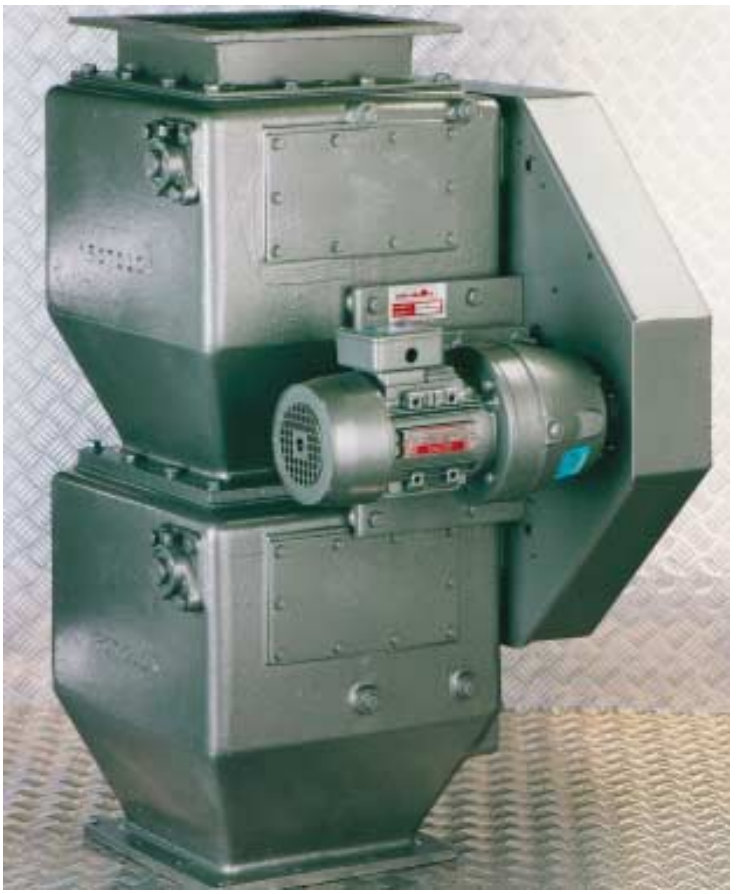
DOUBLE DUMPS



ROTOLOK

everything under control...

• DOUBLE DUMPS •

INTRODUCTION

Suitable for discharging dry dust, powder, granules and fibrous materials from cyclones, filters, hoppers etc., whilst maintaining an effective gas seal.

The valve consists of two flaps connected by counterweights or spring loaded spindles, which are operated by means of a motor driven cam. The cam alternately opens each flap allowing material to pass through the separate chambers in batch form and thereby ensuring a gas seal.

After cam release, the counterweights (or springs), return each flap to the horizontal (sealed) position and are designed and sized so that a clapping action at the flaps is obtained, aiding material flow and preventing build up at the seal plate.

The unit is suitable for pressure differentials of up to 500mm W.G. This can be increased with special features.

OPERATION

Units can be adapted for use on simple cyclone discharge systems. These are single flap counterweighted but non-motorized types. Product builds up on the flap until a sufficient head overcomes the counterweight. Discharge then commences and continues whilst material head exceeds counterweight and vacuum effects. Seal is partially maintained by product during discharge.

