

Slide Valves for Bulk Material Shut-Off

Dust tight
and fully
sealed
closure



Overview

The Mucon name has been synonymous with the flow control of bulk solids, since launching the first ever Iris Diaphragm Valve in 1946.

However, in applications where flow control is not a key requirement, a more robust total shut-off solution can be more appropriate. Identifying this need, we have developed a range of innovative, yet cost effective, Slide Gate Valves; Harnessing over seventy years experience in the design and manufacture of valves and other bulk solids handling equipment allows Mucon to continually meet the requirements of an ever demanding market.

SD-P In-line Pneumatic Actuated Valves

Cutting edge moving orifice slide gate technology for in-line isolation.

Patented self compensating seals reduce maintenance and improve sealing performance.



p3

SD-H In-line Hand Wheel Actuated Valves

All the technology of the SD range, but with a simple hand wheel operation.



p4

RGV Roller Gate Valve

Designed to be as modular and configurable as it is robust and reliable.

Ideal for heavy duty and large scale applications. Patented blade support ensures uninterrupted opening / flow control.

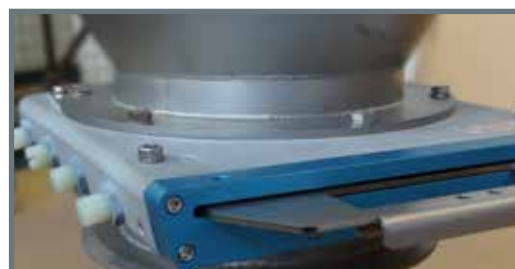


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DSV Slide Gate Valve

Simple cost effective isolation solution for powders, granules and pellets.

Double flanged for in-line applications, yet slim and compact.



p8

DSV-P Pneumatic Slide Gate Valve

Enhanced DSV design with a pneumatic actuator. Ideal for remote isolation applications where infrequent operation is required.

Take a look at our 4-step upgrade procedure from your hand operated DSV.



p9

SV Open Discharge Slide Gate Valve

Simple, cost effective solution for IBC closure and discharge.

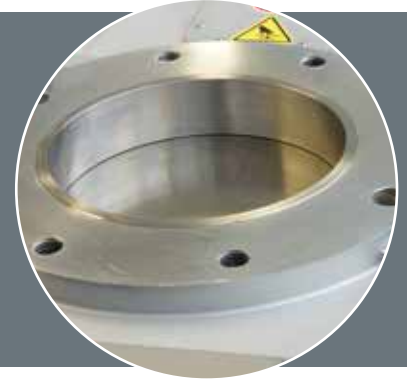


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SD-P In-Line Pneumatic Operation Valve

Key Benefits

- Uninterrupted smooth bore when the valve is fully open
- Effective fully sealed closure
- Self cleaning slide gate blade
- Dust tight operation
- Extremely low maintenance
- Smooth, efficient operation
- Slim design

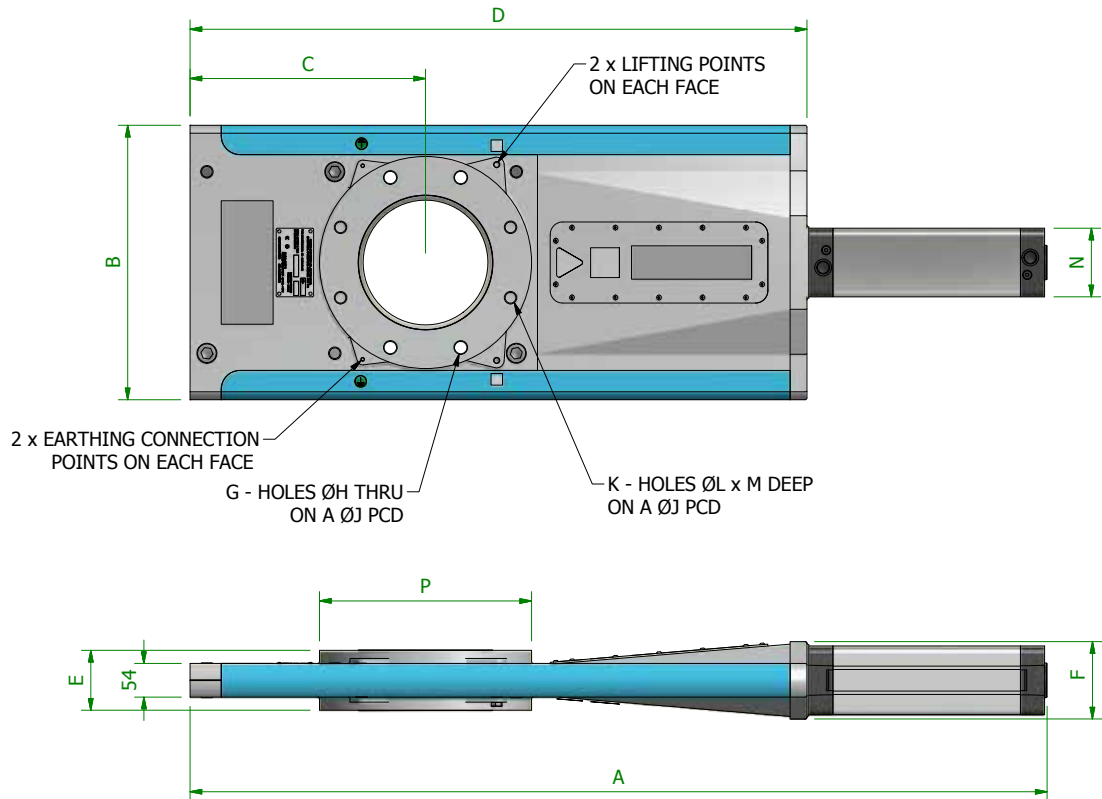


Main Features

- Powered by a low friction, high efficiency pneumatic cylinder
- Provision for 'earth' tags where there is potential for static electricity generation
- Lifting points provided at the valve's centre of gravity
- Flange dimensions to DIN or ANSI patterns
- Rated up to +1 barg conveying pressures
- ATEX certified to CE Ex 1D/2D categories

