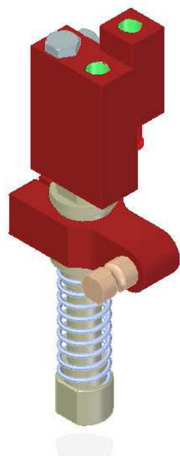


# Vacuum Check Valve VT-1H COAX® with level compensator, G threads, Lock pin 16, Right hand connection

Item number: X6016RH



- Two-stage COAX® cartridge MINI Pi12-2 integrated.
- Check valve that traps vacuum in sealed applications for safe operation.
- Built-in blow off check valve for fast release of object.
- Available in lock pin 16, 19 or ball joint mountings, industry standard.
- Available with level compensator to compensate for differences in level of object.
- Recommend using 4mm (5/32”) tubing and no more than 80 psi for blow off.
- Recommend using 6mm (1/4”) tubing and no more than 80 psi for vacuum.
- Equal line lengths from common manifold should be used for both blow-off and vacuum.
- Maximum of (12) units per tool.

Technical data

| Description                              | Unit   | Value                                               |
|------------------------------------------|--------|-----------------------------------------------------|
| Material                                 | -      | Al, Ceramic, CuZn, Nitrile (NBR), PA, PP, SS, Steel |
| Load, vertical, max.                     | lbf    | 157.37                                              |
| Temperature, max.                        | °F     | 176.0                                               |
| Temperature, min.                        | °F     | 14.0                                                |
| Weight, max.                             | oz     | 61.69                                               |
| Weight, min.                             | oz     | 58.94                                               |
| Feed pressure, max. (blow-off)           | psi    | 0.080                                               |
| Feed pressure, min. (breakaway blow-off) | psi    | 0.036                                               |
| Noise level, max.                        | dBA    | 68                                                  |
| Noise level, min.                        | dBA    | 66                                                  |
| Vacuum flow, range, max.                 | scfm   | 1.44                                                |
| Life span (at max load)                  | cycles | 10000000                                            |
| Volume, internal (level compensator)     | in³    | 0.84                                                |
| Action range                             | °      | 0-360                                               |
| Action range/Stroke                      | in     | 1.97                                                |
| Spring force, max.                       | lbf    | 14.99                                               |

