Description

Flange: ISO-K 100
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: \( \leq 1 \cdot 10^{-8} \text{ mbar ls}^{-1} \)
– Valve seat: \( < 1 \cdot 10^{-8} \text{ mbar ls}^{-1} \)

Leak rate (accidental condition)
– Valve body: \( \leq 1 \cdot 10^{-8} \text{ mbar ls}^{-1} \)
– Valve seat: n/a

Pressure range
1 \cdot 10^{-8} \text{ mbar to 1.5 bar (abs)}

Differential pressure on the plate
– In opening direction: \( \leq 1.2 \text{ bar} \)
– In closing direction: \( \leq 1.5 \text{ bar} \)

Differential pressure at opening
\( \leq 1 \text{ bar} \)

Conductance (molecular flow)
440 \text{ ls}^{-1}

Closing time
\( \leq 1 \text{ sec.} \)

Cycles until first service
10,000

Temperature

(Maximum values: depending on operating conditions and sealing materials)
– Valve body: \( \leq 150 \degree \text{ C} \)
– Actuator: \( \leq 120 \degree \text{ C} \)
– Position indicator: \( \leq 120 \degree \text{ C} \)

Material
– Valve body: AISI 316L (1.4404)
– Actuator: Aluminum
– Plate: AISI 316L (1.4404)
– Bellows: AISI 316L (1.4404), AISI 316 Ti (1.4571)
– Bonnet: metal
– Plate: EPDM
– Actuator: EPDM

Seal

Weight
10 kg / 22 lbs

Mounting position
any

Radiation resistance
\( 10^6 \text{ Gy (10}^8 \text{ rad) } \)

Maximum magnetic field levels
\( \leq 150 \text{ mT} \)

Volume of pneumatic actuator
0.3 l / 0.01 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 open
- During actuation

valve remains closed and leaktight
valve closes leaktight
valve closes leaktight

Behavior in case of power failure

- Valve closed
- Valve open
- During actuation

depending on customer installation
depending on customer installation
depending on customer installation

Assembly cleanliness level

ISO Class 8

Related documents
Dimensional drawing No. 855622
STEP file No. 855621

Electrical connections

Position indicator

Type
Micro switch

Voltage
≤ 50 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