Air Supply	Dry, filtered compressed air, lubricated or non-lubricated
Pressure	6-10 barg (85 - 145 psi)

Valve Type	Nom Bore mm Inch	Cylinder Port BSP
SD04-P	100 4"	1/4"
SD06-P	150 6"	3/8"
SD08-P	200 8"	1/2"
SD10-P	250 10"	1/2"
SD12-P	300 12"	1/2"



Valve Type	Nom Bore mm Inch	Body Dimensions							Flange PN10						Flange ANSI 150						Nett Weight		
		A	B	C	D	E	F	N	G	H	J	K	L	M	P	G	H	J	K	L		M	P
SD04-P	100mm (4")	924	340	214	664	97	108	94	4	18	180	4	M16 x 2	28	228	4	18	190.5	4	M16 x 2	28	228	24.1
SD06-P	150mm (6")	1164	390	302	839	97	108	94	4	22	240	4	M20 x 2.5	28	285	4	22	241.5	4	M20 x 2.5	28	285	37.4
SD08-P	200mm (8")	1374	440	378	989	97	124	111	4	22	295	4	M20 x 2.5	28	340	4	22	298.4	4	M20 x 2.5	28	340	45.1
SD10-P	250mm (10")	1569	504	428	1130	97	148	135	4	22	350	8	M20 x 2.5	28	406	4	22	362.0	8	M20 x 2.5	28	406	60.5
SD12-P	300mm (12")	1880	574	518	1362	97	190	170	4	22	400	8	M20 x 2.5	28	478	4	22	431.8	8	M20 x 2.5	28	478	85.5

All dimensions in mm / weights given in kg

SD-H In-Line Hand Wheel Operation Valve

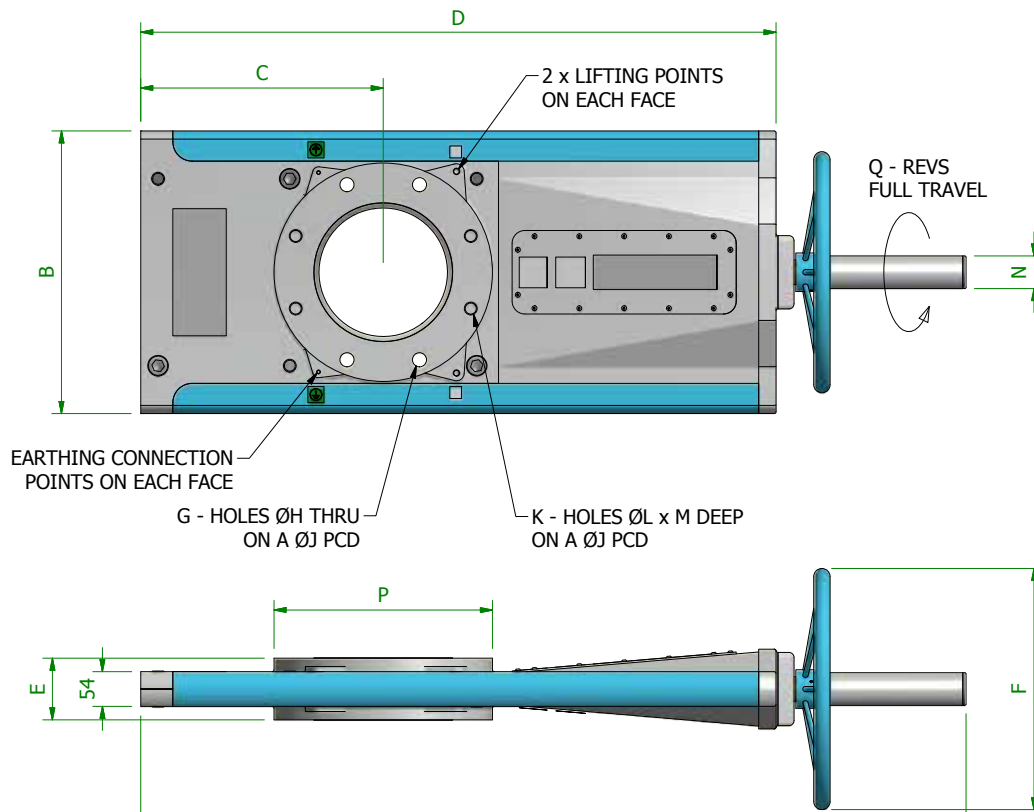
Key Benefits

- Uninterrupted smooth bore when the valve is fully open
- Effective fully sealed closure
- Self cleaning slide gate blade
- Dust tight operation
- Extremely low maintenance
- Smooth, efficient operation
- Slim design



Main Features

- Operated by a multi-start drive screw via a large radius hand wheel
- Provision for 'earth' tags, where there is potential for static electricity generation
- Lifting points provided at the valve's centre of gravity
- Flange dimensions to DIN or ANSI patterns
- Rated up to +1 barg conveying pressures
- ATEX certified to CE Ex 1D/2D categories

