



OPERATING & MAINTENANCE INSTRUCTIONS
FOR
DOUBLE FLAP VALVES

BULK HANDLING SPECIALISTS
www.ROTOLOK.com



DOUBLE FLAP VALVES

OPERATING & MAINTENANCE INSTRUCTIONS DOUBLE FLAP VALVES



Indicates relevance to counterweight operation



Indicates relevance to motorised operation



Indicates relevance to pneumatic operation

Description

The valve consists of two flap plates, which are operated by pneumatics, motorised or counterweights. Each method of actuation is controlled, such that each flap plate is opened alternately allowing material to pass through the separate chambers in batch form. At no stage are both flaps open together thereby ensuring a seal is maintained.

NB: The control or timing equipment required to operate the valve is supplied by the client, not Rotolok

The unit is suitable for pneumatic, motorised and counterweight operation as standard.



Counterweight levers are fixed to the drive shafts.



Two air cylinders, complete with solenoid valve and piping, actuate the valve.



A cam driven by a geared motor.

Construction

Body: Cast iron or fabricated mild steel as standard.
Inlet and Flap Plate: Mild Steel or Abro 400 abrasive resistant steel

Actuation:



Counterweight levers



VDMA Air cylinders with five port two way spring return solenoid valve



IEC Electric geared motor

Group Accounts/Sales/Purchasing:

Rotolok Ltd. 1 Millennium Place, Tiverton Business Park, Tiverton, Devon. EX16 6SB.
Telephone: Central Switchboard: 01884 232232 Fax: 01884 232200.

Email: sales@rotolok.co.uk Web: www.rotolok.co.uk

Registered in England No. 2050400

Registered Office 1 Millennium Place, Tiverton Business Park, Tiverton, Devon. EX16 6SB



Application

Suitable for cyclone dust filter applications where pressures or vacuums are in the order of 15-20"wg (540-720 mbar). Their use is particularly suitable on stringy, fibrous products or very abrasive applications where a rotary valve may falter.

Operation

It is important to ensure that the valve internals are free from product and any tramp materials before first operation and any subsequent reset or maintenance.



The air cylinders need a supply of clean, dry air at 80 psi.



The motor should be wired up as per manufacturer's instructions supplied. Prior to start up, the gearbox should be checked and filled if necessary to the appropriate level with the specified oil in the manufacturer's instructions. Note that grade of oil is dependent on temperature and conditions of duty.

Maintenance

Ensure the valve is completely empty of product prior to carrying out any maintenance. Isolate the valve electrically and pneumatically prior to carrying out any maintenance.

The valve is basically maintenance free as the only moving internal parts are the shafts, flap plate. The valve usage, product handled, actuation time and frequency will obviously affect the preventative maintenance schedule.

As a minimum it is recommended that the shaft seals should be checked as often as possible for signs of general wear. It is preferable, and usually easier, to remove the valve from the system and separate the two bodies. Once removed, separate the inlet section, taking care not to damage any actuation components.



Remove the scroll pin through the pneumatic lever arm boss before taking the arm off the shaft.

Check flap plate and the bearings SKF (or equivalent) for wear mounted out board; also the cam with associated parts. On reassembly it is important that the screws are tightened adequately. Ensure the flap plates can be operated by twisting the shaft by hand before reconnecting the actuation.



Check the cylinder movement is smooth at twelve monthly intervals, more frequently if the atmosphere is dusty or at an elevated temperature. Check at six monthly intervals that the actuation arm strikes the limit switches to ensure that the switches are not being overloaded by over travel.



Check motor in line with manufacturer's instructions.

Group Accounts/Sales/Purchasing:

Rotolok Ltd. 1 Millennium Place, Tiverton Business Park, Tiverton, Devon. EX16 6SB.
Telephone: Central Switchboard: 01884 232232 Fax: 01884 232200.

Email: sales@rotolok.co.uk Web: www.rotolok.co.uk

Registered in England No. 2050400

Registered Office 1 Millennium Place, Tiverton Business Park, Tiverton, Devon. EX16 6SB



Recommended Spares

When spare parts are required, always quote the valve serial number.

2 x Flap Plates.
2 x Flanged Bearings.
2 x Cam Follower.
2 x Cam Follower Bearing
1 x Spring
2 x Spring Mounting Bush
Limit Switches



Handling

Lift valves using straps secured around the body castings of the unit. Avoid lifting from the shaft or actuation components. If fork trucks are used to move the valves, take care to prevent damage to the fabricated parts. Improper handling can cause distortion, misalignment and breakage, particularly on flanges.

Most valves will require the use of auxiliary lifting devices which must be operated in accordance with local health and safety regulations and site requirements.

Safety

In addition to standard safety regulations, the operator and maintenance personnel should be instructed to observe the following safety rules with motorised and pneumatic actuated valves.

1. Ensure the valve cannot be operated remotely before removing any guards or performing any maintenance.
2. Ensure adequate guarding of all exposed moving parts.
3. Isolate the valve electrically and pneumatically prior to any maintenance.
4. Do not put body parts or tools inside the valve while in operation.

