

DSBF-...-EX4-...
Standard cylinder

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Operating conditions | EX

8094981
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[8094983]



Translation of the original instructions

1 Identification EX

Table with 3 columns: Identification mark, II 2G, Ex h IIC T4 Gb; II 2D, Ex h IIC T120°C Db; -20°C ≤ Ta ≤ +60°C

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 Certified products

Table with 1 column: Type
DSBF-C-32-...-EX4-...
DSBF-C-40-...-EX4-...
DSBF-C-50-...-EX4-...
DSBF-C-63-...-EX4-...
DSBF-C-80-...-EX4-...
DSBF-C-100-...-EX4-...

Tab. 2

4 Function

Pressurising the cylinder chambers causes the piston in the pipe to move back and forth. The piston rod transfers the movement outwards.

5 Safety

5.1 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.
- The device is not intended for use with other fluids.
- It is not intended to be used as a spring and damping element. Impermissible loads may occur.

5.2 Intended use

The linear drive is intended for the transportation of loads and the transmission of forces.

6 Commissioning

WARNING!
The discharge of electrostatically charged parts can lead to ignitable sparks.
- Prevent electrostatic discharge by taking appropriate installation and cleaning measures.
- Include the device in the system's potential equalisation.

WARNING!
Some piston rod attachments and mounting elements permit oscillating rotating and swivelling movements of the cylinder. This could result in impermissible heating.
- Do not use piston rod attachments and mounting elements as radial plain bearings with circumferential speeds of ≥1 m/s.

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!
Particulate matter in the compressed air can cause electrostatic charges.

NOTICE!
Related type of ignition protection: c (constructional safety)

- Observe the product labelling.
- 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.

7 Service and care

- Check the operational reliability of the device regularly. Interval: 2 million movement cycles or after 6 months at the latest.
- When using the device in a dusty environment:
- Check that the piston rods and bearings are functioning in accordance with their environmental conditions at frequent intervals.

8 Fault clearance

Table with 2 columns: Malfunction, Remedy
Longitudinal scoring marks on the piston or guide rod -> Replace device
Piston rod is dirty -> Clean the piston rod with a soft cloth
Increased bearing clearance -> Replace device
Increased noise generation -> Replace device
Audible leakage at the rod seal -> Replace wear part or send the device back to the Festo repair service
Cylinder not securely mounted, mounting on piston rod not secure -> Tighten the retaining screws
Hard impact at the end positions -> Reduce the accelerated load, Reduce the speed, PPV: adjust the end-position cushioning.

Tab. 3

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.

9 Technical data

Table with 3 columns: Operating conditions, Max. operating pressure [bar], Ambient temperature [°C], Temperature of medium [°C], Operating medium, Mounting position, Materials
Max. operating pressure [bar]: 12
Ambient temperature [°C]: -20 ... +60
Temperature of medium [°C]: -20 ... +60
Operating medium: Compressed air to ISO 85731: 2010: [7:4:4]
Mounting position: Any
Materials: All aluminium alloys used contain less than 7.5 % magnesium (Mg).

Tab. 4