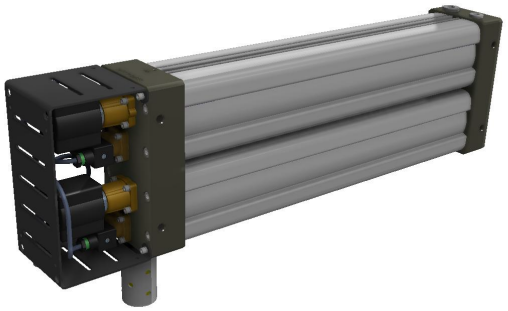
- **Port size: G1/2, G3/4, G1 & G1 1/2**
- **High efficiency Adsorbent Media Tube (AMT) air dryer providing variable pressure dew point suppression**
- **Suitable for flow rates up to 6000l/min (212 scfm)**
- **Fully recovers from water saturation**
- **Full environmental validation to EN 50155**
- **Performance un-affected by shock, vibration or orientation**
- **Shock and Vibration tested to EN 61373:2010 Category 1, Class B**
- **No post dryer dust filtration required**
- **Available with heaters for cold start up applications**



EN 61373

## Technical features

**Medium:**
Compressed air
**Operation:**
Pressure swing adsorption
**Operating pressure:**
4 ... 12 bar (58 ... 175 psi)

**Flow:**
See table below
**Port size:**
G1/2, G3/4, G1 & G1 1/2
**Particle removal:**
None
**Purge air:**
See table below

**Ambient/Media temperature:**
-40 ... +80°C (+40 ... +176°F)
**Servicing:**
Long service life – up to 21000 hours (7 year service intervals)

**Materials:**
Manifolds: Aluminium Alloy
Barrels: Aluminium alloy
Adsorbent Material:
Adsorbent Media Tube (AMT)
Polymer (internal components):
Flame Retardant PA66
Elastomers (Seals): NBR

## Electrical details for solenoid operators

| | |
|---|---|
| **Voltage** | 24 V d.c. (8 W exhaust valve, 22 W inlet valve) |
| **Voltage tolerance** | ± 10%, wider tolerance on request |
| **Rating** | 100% continuous duty |
| **Electrical connection with rockguard version AA, AB** | 6 pin connector plug ,Derivate from MIL-DTL-5015 standard (*4) |
| **Electrical connection without rockguard – version BB** | EN 175301-803 - Form A, 30 mm |
| **Protection class** | IP 65 (with sealed plug) |

## Electrical details for optional heaters

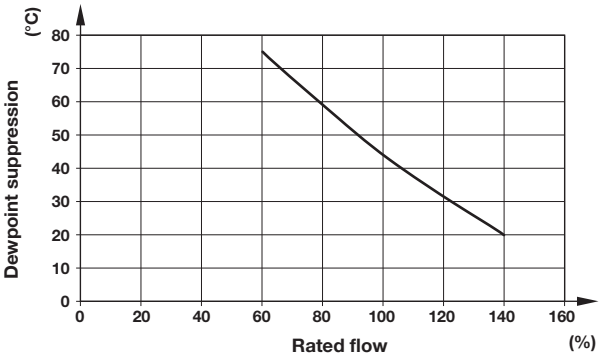
| | |
|---|---|
| **Voltages** | 24, 37.5, 72, 110, 220 V a.c. / V d.c. |
| **Voltage tolerance** | ± 30% |
| **Electrical connection with rockguard version AA, AB** | 3 pin connector plug ,Derivate from MIL Specification (*4) |
| **Electrical connection without rockguard – version BB** | Series WR2: 3x3 core flying leads<br>Series WR3 ,WR4 and WR5 : 4x3 core flying leads |
| **Protection class** | IP 65 |

