

POWDERFLOW BUTTERFLY VALVE

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Now Available

Rotary Valve Calculator App



STANDARD FEATURES:

- ▶ Cast Iron Body
- ▶ Lug or Wafer style body
- ▶ Install between 150 lb. flanges
- ▶ ISO 5211 square drive shaft for easy automation
- ▶ Graphite reinforced PTFE stem bushings for long service life
- ▶ Replaceable cartridge style seat
- ▶ Manual hand lever operator with locking arm/plate
- ▶ Rotary Pneumatic actuators
- ▶ Buna N seat material for temperature up to 175 degrees F

ENGINEERED TO INCREASE PRODUCTIVITY. BUILT TO LAST.

FOR USE IN DRY POWDER HANDLING APPLICATIONS

Young Industries offers the PowderFlow Butterfly Valve specifically designed for use in dry powder handling applications. The Patent pending valve utilizes a disc lined with Transflow fluidization media. The Transflow disc fluidizes and conditions even the most cohesive powders.

**ADVANCED
TECHNOLOGY
PROVEN DESIGN**

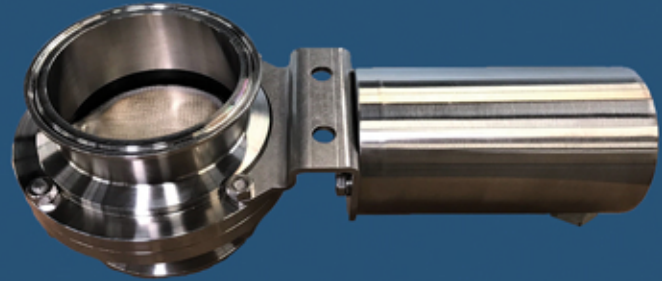


TransFlow Disc

POWDERFLOW BUTTERFLY VALVE

OPTIONAL FEATURES:

- ▶ 300 Stainless Steel Body
- ▶ Many types of seats available
- ▶ Materials for operating temperatures up to 300 degrees F
- ▶ Pneumatic positioners for controlling position of disc
- ▶ Electric actuators
- ▶ Control systems as needed for fluidizing and conditioning from the Powder-flow disc



