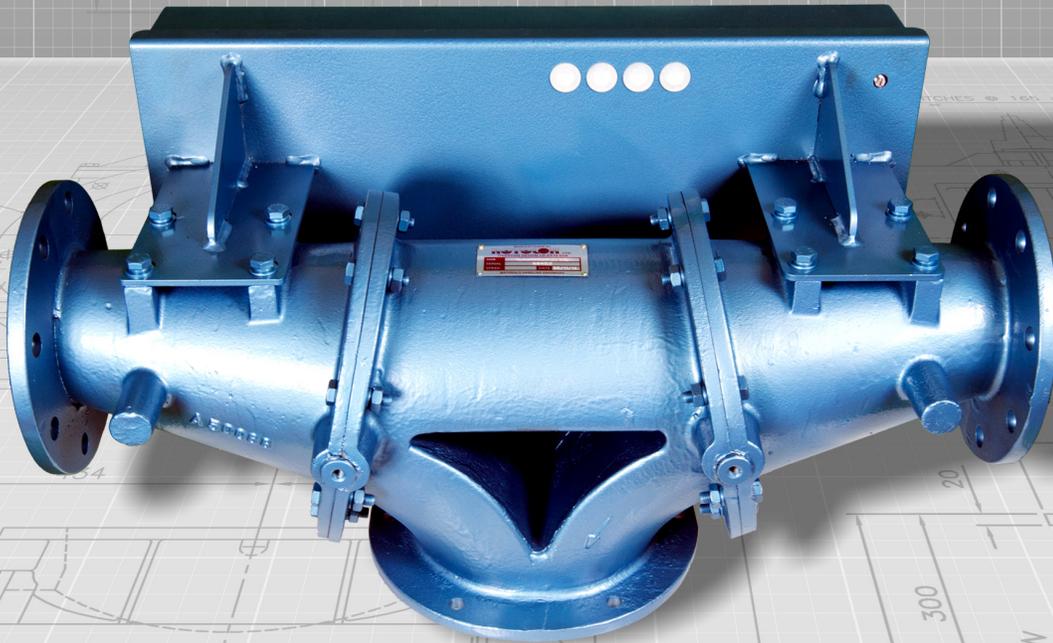


ROTOLOK

everything under control...



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WEIGH VALVES

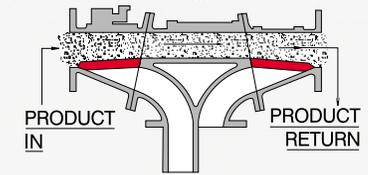
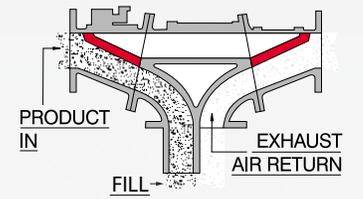


INTRODUCTION

The Weigh Valve is a natural development from the Rotolok series of Pneumatic Conveying Diverter Valves. It is primarily used in small bulk handling systems whereby a product is pneumatically conveyed to a hopper or bulk bin which is process weighed.

Initially the valve is positioned as Fig 1, showing the product being discharged into a bin whilst the air is exhausted. On the correct weight being designated the valve changes position by means of the single cylinder to the position as per Fig 2.

In this case the correct weight has been established and the product is then either sent to alternative weigh stations or conveyed back to its holding hopper. The valve has the same important design feature of the well established pneumatic Conveying Diverter.



THE WEIGH VALVE

The Rotolok Weigh Valve consists of a robust body manufactured in three sections split at flanges giving direct access to the internal sealing flap.

By the special design cone transition, the sealing areas within the cones form a complete parabola and therefore an efficient internal seal can be maintained without resorting to ledges, increasing the conveying line pressure, the rubber wiper seals more effectively.

Internals are clean with no lodgement points and the transitional effects are gradual limiting turbulence and, therefore, pressure drop.

Choice of materials can cater for the majority of applications and by plating the body and internal components, semi abrasive products can be handled.

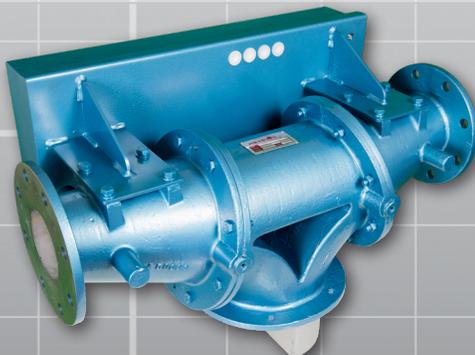
Further demands of industry have led to the manufacture of two types of connections: flanged and spigotted.

