

BILL OF MATERIAL NO: B0574898-Q1				1 SUGGESTED SPARE PARTS 2 CODE: BSCQX (OFF STOW)	
NO	PART CODE	QTY	DESCRIPTION	MATERIAL	1 2
1	C0404682DB-Q3	1	SLEEVE	316	
11	C0592056DB-Q1	1	GLAND	316	
5	670416DB	0	PIN	316	
11.1	C0409572DB-Q3	1	GLAND	316	
5.1	670419DB	1	PIN	316	
13	568233AD	2	SEAT GASKET	PERFLUOROELASTOMER	* X
14	4N12163SL	2	STATIONARY FACE	SILICON CARBIDE	* W
15	3N11640GE	1	ROTATING FACE	CARBON	* X
15.1	3R3885GE	1	ROTATING FACE	CARBON	* X
16	669124NL	16	COIL SPRING	ALLOY C-276	* X
17	154780DB	2	SPRING HOLDER	316	
18	568243AD	1	GLAND GASKET	PERFLUOROELASTOMER	* X
18.1	568240AD	1	GLAND GASKET	PERFLUOROELASTOMER	* X
19	568226AD	1	SLEEVE GASKET	PERFLUOROELASTOMER	* X
24	4R11088GE	1	GLAND BUSHING	CARBON	
40	4R2891CK	2	IHCS 5/16-18 X 1/2	18-8	
40.1	4R2889CK	2	IHCS 5/16-18 X 1/2	18-8	
54	668833DB	2	RETAINING RING	316	X
57	4R0460DB	4	SSADP 5/16-18 X 5/16	316	X
57.1	4R0431DB	4	SSCP 5/16-18 X 1/4	316	* W
57.2	4R7959DB	4	SSCP 5/16-18 X 7/16	316	* W
57.3	4R3976CI	8	SSCP 1/4-20 X 7/16	ALY STL, ZINC PLTD	
58	4R14242DB	1	DRIVE COLLAR	316	
71	568140AD	1	O-RING GASKET	PERFLUOROELASTOMER	*
76	M2740632AD	1	ROTATING FACE GASKET	PERFLUOROELASTOMER	* W
76.1	568230AD	1	ROTATING FACE GASKET	PERFLUOROELASTOMER	* X
90	4N511280DB	1	PUMPING RING	316	
103	4N0857DB	2	SETTING DEVICE	316	
111	SB085X515	1	SNAP RING	UNS N07718 / P.H.	
142	C0592058DX	1	RETAINER	DUPLEX 2205	
167	4R3000X953	2	PIPE PLUG 3/8 NPT HEX HEAD	SA-479 TY316/316L	
167.1	4R3001X953	2	PIPE PLUG 1/2 NPT HEX HEAD	SA-479 TY316/316L	
167.2	4R3002X953	2	PIPE PLUG 3/4 NPT HEX HEAD	SA-479 TY316/316L	
172	3N45204DB	1	ADAPTER	316	

