Description

Flange  CF-R 160
Actuator  Pneumatic, single acting with closing spring
  – without solenoid valve
  – with position indicator
Feedthrough  Bellows
Options  CQD =
  – Product: valve type ITER 21

Technical data¹

Leak rate
  – Valve body  ≤ 1 · 10⁻⁸ mbar ls⁻¹
  – Valve seat  < 1 · 10⁻⁸ mbar ls⁻¹
Leak rate (accidental condition)
  – Valve body  ≤ 1 · 10⁻⁸ mbar ls⁻¹
  – Valve seat  n/a
Pressure range
  1 · 10⁻⁸ mbar to 1.5 bar (abs)
Differential pressure on the plate³
  – In opening direction  ≤ 1.2 bar
  – In closing direction  ≤ 1.5 bar
Differential pressure at opening
  ≤ 1 bar
Conductance (molecular flow)
  1000 ls⁻¹
Closing time
  ≤ 1.5 sec.
Cycles until first service
  (Tmax  80 °C, under clean conditions)
  10 000
Temperature
  (Maximum values: depending on operating conditions and sealing materials)
  – Valve body  ≤ 150 °C
  – Actuator  ≤ 120 °C
  – Position indicator  ≤ 120 °C
Material
  – Valve body  AISI 316L (1.4404)
  – Actuator  Aluminum
  – Plate  AISI 316L (1.4404)
  – Bellows  AISI 316L (1.4404), AISI 316 Ti (1.4571)
Seal
  – Bonnet  metal
  – Plate  EPDM
  – Actuator  EPDM
Weight
  14 kg / 31 lbs
Mounting position
  any
Radiation resistance
  10⁶ Gy (10⁸ rad)
Maximum magnetic field levels
  ≤ 150 mT
Volume of pneumatic actuator
  0.65 l / 0.023 ft³
Compressed air
  min. – max. overpressure
  4.5 – 7 bar / 65 – 102 psi
Compressed air connection
  1/8" female ISO/NPT

¹ Values according technical specification D_R8752R v.1.1
² Deviation to technical specification D_R8752R v.1.1 in agreement with responsible IO department
Behavior in case of compressed air pressure drop

- Valve closed: valve remains closed and leaktight
- Valve open: valve closes leaktight
- During actuation: valve closes leaktight

Behavior in case of power failure

- Valve closed: depending on customer installation
- Valve open: depending on customer installation
- During actuation: depending on customer installation

Assembly cleanliness level: ISO Class 8

Related documents

Dimensional drawing No.: 861969
STEP file No.: 861968

Electrical connections

Position indicator

Type: Micro switch
Voltage: \( \leq 50 \, \text{V AC / DC} \)
Current: 5 – 100 mA
Short circuit protected: No
Male plug (VAT valve): 4 pin
Female connector (ITER)\(^a\): 8070-2201-01Z16-4SA (Glenair)

\(^a\) Not included with delivery

Wiring diagram

948650EB