FLANGED CONNECTIONS

Simple and robust, bolt on flanged ends drilled to match various international standards for bolted joints

SPIGOTTED CONNECTIONS

The spigotted ends are connected to pipework with 'Blo-line' type couplings, facilitating quick access in case of blockages. It also gives flexibility in pipe length accuracies and misalignment variation. Furthermore, the Rotolok spigotted ends are not of cast fixed length, but bolted on and fabricated of variable length. This enables the ends to be supplied to fit exactly to existing pipework.



SPECIFICATION

BODIES

Cast Iron, Cast Aluminum or Stainless Steel

FLAP VALVES AND SPINDLES

Mild or Stainless Steel

WIPER SEALS

Polyurethane or food quality rubber.

SHAFT SEAL

Rubber 'O' ring

ACTUATION

Air Cylinder complete with five-port two-way single solenoid spring

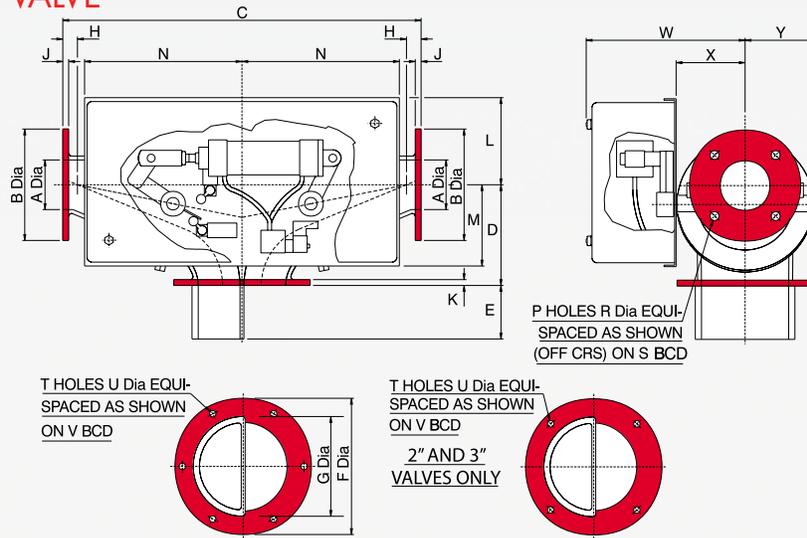
LIMIT SWITCHES

Positioned and actuated to indicate valve condition

IMPORTANT FEATURES

- Compact design
- Small divert angle
- Low pressure drop - minimal transition effect
- Smooth internals - no lodgement points
- Wide selection of materials
- High sealing efficiencies - with line pressure increasing effectiveness
- Dust tight enclosures to 20p.s.i.
- Simple access and maintenance
- One cylinder direct action operation.

