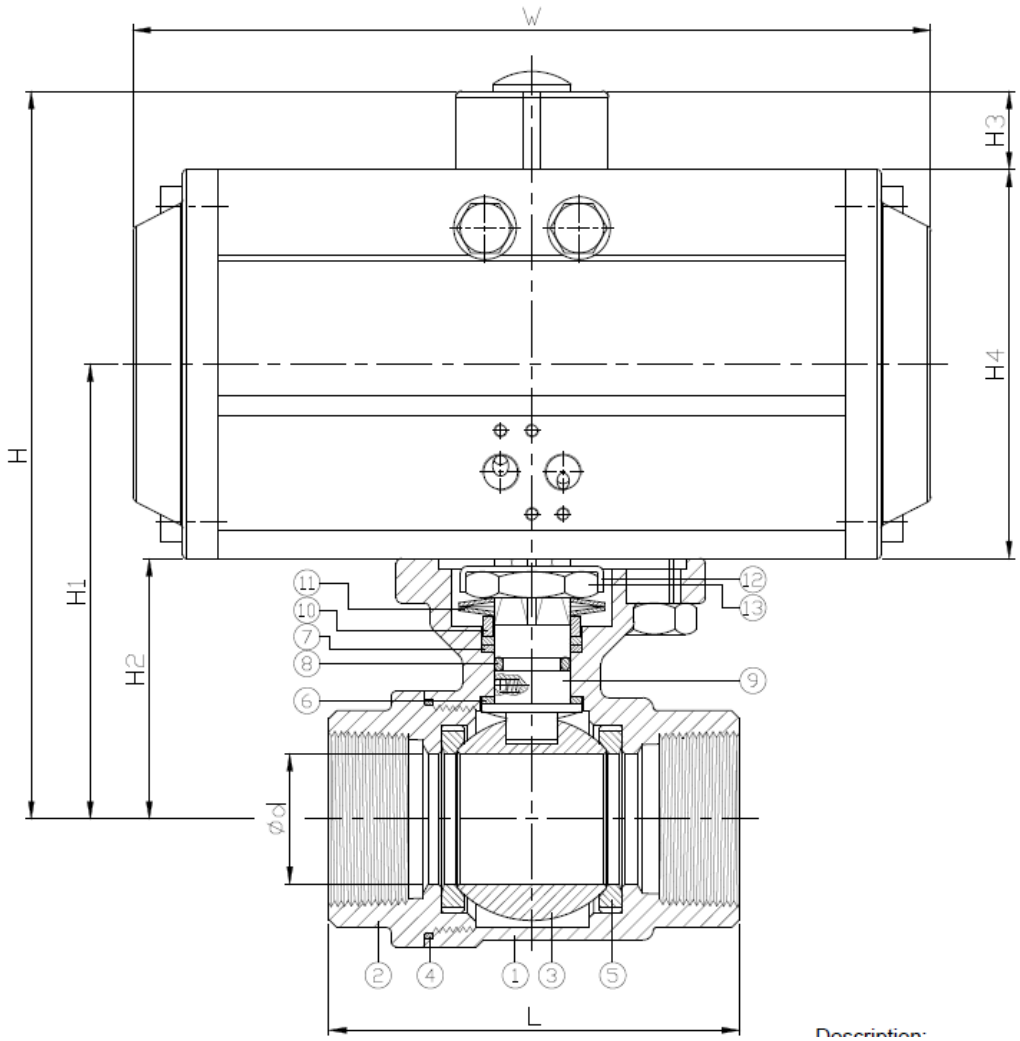
RS Stock No.: 0834643



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Similar Products

| RS Stock No. | MPN | Actuators Model | DN (mm) | NPS | L (mm) | H | | W (mm) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | H | H1 | |
| | 834640 | 834640 | DN8 | 1/4" | 58 | 62 | 8 | 113.5 |
| | 834641 | 834641 | DN10 | 3/8" | 58 | 62 | 8 | 113.5 |
| | 834642 | 834642 | DN15 | 1/2" | 58 | 62 | 8 | 113.5 |
| | 834643 | 834643 | DN20 | 3/4" | 65.6 | 65 | 8 | 113.5 |
| | 834644 | 834644 | DN25 | 1" | 78.7 | 76 | 11.8 | 140 |
| | 834646 | 834646 | DN32 | 1 1/4" | 90 | 81.5 | 11.5 | 140 |
| | 834647 | 834647 | DN40 | 1 1/2" | 105 | 103 | 11.3 | 172 |
| | 834648 | 834648 | DN50 | 2" | 124 | 111.5 | 10.4 | 172 |
| | 834649 | 834649 | DN80 | 3" | 163.7 | 150 | 100.75 | 325 |




Description:

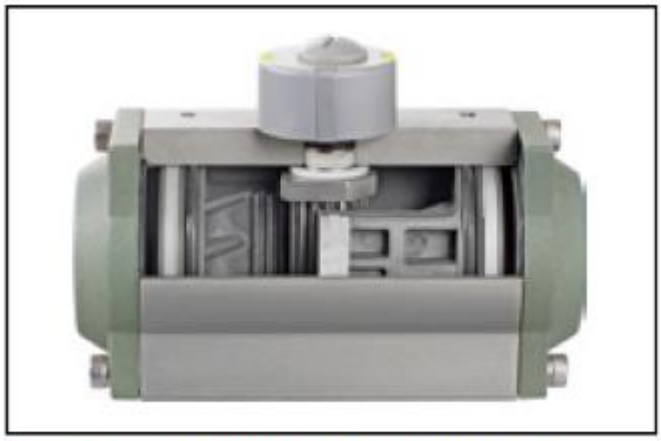
| DN | d | L | H | H1 | H2 | H3 | H4 | W | ACTUATOR |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 11.6 | 58 | 101.4 | 59.4 | 36.4 | 19 | 46 | 114 | HTD-032 |
| 10 | 12.7 | 58 | 101.4 | 59.4 | 36.4 | 19 | 46 | 114 | HTD-032 |
| 15 | 15 | 58 | 101.4 | 59.4 | 36.4 | 19 | 46 | 114 | HTD-032 |
| 20 | 20 | 65.6 | 133.2 | 76.2 | 39.2 | 20 | 74 | 158 | HTD-052 |