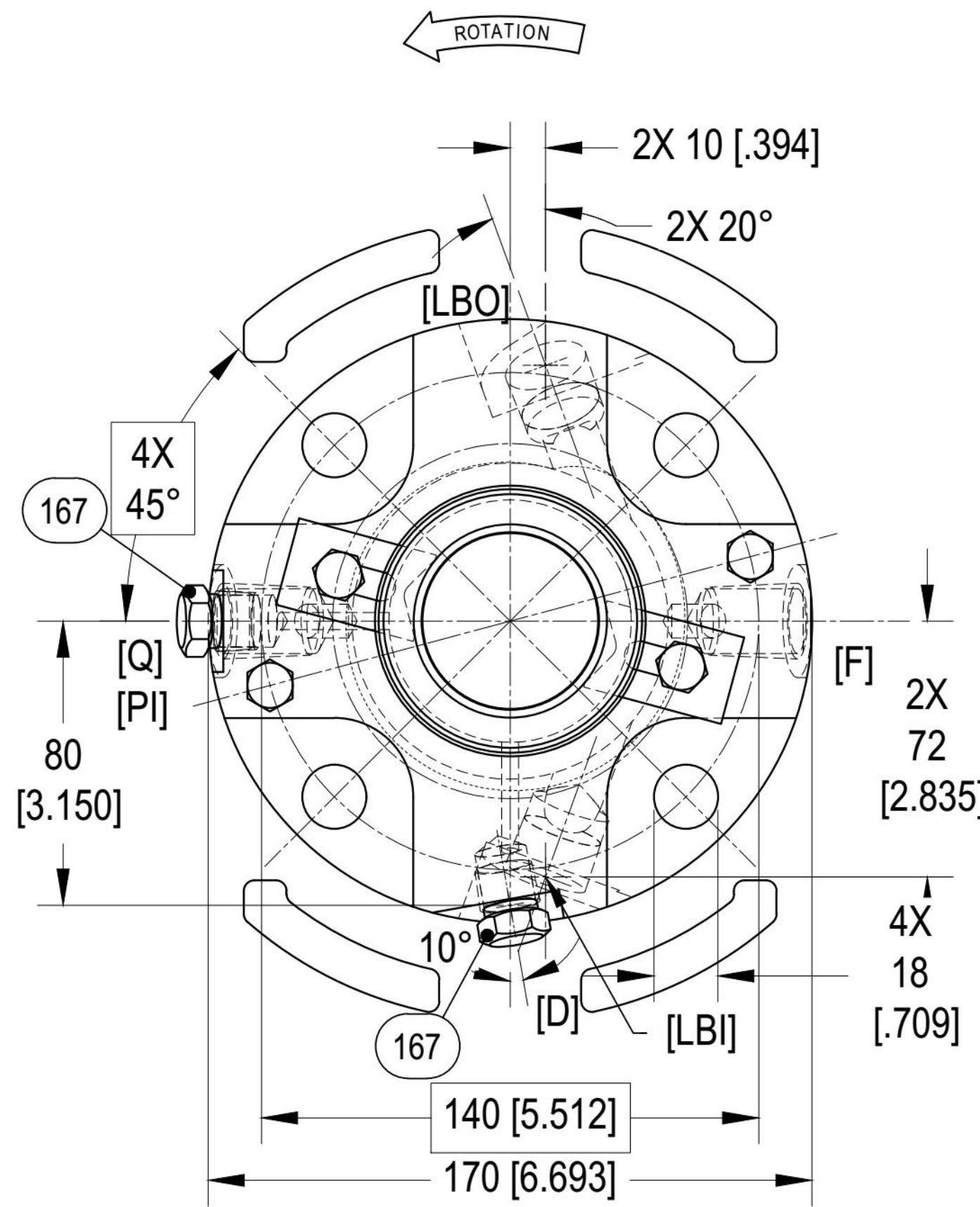
INNER SEAL PRESSURE CAPABILITIES	
MAX. ALLOWED DIFFERENTIAL PRESSURE	
Barrier Fluid over Process Fluid	
DYNAMIC:	145 PSIG
STATIC:	218 PSIG
MAX. ALLOWED PRESSURE	
From O.D. side (seal chamber) during emergency conditions	
DYNAMIC:	750 PSIG
STATIC:	1050 PSIG *
(*) BASED ON SET SCREW HOLDING POWER FOR DRIVE COLLAR	
OUTER SEAL PRESSURE CAPABILITIES (MAX.)	
DYNAMIC:	750 PSIG
STATIC:	1050 PSIG *

SEAL COOLING REQUIREMENTS:
COOLING WATER INLET PRESSURE: 45 PSIG
COOLING WATER INLET TEMPERATURE: 80 DEG F
COOLING WATER OUTLET TEMPERATURE: 81.2 DEG F
COOLING WATER FLOWRATE: 6.5 GPM

BARRIER FLUID: DURACLEAR 5-F

- FOR INSTALLATION AND OPERATING INSTRUCTIONS SEE APPROPRIATE FLOWERVE INSTALLATION SHEET (FIS135).
- TIGHTEN SETSCREWS (ITEM # 57.1 & 57.2) EQUALLY, IN 4 STEPS. FINAL TORQUE: 4.5 Nm [40 LBF.INCH]. SECURE AT ASSEMBLY.
- TIGHTEN SETSCREWS (ITEM # 57.3) EQUALLY, CROSSWISE, IN 4 STEPS. FINAL TORQUE: 9 Nm [80 LBF.INCH].
- DISENGAGE SETTING DEVICES BEFORE START-UP.
- FOR COMPLETE DRAINAGE, THE SEAL SHALL BE REMOVED FROM THE PUMP.
- DO NOT OVERTIGHTEN ITEM #57 & ITEM #40.1. SECURE AT ASSEMBLY
- CMTRS, NACE MR0103 & PMI (AS PER SPECIFICATION A8KM-PP-000-50512-A) ARE REQUIRED FOR ITEMS 1, 11 & 11.1
- TIGHTEN HHCS (ITEM #40) EQUALLY, IN 4 STEPS. FINAL TORQUE: 13.9 Nm [122.8 LBF.INCH]. SECURE AT ASSEMBLY.
- ITEMS 167.1 & 167.2 ARE NOT SHOWN IN ASSEMBLY DRAWING.

