



Red Roc



Features and Benefits

Reliable, low maintenance, cost effective valves engineered for tough, dry and wet abrasive slurries and corrosive chemical applications.

- DN150 - DN1000 and larger on request
- PN10, PN16, PN25, PN40
- Sleeves are available in various rubber and polyurethane elastomers to best suit specific applications
- 100% full bore design, identical to a rubber lined pipe, for no line losses in open position
- Pre-Pinched profile sleeves available for linear valve characteristics
- In-house sleeve manufacturing facility dedicated to uncompromising quality standards
- In-house pressure testing of each sleeve

- Patented sleeve replacement system engineered to replace a sleeve in-situ in under 30 min:
 - Very safe system
 - No crane or rigging required
 - Minimum labour

- High Lift is a vertical design to lift the upper body upwards to provide easy access up to DN400
- Easy Change is a horizontal design with vertical pinch bars and two opposing actuators for sizes above DN400.
- Early warning sleeve (with embedded sensor) to indicate that the wear liner has worn and replacement should be scheduled for the next available shutdown.
- Internet for Things (IoT) under development for real time diagnostics (sleeve condition, valve position, line pressure, hydraulics pressures, body cavity pressure, temperature, GPS, etc)

Open Frame

(cost effective)

Shrouded Frame

(protect sleeve from elements)

Enclosed Frame

(zero spillage)

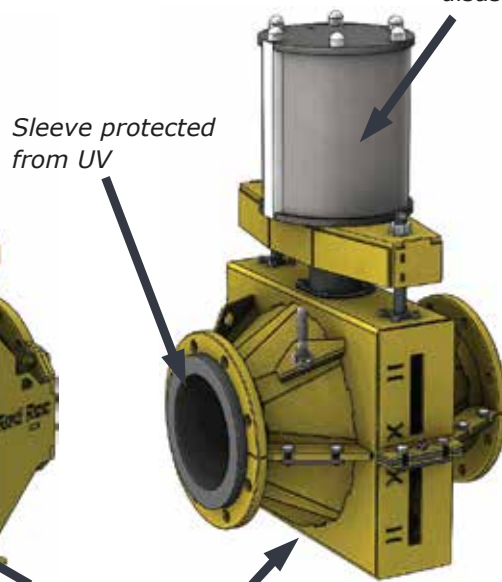
Manual Operated
(Gearbox)



Sleeve exposed to UV

Easy to see valve position indicated

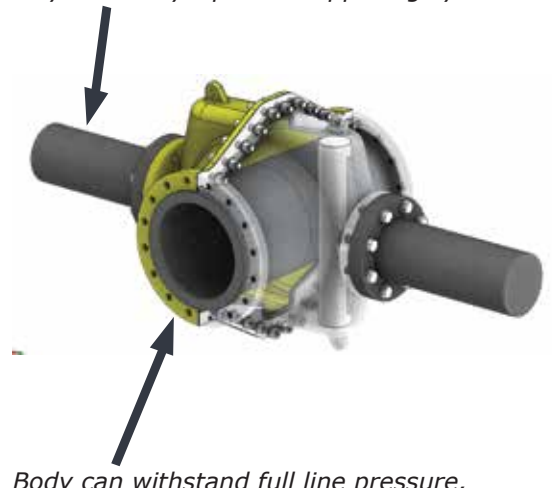
Pneumatically Operated (Actuator)
designed to be removed without
disassembling the valve body



Sleeve protected from UV

Spillage directed downwards

Hydraulically Operated opposing cylinders



Body can withstand full line pressure, designed to PER standards

Typical Applications



Mine Tailing



Mine Slurries



Mine Corrosives



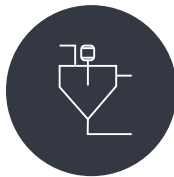
Mine Acids



Pump Isolation



Cyclone Isolation



Thickener & Clarifier



Fertilizer Manufacture



Sewage Treatment



Paper & Pulps



Cement & Powders



Ash Handling



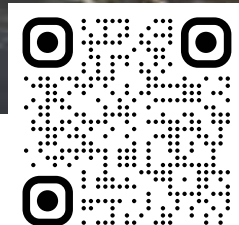
Coal Transfer



Dust and Scrubbers

Hi-Lift / Easy Change Pinch Valve

This in-line sleeve replacement system reduces the time and manpower required to replace a worn Red Roc sleeve. The sleeve can be replaced in minutes rather than hours with no rigging and lifting equipment required. The high-lift has been patented (#2016/02098).

