



# Valves

Handling the world's dry bulk solids®

## VORTEX® QUANTUM® SERIES 2-WAY WYE LINE DIVERTER™

The patented Vortex® Quantum® Series Wye Line Diverter™ is specifically engineered to handle dry bulk solids in vacuum or dilute phase pneumatic conveying systems with pressures up to 15 psig (1 barg). A full flow orifice provides unrestricted conveying of material with no disk or ledges to impede flow. The diverter seat and live-loaded seals are shielded from abrasion by a metal insert, which provides superior shearing action. The Wye Line Diverter™ is designed to eliminate problems, increasing production, while decreasing labour and equipment costs.

### Vortex® Quantum® Series 2-Way Wye Line Diverter™ Features

- Ability to Shift without Shutting Down Blower
- Improves Conveying Efficiency
- Smooth, Unobstructed Bore for Unrestricted Flow of Material
- Seal Protected from Abrasion
- Easy Installation and Maintenance
- Air Cylinder Model Includes Magnetic Piston



### Valve Specifications

<b>Size/Bore Options</b>	50mm to 300mm Pipe or Tube
<b>Media</b>	Powder, Pellets, Granulars
<b>Connection Options</b>	ANSI, DIN, JIS, or Compression Couplings
<b>Media Temperature</b>	Up to 82°C continuous to 121°C intermittent service, Modifications allow up to 204°C continuous to 232°C intermittent service
<b>Media Pressure</b>	-0.1 MPa +0.1 MPa, 1 barg, 15 psig, depending on size
<b>Metal Construction Options</b>	304 or 316L Stainless Steel, Aluminium, and/or Carbon Steel
<b>Seal/Seat Material Options</b>	Nylon, PET, UHMW, Glass Filled Teflon, Natural Rubber, and/or Silicon Rubber
<b>Drive/Actuation Options</b>	Double Acting Air Cylinder and Solenoid Operated Air Control Valve, Electric Actuator, Handwheel, or Chainwheel
<b>Position Detection</b>	Magnetic Reed Switch, Proximity Switch, or Mechanical Switch
<b>Compliance/Approvals</b>	CE, ATEX, FDA
<b>Industry Use</b>	Plastics, Petrochemicals, Chemicals, Foods, Minerals, Textiles, Agriculture



