DENISON HYDRAULICS
Pressure Relief Valves
Series R1E02
**FEATURES**

- These valves are available in four different mounting types:
  - cartridge type (manifold)
  - foot mounting
  - panel mounting
  - subplate mounting
- Stable pressure function due to the damping of the moving inner parts.
- Three different pressure setting ranges up to 350 bar.
- Three different control types are available:
  - hand knob
  - acorn nut with lead seal
  - adjusting device with key lock
- Usable as remote control valve for all pilot operated pressure control valves (e.g. DENISON series R4 and R5).
- Each valve is factory tested prior to delivery.
- Worldwide DENISON sales and service.

**DESCRIPTION**

The DENISON valve series R1E02 is a direct operated pressure relief valve. It is designed to control system pressure according to the manual setting of the adjustment device (p-Q-function see diagram page 3). These reliable seat type valves consists mainly of seat, cone and pressure spring. Below the setting pressure the valve is leakage free. A damping spool maintains a stable function after the setting pressure is reached.
TECHNICAL DATA, ORDERING CODE

GENERAL

- Design: Poppet type
- Type of mounting: Subplate mounting, Panel mounting, Foot mounting, Cartridge type (manifold)
- Mounting position: optional
- Direction of flow: P → T
- Ambient temperature range: –20…+60 °C
- Suitability for special working conditions: Further information required

HYDRAULIC CHARACTERISTICS

- Operating pressure range
  - Inlet (Port P): 0…350 bar
- Pressure setting range: 7…350 bar
- Nominal flow: 3.8 l/min
- Fluid: Mineral oil according DIN 51524/25 (other fluids on request)
- Contamination level: Max. permissible contamination level according to NAS 1638 Class 8 (Class 9 for 15 micron and smaller) or ISO 17/14
- Fluid temperature range: –18…+80 °C
- Viscosity range: 10…650 cSt; optimal 30 cSt

ORDERING CODE

- Series
- Body mounting:
  0 = Cartridge
  1 = Foot mounting
  2 = Panel mounting
  3 = Subplate mounting
- Pressure setting range:
  1 = 7…105 bar
  3 = 7…210 bar
  5 = 7…350 bar
- Connections:
  0 = without (only for cartridge)
  1 = ¼” NPTF
  2 = G ¼”

* = on bodies for subplate mounting use adapter plate S16–64188 if necessary.

DIN 912; 12.9
Order no. 700–71447–8

Viscosity
35 cSt

Test temp.
50 °C ± 5 °C

Δ p-Q-Characteristics

Flow (l/min)

Viscosity
35 cSt

Test temp.
50 °C ± 5 °C

* = on bodies for subplate mounting use adapter plate S16–64188 if necessary.
Panel mounting
2.1 kg

Foot mounting
2.1 kg

Subplate mounting
1 kg

Optional adjusting devices
Hand knob
50 mm dia.
Acorn nut with lead seal
Adjusting device with key lock

Cartridge type
0.3 kg

Installation dimensions
0.5 x 45° or 0.5 r max.
**SUBPLATES**

Weight: 1.4 kg

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**Model no.** | **Order no.** | **Port d₁** | **Dimensions** | **4 Mounting screws*** |
---|---|---|---|---|
SS–B–04–04 | S16–33062–0 | G 1/4” | h₁ 0.5 h₂ 14.0 h₃ 19.0 d₂ 24.0 | M10 x 40 lg. DIN 912; 12.9 |
SS–B–06–04 | S16–33064–0 | G 3/8” | 0.5 14.0 19.0 24.0 | 700–71595–8 |

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*Mounting screws are included in subplate order. For valves ordered without subplate, mounting screws must be ordered separately.

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The product described is subject to continual development and the manufacturer reserves the right to change the specifications without notice.