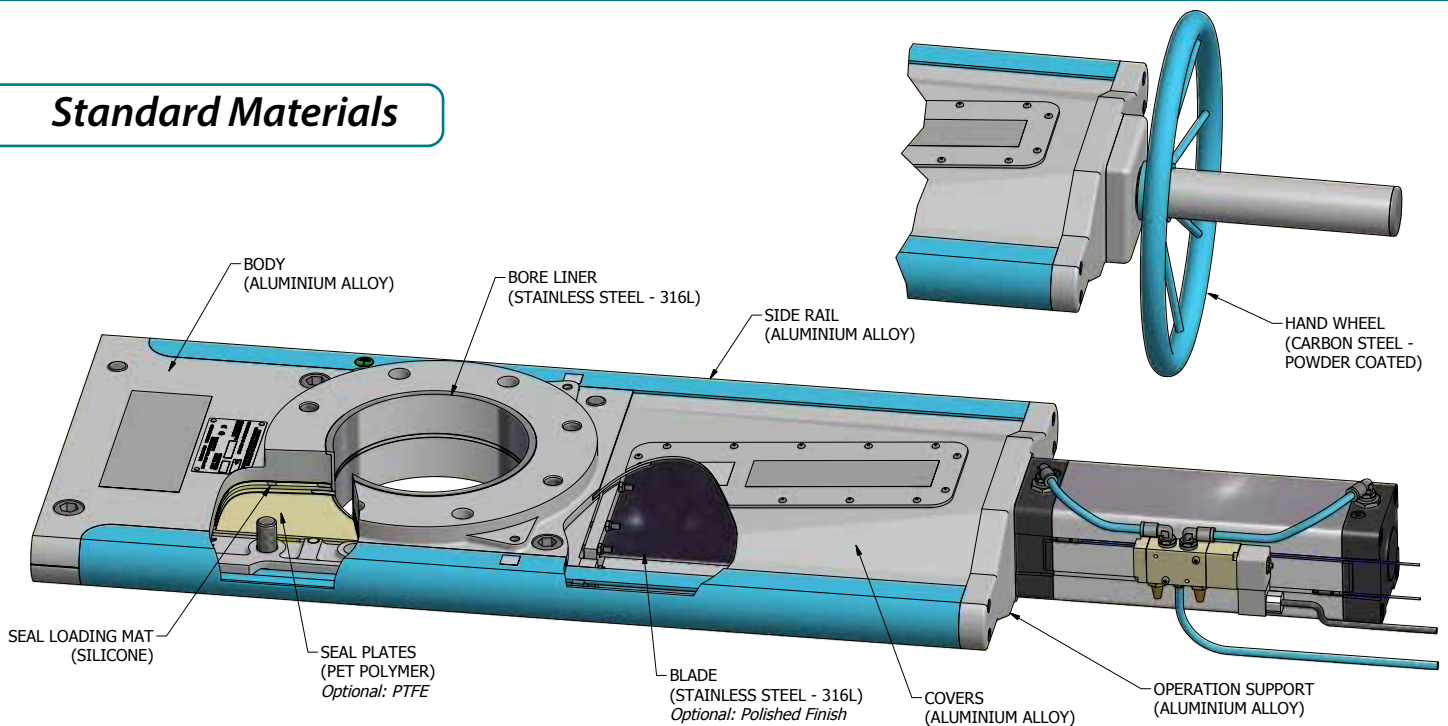


Valve Type	Nom Bore mm Inch	Body Dimensions								Flange PN10						Flange ANSI 150						Nett Weight		
		A	B	C	D	E	F	N	G	H	J	K	L	M	P	G	H	J	K	L	M		P	Q
SD04-H	100mm (4")	860	340	214	664	97	375	51	4	18	180	4	M16 x 2	28	228	4	18	190.5	4	M16 x 2	28	228	6	27.0
SD06-H	150mm (6")	1095	390	302	839	97	375	51	4	22	240	4	M20 x 2.5	28	285	4	22	241.5	4	M20 x 2.5	28	285	8	36.3
SD08-H	200mm (8")	1285	440	378	989	97	375	51	4	22	295	4	M20 x 2.5	28	340	4	22	298.4	4	M20 x 2.5	28	340	10	46.0
SD10-H	250mm (10")	1486	504	428	1130	97	375	51	4	22	350	8	M20 x 2.5	28	406	4	22	362.0	8	M20 x 2.5	28	406	11	59.3
SD12-H	300mm (12")	1780	574	518	1362	97	375	51	4	22	400	8	M20 x 2.5	28	478	4	22	431.8	8	M20 x 2.5	28	478	11	90.7

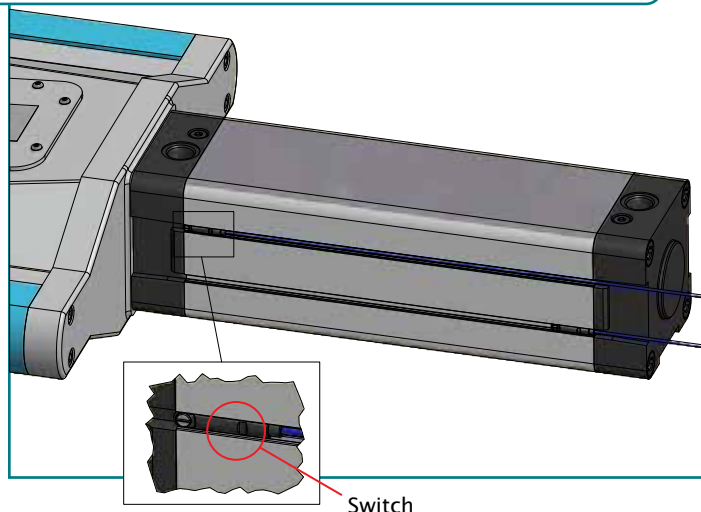
All dimensions in mm / weights given in mm

SD-P In-Line Pneumatic Operation Valve

Standard Materials



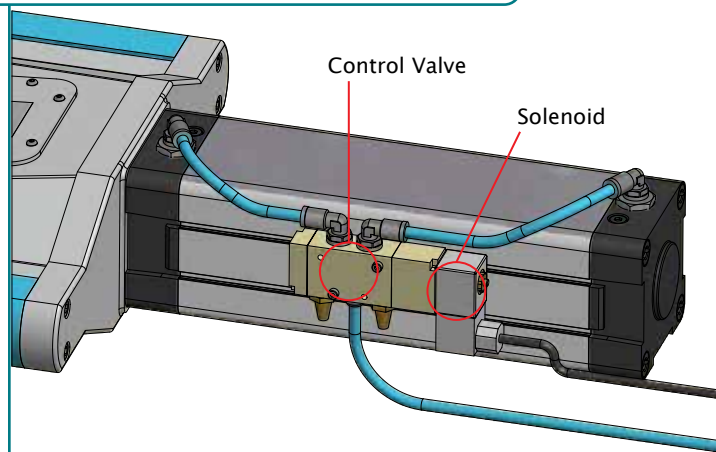
Open and Closed Switches



In most cases, an automated control system will require a feedback signal, identifying whether the valve is open or closed. To facilitate this requirement the cylinder of the SD-P valve can be fitted with open and closed indication switches, as shown below.

