

# **Gravity Flow**

# ROTARY VANE DIVERTER VALVE



# STANDARD FEATURES:

- ► Fabricated carbon steel, or 300 series stainless steel
- Standard operating temperature up to 250 degrees F
- Standard internal pressure rating of 2 PSIG
- O-ring shaft seal
- Ball bearing supported diverter blade
- Manual, Pneumatic, or Electric actuation
- Machined blade and housing (no internal wipers or fasteners)
- No internal ledges
- Dust tight to exterior
- Round or Square Flanges

#### ADVANCED TECHNOLOGY PROVEN DESIGN



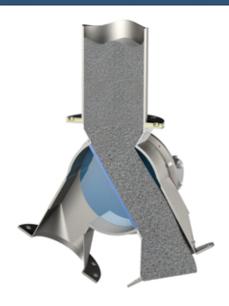
#### PRECISION MACHINED GRAVITY FLOW DIVERTER NO INTERNAL "HANG-UP" POINTS

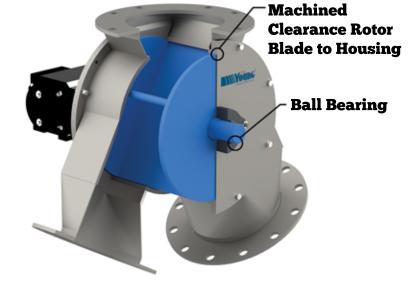
Young Industries Rotary Vane Diverter Valve is designed for handling powders or granular products in gravity flow or low-pressure conditions. The Rotary Vane Diverter Valve is available in size 4" thru 12" as standard with larger sizes available. The valve has one inlet connection and two discharge connections and can be configured either symmetrical or asymmetrical. The symmetrical configuration connections can be either 30 degrees or 45 degrees offset from the vertical centerline of the inlet. The asymmetrical configuration has one leg vertical with the off-set leg at 30 degrees from the vertical leg.

The Rotary Vane Diverter Valve utilizes a heavy machined diverter blade/rotor and housing to provide tight internal clearances for sealing from leg to leg. The design is similar to a rotary valve, except the rotor for the Rotary Vane is a single diversion blade. The precision machined surfaces of the valve diverter blade eliminate internal wipers and fasteners that are common in most sheet metal style diverter valves. The Rotary Vane Diverter is an excellent choice for those applications where there can be **no internal "hang-up" points for product to accumulate.** This Diverter Valve has no internal wiper that can wear over time. The Rotary Vane Diverter Valve is virtually maintenance free!