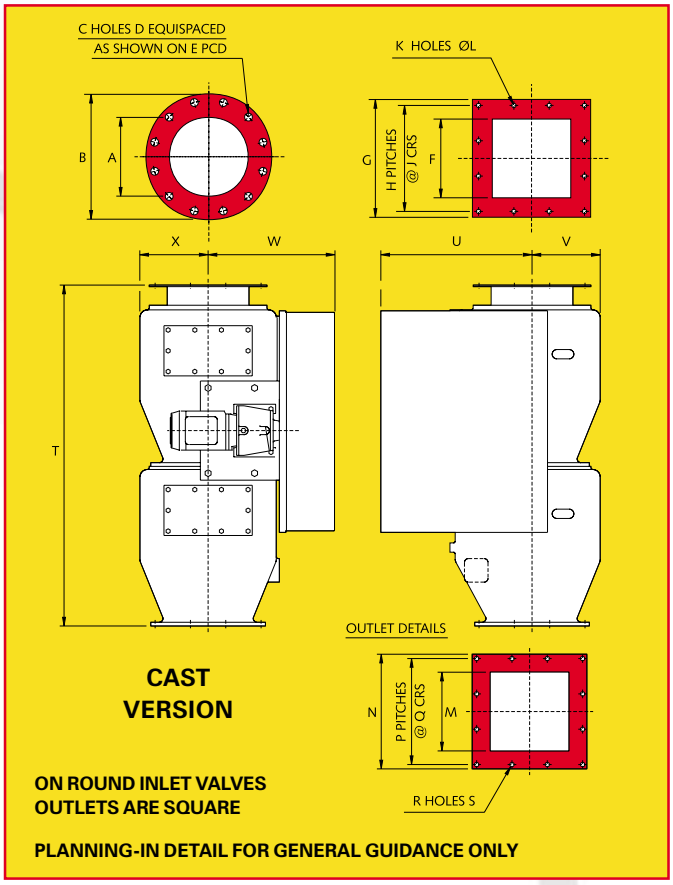
CAST DOUBLE DUMP

FABRICATED DOUBLE DUMP

RANGE

Sizes available: 150, 200, 250 and 300mm as standard with square or round inlets. Larger sizes can be accommodated.
Rotolok makes a full range of fabricated types in mild steel and stainless steel, with specials up to a maximum of 750mm.

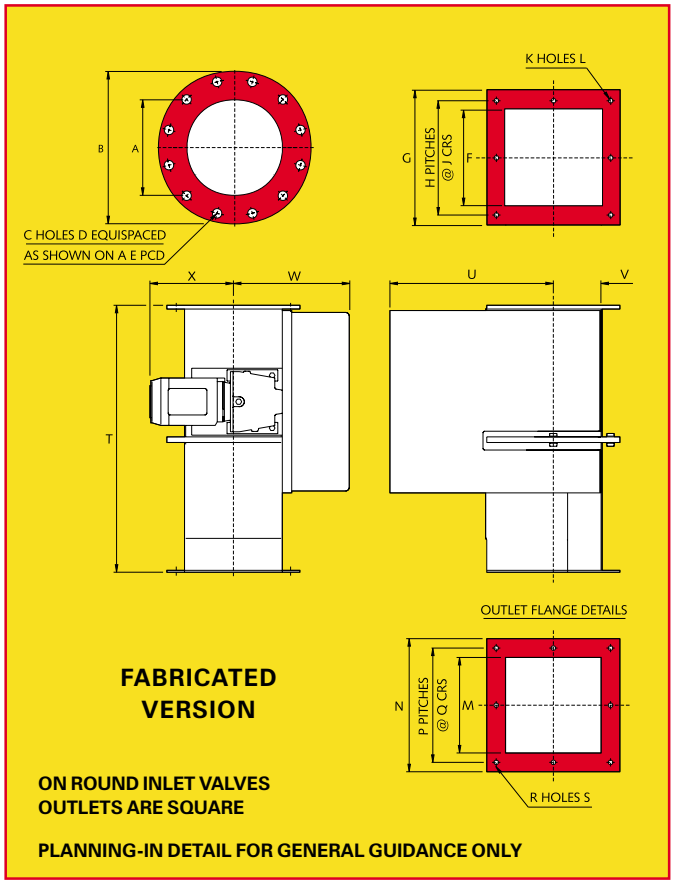
• DOUBLE DUMPS •



CAST VERSION

ON ROUND INLET VALVES OUTLETS ARE SQUARE

PLANNING-IN DETAIL FOR GENERAL GUIDANCE ONLY



FABRICATED VERSION

ON ROUND INLET VALVES OUTLETS ARE SQUARE

PLANNING-IN DETAIL FOR GENERAL GUIDANCE ONLY

CAST ROUND VERSION

	SIZE	A	B	C	D	E	M	N	P	Q	R	S	T	U	V	W	X
VALVE SIZE	150	152	280	8	22	241	200	320	3	97	12	15	755	405	170	375	221
	200	203	320	12	22	298	200	320	3	97	12	15	755	405	170	375	221
	250	254	406	12	22	362	254	370	3	114	12	14	1100	488	220	425	269
	300	305	483	12	25	432	254	370	3	114	12	14	1100	488	220	425	269

All dimensions in mm.

