MATERIALS HANDLING



RS SERIES

CORROSION RESISTANT ROTARY VALVES

OPENING SIZE 150 / 200 / 250 / 300

DRIVE TYPE

- *DIRECT DRIVE : D
- CHAIN DRIVE : C BARE SHAFT : B INLINE DRIVE : E

ROTOR SPEED

ROTOR TYPE

- *OPEN ROTOR CASTING : 0
- CLOSED ROTOR FABRICATED : M
- SCALLOPED ROTOR FABRICATED : Q REDUCED POCKET OPEN ROTOR FABRICATED : R
- REDUCED POCKET OPEN ROTOR FABRICATED : R

PURGE SEALING

- *GREASE PURGE : G GAS PURGE : A

ROTOR TIPS

- *NONE : -
 - WEAR TIPS : F
 - VEAR TIPS : W

UNDERSPEED SENSORS

- PROXIMITY SENSOR : P
- PROXIMITY SENSOR : P
- P S

*DEFAULT



RS 200

14

BASIC DESIGNATION

М

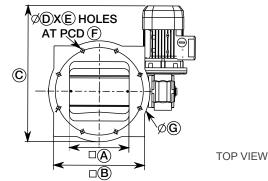
G

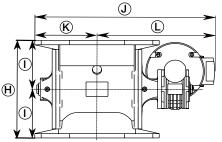
F

EXTENDED DESIGNATION

D

DIRECT DRIVE (D) > DIMENSIONS







FRONT VIEW

| LEGENDS | RS 150 | RS 200 | RS 250 | RS 300 | |
|--------------|--------|--------|--------|--------|--|
| А | 150 | 200 | 250 | 300 | |
| В | 250 | 305 | 360 | 400 | |
| C# | 430 OA | 460 OA | 540 OA | 575 OA | |
| D | 13 | 13 | 13 | 17.5 | |
| E | 8 | 8 | 12 | 12 | |
| F | 240 | 295 | 350 | 400 | |
| G | 280 | 340 | 406 | 455 | |
| Н | 210 OA | 270 OA | 330 OA | 400 OA | |
| I | 105 | 135 | 165 | 200 | |
| J# | 445 OA | 495 OA | 580 OA | 635 OA | |
| К | 140 | 170 | 203 | 227.5 | |
| L# | 305 | 325 | 377 | 407.5 | |
| NET WEIGHT | 28 | 48 | 65 | 93 | |
| GROSS WEIGHT | 33 | 57 | 90 | 118 | |

ALL DIMENSIONS IN MM, WEIGHT IN KGS.

APPROXIMATE DIMENSION ONLY. VARIES WITH MOTOR SIZE AND GEARBOX VARIATION.

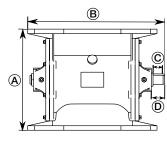
CHAIN DRIVE (C) > DIMENSIONS

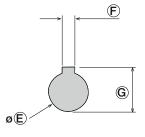
| LEGENDS | RS 150 | RS 200 | RS 250 | RS 300 |
|--------------|--------|--------|--------|--------|
| А | 150 | 200 | 250 | 300 |
| В | 250 | 305 | 360 | 400 |
| C# | 400 OA | 424 OA | 460 OA | 500 OA |
| D | 13 | 13 | 13 | 17.5 |
| E | 8 | 8 | 12 | 12 |
| F | 240 | 295 | 350 | 400 |
| G | 280 | 340 | 406 | 455 |
| Н | 210 OA | 270 OA | 330 OA | 400 OA |
| I | 105 | 135 | 165 | 200 |
| J# | 425 OA | 505 OA | 565 OA | 635 OA |
| К | 140 | 170 | 203 | 227.5 |
| L# | 285 | 335 | 362 | 402.5 |
| NET WEIGHT | 29 | 48 | 65 | 93 |
| GROSS WEIGHT | 33 | 57 | 90 | 118 |

ALL DIMENSIONS IN MM. WEIGHT IN KGS.

APPROXIMATE DIMENSION ONLY. VARIES WITH MOTOR SIZE AND GEARBOX VARIATION.