## ROTARY VANE DIVERTER VALVE

# **Gravity Flow**





#### **OPTIONAL FEATURES:**

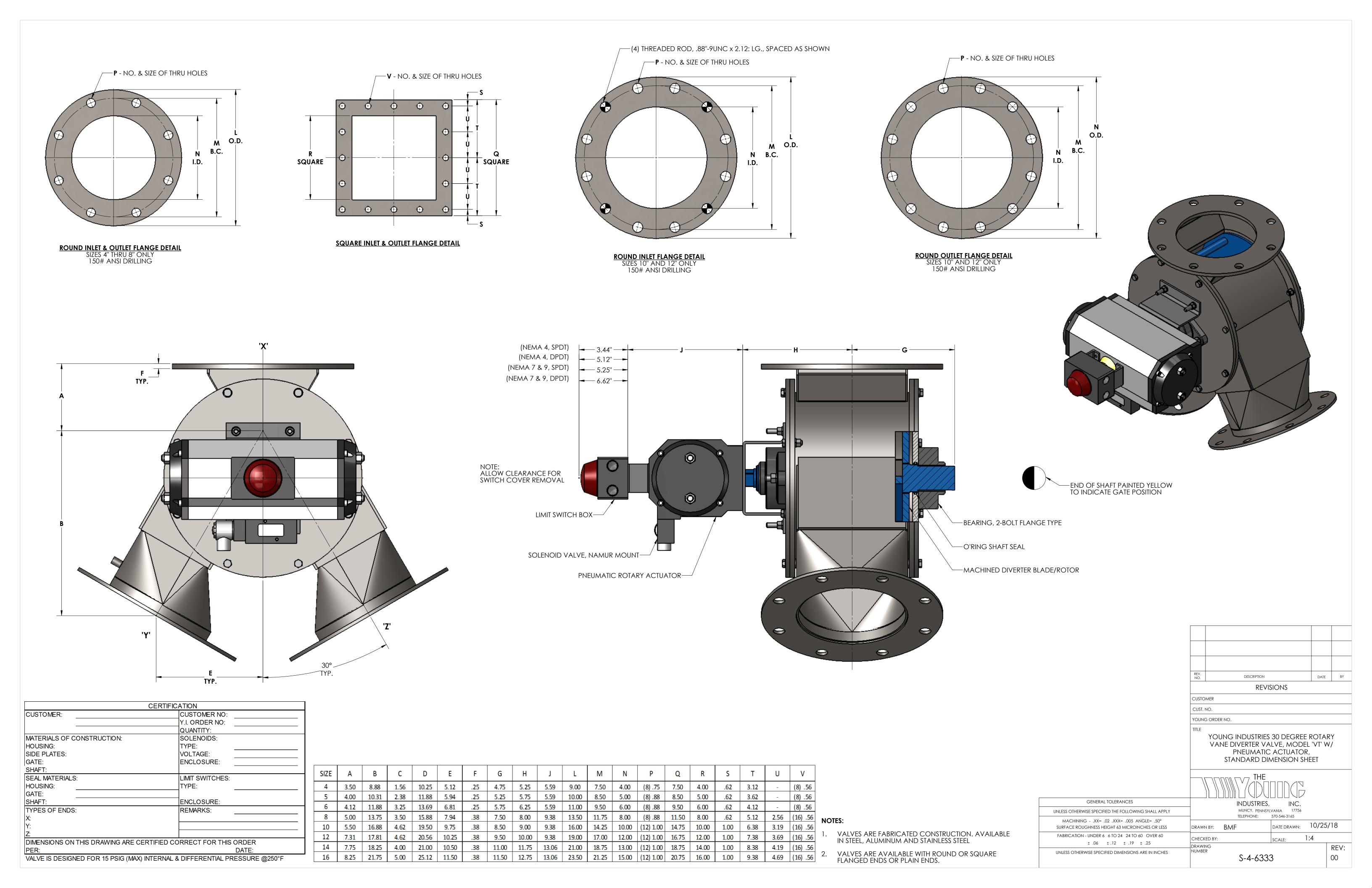
- Abrasion resistant interior coatings
- Access/ Inspection covers
- High temperature service
- Exterior painting and coatings to meet customer specifications
- Diverter blade can be supplied with flexible wipers
- Sanitary design needs no tools to remove and access the gate/rotor and internal surfaces