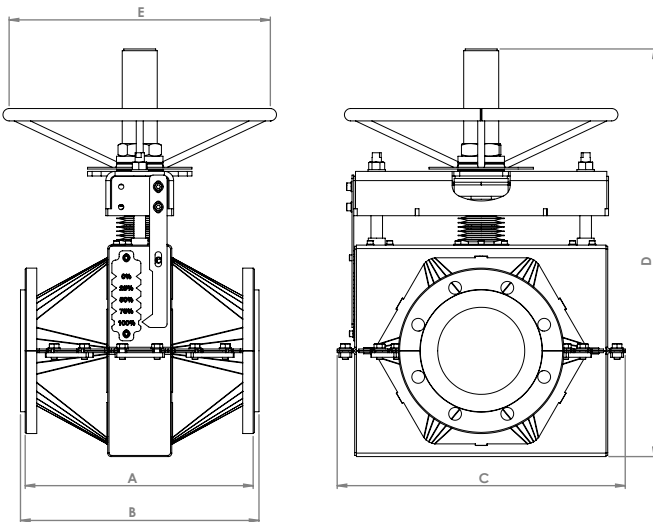


See the article in *Instrumentation and Control* at:
www.instrumentation.co.za/58950n

Technical Specification

| Available Flanges | | | |
|---------------------------|-----------|--|--|
| Spec | Pressure | Spec | Pressure |
| BS 4504/SANS 1123 1000/3 | 10 bar | DIN PN 10 | 10 bar |
| BS 4504/SANS 1123 1000/16 | 16 bar | DIN PN 16 | 16 bar |
| BS 4504/SANS 1123 1000/25 | 25 bar | DIN PN 25 | 25 bar |
| BS 10 TABLE D | 6.89 bar | ANSI/ASME B16.1 #125 (grey cast iron, fits to B16.5 #150) | (<38°C) 1-12": 13.8 bar 14-24": 10.3 bar |
| BS 10 TABLE E | 13.78 bar | ANSI/ASME B16.5 #150 (steel) | 17.2 bar |

| Material of Construction | | | |
|--------------------------|--|----------|---|
| Part | Material Options | Part | Material Options |
| Body | Stainless Steel 316 or Phenoline Painted S355JR steel | Actuator | ECoated endplates and StSt 304 cover or all 316 Stainless Steel. |
| Pedestal | Stainless Steel 316 or Phenoline Painted S355JR steel | Sleeve | Reinforced Rubber Optional Red gum or polyurethane wear liner |



**Higher pressures and
larger sizes available
on request**

| Dimension Table | | | | | | | | |
|-----------------|----|--------------|---------------|--------------|---------------|-----------------|-----------|--------|
| Size | | Face-to-Face | | | | | Clearance | Weight |
| mm | in | A (frame) | B (sleeve) | C (width) | D (height) | E (H/W) | | |
| 150 | 6 | 395 | 411 | 430 | 653 | 450 | 300 | 95 |
| 200 | 8 | 500 | 530 | 510 | 770 | 450 | 400 | 119 |
| 250 | 10 | 615 | 645 | 610 | 1043 | 600 | 450 | 181 |
| 300 | 12 | 730 | 760 | 780 | 1309 | 701 | 550 | 259 |
| 350 | 14 | 950 | 990 | 930 | 1670 | 900 | 680 | 438 |
| 400 | 16 | 1160 | 1200 | 1030 | 1915 | GB [‡] | 800 | 578 |
| 450 | 18 | 1310 | 1350 | 1090 | 2015 | GB [‡] | 900 | 624 |
| 500 | 20 | 1460 | 1500 | 1180 | 2135 | GB [‡] | 900 | 656 |

‡Gearbox