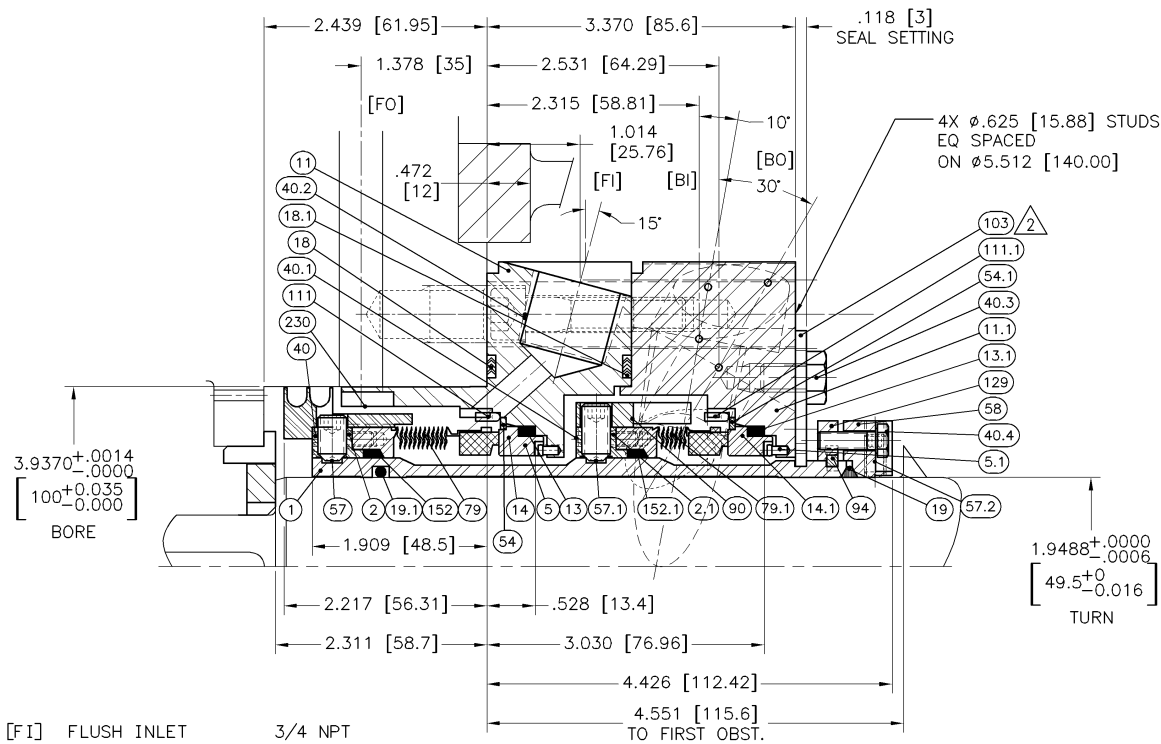
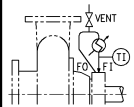


NO: 2M-20529
REV: A

[FI] FLUSH INLET 3/4 NPT
[FO] FLUSH OUTLET BY FPD
[BI] BUFFER INLET 3/4 NPT
[BO] BUFFER OUTLET 3/4 NPT

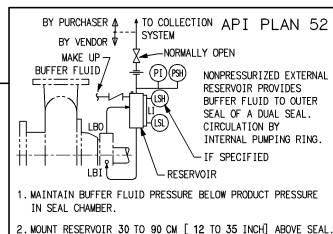
1. FOR INSTALLATION AND OPERATING INSTRUCTIONS SEE APPROPRIATE FLOWERVE INSTALLATION SHEET (FIS).

2. DISENGAGE SETTING DEVICE BEFORE START-UP.



API PLAN 23
RECIRCULATION FROM SEAL WITH
PUMPING RING THROUGH COOLER
AND BACK TO SEAL

1. MAINTAIN SEAL CHAMBER PRESSURE AT LEAST 30% ABOVE
PRODUCT VAPOR PRESSURE OR MAINTAIN A 20°C [36°F]
PRODUCT TEMPERATURE MARGIN.



PIPING REQUIREMENTS

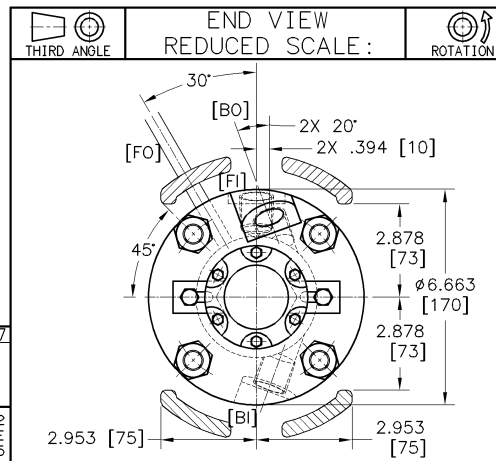
PIPING REQUIREMENTS

REVISION: A [DATE: 13-AUG-2009] BY: FDI/AZ CHKD: GPORTILLO EGN NO: 09-11677
REVISION NOTE: TAG & SERIAL NUMBER UPDATED PER CUSTOMER REQUEST.