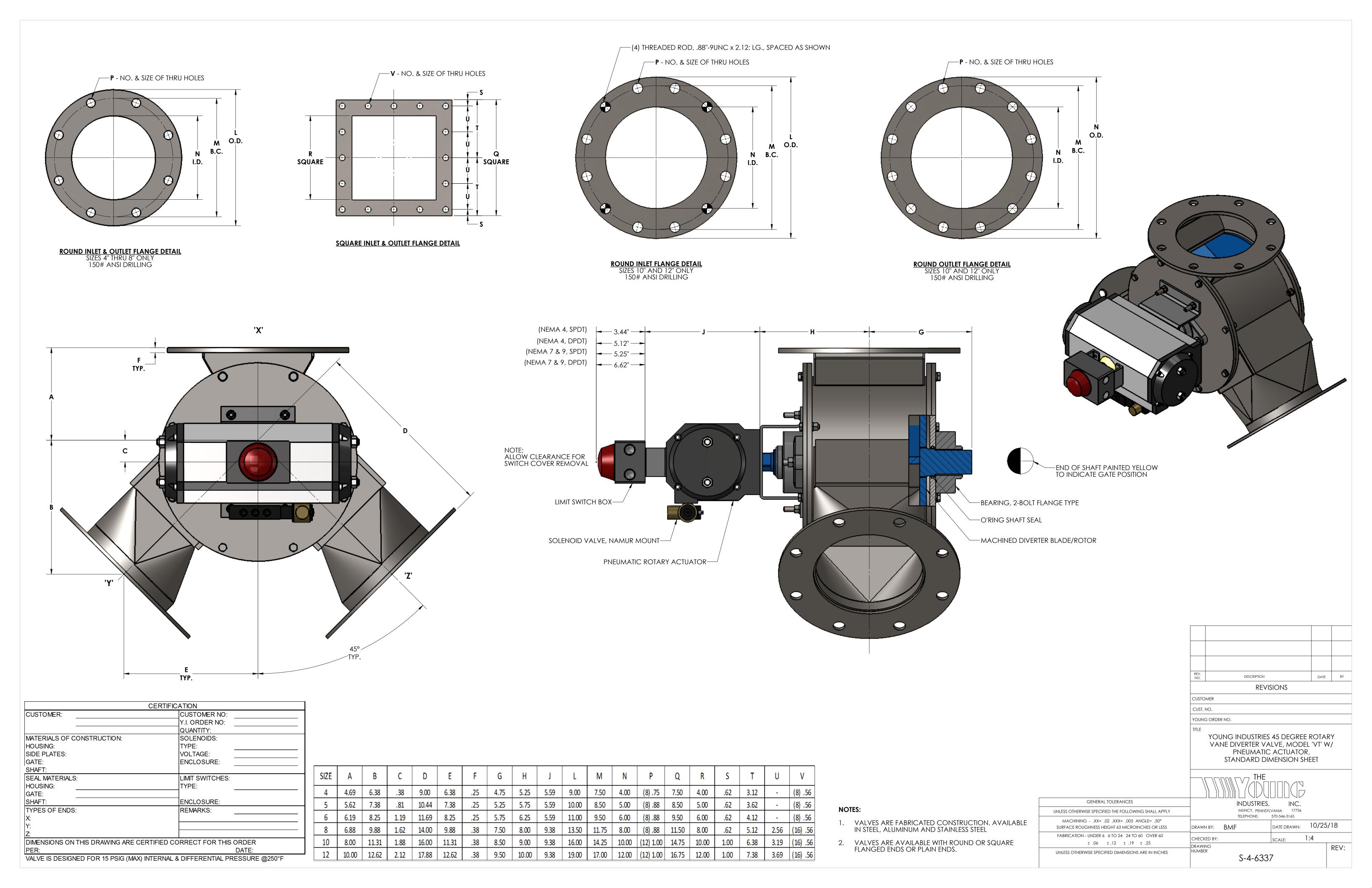
The diverter blade is supported by flange type ball bearings and utilizes an O-ring to seal the diverter shaft to the exterior. The Diverter Valve offers long service life with virtually no maintenance for low pressure and gravity flow conditions.

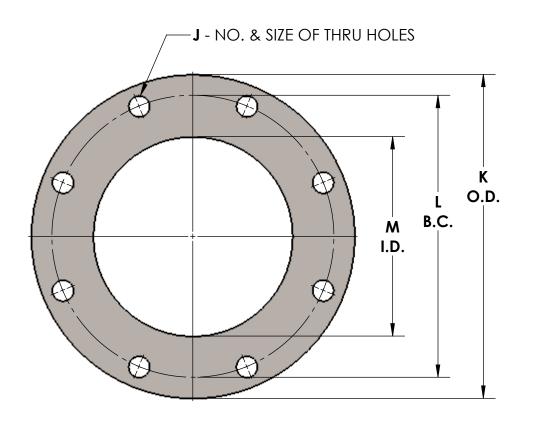
Young Industries Rotary Vane Diverter Valve is available with manual spring tensioned lever operator, chain wheel, rotary pneumatic actuator, or electric actuator.



