PROCOL

MONITORING AND DIRECTIONAL CONTROL OF SOLIDS

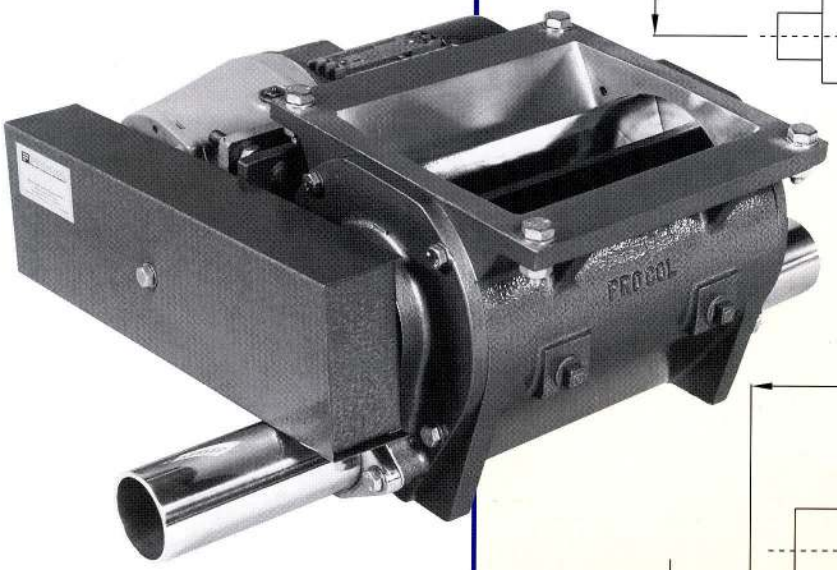
ROTARY VALVES

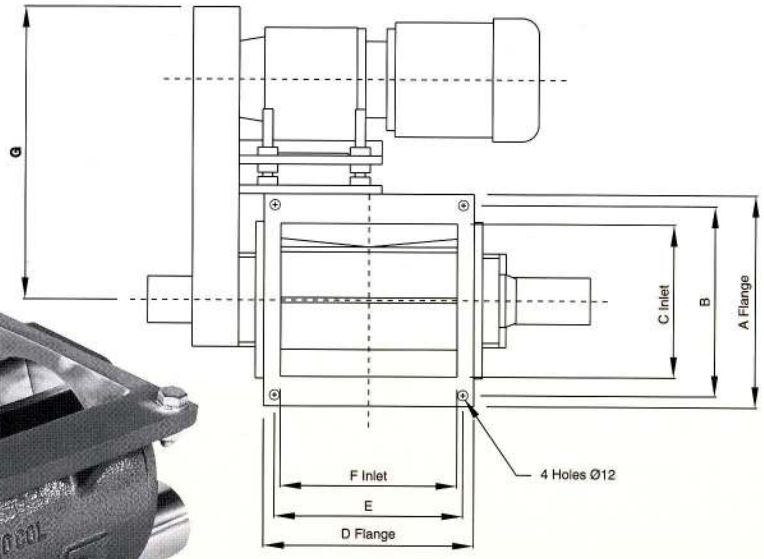
COMPACT BLOWING SEALS

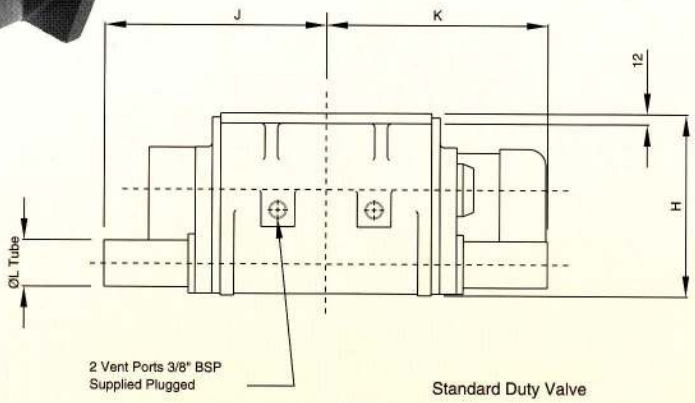
HEAVY DUTY BLOWING SEALS

THE **DOWSON** GROUP

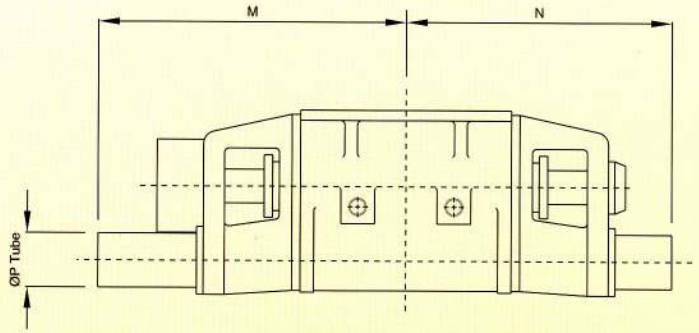
PROCOL







Standard Duty Valve



Heavy Duty Valve

Remaining Details As Standard Duty Valves

COMPACT BLOWING SEALS

STANDARD SPECIFICATION

BODY
Fabricated Mild Steel, 304 or 316 Stainless Steel.

ENDPLATES
Fabricated Mild Steel, 304 or 316 Stainless Steel.

ROTOR
6 Blade Fabricated Mild Steel, 304 or 316 Stainless Steel. Fitted with flexible blades

BEARINGS
Self aligning sealed deep groove ball bearings.

DRIVE
Direct coupled worm geared motor. TEFC IP55 suitable for AC 415-3-50 supply.

Valve Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Drive Kw	Weight Kg
150	250	224	180	250	224	210	375	215	305	255	53	365	315	64	0.37	50
180	300	270	230	320	270	280	400	270	340	290	53	400	350	76	0.37	60

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VALVE SELECTION

Various factors affect the actual feed rate of Rotary Valves and Blowing Seals. These factors include but are not limited to:

- Flow characteristics of the material.
- Bulk density of the material.
- Pressure differential across the valve.
- Design of ancillary equipment.
- Air leakage through the valve.

Whilst the following formula may be used to determine the valve size for a particular application the selection should be confirmed by our technical department.

The valve capacity based on 100% rotor fill may be obtained from the capacity chart below.

$$\text{Valve Speed} = \frac{\text{Required Feed Rate (Kg/hr)}}{\text{Loose Bulk Density of Product (Kg/m}^3\text{)} \times \text{Valve Capacity (m}^3\text{/hr/rpm)} \times \text{Filling Efficiency}}$$

VALVE CAPACITY CHART

Rotary Valve	Capacity m^3/hr/rpm	Capacity ft^3/hr/rpm	Blowing Seal	Capacity m^3/hr/rpm	Capacity ft^3/hr/rpm
125	0.076	2.40	0.1	0.170	6.00
150	0.137	4.80	0.2	0.339	12.00
200	0.360	12.72	200	0.360	12.30
250	0.713	25.20	240	0.481	16.98
300	1.224	43.20	280	0.921	32.52
350	1.974	69.60	360	1.869	66.00
400	2.880	102.00	450	3.398	120.00
500	5.940	210.00			
600	9.840	347.00			