Dimensions subject to change without notice

CAST SQUARE VERSION

	SIZE	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
VALVE SIZE	150	150	254	2	108	8	14	200	320	3	97	12	15	755	405	170	375	221
	200	203	320	3	97	12	14	200	320	3	97	12	15	755	405	170	375	221
	250	254	380	3	114	12	14	254	370	3	114	12	14	1100	488	220	425	270
	300	305	440	3	128	12	14	254	370	3	114	12	14	1100	488	220	425	270

All dimensions in mm.

Dimensions subject to change without notice

FABRICATED ROUND VERSION

	SIZE	A	B	C	D	E	M	N	P	Q	R	S	T	U	V	W	X
VALVE SIZE	150	152	279	8	22	241	152	252	2	108	8	12	755	435	158	274	300
	200	203	303	8	22	298	203	303	2	127	8	12	755	409	172	298	246
	250	254	354	12	25	362	254	354	2	152	8	12	780	435	203	323	222
	300	305	483	12	25	432	305	405	3	119	12	14	780	460	101	350	206

All dimensions in mm.

Dimensions subject to change without notice

FABRICATED SQUARE VERSION

	SIZE	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
VALVE SIZE	150	152	252	2	108	7	12	152	252	2	108	8	12	710	435	158	274	300
	200	203	303	2	127	7	12	203	303	2	127	8	12	710	384	151	272	246
	250	254	354	2	152	7	12	254	354	2	152	8	12	710	435	127	323	240
	300	305	405	3	119	10	14	305	405	3	119	12	14	710	406	101	350	206
	350	356	456	4	102	13	14	356	458	4	102	16	14	1030	560	228	378	228

All dimensions in mm.

Dimensions subject to change without notice

Drillings are Rotolok standards. Variations can be made.

DOUBLE PLUG AIRLOCK

ROTOLOK

everything under control...

DOUBLE PLUG AIRLOCK

everything under control...

INTRODUCTION

The Double Plug Airlock (DDA) is a development of our popular Double Flap Valves, specifically designed for discharging 'problem' (abrasive, free flowing & flushing) materials, whilst maintaining higher-pressure differentials (up to 25 psig).

The Valve consists of two Plug Airlock Modules connected via a charge hopper. The upper airlock is opened for a duration to fill the charge hopper, and then closed. The lower airlock is then opened to empty the charge hopper, and then closed. This constitutes one cycle of the valve.

Each airlock is operated (via a PLC) to open & close in a pre-programmed sequence. Unlike cam operated systems, the open, close & dwell cycle is fully adjustable to suit product flow characteristics and maximise throughput efficiency. This represents a major advance in material delivery adjustment, control & metering. The modular construction and adjustable PLC control also provide a simple facility for increasing the volume of product handled per cycle. A suitably flanged spool piece can be fitted between the upper airlock and the charge hopper to suit a particular application.