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DIM'S ARE REF UNLESS
SPECIFIED OTHERWISE.
DIM'S IN: INCHES [MM]

C/A2
JUNE
2005



BILL OF MATERIAL NO: 2M20529					1 SUGGESTED SPARE PARTS 2 CODE/BSC [X]/OFF STD [W]	
NO	PARTCODE	QTY	DESCRIPTION	MATERIAL	1	2
1	3R121117DB	1	SLEEVE	316		
2	3R16007DB	1	SEAL DRIVE	316		
2.1	3R16007DB	1	SEAL DRIVE	316		
5	4R9695DB	1	PIN	316		X
5.1	4R9695DB	1	PIN	316		X
11	3M03260DB	1	GLAND	316		
11.1	3M03264DB	1	GLAND	316		
13	4R9595QF	1	SEAT GASKET	FLEXIBLE GRAPHITE	*	X
13.1	4R9595QF	1	SEAT GASKET	FLEXIBLE GRAPHITE	*	X
14	3R11397SL	1	STATIONARY FACE	SILICON CARBIDE	*	X
14.1	3R11397SL	1	STATIONARY FACE	SILICON CARBIDE	*	X
18	665171JF	1	GLAND GASKET	316L / FLEX GRAPH	*	
18.1	665171JF	1	GLAND GASKET	316L / FLEX GRAPH	*	
19	4R5370QF	1	SLEEVE GASKET	FLEXIBLE GRAPHITE	*	
19.1	568226AD	1	SLEEVE GASKET	PERFLUOROELASTOMER	*	
40	4N03011AI	6	SHCS #8-32X1/2	A-286 / SILVER PLTD		
40.1	4N03011AI	6	SHCS #8-32X1/2	A-286 / SILVER PLTD		
40.2	4N01767CI	2	SHCS 3/8-16X1-3/4	ALLOY STEEL, PLATED		
40.3	4R2889CI	2	HHCS 5/16-18X1/2	ALLOY STEEL, PLATED		
40.4	4N02083CI	6	HHCS M5X16	ALLOY STEEL, PLATED		
54	4R9620DB	1	RETAINING RING	316		X
54.1	4R9620DB	1	RETAINING RING	316		X
57	4R0434DB	6	SSCP 5/16-18X1/2	316		*
57.1	4R1048DB	6	SSCP 5/16-18X5/8	316		*
57.2	4N01859CI	6	SSCP M6X12	ALLOY STEEL, PLATED	*	
58	3N12484CB	1	DRIVE COLLAR	416		
79	3R29971TQ	1	BELLOWS ASSEMBLY	ALLOY 718 / 316 / HIGH-CHROME ALLOY / SILICON CARBIDE	*	X
79.1	3R15957MO	1	BELLOWS ASSEMBLY	ALLOY C-276 / 316 / Fe-Ni ALLOY / CARBON	*	X
90	4R118849DB	1	PUMPING RING	316		
94	4N12995DB	1	SPLIT RING	316		
103	4N09587DB	2	SETTING DEVICE	316		
111	4R9709DB	1	SNAP RING	316		X
111.1	4R9709DB	1	SNAP RING	316		X
129	3N12526DB	1	ADJUSTING COLLAR	316		
152	4R9570QF	1	BELLOWS ADAPTER GASKET	FLEXIBLE GRAPHITE	*	X
152.1	4R9570QF	1	BELLOWS ADAPTER GASKET	FLEXIBLE GRAPHITE	*	X
230	3M03261HU	1	THROAT BUSHING	ALLOY 400		

CUSTOMER: FLOWERVE PUMP DIVISION ULTIMATE USER: WESTERN REFINING YORKTOWN ADDRESS: GRAFTON, VA UNITED STATES CUSTOMER P.O.: 54684 PRODUCT: HYDROCARBON TEMP: 720°F SPEC GRAVITY: 0.761 VISCOSITY: 0.9 CP VAPOR PRES: 1.10 PSIA		SEAL CHAMBER PRES: 4.50 PSIG SUCTION PRES: 0 PSIG NORM / 44.3 PSIG MAX DISCH PRES: N/S PSIG RPM: 3550 EQUIP SERIAL NO.: 09HE0026 EQUIP ITEM NO.: J-114 API PLAN: 23/52 SERVICE: VAC OVERFLASH RECYCLE	
SEAL TYPE: BXHHW/BXHW		SEAL SIZE: 2.375/2.375	
SEAL CONFIG: DUAL UNPRESSURIZED-FACE TO BACK-CARTRIDGE		SIZE CODE:	
MATL CODE: HXCX/APCX		DESIGN:	
EQUIP MFR: FLOWERVE / IDP		INSTR:	
EQUIP MODEL: 1.5HPXM12A / 1 STAGE			
EQUIP DWG: DBM905174-1			
 Flow Solutions Division		SCALE: TO SCALE	
		DRAWN: FDI/AZ	
		DATE: 12-MAY-2009	
		CHKD: GPORTILLO	
APPVD:		F.O. NO: 2M-20529	
		OPTIONS:	
		REF DWG: 2M-20353, 2M-15436	
		FORM DWG:	
		ASSY/ORDER NO: SHEET: 1 OF: 1	
		REV:	
		2M-20529	
		A	