Nominal voltage: 8.2V (Use with barrier)
Max values: U=15 V, I=50 mA, P=120 mW
Temperature range: -25°C to +70°C
Connection: 5m long PVC flying lead, 2 wires
0.14mm² stripped ends
Degree of protection: IP67
Switch certification: CE, ATEX 1G/D, ATEX 3G/D
6 barg air supply

Solenoid Assembly



To simplify the installation of the SD-P valve into your system, we offer a simple open and closed solenoid control package that mounts directly onto the cylinder. Simply connect your compressed air feed to the push in fitting provided and wire the solenoid coil to your control system.

Standard voltages: 24 to 230 VAC - 50/60Hz
12-24 VDC
Rated power: 5.3 VA (50Hz), 5.3 VA (60Hz)
5.4 W (DC)
Voltage tolerance: ±10%
Temperature range: -20°C to +40°C
Coil certification: CE, EExm II T4 (135°C)
Duty cycle: 100%

RGV Roller Gate Valve

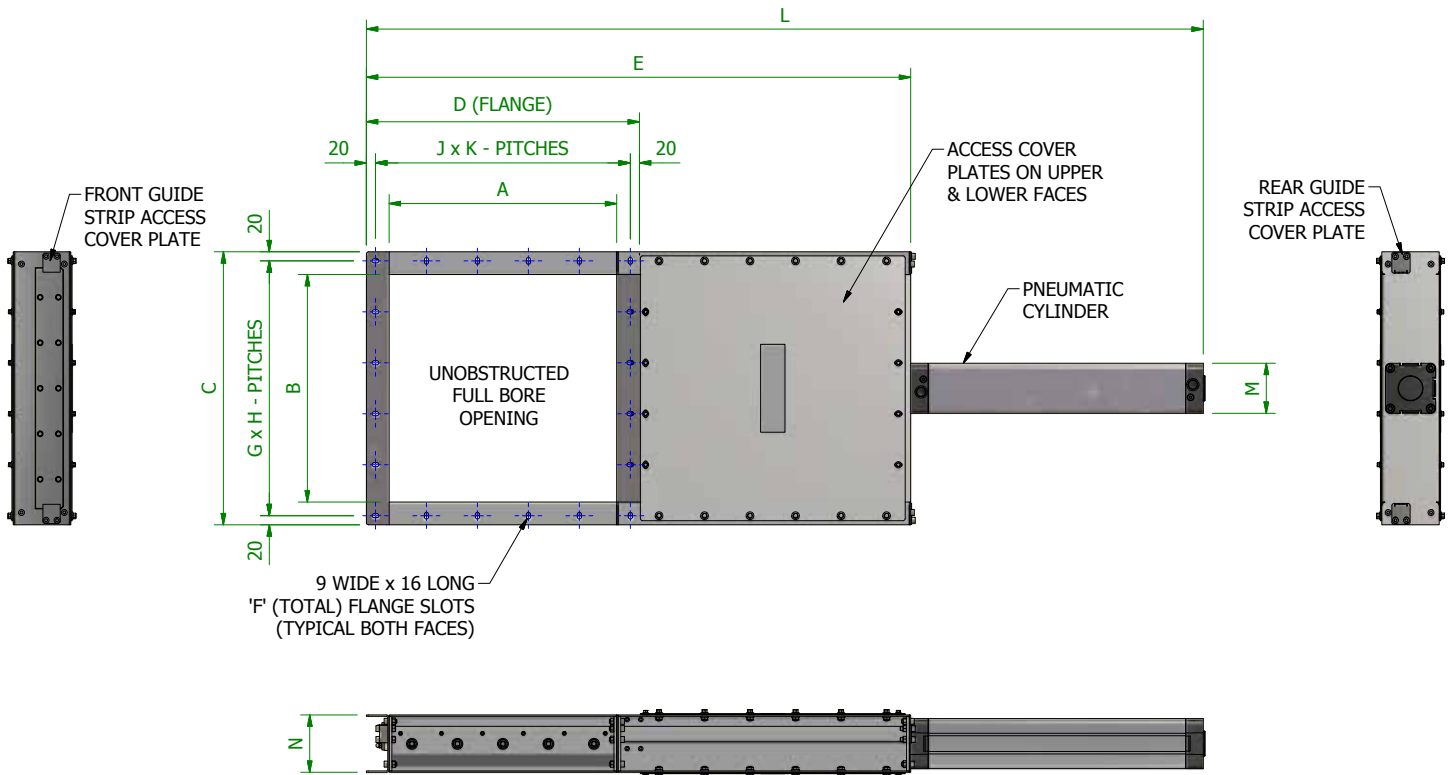
Key Benefits

- Uninterrupted opening due to our patented blade support system
- Heavy duty construction for arduous applications
- Self compensating blade scraper seal keeps the product contained and also cleans the blade during operation
- All valve seals and guides can be replaced in-situ
- Easily adapted for round outlets or ducts
- Steel rollers as standard
- Fast and smooth blade action



Main Features

- Available in a variety of materials and finishes
- Able to support high product loads
- Inlet baffle is available for use with extremely arduous applications
- Modular square and rectangular design allows configuration of custom opening dimensions
- Electric and Pneumatic actuators available



Valve Type	Body Dimensions										
	A	B	C	D	E	F	G x H	J x K	L	M	N
RGV-6W6S	150	150	250	250	496	12	3 x 70mm	3 x 70mm	793	110	126
RGV-8W8S	200	200	300	300	596	16	4 x 65mm	4 x 65mm	943	110	126
RGV-10W10S	250	250	350	350	696	16	4 x 77.5mm	4 x 77.5mm	1093	110	126
RGV-12W12S	300	300	400	400	796	16	4 x 90mm	4 x 90mm	1243	110	126
RGV-16W16S	400	400	500	500	996	20	5 x 92mm	5 x 92mm	1543	110	126
RGV-20W20S	500	500	600	600	1196	20	5 x 112mm	5 x 112mm	1843	110	126
RGV-24W24S	600	600	700	700	1396	24	6 x 110mm	6 x 110mm	2143	110	126