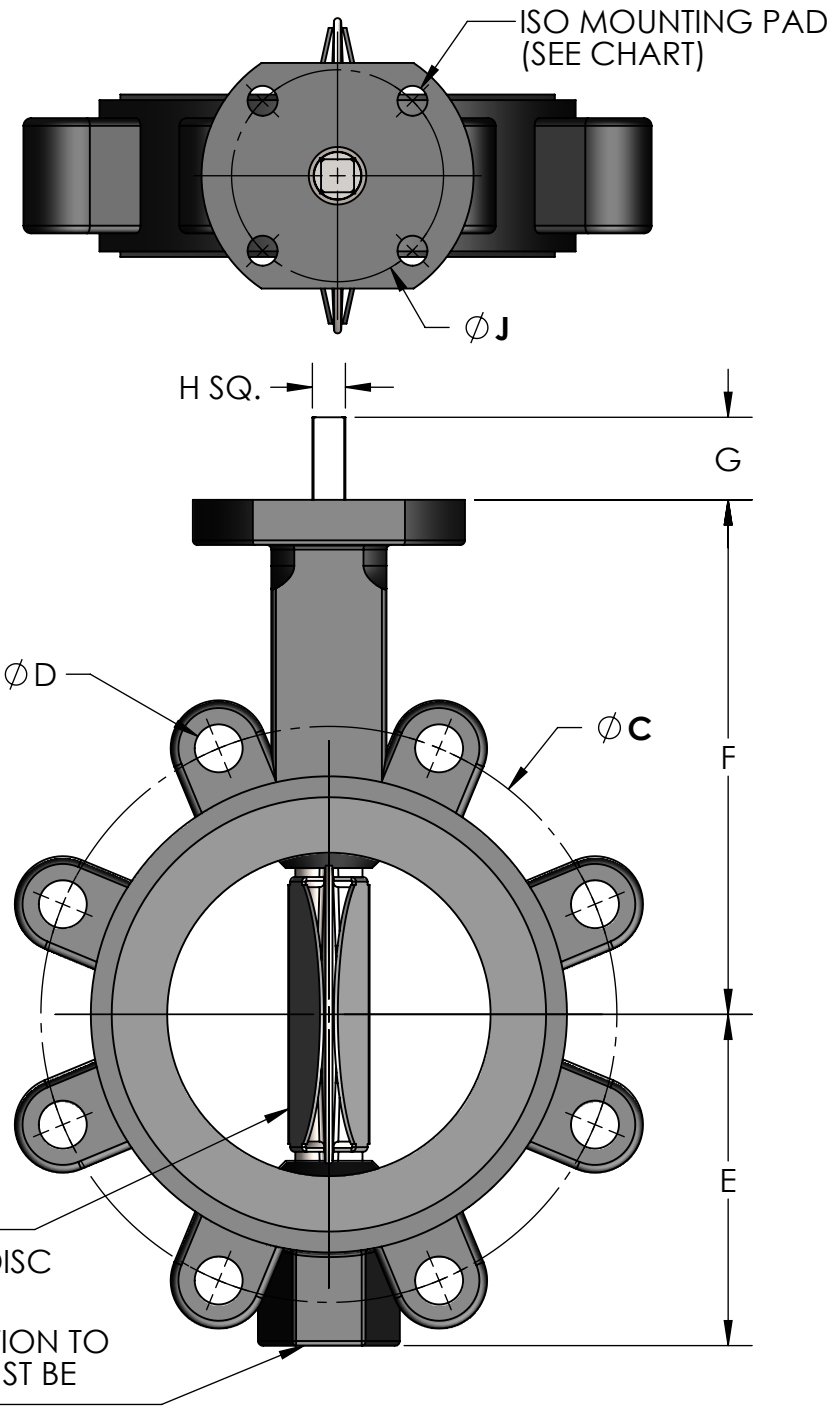
Easy Clean PowderFlow Valve

POWDERFLOW ADVANTAGE:

The PowderFlow Butterfly valve is designed to enhance powder flow not to obstruct it. The disc of the valve is lined on both sides with Transflow fluidization media. The Transflow disc fluidizes and conditions the powder so that it will flow through the valve easily. The most effective area to begin fluidizing and condition powders for repeatable flow from hoppers is the lowest point of the hopper. The lowest point on any hopper is the valve attached to its discharge connection. With the PowderFlow Butterfly Valve the fluidization and conditioning process starts in the valve itself. This is the lowest point and best location to start the fluidization and conditioning of the powder in the process vessel above. The operation of the valve is as follows:

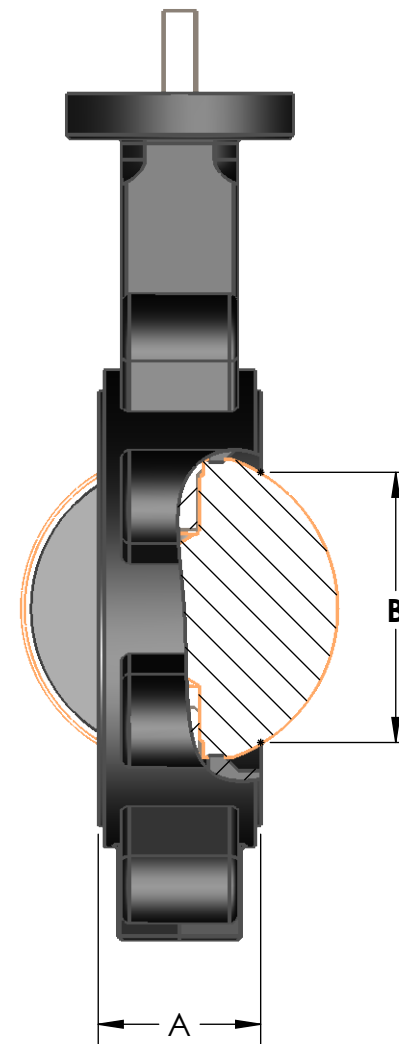
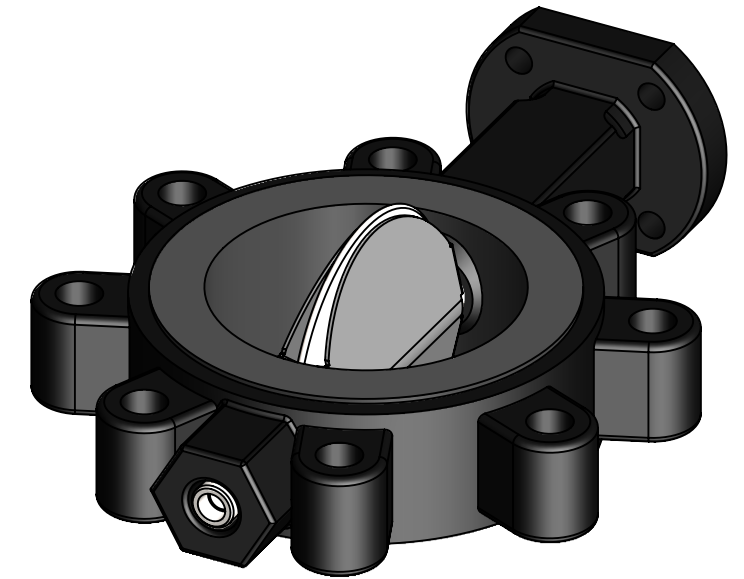
- A. Compressed gas is regulated to 3-5 PSIG to the Transflow disc. The compressed gas inlet is in the tail end of the disc shaft.
- B. While the disc is still in a closed position, the compressed gas enters into the plenum area behind the disc's Transflow surface. This is accomplished by use of a solenoid for automated control or a manual ball valve if manual operation is preferred.
- C. Once the compressed gas is turned on, the low volume of gas exiting the Transflow disc, fluidizes and conditions the powder above. When needed the disc can go to an open, vertical position. No compacting of powder from disc to seat occurs since the powder is in a fluidized state.
- D. With the Transflow disc in a vertical position powders are still being fluidized and will slip over the Transflow disc due to the minimal frictional resistance on the surface of the Transflow lined disc. Like an air hockey game in an arcade, the powder slips around the disc easily.

Young Industries PowderFlow Butterfly Valve can be used in place of a knife gate valve to start and stop the flow of powders on bins or hoppers. The valve can be supplied with manual actuator or rotary pneumatic actuator which has a small footprint for those applications where saving space is needed. Our Valve is rated for 50 PSIG and has shaft seals to provide a positive gas tight seal. When closed, the disc to seat seal is gas and dust tight so there is no leakage around the disc.



NOTES:

1. INSTALL BETWEEN STANDARD ANSI CLASS 125/150# FLANGES
2. GAS REQUIREMENT: 3 TO 11 SCFM AT 3 TO 15 PSIG
3. MANUAL OR PNEUMATIC ACTUATORS



03	UPDATED NOTES, PLUMBING, AND DIMENSIONS	03/17/21	JAH
02	ADDED FLOW CONTROL VALVE AND TUBE FITTING	10/15/20	JAH
01	ADDED 2" VALVE SIZE, ADDED PIPE SIZE 'K'	07/31/18	JAH
REV. NO.	DESCRIPTION	DATE	BY

REVISIONS

CUSTOMER:
 CUSTOMER PO NUMBER:
 YOUNG JOB NUMBER:

