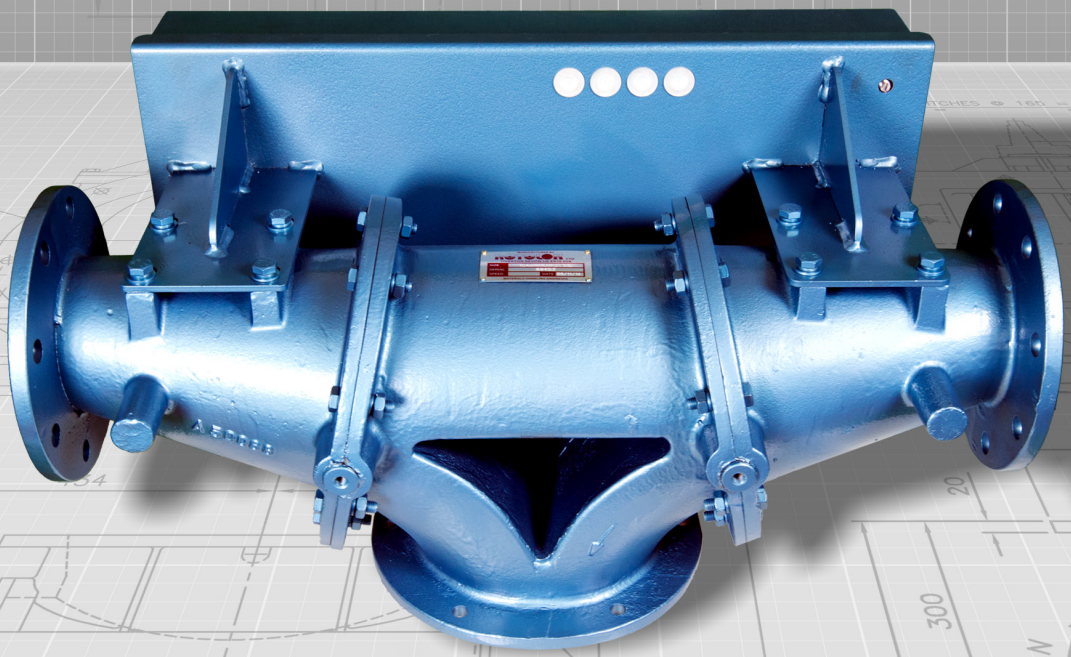
ROTOLOK

everything under control...

# WEIGH VALVES



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
everything under control...

## 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.

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

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.