All dimensions in mm

RGV Roller Gate Valve

Solenoid and switch assemblies available
- See page 5 for further information

Replaceable Blade Guides and Seals

Our design allows for different materials of construction for contact and non-contact surfaces

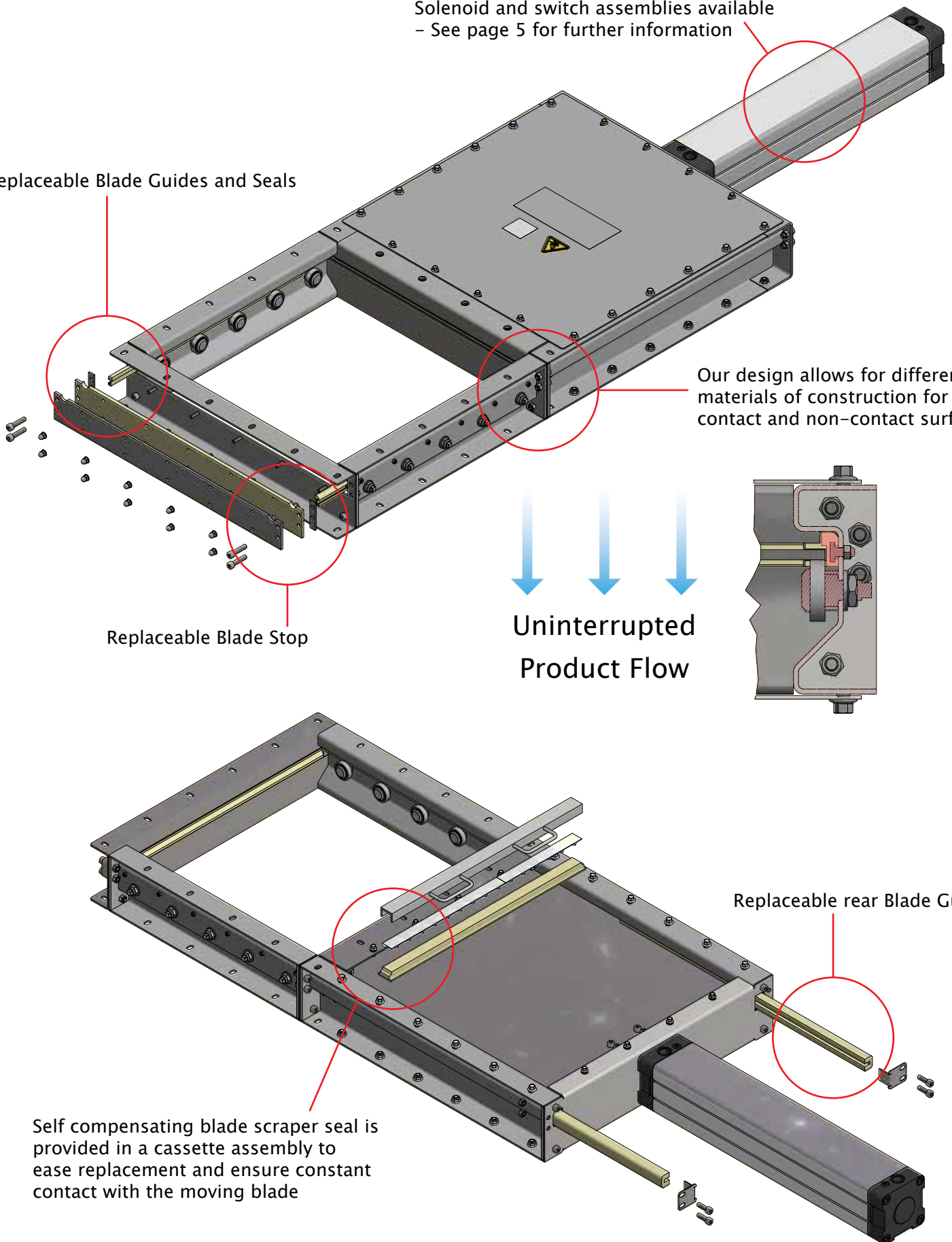
Uninterrupted
Product Flow

Replaceable Blade Stop

Replaceable rear Blade Guides

Self compensating blade scraper seal is provided in a cassette assembly to ease replacement and ensure constant contact with the moving blade

Contact our technical sales team for bespoke sizing and configuration queries.