TITLE
 YOUNG INDUSTRIES LUG STYLE POWDER-FLOW BUTTERFLY VALVE STANDARD DIMENSION SHEET

REFERENCE PRODUCT LINE REPORT 018-234



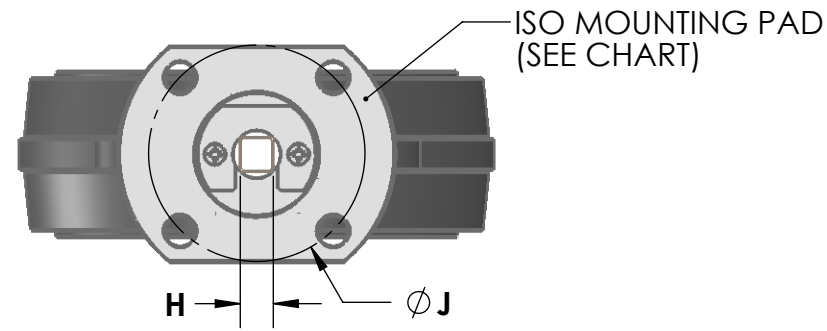
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CHECKED BY:		SCALE = 1:2.5	
DRAWING NUMBER	B-20585-00	SHEET: 1 OF 1	REV: 03

PATENTED

VALVE SIZE	A	B	C	D	E	F	G	H	J	K	ISO
1.5	1.30	0.81	4.33	(4) 5/8-11 UNC	2.5	4.9	1.18	.354	1.97	1/16	F05
2	1.69	1.13	4.75		2.6	5.1					
2.5	1.81	1.79	5.50		3.2	5.6					
3	1.81	2.45	6.00		3.5	5.8					
4	2.05	3.50	7.50	(4) 3/4-10 UNC	4.3	6.7	.433	2.76	1/8	F07	
5	2.20	4.55	8.50		4.8	7.4					
6	2.20	5.71	9.50		5.4	8.0					
8	2.36	7.77	11.75	(4) 7/8-9 UNC	6.7	9.4	.669	4.02	1/4	F10	
10	2.68	9.76	14.25		7.9	10.7					
12	3.07	11.73	17.00		9.3	12.0					

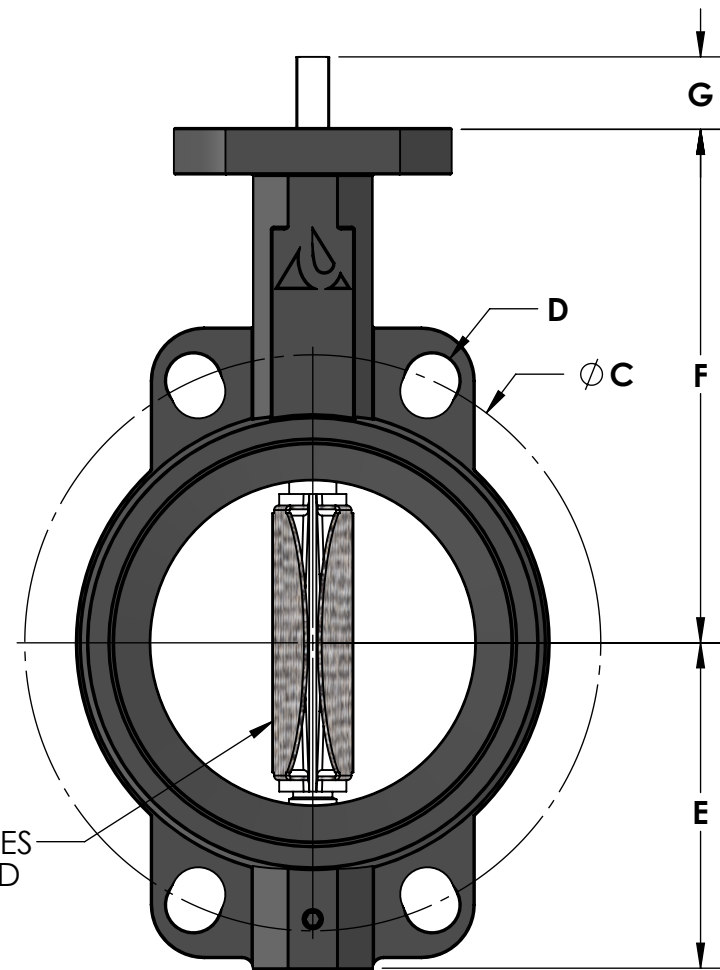
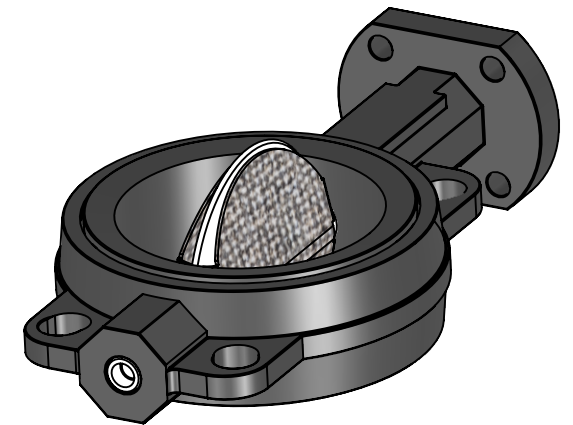
DIMENSIONS ARE IN INCHES