| 25 | 25 | 78.7 | 142.7 | 85.7 | 48.7 | 20 | 74 | 158 | HTD-052 |
| 32 | 32 | 90 | 148.2 | 91.2 | 54.2 | 20 | 74 | 158 | HTD-052 |
| 40 | 38 | 105 | 173.7 | 109.7 | 65.7 | 20 | 88 | 190 | HTD-063 |
| 50 | 50 | 124 | 183.5 | 119.5 | 75.5 | 20 | 88 | 190 | HTD-063 |
| 65 | 63 | 146.2 | 220.5 | 146 | 91.5 | 20 | 109 | 213 | HTD-083 |
| 80 | 76 | 163.7 | 229.8 | 155.3 | 100.75 | 20 | 109 | 213 | HTD-083 |

unit:mm

| NPS | d | L | H | H1 | H2 | H3 | H4 | W | ACTUATOR |
|---|---|---|---|---|---|---|---|---|---|
| 1/4" | 0.46 | 2.28 | 3.99 | 2.34 | 1.43 | 0.75 | 1.81 | 4.49 | HTD-032 |
| 3/8" | 0.5 | 2.28 | 3.99 | 2.34 | 1.43 | 0.75 | 1.81 | 4.49 | HTD-032 |
| 1/2" | 0.59 | 2.28 | 3.99 | 2.34 | 1.43 | 0.75 | 1.81 | 4.49 | HTD-032 |
| 3/4" | 0.79 | 2.58 | 5.24 | 3 | 1.54 | 0.79 | 2.91 | 6.22 | HTD-052 |
| 1" | 0.98 | 3.1 | 5.62 | 3.37 | 1.92 | 0.79 | 2.91 | 6.22 | HTD-052 |
| 1-1/4" | 1.26 | 3.54 | 5.83 | 3.59 | 2.13 | 0.79 | 2.91 | 6.22 | HTD-052 |
| 1-1/2" | 1.5 | 4.13 | 6.84 | 4.32 | 2.59 | 0.79 | 3.46 | 7.48 | HTD-063 |
| 2" | 1.97 | 4.88 | 7.22 | 4.7 | 2.97 | 0.79 | 3.46 | 7.48 | HTD-063 |
| 2-1/2" | 2.48 | 5.76 | 8.68 | 5.75 | 3.6 | 0.79 | 4.29 | 8.39 | HTD-083 |
| 3" | 2.99 | 6.44 | 9.05 | 6.11 | 3.97 | 0.79 | 4.29 | 8.39 | HTD-083 |