## Technical data - standard models

| Symbol | Inlet/ Outlet port size | Inlet flow rate *2) | | Purge flow rate *1) *2) | | Dew point suppression *1) | | Outlet RH *1) | Weight *3) | | Model |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (l/min) | (scfm) | (l/min) | (scfm) | (°C) | (°F) | (%) | (kg) | (lbs) | |
|  | G1/2 | 550 | 19.4 | 110 | 3.9 | > 40 | > 72 | <10 | 16 | 35 | WR2A-4GT-D2C- ★ ★ ★ ★ |
| | G1/2 | 1000 | 35.3 | 200 | 7.1 | > 40 | > 72 | <10 | 19 | 42 | WR2A-4GT-C2E- ★ ★ ★ ★ |
| | G1/2 | 1450 | 51.2 | 290 | 10.2 | > 40 | > 72 | <10 | 22 | 49 | WR2A-4GT-H2F- ★ ★ ★ ★ |
| | G3/4 | 750 | 26.5 | 150 | 5.3 | > 40 | > 72 | <10 | 28 | 62 | WR3A-6GT-A2C- ★ ★ ★ ★ |
| | G3/4 | 1350 | 47.7 | 270 | 9.5 | > 40 | > 72 | <10 | 32 | 71 | WR3A-6GT-H2E- ★ ★ ★ ★ |
| | G3/4 | 1800 | 63.6 | 360 | 12.7 | > 40 | > 72 | <10 | 36 | 79 | WR3A-6GT-G2F- ★ ★ ★ ★ |
| | G1 | 875 | 30.9 | 175 | 6.2 | > 40 | > 72 | <10 | 34 | 75 | WR4A-8GT-B2C- ★ ★ ★ ★ |
| | G1 | 2000 | 70.6 | 400 | 14.1 | > 40 | > 72 | <10 | 38 | 84 | WR4A-8GT-E2E- ★ ★ ★ ★ |
| | G1 | 3000 | 105.9 | 600 | 21.2 | > 40 | > 72 | <10 | 42 | 93 | WR4A-8GT-J2F- ★ ★ ★ ★ |
| | G1 1/2 | 4500 | 158.9 | 990 | 35 | > 40 | > 72 | <10 | 48 | 106 | WR5A-BGT-L2E- ★ ★ ★ ★ |
| | G1 1/2 | 6000 | 211.9 | 1500 | 53 | > 40 | > 72 | <10 | 57 | 126 | WR5A-BGT-M2F- ★ ★ ★ ★ |

*1) Typical performance figures at rated inlet conditions of 35°C, 90% RH @8barg
*2) Inlet and purge flow rates stated to produce 40°C dew point suppression, other performance available upon request.
*3) Weight may vary +/- 1 kg depending on options selected.
*4) Connector plug required

## Typical performance characteristics:




For further data please consult IMI Precision Technical Department

## Option selector

WR#A-#GT-###-★★★★

| Heater voltage | Substitute |
|---|---|
| No heaters | **0** |
| 24 | **1** |
| 37.5 | **2** |
| 72 | **4** |
| 110 | **6** |
| 220 | **7** |

| Wiring harness and rock guard configuration | Substitute |
|---|---|
| Harness and rock guard with side guards | **AA** |
| Harness and rock guard without side guards | **AB** |
| No harness and rock guard | **BB** |

| IMI Precision branding | Substitute |
|---|---|
| Yes | **Y** |
| No | **N** |

## Accessories

Dimensions in mm
Projection/First angle

**Connector plug**

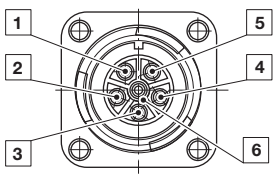
**Silencer**

| For all series | Silencer for Series | |
|---|---|---|
| WR0S-060 - 6 pin Solenoid connector plug | WR2 | WR0S-065 (R1/2) |
| WR0S-061 - 3 pin Heater connector plug | WR3 | WR0S-066 (R3/4) |
| | WR4 & WR5 | WR0S-067(R1 ¼ ) |

**Note**:
Male to female elbow adaptors are need to connect silencers!

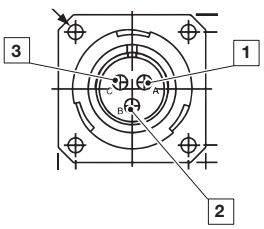
## Electrical connector

### Valve connector




1 Pin A – 24 V d.c. (Lower purge valve)
2 Pin B – 24 V d.c. (Lower flow valve)
3 Pin C – 24 V d.c. (Upper purge valve)
4 Pin D – 24 V d.c. (Upper flow valve)
5 Pin E – Common 0V
6 Pin F – Earth (Common earth)

