



SIZE	ROTOR DIA. X LG.	ROTOR CAPACITY (CU. FT. PER REV.)				STD RPM	VENT SIZE	STD HP	A								J								WEIGHT C/S											
		AS	BS	CS	DS				10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40		42	44	46	48	50						
4	6 X 4	.0428	.0274	.0129	.0399	38	1.25	.50	10.00	19.25	10.31	7.69	7.31	.31	1.19	1.00	.25	X .12 X 2.62	9.00	7.50	4.00	(8)	.75	N/A	7.50	4.00	.62	3.12	N/A	(6)	.56	(2)	.50-13UNC-2B	13.31	205	
5	8 X 5	.105	.0642	.0440	.101	38	1.50	.50	12.00	20.50	10.94	8.31	7.94	.44	1.44	1.25	.38	X .19 X 2.62	10.00	8.50	5.00	(4)	.88	(4)	.75-10UNC-2B	8.50	5.00	.62	3.62	N/A	(6)	.56	(2)	.50-13UNC-2B	14.31	260
6	10 X 6	.208	.124	.0795	.203	32	1.50	.50	14.00	22.38	11.88	9.25	8.88	.44	1.94	1.75	.50	X .25 X 2.62	11.00	9.50	6.00	(4)	.88	(4)	.75-10UNC-2B	9.50	6.00	.62	4.12	N/A	(6)	.56	(2)	.50-13UNC-2B	15.38	310
8	12 X 8	.393	.214	.115	.389	32	2.00	.75	17.00	24.38	12.88	10.25	9.88	.44	1.94	1.75	.50	X .25 X 2.62	13.50	11.75	8.00	(4)	.88	(4)	.75-10UNC-2B	11.50	8.00	.62	5.12	2.56	(14)	.56	(2)	.50-13UNC-2B	16.38	385
10	15 X 10	.815	.507	.154	.811	32	2.50	.75	20.00	26.62	13.88	11.25	10.88	.44	2.19	2.00	.50	X .25 X 2.62	16.00	14.25	10.00	(8)	1.00	(4)	.88-9UNC-2B	14.75	10.00	1.00	6.38	3.19	(14)	.56	(2)	.50-13UNC-2B	18.00	520
12	17 X 12	1.30	.670	.259	1.295	32	2.50	.75	22.00	29.75	15.81	12.44	12.06	.56	2.44	2.25	.62	X .31 X 3.38	19.00	17.00	12.00	(8)	1.00	(4)	.88-9UNC-2B	16.75	12.00	1.00	7.38	3.69	(14)	.56	(2)	.50-13UNC-2B	19.00	660
14	19 X 13	1.715	.940	.438	1.705	32	3.00	.75	24.00	30.75	16.31	12.94	12.56	.56	2.44	2.25	.62	X .31 X 3.38	21.00	18.75	13.00	(8)	1.12	(4)	1.00-8UNC-2B	18.00	13.00	1.00	8.00	4.00	(14)	.56	(2)	.50-13UNC-2B	19.94	885
16	23 X 15	2.787	1.518	.701	2.787	30	3.50	1.5	28.00	34.62	18.31	14.81	14.44	.62	2.94	2.75	.75	X .38 X 3.50	23.50	21.25	15.00	(12)	1.12	(4)	1.00-8UNC-2B	20.00	15.00	1.00	9.00	4.50	(14)	.69	(2)	.62-11UNC-2B	23.00	1260
18	25 X 17	3.819	2.062	.937	3.818	28	3.50	1.5	30.00	36.62	19.31	15.81	15.44	.62	2.94	2.75	.75	X .38 X 3.50	25.00	22.75	17.00	(12)	1.25	(4)	1.12-7UNC-2B	22.00	17.00	1.00	10.00	5.00	(14)	.69	(2)	.62-11UNC-2B	24.06	1510
20	28 X 19	5.397	2.909	1.369	5.415	28	4.00	2.0	36.00	41.38	22.38	17.50	17.12	.75	3.19	3.25	.75	X .38 X 3.50	27.50	25.00	19.00	(16)	1.25	(4)	1.12-7UNC-2B	25.50	19.00	1.25	11.50	5.75	(14)	.81	(2)	.75-10UNC-2B	26.62	2200
22	32 X 21	7.983	4.343	2.047	8.005	26	5.00	2.0	40.00	45.75	24.81	19.44	19.06	.75	3.69	3.75	.88	X .44 X 5.00	29.75	27.25	21.00	(16)	1.38	(4)	1.25-7UNC-2B	27.50	21.00	1.25	12.50	6.25	(14)	.81	(2)	.75-10UNC-2B	28.62	2730
24	34 X 23	10.037	5.434	2.519	10.033	24	5.00	2.0	42.00	47.75	25.81	20.44	20.06	.75	3.75	3.75	.88	X .44 X 5.00	32.00	29.50	23.00	(16)	1.38	(4)	1.25-7UNC-2B	29.50	23.00	1.25	13.50	6.75	(14)	.81	(2)	.75-10UNC-2B	29.62	3000

- NOTES:
1. VALVE HOUSINGS ARE CAST OF IRON, ALUMINUM, STEEL OR STAINLESS STEEL; FABRICATED OF STEEL OR STAINLESS STEEL. ALL ROTORS ARE FABRICATED OF STEEL OR STAINLESS STEEL.
  2. VALVE HOUSINGS ARE AVAILABLE WITH EITHER A SQUARE OR ROUND INLET AND OUTLET. ROUND FLANGES MATCH 150# ANSI DRILLING.
  3. STANDARD HOUSINGS ARE DESIGNED FOR 15 PSI (MAX) INTERNAL & DIFFERENTIAL @ 250 DEGREES F.
  4. INSPECTION DOOR IS OPTIONAL AND WILL BE FURNISHED ONLY WHEN SPECIFIED.
  5. END PLATES AND INSPECTION DOOR O-RINGS ARE OPTIONAL AND WILL BE FURNISHED ONLY WHEN SPECIFIED.
  6. AIR PURGE CONNECTIONS WITH BRASS LANTERN RINGS ARE OPTIONAL AND WILL BE FURNISHED ONLY WHEN SPECIFIED.
  7. VENT WITH SCH 10 PIPE IS OPTIONAL AND WILL BE FURNISHED ONLY WHEN SPECIFIED. VENT CONNECTION WILL CHANGE ROTOR ROTATION TO COUNTER-CLOCKWISE

REV. NO.	DESCRIPTION	DATE	BY
REVISIONS			
CUSTOMER:			
CUSTOMER PO NUMBER:			
YOUNG JOB NUMBER:			
TITLE			
YOUNG INDUSTRIES MODEL 'HC' ROTARY VALVE, SIZE 4"-24" CLASS 15 W/ PARALLEL SHAFT DRIVE, SHROUDED ROTOR STANDARD DIMENSION SHEET			

GENERAL TOLERANCES UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY	
MACHINING - .XX" .02 .XXX" .005 ANGLES .50"	SURFACE ROUGHNESS HEIGHT .63 MICRORINCHES OR LESS
FABRICATION - UNDER 6" 6 TO 24" 24 TO 40" OVER 40"	± .06 ± .12 ± .19 ± .25
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. UNLESS SPECIFIED DIMENSIONS & TOLERANCES INTERPRETED PER ASME Y14.5-2009	
3RD	

**YOUNG INDUSTRIES**  
MUNCY, PENNSYLVANIA 17756  
TELEPHONE: 570-546-3165

DRAWN BY: MEA DATE: 07/22/24  
CHECKED BY: SCALE=1:4  
DRAWING NUMBER: D-21404-05 SHEET 1 OF 1 REV: 00