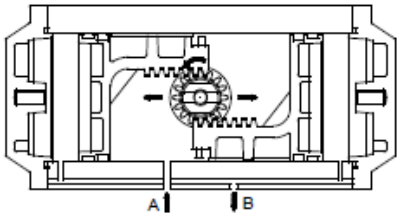
unit:in

| ITEM | PARTS | MATERIAL | |
|---|---|---|---|
| 1 | BODY | ASTM A351-CF8M | ASTM A216-WCB |
| 2 | CAP | 1.4408 | 1.0619 |
| 3 | BALL | ASTM A351-CF8M | |
| 4 | SEAL | PTFE | |
| 5 | SEAT | PTFE / RTFE / TFM 1600 | |
| 6 | THRUST WASHER | PTFE | |
| 7 | PACKING | | |
| 8 | O-RING | VITON | |
| 9 | STEM | ASTM A276-316 | |
| 10 | GLAND RING | AISI 304 | |
| 11 | BELLEVILLE WASHER | AISI 301 | |
| 12 | LOCK WASHER | AISI 304 | |
| 13 | STEM NUT | | |



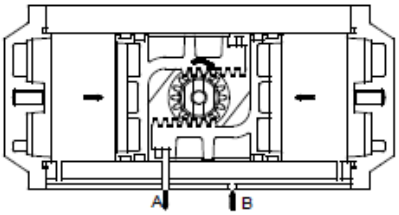
The operating principle of double acting actuator

CCW-counter-clockwise




Air to port A forces the pistons outwards, causing the piston to turn counter-clockwise while air is being exhausted from port B.

CW-clockwise




Air to port B forces the pistons inwards, causing the piston to turn clockwise while air is being exhausted from port A.

**Torque Table of Double Acting Actuator** Unit: in.lbs

| Model | Air Supply Pressure | | | | | | |
|---|---|---|---|---|---|---|---|
| | 40 Psi | 50 Psi | 60 Psi | 70 Psi | 80 Psi | 90 Psi | 100 Psi |
| HTD-032 | 33 | 43 | 54 | 63 | 72 | 80 | 86 |
| HTD-052 | 94 | 118 | 142 | 165 | 189 | 212 | 236 |
| HTD-063 | 168 | 210 | 252 | 294 | 336 | 378 | 420 |
| HTD-075 | 274 | 342 | 409 | 477 | 545 | 613 | 681 |
| HTD-083 | 344 | 430 | 516 | 602 | 688 | 775 | 860 |

Unit: N.m

| Model | Air Supply Pressure | | | | | |
|---|---|---|---|---|---|---|
| | 3 Bar | 4 Bar | 5 Bar | 6 Bar | 7 Bar | 8 Bar |
| HTD-032 | 4.1 | 5.9 | 7.4 | 8.8 | 9.8 | 11.3 |
| HTD-052 | 11.6 | 15.5 | 19.3 | 23.2 | 27.1 | 31 |
| HTD-063 | 20.6 | 27.5 | 34.4 | 41.3 | 48.2 | 55 |
| HTD-075 | 33.7 | 44.7 | 55.9 | 67 | 78.2 | 89.3 |
| HTD-083 | 42.3 | 56.4 | 70.5 | 84.6 | 98.7 | 112.9 |