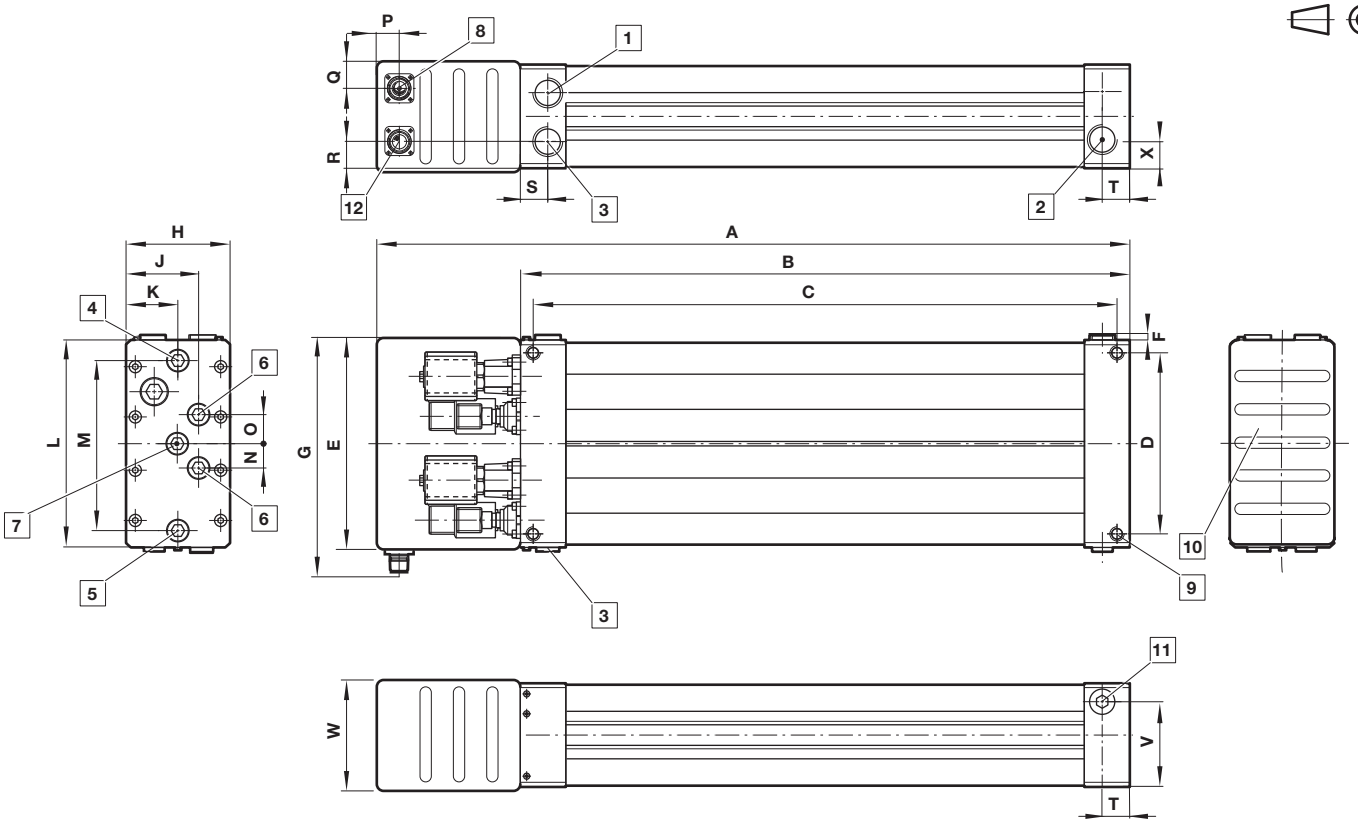
### Heater connector




1 Pin A – Live
2 Pin B – 0V
3 Pin C – Earth

## Dimensions

Dimensions in mm
Projection/First angle




1 Inlet port
2 Outlet port
3 Exhaust port Ø 80 mm: G3/4; Ø 100 mm: G3/4; Ø 125 mm: G1; Ø 150 mm: G11/2
4 G1/4 port to allow monitoring of pressure in top barrel
5 G1/4 port to allow monitoring of pressure in bottom barrel
6 G1/4 port on outlet to allow fitting of test point sensor
7 **Series WR5 only**: G1/2 port on outlet to allow fitting of humidity sensor
8 Electrical connector (valve control)
9 Mounting threads
Ø 80 mm: M10 x 1,5, thread 16 mm deep
Ø 100 mm: M12 x 1,75, thread 18 mm deep
Ø 125 mm: M12 x 1,75, thread 20 mm deep
Ø 150 mm: M12 x 1,75, thread 30 mm deep
10 Standard guard, side guard optional
11 Alternative outlet port (plugged)
12 Electrical connector (heater control)