DSV Valve

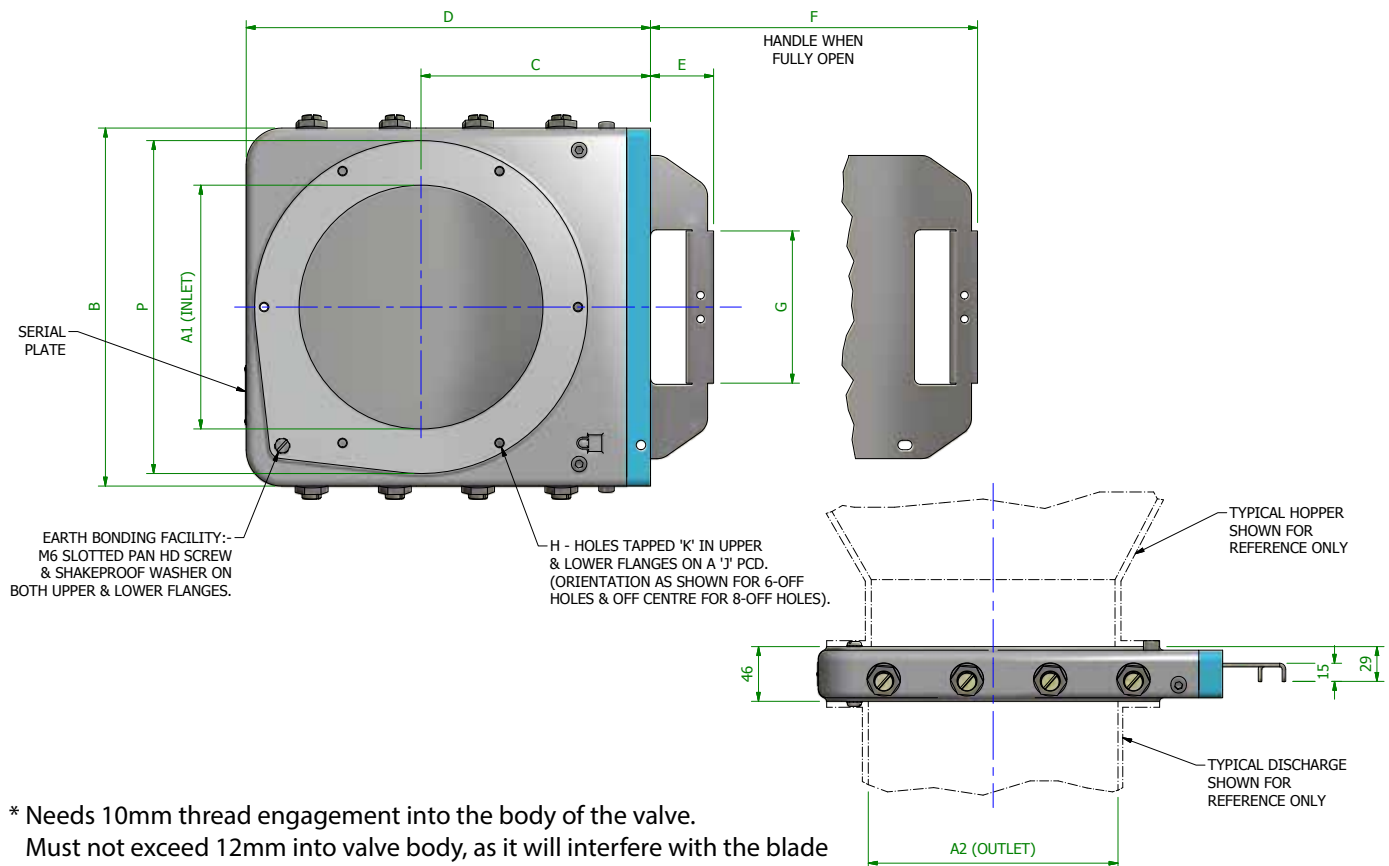
Key Benefits

- Externally replaceable slide gate supports
- Unlike other manual slide valves the DSV does not use an eccentric cam to support the slide gate
- Slim, compact design
- Pneumatic cylinder can be added retrospectively
- Ideally suited for the gravity discharging of materials in an in-line application
- Robust integrated handle



Main Features

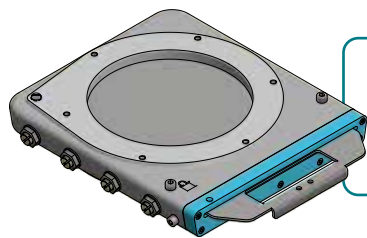
- Robust aluminium construction
- Anti-tamper locking facility – allowing the user to lock or tag the valve in the closed position
- Provision for 'earth' tag where there is potential for static electricity generation
- Lightweight cast aluminium body with machine flanged face
- Externally adjustable tapered and angled polymer slide supports allow the height of the slide gate to be finitely adjusted to compensate for wear



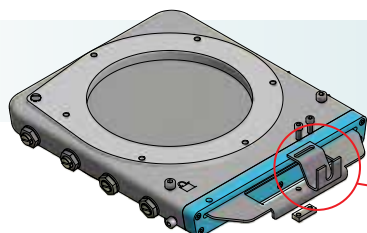
Valve Type	Nom Bore mm Inch	Body Dimensions											Nett Weight	
		A1	A2	B	C	D	E	F	G	H	J	K		P
DSV06-H	150mm (6")	155	160	251	168	290	53	222	128	6	213	M8	230	5.0
DSV08-H	200mm (8")	205	210	301	193	340	53	272	128	6	264	M8	280	6.5
DSV10-H	250mm (10")	255	260	361	218	390	53	325	128	6	320	M10	340	8.6
DSV12-H	300mm (12")	305	310	419	253	450	53	383	106	8	369	M8	390	15.4

All dimensions in mm / weights given in kg

DSV-P Valve

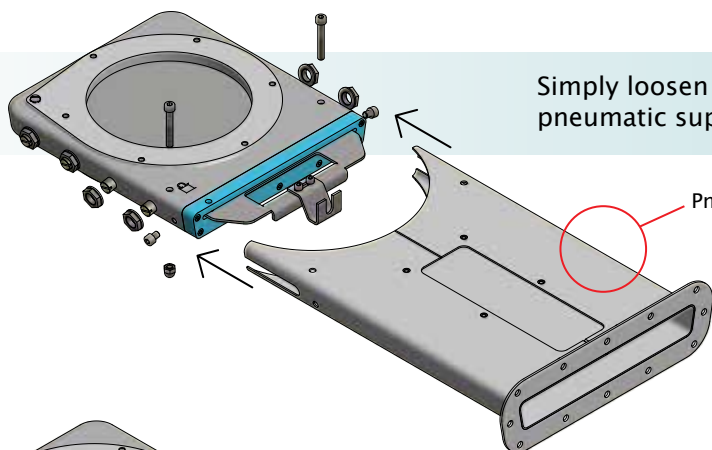


4 step conversion procedure from hand operated to pneumatic actuation
- without the need to remove the valve from its application.