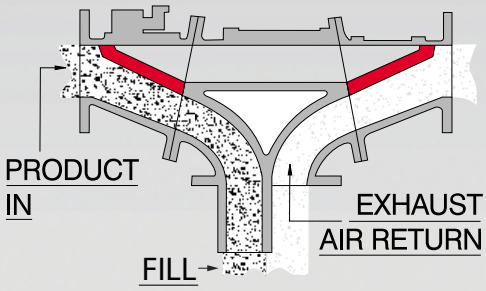



Fig 1

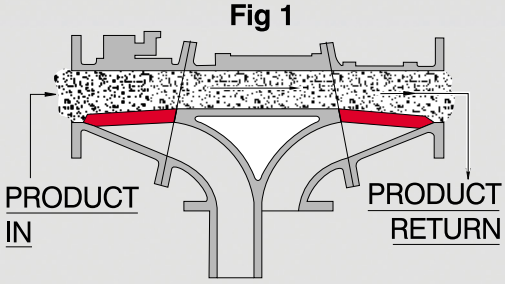



Fig 2

## SPECIFICATION

BODIES
Cast Iron, Cast Aluminium or Stainless Steel

FLAP VALVES AND SPINDLES
Mild Steel or Stainless

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

## STANDARD FEATURES

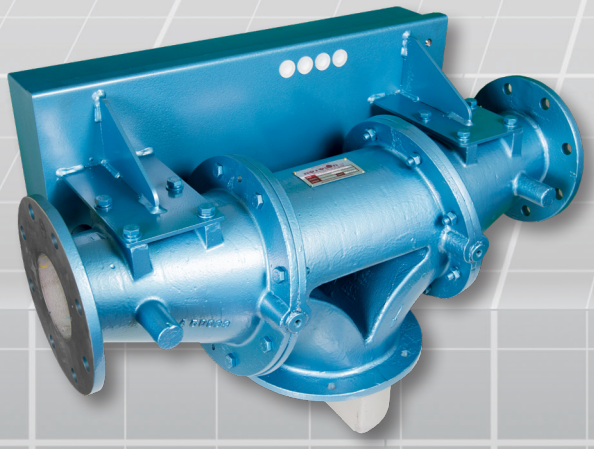
- Compact design
- Small divert angle
- Low pressure drop - minimal transition effect
- Smooth internals - no lodgement points
- Wide selection of materials
- High sealing efficiencies - with line pressure increasing effectiveness
- Dust tight enclosures to 20p.s.i.
- Simple access and maintenance
-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

## FLANGED 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.

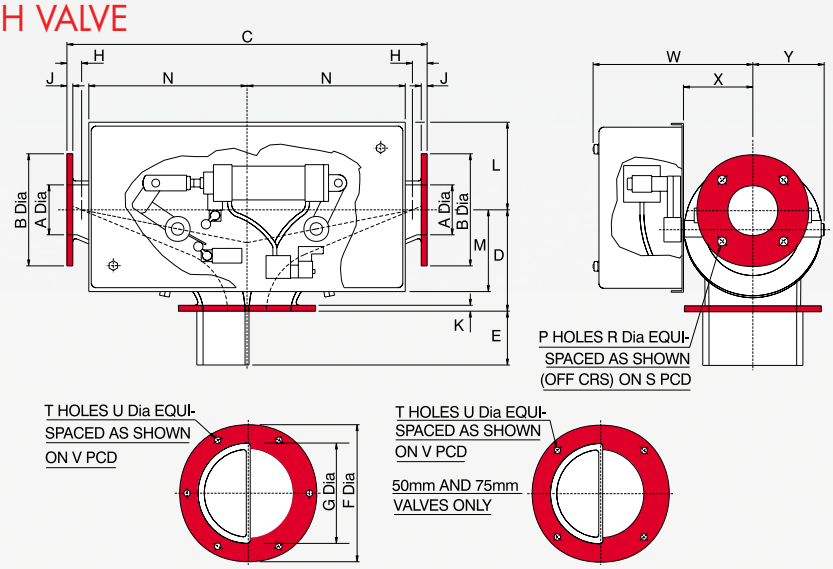


Dimensions are approximate and subject to change without notice
Planning-in detail for general guidance only
(To cover safety aspects ask for our safety leaflets)
Drillings are Rotolok standards. Variations can be made.

www.ROTOLOK.co.uk

ROTOLOK
everything under control...