| System | A *1) | B | C | D | E | F | G | H | J | K | L | M | N | O | P | Q | R | S | T | V | W | X | Port size | Model |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø 80 | 633/593 | 470 | 380 | 126 | 234 | 5 | 260 | 100 | 72 | 50 | 220 | 166 | 29 | 29 | 26 | 29 | 26 | 25 | 33 | 74 | 100 | 28 | G1/2 | WR2A-4GT- ★ 2C- ★★★★ |
| Ø 80 | 833/793 | 670 | 580 | 126 | 234 | 5 | 260 | 100 | 72 | 50 | 220 | 166 | 29 | 29 | 26 | 29 | 26 | 25 | 33 | 74 | 100 | 28 | G1/2 | WR2A-4GT- ★ 2E- ★★★★ |
| Ø 80 | 1033/993 | 870 | 780 | 126 | 234 | 5 | 260 | 100 | 72 | 50 | 220 | 166 | 29 | 29 | 26 | 29 | 26 | 25 | 33 | 74 | 100 | 28 | G1/2 | WR2A-4GT- ★ 2F- ★★★★ |
| Ø 100 | 656/629 | 505 | 474 | 152 | 240 | 6 | 267 | 120 | 89 | 49 | 240 | 178 | 31 | 31 | 24 | 101 | 31 | 28 | 31 | 89 | 120 | 31 | G3/4 | WR3A-6GT- ★ 2C- ★★★★ |
| Ø 100 | 856/829 | 705 | 674 | 152 | 240 | 6 | 267 | 120 | 89 | 49 | 240 | 178 | 31 | 31 | 24 | 101 | 31 | 28 | 31 | 89 | 120 | 31 | G3/4 | WR3A-6GT- ★ 2E- ★★★★ |
| Ø 100 | 1056/1029 | 905 | 874 | 152 | 240 | 6 | 267 | 120 | 89 | 49 | 240 | 178 | 31 | 31 | 24 | 101 | 31 | 28 | 31 | 89 | 120 | 31 | G3/4 | WR3A-6GT- ★ 2F- ★★★★ |
| Ø 125 | 700/669 | 544 | 452 | 185 | 280 | 7 | 308 | 145 | 110 | 70 | 280 | 210 | 50 | 50 | 25 | 19 | 42 | 26 | 28 | 101 | 145 | 44 | G1 | WR4A-8GT- ★ 2C- ★★★★ |
| Ø 125 | 900/869 | 744 | 652 | 185 | 280 | 7 | 308 | 145 | 110 | 70 | 280 | 210 | 50 | 50 | 25 | 19 | 42 | 26 | 28 | 101 | 145 | 44 | G1 | WR4A-8GT- ★ 2E- ★★★★ |
| Ø 125 | 1100/1069 | 944 | 852 | 185 | 280 | 7 | 308 | 145 | 110 | 70 | 280 | 210 | 50 | 50 | 25 | 19 | 42 | 26 | 28 | 101 | 145 | 44 | G1 | WR4A-8GT- ★ 2F- ★★★★ |
| Ø 150 | 944/915 | 786 | 670 | 210 | 291 | 10 | 350 | 170 | 115 | 85 | 335 | 238 | 75 | 75 | 22 | 49 | 49 | 43 | 40 | 115 | 170 | 55 | G1 1/2 | WR5A-BGT- X2E- ★★★★ |
| Ø 150 | 1144/1115 | 986 | 870 | 210 | 291 | 10 | 350 | 170 | 115 | 85 | 335 | 238 | 75 | 75 | 22 | 49 | 49 | 43 | 40 | 115 | 170 | 55 | G1 1/2 | WR5A-BGT- X2F- ★★★★ |

*1) Overall length with/without rock guard

### Warning

These products are intended for use in industrial compressed air and rail transport systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult
IMI Precision Engineering, Norgren Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.