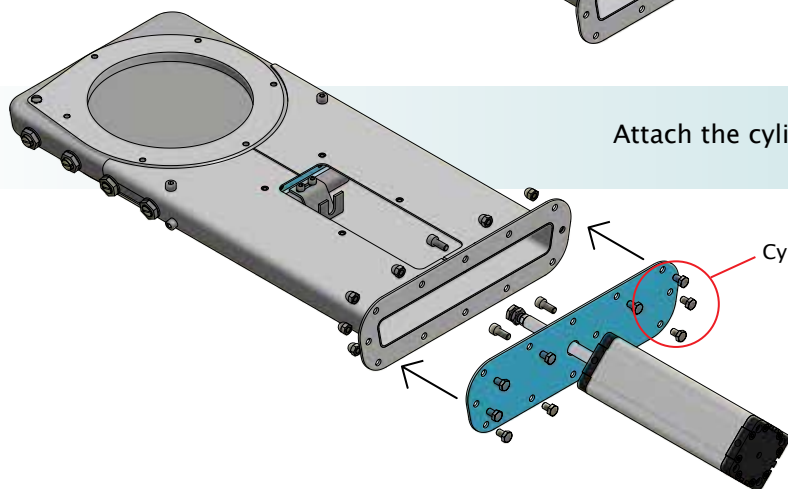
Fit the clevis to the existing handle – note the holes are already there

Clevis



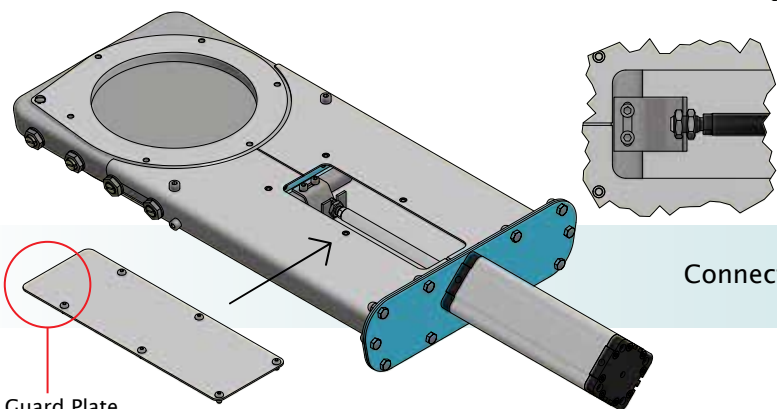
Simply loosen some of the existing fasteners and slide the pneumatic support housing into place

Pneumatic Support Housing



Attach the cylinder on its support plate

Cylinder Support Plate



Connect the cylinder to the clevis and fix the guard plate

Guard Plate

DSV-P Valve

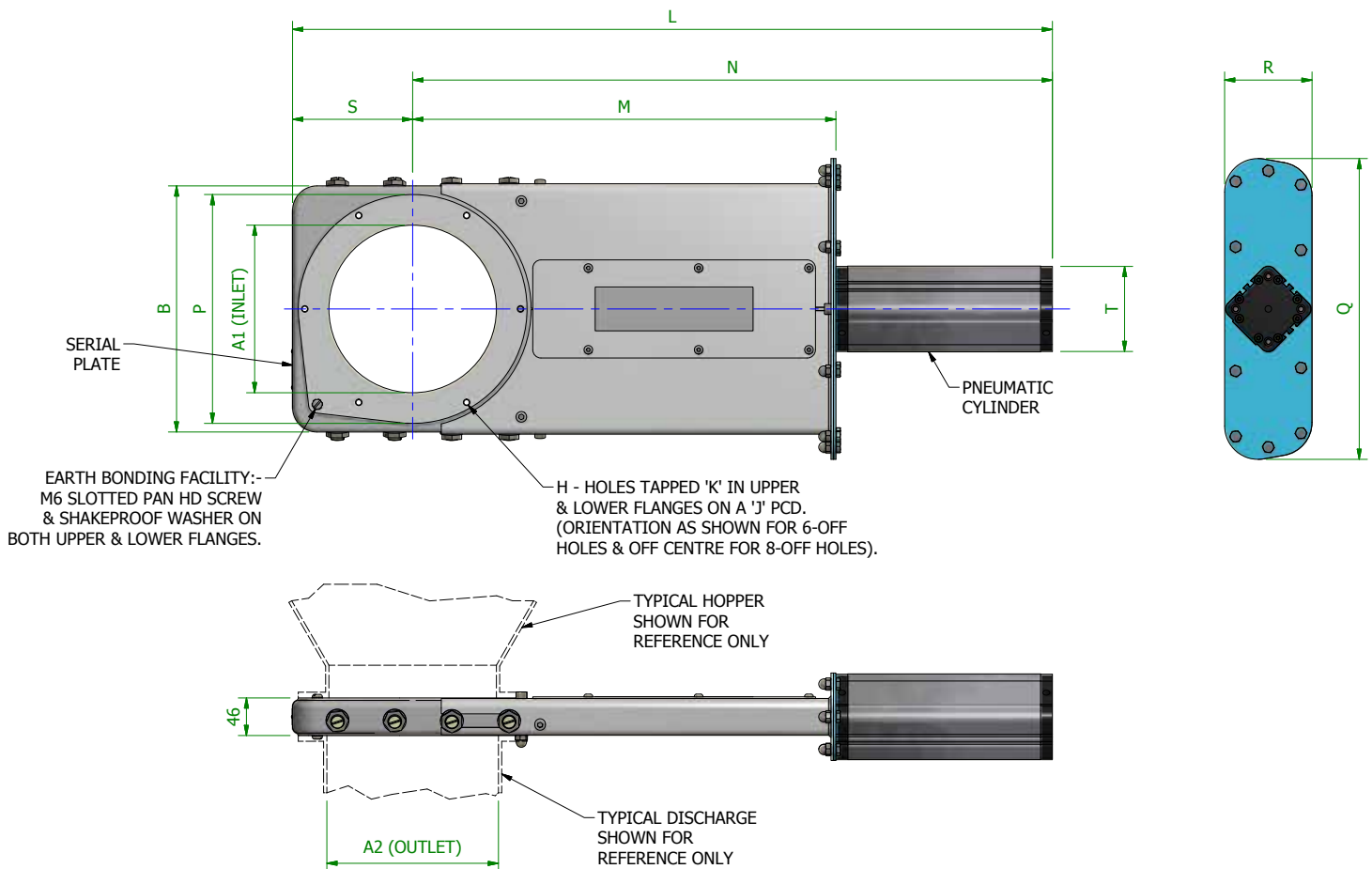
Key Benefits

- Externally replaceable slide gate supports
- Unlike other manual slide valves, the DSV does not use an eccentric cam to support the slide gate
- Slim, compact design
- Compact and lightweight
- Full bore opening
- Pneumatic actuator, specifically designed to facilitate addition retrospectively