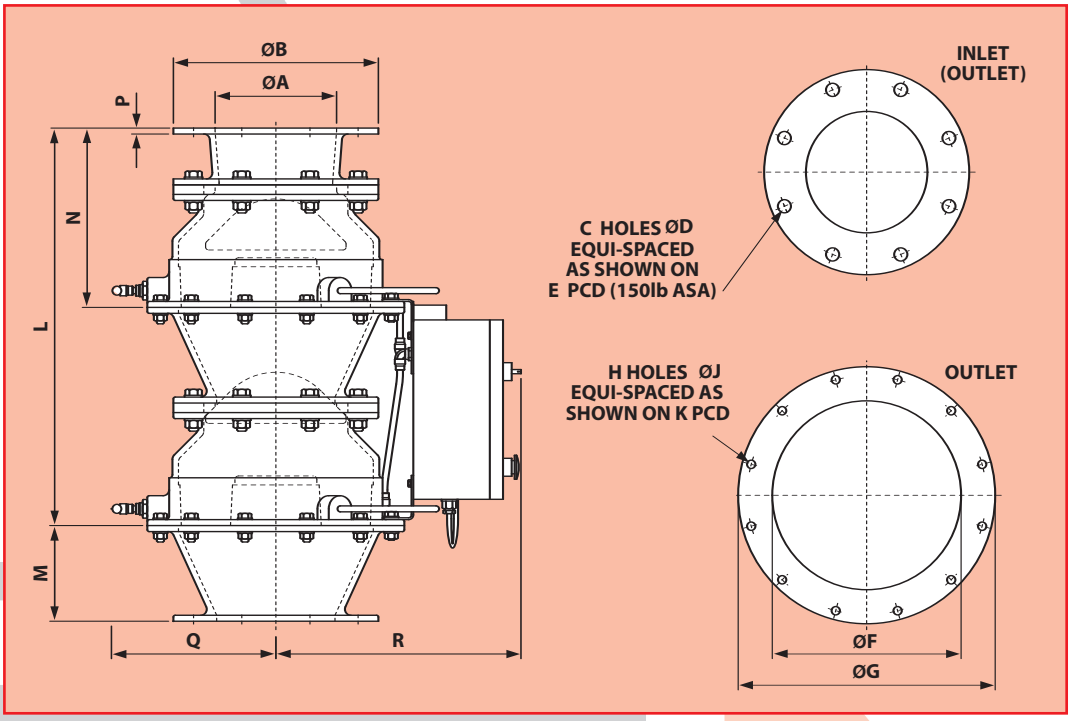
APPLICATIONS

Standard Temperature Range =10º to +80ºC (up to 150º C can be accommodated). Standard Units operate within pressure differentials up-to 25psig. Higher pressures can be achieved using a system that allows pressure to be equalised above & below the active plug airlock module before opening.

Single plug airlocks modules are available for use in flow control applications. With the use of an appropriate manifold, Airlock Valve Modules can be configured as conveying diverters & distribution nodes that can be operated under pressurised & full flow conditions.

KEY FEATURES

- **PROBLEM MATERIALS**
- **HIGH PRESSURE DIFFERENTIALS**
- **FULL CYCLE CONTROL & ADJUSTMENT**
- **CONDITION MONITORING OPTIONS**
- **SIMPLE SEAL SERVICING**
- **ROBUST CONSTRUCTION**



SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
150	154	279	8	19	241	316	430	12	14	400	630	195	265	10	275	410
200	203	343	8	22	298	316	430	12	14	400	665	160	300	10	275	410
250	254	406	12	25	362	450	564	18	14	534	906	194	404	15	341	477
300	305	483	12	25	432	450	564	18	14	534	906	194	404	15	341	477

Capacities: @ 10 cycles/min

Size	m^3/hr	ft^3/hr
150/200	5	185
250/300	17	600

Theoretical maximum with standard Charge Hopper

RANGE

Sizes available: 150, 200, 250 & 300mm as standard with round inlet/outlet. Square inlet & larger charge hoppers can be accommodated. Single Plug Valve Modules can also be supplied for positive shut off applications.

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• BUTTERFLY DAMPERS •

The Company

Since its formation in 1973 Rotolok, by its continuing policy of re-investment through profit regeneration, has quickly established itself as a market leader in many of its range of products.

Initially formed to manufacture Rotary Airlocks, Rotolok has broadened its base in complementary areas of powder and bulk solids handling technology, so much so that it is now a highly respected supplier of a wide range of equipment to markets both in the UK and overseas.

Introduction

The fabricated range of Rotolok Butterfly Dampers are used extensively in the air and dust handling industries generally in fan systems.

They are normally operated remotely by air cylinders, electric or pneumatic actuators although manual versions through the customary hand lever, handwheel and reduction gearboxes can also be accommodated.

Specification

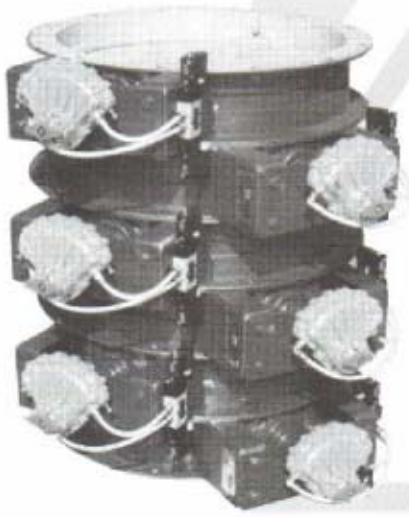
Construction is generally from Mild or Stainless Steel with the body of the valve formed from rolled steel angles or channels dependent on the size.