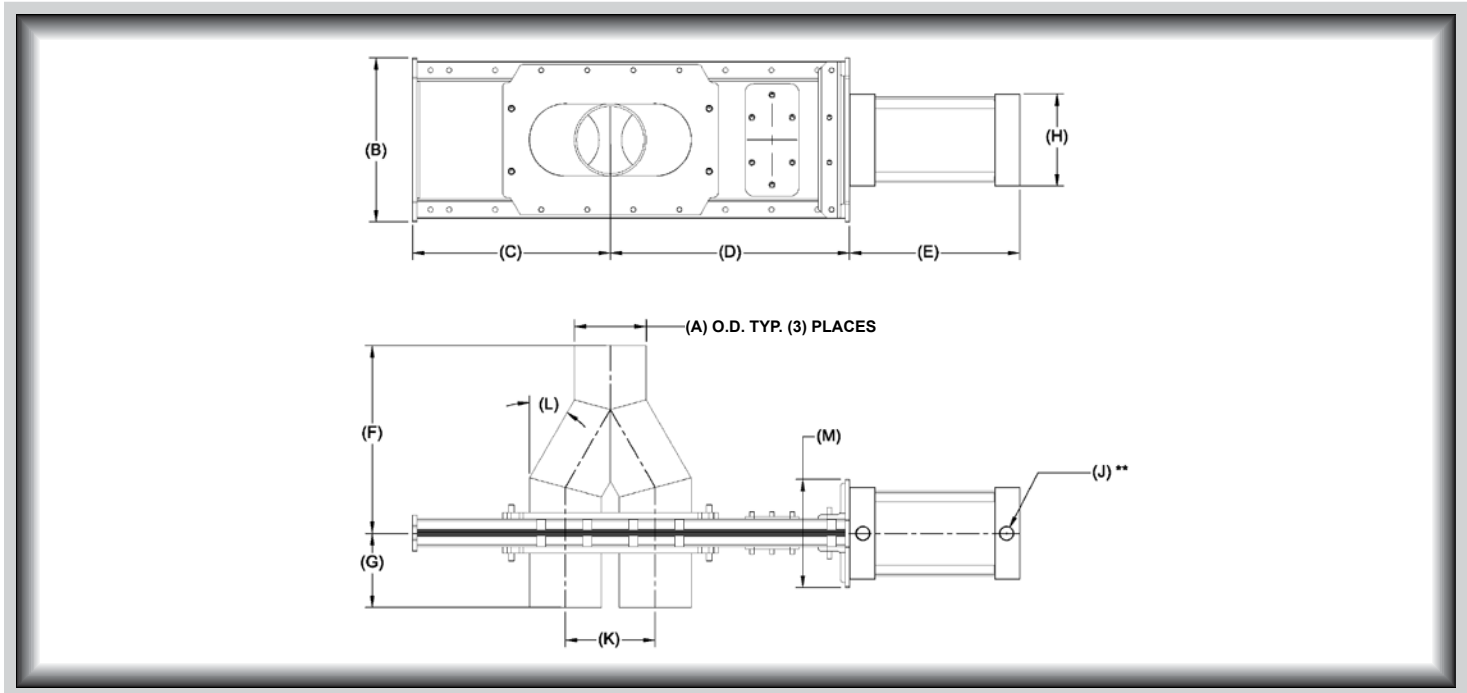
Patent No. 7464913

### Application Specific Modifications

<b>S</b>	Material contact is 316L stainless steel.
<b>SL</b>	Diverter has straight through conveying line designed for easier "in line" installation and less system conveying pressure drop when using multiple diverters.
<b>HT3</b>	Modifications are made allowing 121°C continuous to 149°C intermittent service.
<b>HT4</b>	Modifications are made allowing up to 204°C continuous to 232°C intermittent service.
<b>P10</b>	Diverter are made with schedule 10 Pipe throughout.
<b>P40</b>	Diverter are made with schedule 40 Pipe throughout.
<b>WS1</b>	Slide blade is electro-polished. Polyethylene Terephthalate (PET) pressure plate seals replace Nylon.
<b>OF 45/30</b>	Inlets and outlets are flanged with ANSI, DIN or JIS connections. The outlet opposite the air cylinder is offset at 45 or 30 degrees.



## VORTEX® 2-WAY WYE LINE DIVERTER™ DIMENSIONAL INFORMATION



Tube Model	A	B	C	D	E	F	G	H	J	K	L	M
DR50-2(XX)	51	181	165	210	159	184	108	89	3/8	64	30	121
DR65-2(XX)	64	206	216	279	203	203	108	105	1/2	89	30	122
DR75-2(XX)	76	206	216	279	203	222	108	105	1/2	89	30	122
DR100-2(XX)	102	232	279	340	241	267	108	130	1/2	127	30	148
DR125-2(XX)	127	257	330	394	273	324	133	140	1/2	152	30	152
DR150-2(XX)	152	283	381	445	298	356	133	140	1/2	178	30	156
DR200-2(XX)	203	343	527	591	400	486	232	165	1/2	254	45	197
DR250-2(XX)	254	406	711	781	505	552	244	216	1/2	356	45	391
DR300-2(XX)	305	457	857	921	581	616	248	216	1/2	432	45	391

Pipe Model	A	B	C	D	E	F	G	H	J	K	L	M
DR50-2(XX)-PXX*	60	206	216	279	203	260	121	105	1/2	89	30	122
DR65-2(XX)-PXX*	73	206	216	279	203	260	130	105	1/2	89	30	122
DR75-2(XX)-PXX*	89	232	279	340	241	327	159	130	1/2	127	30	148
DR100-2(XX)-PXX*	114	257	330	394	273	352	159	140	1/2	152	30	152
DR125-2(XX)-PXX*	143	283	381	445	298	387	165	140	1/2	178	30	156
DR150-2(XX)-PXX*	168	302	527	591	400	394	178	165	1/2	254	45	194
DR200-2(XX)-PXX*	219	352	616	679	454	483	210	216	1/2	305	45	391
DR250-2(XX)-PXX*	273	406	718	781	505	552	244	216	1/2	356	45	391
DR300-2(XX)-PXX*	324	457	857	921	581	616	248	216	1/2	432	45	391