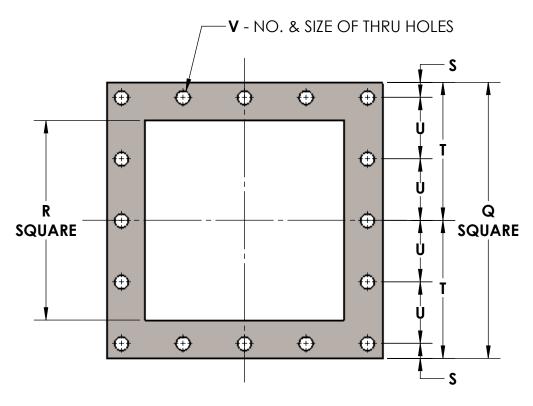




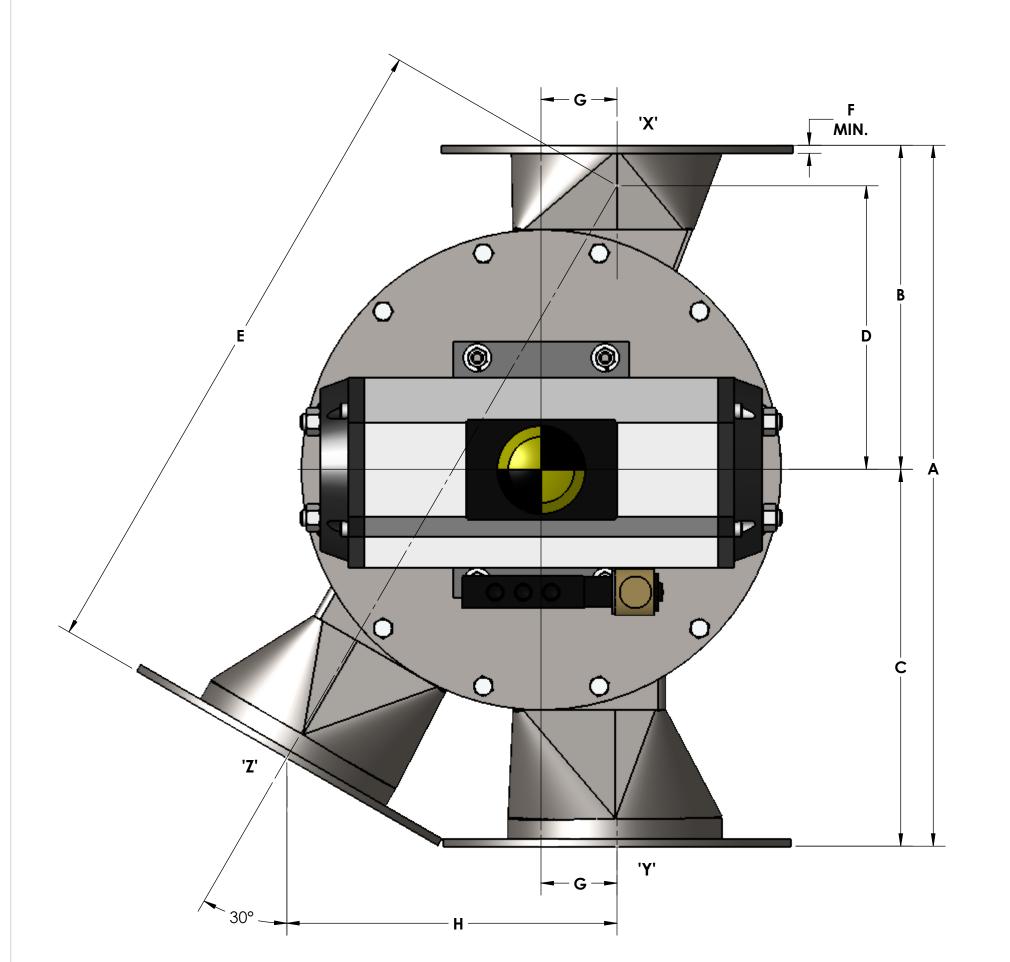


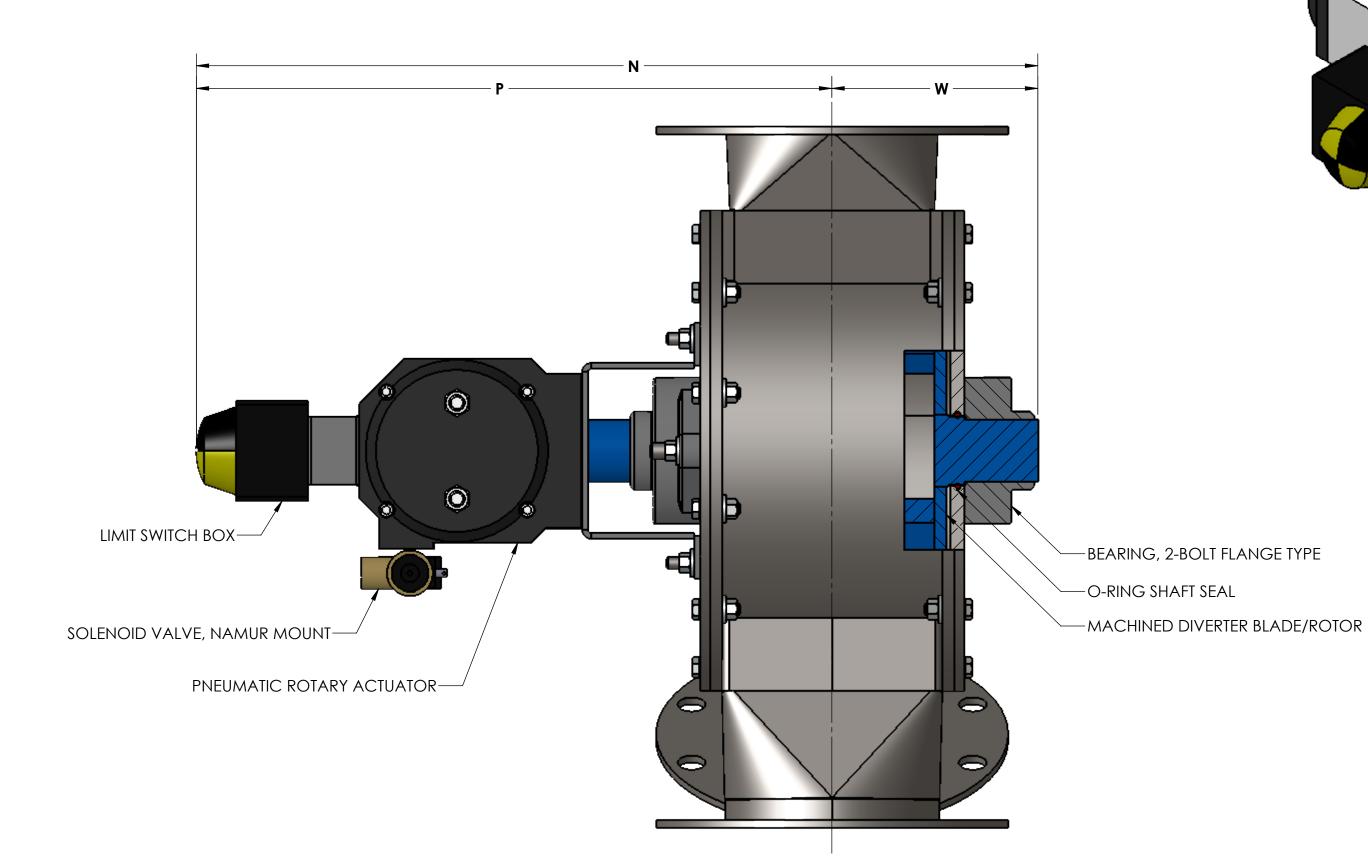


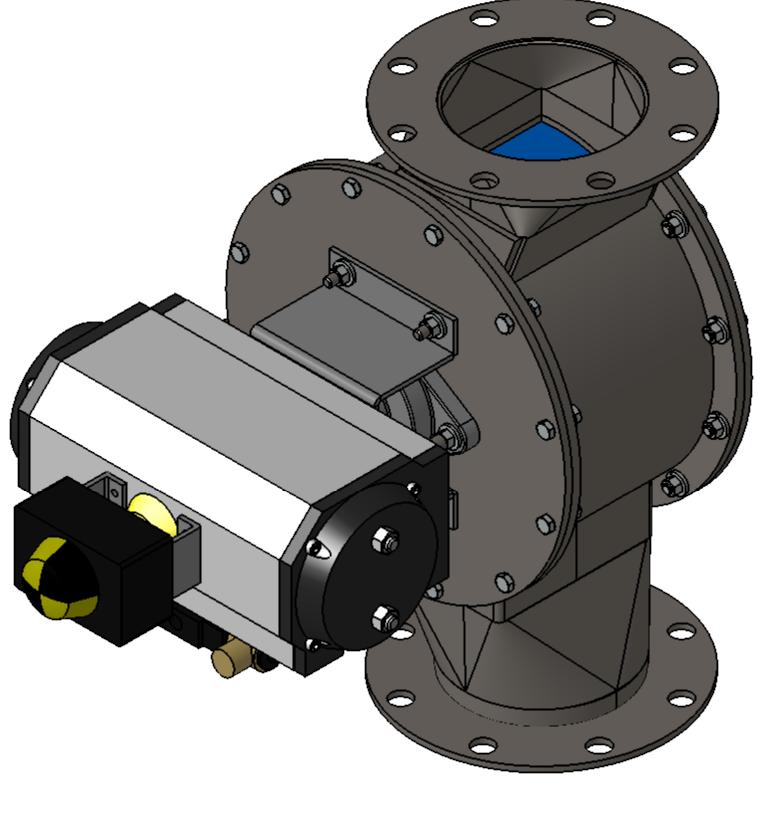
ROUND INLET & OUTLET FLANGE DETAIL 150# ANSI DRILLING



**SQUARE INLET & OUTLET FLANGE DETAIL** 







C	ERTIFICATION	
CUSTOMER:	CUSTOMER NO:	
	Y.I. ORDER NO:	
	QUANTITY:	
MATERIALS OF CONSTRUCTION:	SOLENOIDS:	
HOUSING:	TYPE:	
SIDE PLATES:	VOLTAGE:	
GATE:	ENCLOSURE:	
SHAFT:		
SEAL MATERIALS:	LIMIT SWITCHES:	
HOUSING:	TYPE:	
GATE:		
SHAFT:	ENCLOSURE:	
TYPES OF ENDS:	REMARKS:	
X:		
Y:		
Z:		
DIMENSIONS ON THIS DRAWING ARE CERT	TIFIED CORRECT FOR THIS ORDE	R
PFR.	DATE	<b>=</b> .

VALVE IS DESIGNED FOR 15 PSIG (MAX) INTERNAL & DIFFERENTIAL PRESSURE @250°F