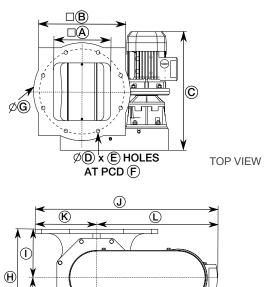
BARE SHAFT (B) > DIMENSIONS

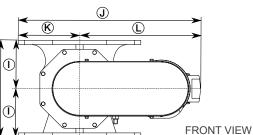




FRONT VIEW

BARE SHAFT VIEW





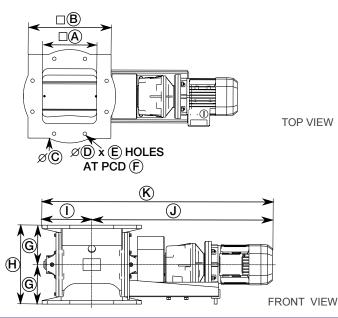
| | | | R |
|--------|---|---|--|
| RS 150 | RS 200 | RS 250 | RS 300 |
| 210 OA | 270 OA | 330 OA | 400 OA |
| 315 OA | 365 OA | 425 OA | 480 OA |
| 30 | 30 | 30 | 35 |
| 45 | 45 | 45 | 50 |
| 25 | 25 | 25 | 30 |
| 8 | 8 | 8 | 10 |
| 28 | 28 | 28 | 33 |
| 19 | 35 | 53 | 70 |
| 24 | 42 | 65 | 80 |
| | 210 OA 315 OA 30 45 25 8 28 28 19 | 210 OA 270 OA 315 OA 365 OA 30 30 45 45 25 25 8 8 28 28 19 35 | 210 OA 270 OA 330 OA 315 OA 365 OA 425 OA 30 30 30 45 45 45 25 25 25 8 8 8 28 28 28 19 35 53 |

ALL DIMENSIONS IN MM, WEIGHT IN KGS.

RS



INLINE DRIVE (E) > DIMENSIONS



| LEGENDS | RS 150 | RS 200 | RS 250 | RS 300 | |
|--------------|--------|-------------|--------|----------|--|
| А | 150 | 150 200 250 | | 300 | |
| В | 250 | 305 | 360 | 400 | |
| C# | 280 OA | 340 OA | 406 OA | 455 OA | |
| D | 13 | 13 | 13 | 17.5 | |
| E | 8 | 8 | 12 | 12 | |
| F | 240 | 295 | 350 | 400 | |
| G | 105 | 135 | 165 | 200 | |
| Н | 210 OA | 270 OA | 330 OA | 400 OA | |
| I | 140 | 170 | 203 | 227.5 | |
| J# | 590 | 618 | 667 | 772.5 OA | |
| К | 730 OA | 785 OA | 870 OA | 1000 OA | |
| NET WEIGHT | 29 | 75 | 117 | 160 | |
| GROSS WEIGHT | 35 | 90 | 125 | 175 | |

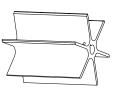
ALL DIMENSIONS IN MM, WEIGHT IN KGS.

APPROXIMATE DIMENSION ONLY. VARIES WITH MOTOR SIZE AND GEARBOX VARIATION

ROTORS & TIPS

The standard RS Series rotor is open-end style, the most common rotor assembly design. Open rotors refers to the open pocket at each end of the rotor. Default design comes with 6 vanes. Rotor is perfectly designed and manufactured to have a close radial and axial clearance of 0.20 mm (max.). Adjustable rubber tipped rotors may be used where required. The rubber tip is reversable so it can be turned over for a new surface.

Also available in Closed rotor, Scalloped rotor, Reduced pocket open rortor of fabricated types.



Closed Rotor Fabricated

Reduced Pocket Open Rotor Fabricated Scalloped Rotor Fabricated

SHAFT SEALING

Open Rotor Casted



LABYRINTH SEALING

We are using Labyrinth Seal, which is a mechanical seal that fits around the axle or shaft to prevent the leakage of any particles.Generally, Labyrinth Seal is composed of many threads or grooves that are tightly fit inside the casing, thus making difficult for the dust to pass through a long and difficult path.

Labyrinth Seals on rotating shafts provide non contact sealing action by controlling the passage of particles through a variety of chambers by centrifugal motion, as well as by the formation of controlled material vortices.

