

INFORMATION



BOTTOM DIVERTER VALVE

SHICK TUBE-VEYOR CORPORATION'S Bottom Diverter Valves are designed to direct product into a vessel from a pneumatic conveying line. Compressed air is used to actuate the valve into either the divert or through position. In the **divert** position, conveying air and product are directed into the receiver, where product is separated from the air stream as the air leaves through the exit port. In the **through** position, product and conveying air by-pass the receiver.

FEATURES

FAIL-SAFE VALVE POSITION INDICATION

- Proof-positive valve position eliminates the possibility of flow diversion error. With Shick's innovative design, the Bottom Diverter Valve must be in either the straight-through or divert position for product to be conveyed.

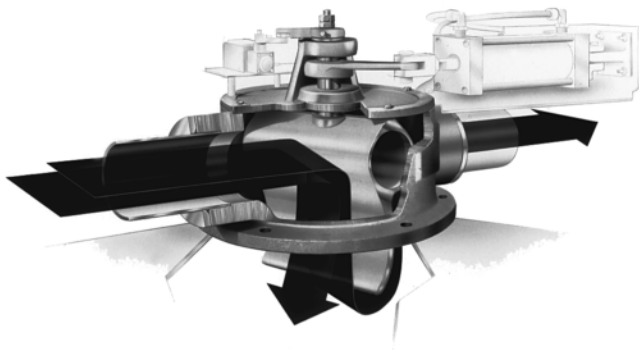
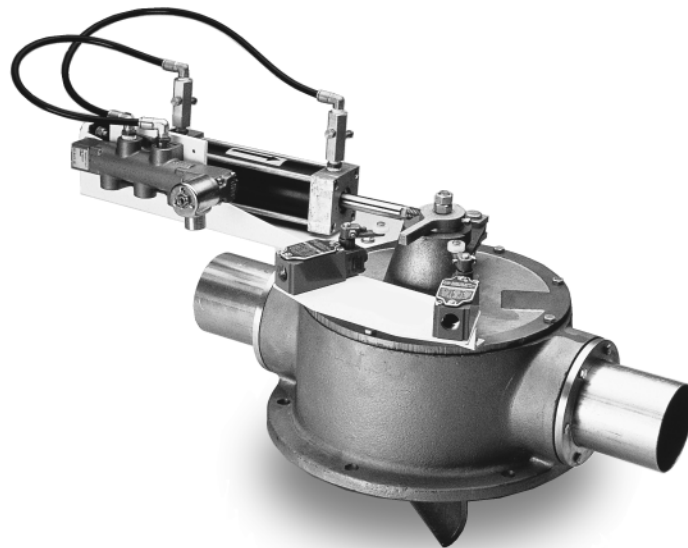
NEMA - 4 and 9 standard, 4X and 7 available.

SELF-VENTING - Because the air passes freely around the diverting piston and through the exit port, local venting or dust collection at the deposit point is generally not required.

MACHINED CLOSE TOLERANCES - Unlike other valves incorporating easily degradable rubber and plastic seats, Shick's valves are machined to precision metal-to-metal clearances eliminating frequent replacement of wearing parts.

SELF-CLEANING - Optional, internal scraper clears the housing of material each time piston rotates, eliminating material build-up and valve binding.

POSITIVE LINE CONNECTION - Removable port flange and O-ring seals provide secure pipe/tube to valve connection for quick installation without leakage.



ABRASION RESISTANT DESIGN & CONSTRUCTION

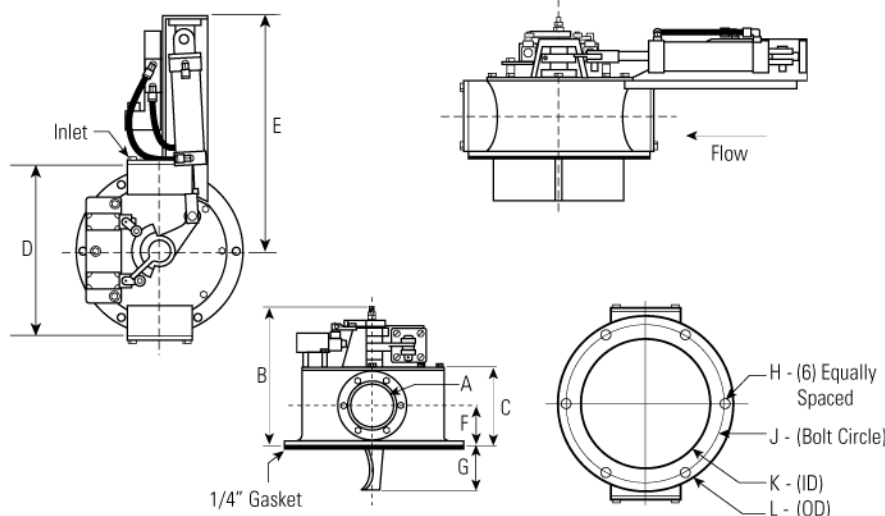
- Valve design allows for straight-through conveying, reducing pressure loss, friction and abrasive wear. Inlet port of the diverting piston is slightly oversized and outlet port slightly undersized to eliminate flow restriction and wear points.

