

 Flow Pump Division 5310 Taneytown Pike Taneytown, MD 21787	DOCUMENT TITLE PUMP CROSS SECTIONAL DRAWING	FLS DOCUMENT NO. CE003552
		CUSTOMER DOCUMENT NO. N/A
	PROJECT WORPAR	SDRL CODE N/A

CUSTOMER:	DESMET BALLESTRA NORTH AM	PO NO.:	PO-00028525
SERVICE:	PE MATURATOR DISCHARGE PUMPS	SALES ORDER NO.:	070-81609
		SERIAL NO.:	2206ME003552-1/2
FLS ORDER NO.:	E003552	EQUIPMENT:	4M223 PUMP
		EQUIPMENT TAG NO.:	DESEMET TAGS: P603.1/1, 1/2 - WEP TAGS: 19-P-751A,751B

PUMP CROSS SECTIONAL DRAWING

Desmet Tags	WEP Tags
P603.1/1	19-P-751A
P603.1/2	19-P-751B

B	1/21/2022	REVIEW	M. TOPPER	T. KARNAS	Z. PLATEK
A	10/21/2021	REVIEW	M. TOPPER	T. KARNAS	Z. PLATEK
REV	ISSUE DATE	ISSUE PURPOSE	ISSUED BY	REVIEWED BY	APPROVED BY

REVISIONS

REV	DESCRIPTION	LOC	NO	DATE	REV'D	CHK'D	APPR
B	SEAL DIMENSIONS CHANGED ALONG WITH STUD			2021-10-11	SAS	CDS	
C	DESMET AND WEP TAGS ADDED			2021-10-11	SRN	TK	

HARDWARE TORQUE VALUE CHART

REF. NUM.	PART DESCRIPTION	TORQUE (ft-lbs)
6581.52	SEALING NUT HEX-5/8-11 UNC	45
6581.50	NUT, HEAVY HEX-5/8-11 UNC	*
6577.45	CAPSCREW HH-5/8-11 X 1.75 LG	62
6577.43	CAPSCREW HH-3/4 X 2.50 LG	120
6577.41	CAPSCREW HH-1-8 X 5.75 LG	275
6577.40	CAPSCREW HH-1-8 X 2.25 LG	275

DESMET TAGS
P603.1/1
P603.1/2

WEP TAGS
19-P-751A
19-P-751B

NOTE:
1. FASTENER MARKED WITH "*" ARE TO BE TORQUED AS PER SEAL DRAWING.

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PARTS LIST

REF. NUM.	PART DESCRIPTION	MATERIAL NO.	PART NUMBER	REF. ZONE	QTY.	SPARE PART
7450.54	GUARD	AL	88447517		1	
6700.53	KEY-7/8 SQ. X 7-3/4 LG	A108 GR1018 CARBON STEEL	9080000-023		1	
6581.52	SEALING NUT	316SS	2123328-162		4	
6581.51	NUT, HEAVY HEX-JAM 7/8-11 UNC	A307	88409182		3	
6581.50	NUT, HEAVY HEX-5/8-11 UNC	A194/B8M	805512-00		6	
6581.49	NUT, HEAVY HEX-1/2-13 UNC	A194 2HPLT	95174389		3	
6578.48	PLUG, PIPE, SQ HEAD-1/4" NPT	STEEL	95033593		3	
6577.47	CAPSCREW HH-5/8-11 X 3.50 LG	A449GR5PLT	95901401		3	
6577.46	CAPSCREW HH-5/8-11 X 3.00 LG	A449GR5PLT	88451690		3	
6577.45	CAPSCREW HH-5/8-11 X 1.75 LG	A449GR5PLT	95861290		2	
6577.44	CAPSCREW HH-3/8-16 X 1.00 LG	A449GR5PLT	95861217		8	
6577.43	CAPSCREW HH-3/4 X 2.50 LG	A449GR5PLT	95862942		8	
6577.42	CAPSCREW HH-1/2-13 X 2.50 LG	A449GR5PLT	95912507		3	
6577.41	CAPSCREW HH-1-8 X 5.75 LG	A449GR5PLT	88468346		12	
6577.40	CAPSCREW HH-1-8 X 2.25 LG	A449GR5PLT	88467116		12	
6572.39	STUD-5/8-11 X 5.25" LG	A193/B8M	9160060-021		6	
6572.38	STUD-5/8-11 X 2.75" LG	316 SS	9160020-023		4	
6542.37	LOCKWASHER-W18	STEEL	9200000-002		1	
6541.36	LOCKWASHER, SPRING-5/8"	PLATED STEEL	95688119		3	
6541.35	LOCKWASHER, SPRING-3/8"	STEEL	81903216		8	
6541.34	LOCKWASHER, SPRING-1/2"	PLATED STEEL	95716890		3	
6521.33	PLUG, BREATHER-1/2" NPT	PLATED STEEL	9120017-001		1	
4610.32	O-RING-#269	BUNA N	82265885		1	
4610.31	O-RING-#025	BUNA-N	9140000-077		4	
4610.30	O-RING-# 266	BUNA N	95086856		1	
4590.29	GASKET, CASING	DURLON 8400	9070000-035		2	
4590.28	GASKET	TEFLON-FEP	9070029-016		1	
4590.27	GASKET	TEFLON-FEP	9070029-003		1	
4590.26	GASKET	RUBBER	21117413-006		1	
4300.25	ISOLATOR BEARING	BRONZE	88528002		1	
4300.24	ISOLATOR BEARING	BRONZE	88528001		1	
4200.23	MECHANICAL SEAL	FLOWERVE SLW-600	88558688		1	
4100.22	SEAL HOUSING	A532 CI 111 TYPE A HCl	2125709-121		1	
3856.21	PLUG, LEVEL SIGHT-1" NPT	PLATED STEEL	9120020-001		1	
3712.20	LOCKNUT-TAG AN-18	STEEL	9090020-002		1	
3260.19	COVER, LINE BEARING	A48 CL35	C-2113890-001		1	
3240.18	BEARING HOUSING	A48 CL35 CI	C-2113918-001		1	
3134.17	SUPPORT FOOT	STEEL	2114027-017		1	
3122.16	BEARING CARTRIDGE	A48 CL35	C-2115123-001		1	
3120.15	ADAPTER SUPPORT	A48 CL35	21117544-001		1	
3031.14	THRUST BEARING-7318 BHPUA	STEEL	9020030-007		2	
3012.13	BEARING, ROLLER	STEEL	9020042-004		1	
2905.12	WASHER, NARROW HARDENED-3/4"	SAE J429 GR8 STEEL	9200070-003		8	
2905.11	WASHER, HARDENED-1"	J429GR8	9200070-005		24	
2905.10	WASHER-5/8"	PLATED STEEL	88467237		2	
2905.9</						