[F] FLUSH 1/2 NPT
[PI] PRESSURE INDICATOR 1/2 NPT (PLUGGED)
[LBI] LIQUID BARRIER INLET 3/4 NPT
[LBO] LIQUID BARRIER OUTLET 3/4 NPT
[Q] QUENCH 3/8 NPT (PLUGGED)
[D] DRAIN 3/8 NPT (PLUGGED)



API PLAN 11
RECIRCULATION FROM HIGH PRESSURE REGION OF PUMP THROUGH FLOW CONTROL ORIFICE TO SEAL.

1. MAINTAIN VAPOR PRESSURE MARGIN NOT LESS THAN 3.5 BAR (50 PSI), IF NOT POSSIBLE, MAINTAIN SEAL CHAMBER PRESSURE NOT LESS THAN 30% ABOVE VAPOR PRESSURE AT PUMPING TEMPERATURE.
2. ORIFICE DIAMETER: Ø 4.8 MM (.188 INCH).

FLUSH RATE: 9.3 LPM [2.46 GPM]

PIPING REQUIREMENTS
PRODUCT: SLOP OIL (SATURATED LIQUID)
TEMP: 35°F Norm / 185°F Max
SPEC GRAVITY: 0.686
VISCOSITY: 0.73 cP
VAPOR PRES: 19.70 psiA
SEAL CHAMBER PRES: 11.15 psiG Norm / 113.05 psiG Max
SUCTION PRES: 8.10 psiG Norm / 110.00 psiG Max

CUSTOMER DATA
CUSTOMER: FLOWERVE S. DE R.L. DE C.V.
ADDRESS: ESTADO DE MEXICO, 15 MEXICO

SEAL DATA
MATL CODE: 5A9X/5A9X
EQUIP MFG: FLOWERVE

GENERAL DATA
JOB NUMBER: 2M-32290
DATE: 18-APR-2022
CHKD: SMORALES
DATE: 18-APR-2022
APVD:
DATE:

ALL DIMENSIONS ARE REFERENCE UNLESS OTHERWISE SPECIFIED

3rd ANGLE

API PLAN 53B
PRESSURIZED EXTERNAL BLADDER ACCUMULATOR PROVIDES LIQUID TO BARRIER FLUID CHAMBER OF PRESSURIZED DUAL SEAL. CIRCULATION BY INTERNAL CIRCULATION DEVICE.

FOR 53B DRAWING PLEASE REFER TO DOCUMENT 2M-32479 / 302321HE1044-1045 / EN207119-FLOW-9V3-00035

MAINTAIN BARRIER LIQUID PRESSURE: 1.4 BAR (20 PSI) MINIMUM ABOVE SEAL CHAMBER PRESSURE.

PIPING REQUIREMENTS
DISCH PRES: 20.20 psiG Norm / 122.2 psiG Max
RPM: 1740
EQUIP SERIAL NO: 21HE1044-1045
EQUIP ITEM NO: 18-P-354A/B
API PLAN: 11/53B
API CODE: 3CW-FB
PROJECT NO: A8KM
SERVICE: SLOP OIL PUMP
API 682 CODE: 23A-FIN-050-11/53B

ULTIMATE USER: WORLD ENERGY PARAMOUNT
ADDRESS: PARAMOUNT, CA UNITED STATES
CUSTOMER P.O.: 283896

EQUIP MODEL: HPX / 1HPX11A-1/2 / 1 STAGE
EQUIP DRAWING: DBM905043

FORM REF: D0480917

FLOWERVE AMSS Seals & Systems

DRAWING TITLE
SEAL ASSEMBLY
QBBW/QBQW 2.500/2.500
DUAL PRESSURIZED-FACE TO BACK-CARTRIDGE

SIZE: D/A1
DRAWING NUMBER: D0574896
SCALE: TO SCALE | UNITS: mm[inch] | SHEET: 1 OF: 1

26-SEP-2022	ESOSA	SMORALES
DESC: RELEASE TO MANUFACTURE		
REV.	CHG NO.	DATE
	REVD	CHKD
		APVD

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