ENHANCED SCALING ACCURACY

- Design allows for instantaneous cut-off at the scaling point, unlike "dead head" scaling configurations.

LOW PROFILE DESIGN - Where overhead clearance is restricted, design allows for filtering of conveying air at a remote location.

SCHEMATICS



NOTES:

Electrical Supply: Standard solenoids and limit switches require 110V/single phase/60Hz control power (other voltages available upon request.)

Weather Resistant: Valves are sealed to resist moisture and can be machined to withstand a wide range of temperatures. Weather shields are available for outdoor applications.

Clean-In-Place Applications (CIP): Available coupling/ferrule arrangement, allows quick disassembly and cleaning.

Exit Port Block: To avoid cross-contamination, the optional port block confines conveying air to the receiving vessel.

Actuation: Air cylinder actuation. Multiple sizes available for particular applications.

Limit Switches: Standard mechanical limit switch. Proximity switches are optional.

Maximum Line Pressure: 20 P.S.I.

Air Supply: 80 - 100 P.S.I. clean dry air. No lubrication.

Gasket: FDA approved, white natural sponge rubber standard. Others available upon request.

MATERIALS OF CONSTRUCTION

3\"/>

CAST IRON
ELECTROLESS NICKEL PLATED
STAINLESS STEEL 304
STAINLESS STEEL 316

DIMENSIONS - UNIT

Inches										
A	B	C	D	E	F	G	H	J	K*	L
3" TUBE	10 1/4	6 1/4	11 5/8	19	3 1/4	3	1/2	10 1/4	8	11 3/4
3" PIPE	10 1/4	6 1/4	11 5/8	19	3 1/4	3	1/2	10 1/4	8	11 3/4
4" TUBE	12 1/4	6 3/4	15 1/2	21	3 1/2	3 1/2	5/8	13 3/4	11	15 1/4
4" PIPE	12 1/4	6 3/4	15 1/2	21	3 1/2	3 1/2	5/8	13 3/4	11	15 1/4
5" TUBE	12 1/2	7 3/4	15 1/2	21	3 5/8	3	5/8	13 3/4	11	15 1/4
5" PIPE	14 3/4	9	18 1/2	22	4 1/4	4	5/8	16 1/2	13 1/2	18
6" TUBE	14 3/4	9	18 1/2	22	4 1/4	4	5/8	16 1/2	13 1/2	18

NOTE: All dimensions are nominal. *Add 1" for vessel opening.

Millimeters										
A	B	C	D	E	F	G	H	J	K*	L
76.2m TUBE	260	159	295	483	83	76	13	260	203	298
76.2m PIPE	260	159	295	483	83	76	13	260	203	298
101.6m TUBE	311	171	394	533	89	89	16	349	279	387
101.6m PIPE	311	171	394	533	89	89	16	349	279	387
127m TUBE	318	197	394	533	92	76	16	349	279	387
127m PIPE	375	229	470	559	108	102	16	419	343	457
152m TUBE	375	229	470	559	108	102	16	419	343	457

NOTE: All dimensions are nominal. *Add 25.4mm for vessel opening.

Information on this page is subject to change without notice. For additional information on this and other Shick Tube-Veyor products and services, please call Shick directly or your local representative.

WEIGHTS*

3\"/>

* Weights shown include cylinders.

HEADQUARTERS:

Shick Tube-Veyor Corporation
4346 Clary Boulevard, Kansas City, MO 64130
P (816) 861-7224 / F (816) 921-1901

Shick Tube-Veyor Asia Pacific PTE LTD
32 Ang Mo Kio Industrial Park 2
#02-03 Sing Industrial Complex, Singapore 569510
Tel: (65) 4824600 Fax: (65) 4818255

REPRESENTED BY:



**SHICK TUBE-VEYOR
CORPORATION**

BDV K96 10K