GENERAL TOLERANCES
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY
MACHINING - .XX= .02 .XXX= .005 ANGLE= .50° SURFACE ROUGHNESS HEIGHT 63 MICROINCHES OR LESS
FABRICATION - UNDER 6 6 TO 24 24 TO 60 OVER 60 ± .06 ± .12 ± .19 ± .25
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES



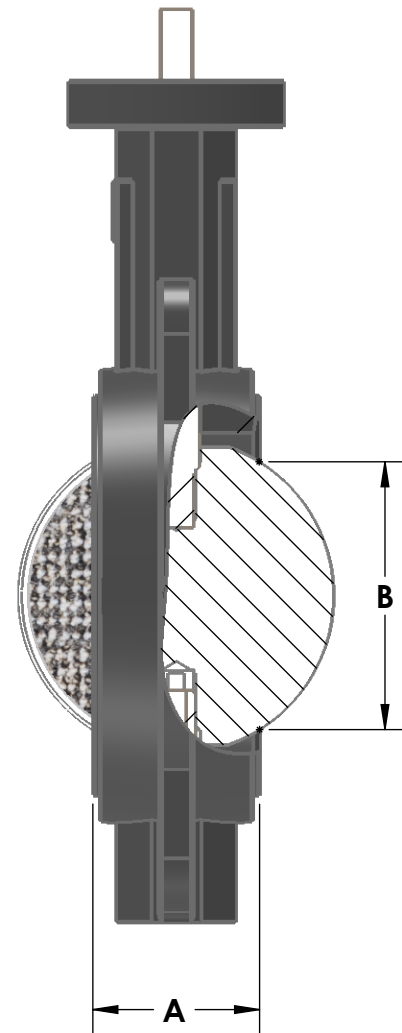
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YOUNG INDUSTRIES
TRANSFLOW LINED
DISC

K NPT AIR CONNECTION TO
VALVE STEM. AIR MUST BE
CLEAN & DRY



PATENTED

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REV. NO.	DESCRIPTION	DATE	BY
REVISIONS			
CUSTOMER:			
CUSTOMER PO NUMBER:			
YOUNG JOB NUMBER:			
TITLE			
YOUNG INDUSTRIES WAFER STYLE POWDER-FLOW BUTTERFLY VALVE, WAFER STYLE STANDARD DIMENSION SHEET			
REFERENCE PRODUCT LINE REPORT 018-234			
INDUSTRIES, INC. MUNCY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165			
DRAWN BY: BMF		DATE: 09/12/18	
CHECKED BY:		SCALE = 1:2.5	
DRAWING NUMBER		SHEET:	REV:
B-20585-01		1 OF 1	01