Main Features

- Ideal for the isolation of powders, granules and pellets
- Position switches and solenoid assemblies are available
- Optional adapters to fit PN10, ASME and ANSI flanges
- Can be converted to hand operation in just minutes
- Optional open and closed position indication switches



Valve Type	Nom Bore mm Inch	Body Dimensions														Nett Weight
		A1	A2	B	H	J	K	L	M	N	P	Q	R	S	T	
DSV06-P	150mm (6")	155	160	251	6	213	M8	780	443	658	230	318	107	122	105	9.6
DSV08-P	200mm (8")	205	210	301	6	264	M8	930	518	783	280	368	107	147	105	12.2
DSV10-P	250mm (10")	255	260	361	6	320	M10	1079	592	907	340	429	107	172	105	15.3
DSV12-P	300mm (12")	305	310	419	8	369	M8	1239	677	1042	390	486	107	197	105	19.3

All dimensions in mm / weights given in kg

SV Open Discharge Valve

Main Features and Benefits

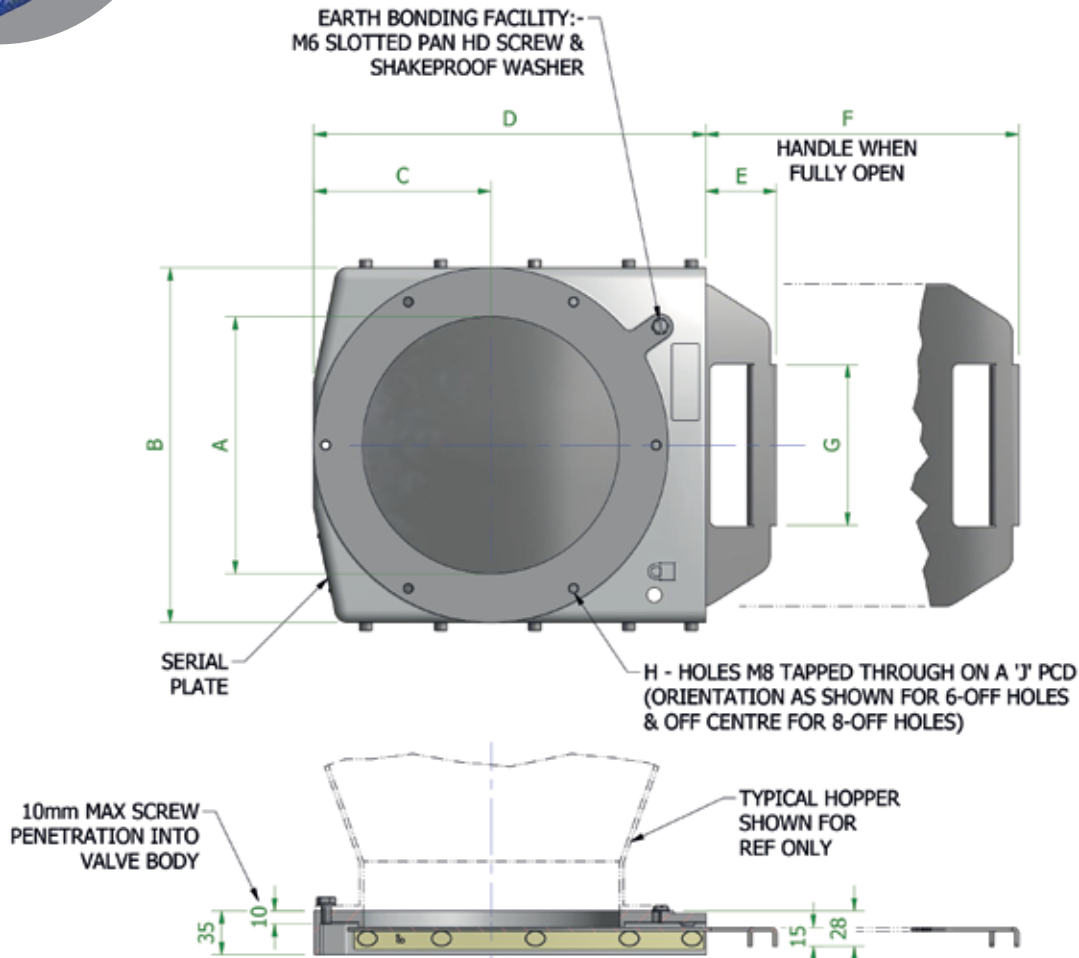
- Greater forces can be applied to the stainless steel stiffened handle compared to conventional plastic handles
 - Slide plate runners are designed to withstand heavy loading
 - Fully interchangeable with the equivalent size Mucon Series H Iris Valve
 - All stainless steel slide plate, handle and fixings provide greater protection from corrosion
 - Robust aluminium body
 - Full bore opening
- * optional - High temperature version available



Lock Off Facility – Locks the valve in the closed position utilising Lockout Hasp, Padlock or Lockout tags



Earth Point Provision – Facilitates earth continuity in applications where there is potential for static generation



Valve Type	Nom Bore mm Inch	Body Dimensions							Flange			Nett Weight
		A	B	C	D	E	F	G	H	J	K	
SV06	150mm (6")	152	230	122	268	57	192	128	6	213	M8	3.0
SV08	200mm (8")	206	283	142	313	57	248	128	6	264	M8	4.0
SV10	250mm (10")	255	340	170	367	57	333	128	6	320	M10	5.5
SV12	300mm (12")	302	406	203	436	57	344	228	8	369	M8	7.6

All dimensions in mm / weights given in kg

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