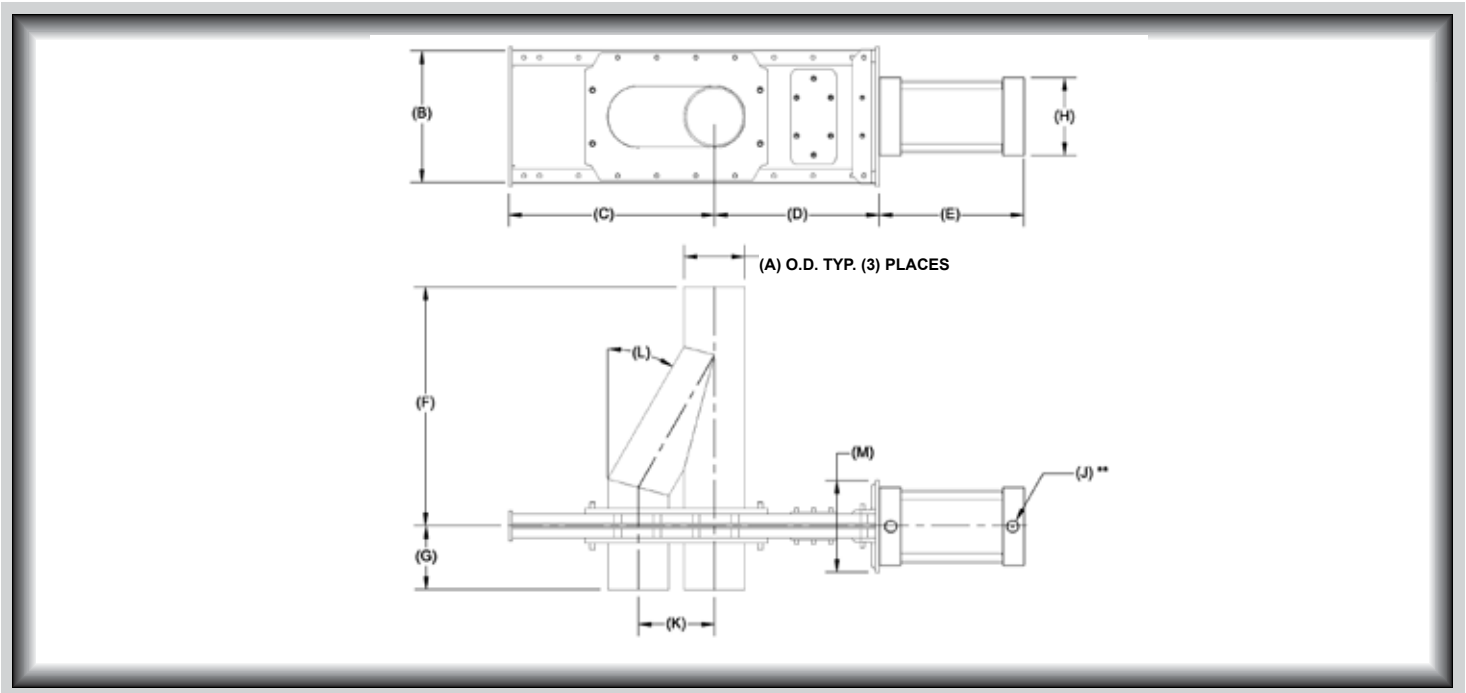
All dimensions are in mm, information subject to change without notice.  
 (XX) Material of construction, aluminum (AL), carbon steel (CS), or stainless steel (SS).  
 \*Select pipe schedule 10 or 40.



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## VORTEX® 2-WAY WYE LINE DIVERTER™ DIMENSIONAL INFORMATION



Tube Model	A	B	C	D	E	F	G	H	J	K	L	M
DR50-2(XX)-SL	51	181	197	178	159	248	108	89	3/8	64	30	121
DR65-2(XX)-SL	64	206	260	235	203	260	108	105	1/2	89	30	122
DR75-2(XX)-SL	76	206	260	235	203	298	108	105	1/2	89	30	122
DR100-2(XX)-SL	102	232	343	276	241	400	108	130	1/2	127	30	148
DR125-2(XX)-SL	127	257	406	318	273	451	133	140	1/2	152	30	152
DR150-2(XX)-SL	152	283	470	356	298	514	133	140	1/2	178	30	156
DR200-2(XX)-SL	203	337	654	464	400	587	232	165	1/2	254	45	197
DR250-2(XX)-SL	254	406	895	603	505	737	244	216	1/2	356	45	391
DR300-2(XX)-SL	305	457	1073	705	581	838	248	216	1/2	432	45	391

Pipe Model	A	B	C	D	E	F	G	H	J	K	L	M
DR50-2(XX)-SL-PXX*	60	206	260	235	203	337	121	105	1/2	89	30	122
DR65-2(XX)-SL-PXX*	73	206	260	235	203	333	159	105	1/2	89	30	122
DR75-2(XX)-SL-PXX*	89	232	343	276	241	438	159	130	1/2	127	30	148
DR100-2(XX)-SL-PXX*	114	257	406	318	273	489	159	140	1/2	152	30	152
DR125-2(XX)-SL-PXX*	143	283	470	356	298	540	159	140	1/2	178	30	156
DR150-2(XX)-SL-PXX*	168	302	654	464	400	508	178	165	1/2	254	45	194
DR200-2(XX)-SL-PXX*	219	352	768	527	454	625	210	216	1/2	305	45	391
DR250-2(XX)-SL-PXX*	273	406	895	603	505	737	244	216	1/2	356	45	391
DR300-2(XX)-SL-PXX*	324	457	1073	705	581	838	248	216	1/2	432	45	391

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(XX) Material of construction, aluminum (AL), carbon steel (CS), or stainless steel (SS).

\*Select pipe schedule 10 or 40.