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	SIZE	Α	В	С	D	E	F	G	Н	J	K	L	М	N	Р	Q	R	S	T	U	V	W
	3	17.00	8.12	8.88	5.12	14.00	.25	1.38	7.00	(4)75" DIA.	7.50	6.00	3.12	17.06	12.56	-	-	-	-	-	-	4.5
	4	19.00	8.50	10.50	6.31	16.81	.25	1.69	8.41	(8)75" DIA.	9.00	7.50	4.12	18.06	13.06	7.50	4	0.62	3.12	-	(8) .56	5
_	5	20.50	9.38	11.12	7.47	18.59	.25	2.00	9.28	(8)88" DIA.	10.00	8.50	5.12	19.06	13.56	8.50	5	0.62	3.62	-	(8) .56	5.5
	6	22.25	10.38	11.88	8.62	20.50	.25	2.31	10.25	(8)88" DIA.	11.00	9.50	6.12	20.06	14.06	9.50	6	0.62	4.12	-	(8) .56	6
	8	26.50	12.38	14.12	10.97	25.09	.38	2.94	12.53	(8)88" DIA.	13.50	11.75	8.25	28.75	20.94	11.50	8	0.62	5.12	2.56	(16) .56	7.81
	10	31.00	14.75	16.25	13.50	29.81	.38	3.62	14.88	(12) - 1.00" DIA.	16.00	14.25	10.25	30.75	21.94	14.75	10	1.00	6.38	3.19	(16) .56	8.81
	12	36.25	17.12	19.12	15.94	35.06	.38	4.38	17.75	(12) - 1.00" DIA.	19.00	17.00	12.25	33.25	23.19	16.75	12	1.00	7.38	3.69	(16) .56	10.06

### NOTES:

- VALVES ARE FABRICATED CONSTRUCTION. AVAILABLE IN STEEL, STAINLESS STEEL AND ALUMINUM.
- 2. VALVES ARE AVIABLE WITH ROUND OR SQUARE FLANGED ENDS OR PLAINENDS.

DESCRIPTION	DATE	Е
REVISIONS		

CUST. NO.

DRAWING NUMBER

GENERAL TOLERANCES

MACHINING - .XX= .02 .XXX= .005 ANGLE= .50°

SURFACE ROUGHNESS HEIGHT 63 MICROINCHES OR LESS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

± .06 ± .12 ± .19 ± .25

FABRICATION - UNDER 6 6 TO 24 24 TO 60 OVER 60

YOUNG ORDER NO.

