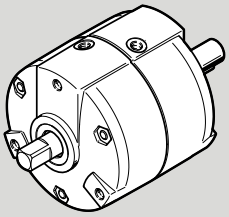
# DRVS-...-EX4-...
## Quarter turn actuator



FESTO

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Operating conditions I EX

8102052
2018-11a
[8102054]

8102052

Translation of the original instructions

### 1 Identification EX

| Identification mark | | |
|---|---|---|
| Ex | II 2G | Ex h IIC T4 Gb X |
| Ex | II 2D | Ex h IIIC T120°C Db X |

Tab. 1

### 2 Further applicable documents

**NOTICE!**

Technical data for the product can have different values in other documents. For operation in an explosive atmosphere, the technical data in this document always have priority.

All available documents for the product ➔ www.festo.com/pk.

### 3 Function

When the compressed air supply ports are pressurized reciprocally, the internal slide in the housing of the device moves back and forth. The swivelling motion is transmitted to the output shaft.

### 4 Safety

#### 4.1 Safety instructions

– The device can be used under the stated operating conditions in zones 1 and 2, explosive gas atmospheres, and in zones 21 and 22, explosive dust atmospheres.
– All work must be carried out outside of potentially explosive areas.
– Extraction of the operating medium outside the potentially explosive area.
– The device is not intended for use with other fluids.
– Positioning tasks or transmitting torques and lateral forces is not intended.

#### 4.2 Intended use

The semi-rotary drive DRVS-... is intended for swivelling payloads which have to execute a defined angular movement.

#### 4.3 Identification X: special conditions

– Danger of electrostatic discharge.
– Ambient temperature:
  $0°C \leq T_a \leq +60°C$

### 5 Commissioning

**⚠ WARNING!**

The discharge of electrostatically charged parts can lead to ignitable sparks.
- Prevent electrostatic charging by taking appropriate installation and cleaning measures.
- Include the device in the system's potential equalisation.
- DRVS-6 and DRVS-8: Reference the shaft separately in the equipotential bonding of the system. The shaft is electrically insulated from the actuator.

**⚠ WARNING!**

When using external stops: impact processes may cause ignitable sparks if corroded metal is involved.
- Do not use stops of metal that could corrode.

**NOTICE!**

Strong charge-generating processes can charge non-conductive layers and coatings on metal surfaces.

**NOTICE!**

Escaping exhaust air can swirl up dust and create an explosive dust atmosphere.

**NOTICE!**

Related type of ignition protection: c (constructional safety)

**NOTICE!**

Particulate matter in the compressed air can cause electrostatic charges.

– Observe the product labelling.
– Seal unused openings with blanking plugs or slot covers.
– Connect the device with hoses as short as possible to prevent additional heating.

When using PPV end-position cushioning:
– Adjust the cushioning so that the piston rod safely reaches the end positions and that it does not strike hard against them or rebound.

### 6 Maintenance and care

– Check the operational reliability of the device regularly. Interval: 1 million movement cycles or after 6 months at the latest.

### 7 Fault clearance

| Malfunction | Remedy |
|---|---|
| External damage after visual inspection | Replace device. |
| Audible leakage | Replace device. |
| The mounting is not secure | Tighten retaining screws. |
| Hard impacts at the end position | Replace device. |
| End position is not reached | Send drive to the Festo repair service. |
| Non-uniform running behaviour | Ensure flow control of exhaust air with one-way flow control valves.<br>Set angles symmetrically.<br>Replace device. |
| Increased noise generation (roller bearings) | Replace device. |
| Increased bearing clearance | Replace device. |

Tab. 2

The replacement of wearing and spare parts is possible in individual cases. Repairs of this type must only be carried out by trained and authorised specialists.
– Please contact your Festo technical consultant.

### 8 Technical data

| Operating conditions | | |
|---|---|---|
| Max. operating pressure | [bar] | 8 |
| Ambient temperature | [°C] | 0 ... +60 |
| Temperature of medium | [°C] | 0 ... +60 |
| Operating medium | | Compressed air to ISO 8573-1:2010 [7:4:4] |
| Mounting position | | Any |
| All aluminium alloys used contain less than 7.5 % magnesium (Mg). | | |

Tab. 3