The damper itself is formed from two plates which sandwich, if required, a felt seal or alternatively it can be a single blade machined for closed fitment to the valve body. The type selected is dependent on the amount of air leakage that can be accepted.

The split spindle mounting system minimizes turbulence within the air stream and these spindles are mounted on either two or four bolt flanged mounted sealed for life ball bearings.

Seals can be fitted if required through a simple 'O' ring or, on high temperature applications, the conventional stuffing box is utilised.

The type of actuator, to suit the clients requirements or specification, can be added, and on pneumatic versions, limit switches and single solenoid spring return valves are standard inclusions.



• BUTTERFLY DAMPERS •

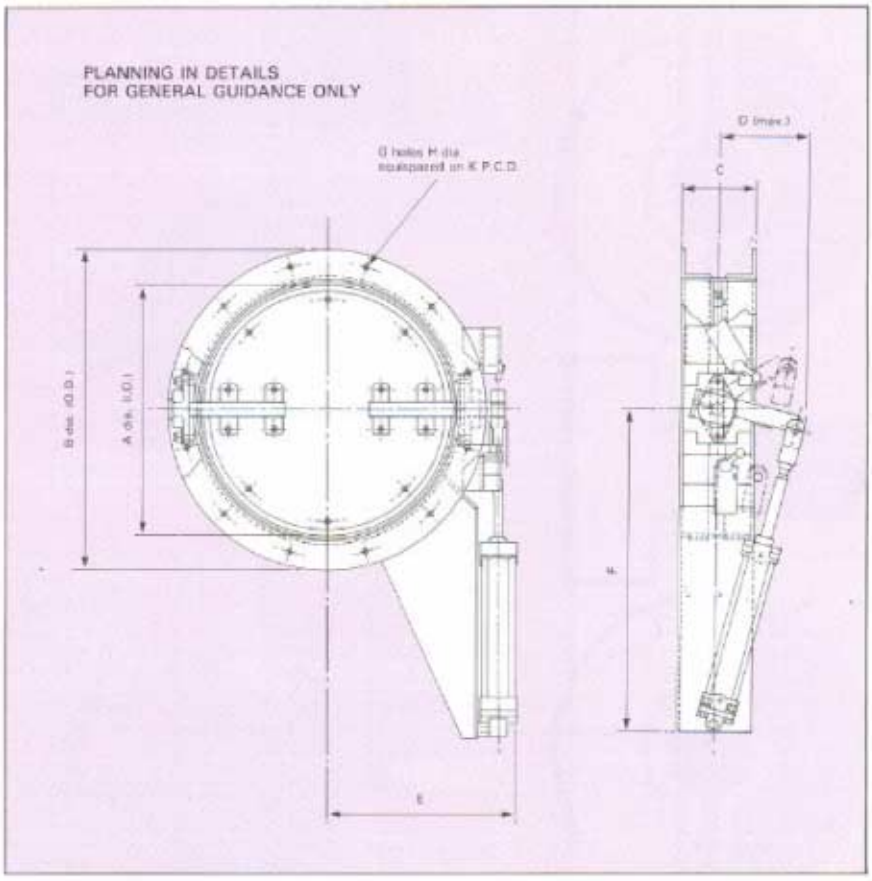
Range

With fabrication, practically any size can be accommodated to suit the duct size with flanges also made to suit designers needs.

The range starts at 350mm dia and extends to 1500mm dia. Standard sizes are as shown in the chart below. Square units can also be designed.

Important Note

On valve size selection it is important to ensure that the ducting size is equal to or slightly larger than the valve. This is to prevent any possible interference during the damper operation in the area where the blade enters the ducting, or should there be any misalignment between the components on assembly.



STD range intermediate and special sizes can be accommodated.

VALVE SIZE	A	B	C	D	E	F	G	H	K
350	350	440	130	160	285	580	8	10	406
400	400	490	130	160	310	580	12	10	456
450	450	540	130	160	330	580	12	10	506
500	500	590	130	160	430	580	12	12	556
600	600	710	150	160	450	580	16	12	666
700	700	810	150	160	470	580	16	12	766

All dimensions in mm