YOUNG INDUSTRIES 30 DEGREE ROTARY

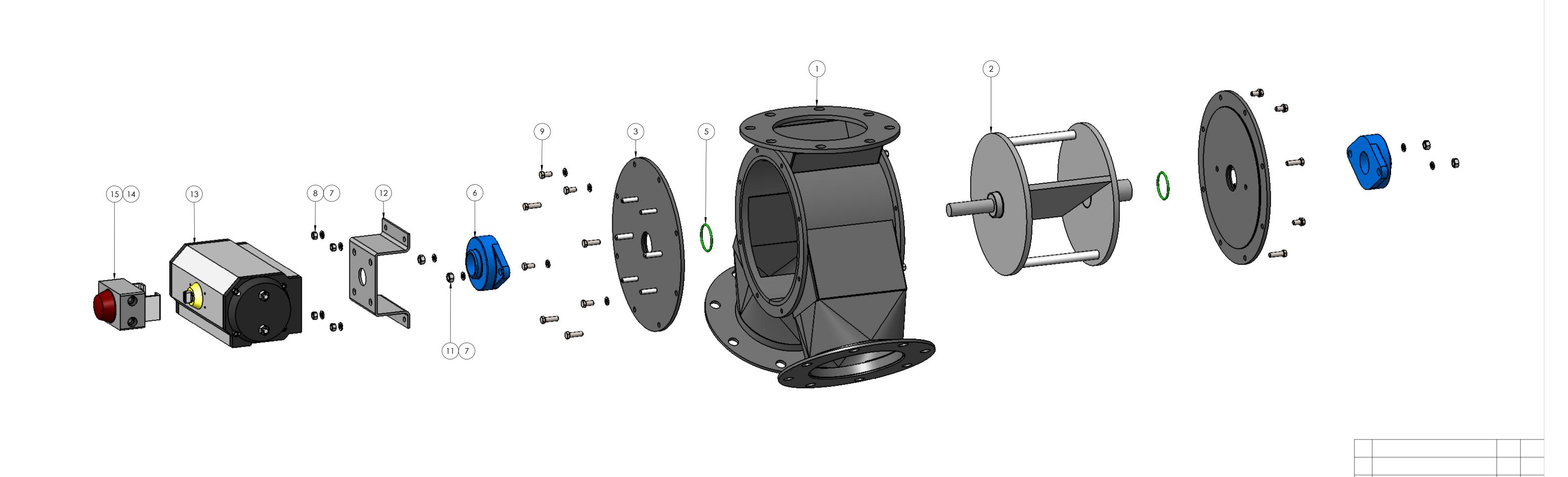
VANE DIVERTER VALVE, MODEL 'RVT' W/
PNEUMATIC ACTUATOR,
STANDARD DIMENSION SHEET

UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY

INDUSTRIES, INC.
MUNCY, PENNSYLVANIA 17756
TELEPHONE: 570-546-3165

DATE DRAWN: 10/26/18 DRAWN BY: BMF SCALE: 1:3 CHECKED BY:

REV: S-4-7388 00



ITEM NO.

10

11

13

14

15

DESCRIPTION

HOUSING ASSY, MODEL VT ROTARY DIVERTER VALVE

GATE ASSY, MODEL VT ROTARY DIVERTER VALVE

END PLATE ASSY, VT ROTARY DIVERTER VALVE

END PLATE ASSY, VT ROTARY DIVERTER VALVE

O-RING DIVERTER VALVE

DODGE SC 2-BOLT FLANGE BEARING

WASHER, LOCK, REGULAR, .38 DIA., PLATED

NUT, HEX, .38-16UNC, PLATED

BOLT, HEX HEAD, .38-16UNC X 0.75, PLATED BOLT, HEX HEAD, .38-16UNC X 1.25, PLATED

NUT, HEX, .44-14UNC, PLATED

ACTUATOR MOUNTING BRACKET, VT VALVE, MAX-AIR
ACTUATOR, PNEUMATIC, MAX-AIR, UT-46

LIMIT SWITCH MOUNTING BRACKET, MAX-AIR

LIMIT SWITCH, CA, NEMA 7, MAX-AIR

DESCRIPTION

CUSTOMER:

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

CUSTOMER PO NUMBER: YOUNG JOB NUMBER:

DRAWN BY: BMF

CHECKED BY:

REVISIONS

YOUNG INDUSTRIES MODEL 'VT' ROTARY DIVERTER VALVE, SHROUDED ROTOR

industries,

MUNCY, PENNSYLVANIA 17756 TELEPHONE: 570-546-3165

DATE: 10/1/18

SCALE=1:4

DATE BY

2

23

10

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