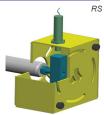
'Double Labyrinth Seals' are filled with flock pads, and greased on each side of the valve. These are standard with all RS Series valves.

Grease Purge - For extreme duty, valves can be fitted with a grease purge unit over the labyrinth seal. By creating a grease filled cavity between the seals, it prevents the escape of any dust particles or gases.

Gas Purge - When grease cannot be used, air or other gases can be used to purge the seal so all dust particles or product gases are flushed back into the product stream.

PROXIMITY SENSORS

Underspeed sensors can be supplied and fitted to rotary valves. These are mounted on a specifically designed bracket that is bolted onto the bearing.

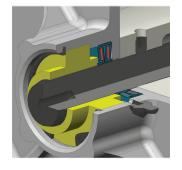


ARRANGEMENT

RS

RS

RS



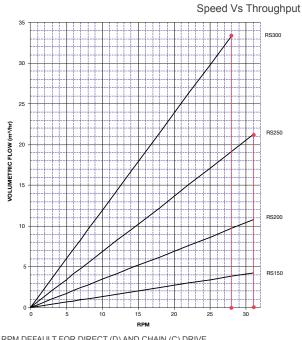
TYPICAL PURGE SEALING

Typical Tipped Rotor Blade

RS

RS

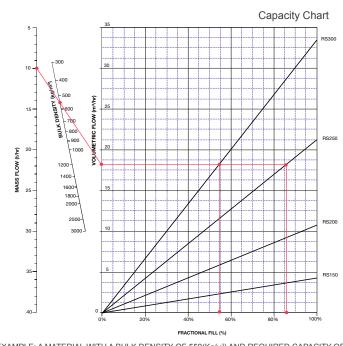
MODEL SELECTION CHART



14 RPM DEFAULT FOR DIRECT (D) AND CHAIN (C) DRIVE
20 RPM DEFAULT FOR INLINE DRIVE

RPM NOT REQUIRED FOR BARE SHAFT

NOTE: THIS CHART IS PREPARED FOR THE GUIDANCE PURPOSE ONLY, CONSIDERING 100% FILLING CAPACITY.



EXAMPLE: A MATERIAL WITH A BULK DENSITY OF 550(KG/M³) AND REQUIRED CAPACITY OF 10(T/HR) CAN BE ACHIEVED BY RS250 AT 86% FILLING CAPACITY WITH 31 RPM AND ALSO BY RS300 AT 54% FILLING CAPACITY WITH 28 RPM.

NOTE: THIS CHART IS PREPARED FOR THE GUIDANCE PURPOSE ONLY, CONSIDERING 100% FILLING CAPACITY.

CONSTRUCTION / TECHNICAL SPECIFICATIONS

| BODY | : | Stainless Steel | BEARINGS | : | Cartridge Type |
|-------------|---|---|---|---|----------------------------------|
| ROTOR | : | Stainless Steel | SHAFT | : | Stainless Steel |
| SIDE PLATES | : | Stainless Steel | OPENING SIZES | : | 150 / 200 / 250 / 300 mm |
| GEARBOX | : | Heliworm or Worm(D) / Helical Gears (C & I) | TEMPERATURE | : | Build to eminent temperature |
| SEALS | : | Labyrinth Seals | DIFFERENTIAL PRESSURE | : | Can handle higher pressure |
| DRIVE TYPE | : | Direct / Chain / Inline / Bare shaft | CAPACITY RANGE | : | Upto 33 m ³ /hr Max. |
| ROTOR TYPE | : | Open rotor casting (O) / Closed rotor fabricated (M) / Scalloped rotor fabricated (Q | SURFACE TREATMENT) (ANVAL STANDARD) | : | Y14 Golden Yellow for guards |
| ROTOR TIPS | : | / Reduced pocket open rotor fabricated (R) Flexible Tips (F) / Wear Tips (W) | SPECIAL SEALS | : | Grease Purge (G) / Gas Purge (A) |
| | | | SENSOR | : | Proximity Sensor (P) |

NOTE: SPECIAL CONSTRUCTIONS ARE AVAILABLE FOR HIGHER DIFFERENTIAL PRESSURE AND TEMPERATURE. FOR PHARMA, CHEMICAL AND FOOD, SUITABLE PURGING ARRANGEMENTS CAN BE DONE.