Ignoring the safety rules could result in serious injury.

Group Accounts/Sales/Purchasing:

Rotolok Ltd. 1 Millennium Place, Tiverton Business Park, Tiverton, Devon. EX16 6SB.
Telephone: Central Switchboard: 01884 232232 Fax: 01884 232200.

Email: sales@rotolok.co.uk Web: www.rotolok.co.uk

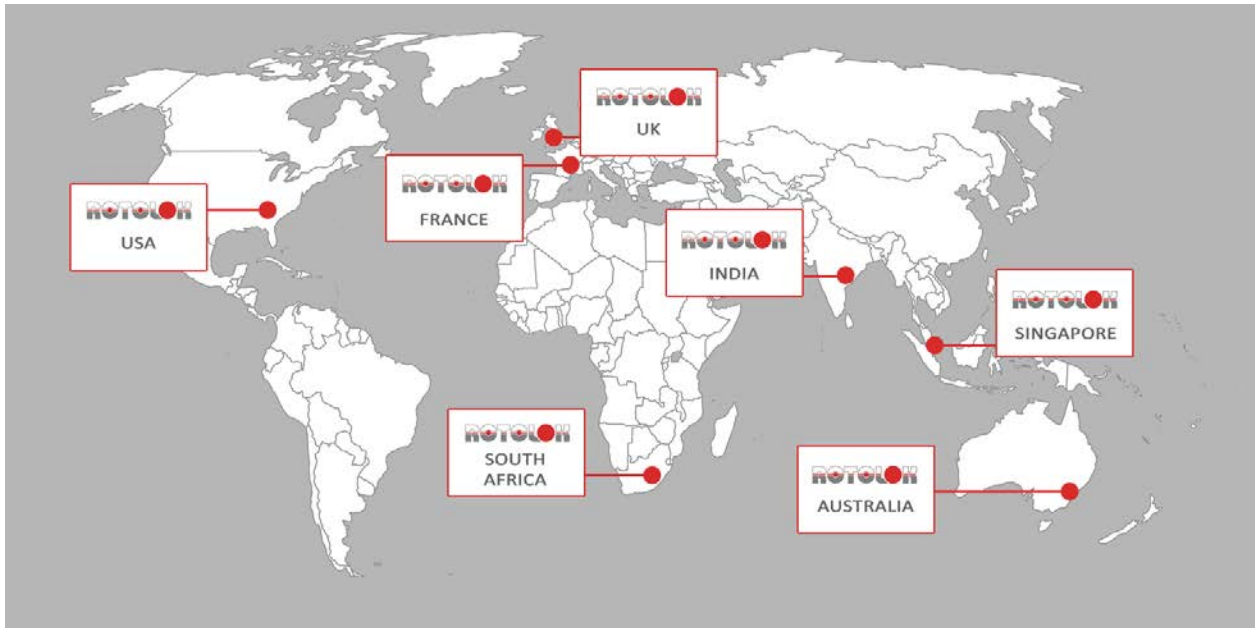
Registered in England No. 2050400

Registered Office 1 Millennium Place, Tiverton Business Park, Tiverton, Devon. EX16 6SB





ROTOLOK Worldwide



ROTOLOK UK

1 Millennium Place
Tiverton Business Park
Tiverton
Devon
EX16 6SB
United Kingdom

Tel: +44 (0) 1884 232232
Fax: +44 (0) 1884 232200

www.rotolok.co.uk
sales@rotolok.co.uk

ROTOLOK USA

Industrial Ventures II
2711 Gray Fox Road
Monroe
North Carolina
28110
United States of America

Tel: +1 (704) 282 4444
Fax: +1 (704) 282 4242

www.rotolok.us
sales@rotolok.us

ROTOLOK AUSTRALIA

Unit 1
6 Bonz Place
Seven Hills
Sydney NSW2147
Australia

Tel: +61 2 9620 4735
Fax: +61 2 9620 4751

www.rotolok.com.au
sales@rotolok.com.au

ROTOLOK SINGAPORE

7 Mandai Link #10 - 11
Mandai Connection
Singapore
728653

Tel: +65 6744 6415
Fax: +65 6744 6425

www.rotolok.sg
sales@rotolok.sg

ROTOLOK SOUTH AFRICA

3 The Triangle
Maraisburg 1709
Republic of South Africa

Tel: +27 (0) 11 674 1166/7
Fax: +27 (0) 11 674 4372

www.rotolok.co.za
sales@rotolok.co.za

ROTOLOK INDIA

1375 Jeedi Drive, Sector 28
Sri City, Sathyavedu mandal
Chittoor District, AP - 517588
India

Tel: +91 (0) 8099 454384

www.rotolok.in
sales@rotolok.in

ROTOLOK FRANCE

Z 1 Les Jalasseries
CD18
13510 Eguilles
France

Tel: +33 (0) 4 42 95 44 00
Fax: +33 (0) 4 4220 76 27

www.rotolok.fr
sales@rotolok.fr