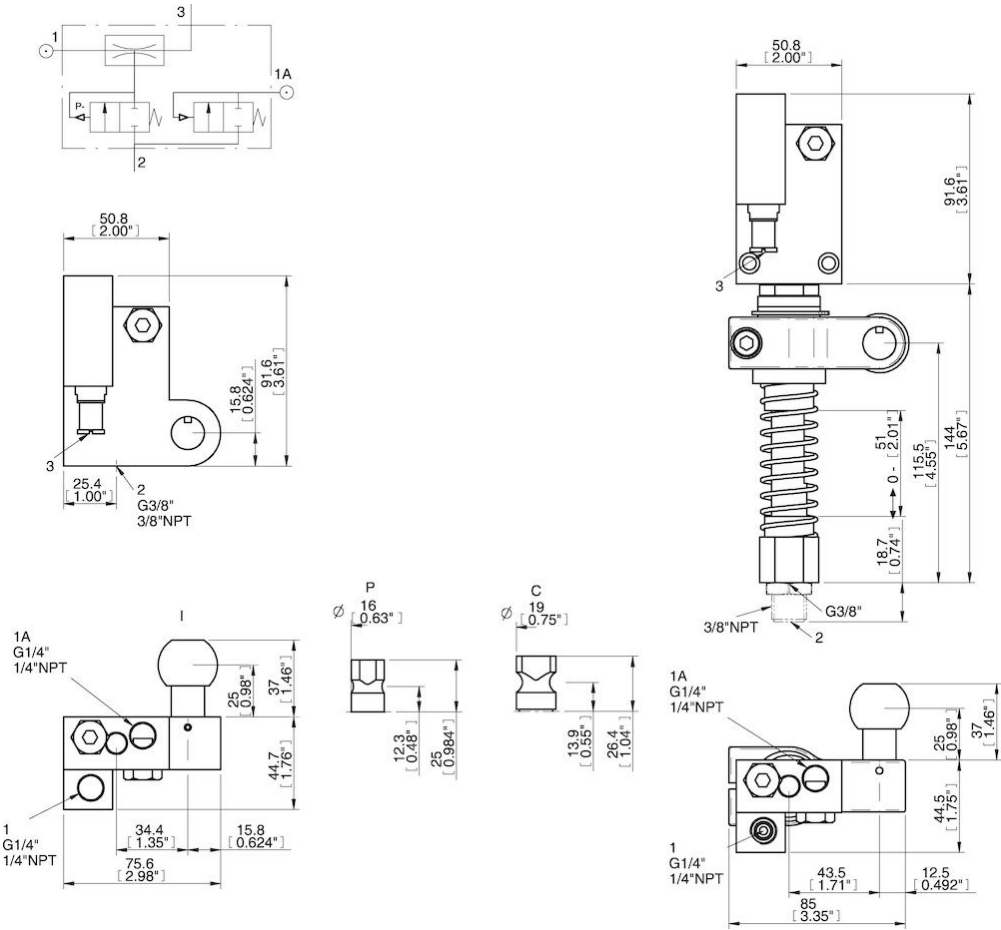
Performance

| Feed pressure | Air consumption | Vacuum flow (scfm) at different vacuum levels (-inHg) |      |       |       |       |       |        |       |    |        |    |    |    |         | Max vacuum |
|---------------|-----------------|-------------------------------------------------------|------|-------|-------|-------|-------|--------|-------|----|--------|----|----|----|---------|------------|
| psi           | scfm            | 0                                                     | 2    | 5     | 8     | 11    | 14    | 17     | 20    | 23 | 26     | 29 | 32 | 35 | psi     |            |
| 24.65         | 0.61            | 0.17                                                  | 0.12 | 0.065 | 0.044 | 0.021 | 0     | 0      | 0     | 0  | 0      | 0  | 0  | 0  | ≥7.10   |            |
| 31.90         | 0.72            | 0.19                                                  | 0.14 | 0.086 | 0.059 | 0.041 | 0.024 | 0.0059 | 0     | 0  | 0      | 0  | 0  | 0  | ≥9.28   |            |
| 45.53         | 0.93            | 0.20                                                  | 0.18 | 0.13  | 0.080 | 0.056 | 0.041 | 0.030  | 0.018 | 0  | 0.0089 | 0  | 0  | 0  | ≥13.050 |            |
| 58.0          | 1.12            | 0.19                                                  | 0.18 | 0.15  | 0.12  | 0.071 | 0.035 | 0.030  | 0.018 | 0  | 0.0059 | 0  | 0  | 0  | ≥12.18  |            |

| Feed pressure<br>psi | Air consumption<br>scfm | Evacuation time (s/cf) to reach different vacuum levels (-inHg) |       |      |      |      |      |      |       |    |    |    |    |    |    | Max vacuum<br>psi |
|----------------------|-------------------------|-----------------------------------------------------------------|-------|------|------|------|------|------|-------|----|----|----|----|----|----|-------------------|
|                      |                         | 2                                                               | 5     | 8    | 11   | 14   | 17   | 20   | 23    | 26 | 28 | 29 | 29 | 29 | 29 |                   |
| 24.65                | 0.61                    | 0.083                                                           | 0.17  | 0.33 | 0.63 | 0    | 0    | 0    | 0     | 0  | 0  | 0  | 0  | 0  | 0  | ≥7.10             |
| 31.90                | 0.72                    | 0.059                                                           | 0.12  | 0.25 | 0.44 | 0.68 | 0.89 | 0    | 0     | 0  | 0  | 0  | 0  | 0  | 0  | ≥9.28             |
| 45.53                | 0.93                    | 0.050                                                           | 0.094 | 0.17 | 0.32 | 0.53 | 0.80 | 1.18 | 1.89  | 0  | 0  | 0  | 0  | 0  | 0  | ≥13.050           |
| 58.0                 | 1.12                    | 0.053                                                           | 0.097 | 0.16 | 0.25 | 0.44 | 0.74 | 1.12 | 2.097 | 0  | 0  | 0  | 0  | 0  | 0  | ≥12.18            |

| Feed pressure | Air consumption | Blow flow (scfm) at different pressure levels (-inHg) |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Max pressure |
|---------------|-----------------|-------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|
| psi           | scfm            | 0                                                     | 2    | 5    | 8    | 11   | 14   | 17   | 20   | 23   | 26   | 29   | 32   | 35   | 38   | 41   | psi          |
| 87.0          | 1.59            | 0.20                                                  | 0.20 | 0.20 | 0.20 | 0.19 | 0.18 | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 | 0.14 | 0.14 | 0.12 | 0.11 | ≥0           |

Dimensional drawings



Values specified in this datasheet are tested at (unless otherwise stated):

- Room temperature (20°C [68°F] ± 3°C [5.5°F]).
- Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- Compressed air quality, DIN ISO 8573-1 class 4.

Tolerance and accuracy:

- Feed pressure tolerance ±0.02 MPa [2.9 psi]
- Vacuum flow/evacuation time accuracy ±10%.