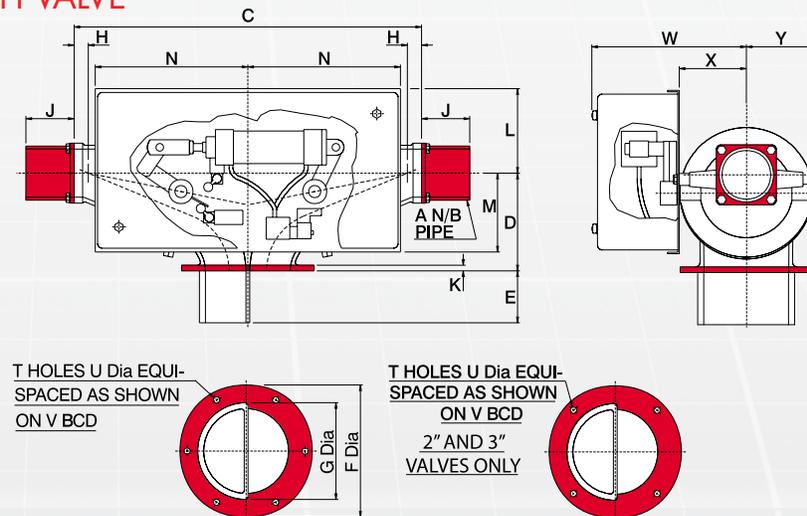
FLANGED WEIGH VALVE



| SIZE | ØA | ØB | C | D | E | ØF | ØG | H | J | K | L | M | N | P | R | S | T | U | V | W | X | Y |
|------|--------|---------|---------|---------|--------|---------|---------|--------|------|------|---------|--------|---------|---|------|---------|----|--------|---------|---------|--------|--------|
| 2" | 2" | 6" | 16 7/8" | 5 5/8" | 3 1/2" | 7" | 4 3/8" | 3/4" | 3/8" | 3/8" | 9 3/4" | 5 1/2" | 7 3/4" | 4 | 3/4" | 4 3/4" | 4 | 1/2" | 5 3/4" | 7 5/8" | 3 5/8" | 3 1/2" |
| 3" | 3" | 7 1/2" | 21 5/8" | 6 3/4" | 4" | 8 5/8" | 6 5/16" | 3/4" | 1/2" | 1/2" | 10 7/8" | 6 1/8" | 9 7/8" | 4 | 3/4" | 6" | 6 | 1/2" | 7 1/2" | 8 3/8" | 4 3/8" | 4 3/8" |
| 4" | 4" | 9" | 29" | 8 1/8" | 4 3/8" | 11" | 8 1/2" | 1 1/8" | 1/2" | 1/2" | 7" | 6 5/8" | 12 3/4" | 8 | 3/4" | 7 1/2" | 6 | 1/2" | 9 7/8" | 10 5/8" | 5 5/8" | 5 3/4" |
| 5" | 5" | 10" | 34 1/2" | 9 7/8" | 4 3/4" | 12 5/8" | 9 5/16" | 1 1/8" | 1/2" | 3/8" | 7 7/8" | 7" | 13 3/4" | 8 | 7/8" | 8 1/2" | 8 | 1/2" | 11 3/8" | 12 1/2" | 6 3/8" | 6 3/8" |
| 6" | 6 1/4" | 11" | 38" | 11 3/8" | 5 7/8" | 14 1/8" | 11 3/8" | 1 3/8" | 5/8" | 5/8" | 8 1/2" | 7 5/8" | 16 3/4" | 8 | 7/8" | 9 1/2" | 8 | 11/16" | 12 3/4" | 13 3/4" | 7 1/8" | 7 1/8" |
| 8" | 8" | 13 1/2" | 49 3/4" | 15" | 5 1/2" | 17" | 13 7/8" | 1 3/8" | 5/8" | 5/8" | 8" | 8 1/4" | 18 3/4" | 8 | 7/8" | 11 3/4" | 12 | 11/16" | 15 1/2" | 16 3/8" | 8 3/4" | 8 3/4" |

All dimensions are in inches

SPIGOTTED WEIGH VALVE



| SIZE | ØA | C | D | E | ØF | ØG | H | J | K | L | M | N | T | U | V | W | X | Y |
|------|----|---------|---------|--------|---------|---------|--------|----|------|---------|--------|---------|---|--------|---------|---------|--------|--------|
| 2" | 2" | 16 7/8" | 5 5/8" | 3 1/2" | 7" | 4 3/8" | 3/4" | 4" | 3/8" | 9 3/4" | 5 1/2" | 7 3/4" | 4 | 1/2" | 5 3/4" | 7 5/8" | 3 5/8" | 3 1/2" |
| 3" | 3" | 21 5/8" | 6 3/4" | 4" | 8 5/8" | 6 5/16" | 3/4" | 4" | 1/2" | 10 7/8" | 6 1/8" | 9 7/8" | 6 | 1/2" | 7 1/2" | 8 3/8" | 4 3/8" | 4 3/8" |
| 4" | 4" | 29" | 8 1/8" | 4 3/8" | 11" | 8 1/2" | 1 1/8" | 4" | 1/2" | 7 1/2" | 6 5/8" | 12 3/4" | 6 | 1/2" | 9 7/8" | 10 5/8" | 5 5/8" | 5 3/4" |
| 5" | 5" | 34 1/2" | 9 7/8" | 4 3/4" | 12 5/8" | 9 5/16" | 1 1/8" | 4" | 3/8" | 6 3/4" | 7 7/8" | 13 3/4" | 8 | 1/2" | 11 3/8" | 12 1/2" | 6 3/8" | 6 3/8" |
| 6" | 6" | 38" | 11 3/8" | 5 7/8" | 14 1/8" | 11 3/8" | 1 3/8" | 4" | 5/8" | 8 1/2" | 7 5/8" | 16 3/4" | 8 | 11/16" | 12 3/4" | 13 3/8" | 7 1/8" | 7" |

Dimensions are approximate and subject to change without notice
 Planning-in detail for general guidance only
 (To cover safety aspects ask for our safety leaflets)
 Drillings are Rotolok standards. Variations can be made.



OTHER ROTOLOK PRODUCTS

As well as the Weigh Valves, Rotolok manufacture and supply a range of other products in Cast Iron for use in conveying systems.

These include, but are not limited to: Slide gates with Manual, Pneumatic or Motorized operation, Rotary Valves; Dust Collector Valves; Roundhead Valve; Blowing Seals and various Diverter Valves.

For more information, please visit our website or contact our sales team.

A Standard Rotary Valve that can be made to suit most applications with a variety of construction materials and rotors



A Cast Iron conveying diverter valve. Available with flanged or spigotted connections to fit existing conveying systems

A typical Blowing Seal with a square inlet used in pneumatic conveying systems.



A Standard Plug Diverter Valve. The valve has a rugged cast iron body and is suitable for abrasive or high pressure applications