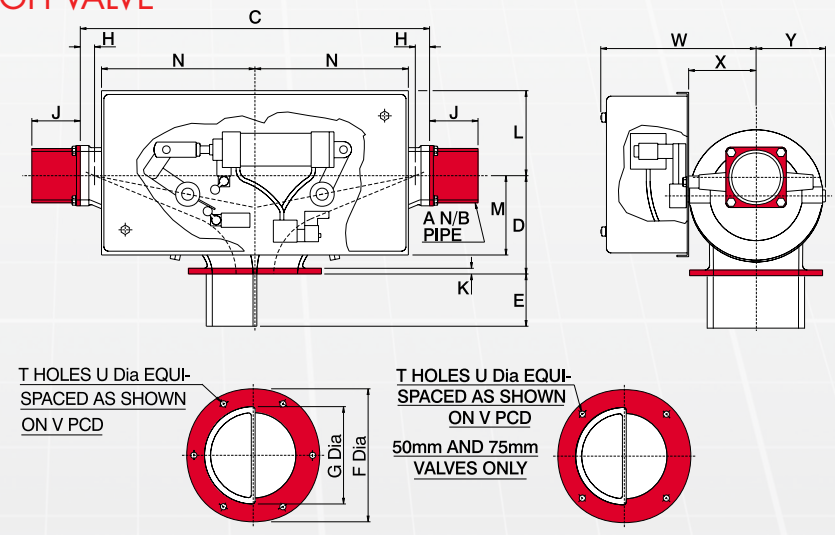
## FLANGED WEIGH VALVE




All dimensions are in millimetres

| SIZE | ØA | ØB | C | D | E | ØF | ØG | H | J | K | L | M | N | P | R | S | T | U | V | W | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 50 | 152 | 428 | 143 | 90 | 180 | 110 | 20 | 10 | 10 | 245 | 141 | 196 | 4 | 18 | 114 | 4 | 13 | 145 | 193 | 91 | 90 |
| 75 | 76 | 191 | 550 | 172 | 100 | 220 | 160 | 20 | 12 | 12 | 276 | 155 | 250 | 4 | 18 | 146 | 6 | 13 | 190 | 214 | 112 | 110 |
| 100 | 102 | 229 | 736 | 207 | 110 | 280 | 215 | 30 | 12 | 12 | 179 | 167 | 323 | 4 | 18 | 178 | 6 | 13 | 250 | 270 | 142 | 146 |
| 125 | 127 | 254 | 876 | 251 | 120 | 320 | 237 | 30 | 14 | 10 | 199 | 177 | 348 | 8 | 18 | 210 | 8 | 12 | 290 | 317 | 162 | 160 |
| 150 | 160 | 280 | 964 | 290 | 150 | 360 | 290 | 35 | 16 | 16 | 216 | 196 | 423 | 8 | 18 | 235 | 8 | 18 | 324 | 339 | 182 | 180 |
| 200 | 204 | 343 | 1263 | 380 | 140 | 430 | 350 | 35 | 16 | 16 | 202 | 210 | 477 | 8 | 18 | 292 | 12 | 18 | 394 | 417 | 222 | 223 |

## SPIGOTTED WEIGH VALVE




All dimensions are in millimetres

| SIZE | ØA | C | D | E | ØF | ØG | H | J | K | L | M | N | T | U | V | W | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 2″ | 428 | 143 | 90 | 180 | 110 | 20 | 102 | 10 | 245 | 141 | 196 | 4 | 13 | 145 | 193 | 91 | 90 |
| 75 | 3″ | 550 | 172 | 100 | 220 | 160 | 20 | 102 | 12 | 276 | 155 | 250 | 6 | 13 | 190 | 214 | 112 | 110 |
| 100 | 4″ | 736 | 207 | 110 | 280 | 215 | 30 | 102 | 12 | 179 | 167 | 323 | 6 | 13 | 250 | 270 | 142 | 146 |
| 125 | 5″ | 876 | 251 | 120 | 320 | 237 | 30 | 102 | 10 | 199 | 177 | 348 | 8 | 13 | 290 | 317 | 162 | 160 |
| 150 | 6″ | 964 | 290 | 150 | 360 | 290 | 35 | 102 | 16 | 216 | 196 | 423 | 8 | 18 | 324 | 339 | 182 | 180 |

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.

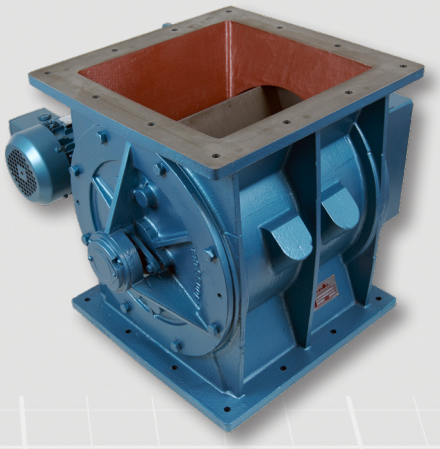
ROTOLOK
everything under control...

## 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: Blo-line pipe coupling; Slide Gates with Pneumatic, Motorised or Manual operation; Rotary Valve; Dust Collector Valve; 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

www.ROTOLOK.co.uk