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

CE003552

ON DIMENSIONS

REV. DESCRIPTION LOC. NO. DATE REV. CHKD. APPV.

B SEAL DIMENSIONS CHANGED ALONG WITH STUD 910000-021 WAS 885037A SAS CDS

C DESMET AND WEP TAGS ADDED 21-12-15 SRN TK

REVISIONS

3240.18 6541.35 6577.44 2110.4 6521.33 6577.43 2905.12 6581.49 2905.8 3260.19 6541.34 6577.42 7450.54 4590.29 2510.6 1110.1 4590.26 1223.2

3712.20 4300.25 6700.53

6542.37 3031.14 4610.32

6577.45 2905.10 3134.17 2542.7 3122.16 3012.13 4300.24 4610.30 3120.15 6577.41 2905.11 4200.23 4100.22 4590.27 2200.5 1915.3

6581.51 6577.46

6577.47 6541.36

2905.9 6581.50 6572.39 6578.48 3856.21

7450.54 GUARD AL 88447517

6700.53 KEY-7/8 SQ. X 7-3/4 LG A108 GR1018 CARBON STEEL 9080000-023

6581.52 SEALING NUT 316SS 2123328-162

6581.51 NUT, HEAVY HEX-5/8-11 UNC A307 88409182

6581.50 NUT, HEAVY HEX-5/8-11 UNC A194/B8M 805512-00

6578.48 PLUG, PIPE, SQ HEAD-1/4" NPT STEEL 95033593

6577.47 CAPSCREW HH-5/8-11 X 3.50 LG A449GR5PLT 95901401

6577.46 CAPSCREW HH-5/8-11 X 3.00 LG A449GR5PLT 88451690

6577.45 CAPSCREW HH-5/8-11 X 1.75 LG A449GR5PLT 95861290

6577.44 CAPSCREW HH-3/8-16 X 1.00 LG A449GR5PLT 95861217

6577.43 CAPSCREW HH-3/4 X 2.50 LG A449GR5PLT 95862942

6577.42 CAPSCREW HH-1/2-13 X 2.50 LG A449GR5PLT 95912507

6577.41 CAPSCREW HH-1-8 X 5.75 LG A449GR5PLT 88468346

6577.40 CAPSCREW HH-1-8 X 2.25 LG A449GR5PLT 88467116

6572.39 STUD-5/8-11 X 5.25" LG A193/B8M 9160060-021

6572.38 STUD-5/8-11 X 2.75" LG 316 SS 9160020-023

6542.37 LOCKWASHER-W18 STEEL 9200000-002

6541.36 LOCKWASHER, SPRING-5/8" PLATED STEEL 95688119

6541.35 LOCKWASHER, SPRING-3/8" STEEL 81903216

6541.34 LOCKWASHER, SPRING-1/2" PLATED STEEL 95716890

6521.33 PLUG, BREATHER-1/2" NPT PLATED STEEL 9120017-001

4610.32 O-RING-#269 BUNA N 82265885

4610.31 O-RING-#025 BUNA-N 9140000-077

4610.30 O-RING-# 266 BUNA N 95086856

4590.29 GASKET, CASING DURLON 8400 9070000-035

4590.28 GASKET TEFLON-FEP 9070029-016

4590.27 GASKET TEFLON-FEP 9070029-003

4300.25 ISOLATOR BEARING BRONZE 88528002

4300.24 ISOLATOR BEARING BRONZE 88528001

4200.23 MECHANICAL SEAL FLOWERVE SLW-600 88558688

4100.22 SEAL HOUSING A532 CI III TYPE A HCl 2125709-121

3856.21 PLUG, LEVEL SIGHT-1" NPT PLATED STEEL 9120020-001

3712.20 LOCKNUT-TAG AN-18 STEEL 9090020-002

3260.19 COVER, LINE BEARING A48 CL35 C-2113890-001

3240.18 BEARING HOUSING A48 CL35 CI C-2113918-001

3134.17 SUPPORT FOOT STEEL 2114027-017

3122.16 BEARING CARTRIDGE A48 CL35 C-2115123-001

3120.15 ADAPTER SUPPORT A48 CL35 2117544-001

3031.14 THRUST BEARING-7318 BHPUA STEEL 9020030-007

3012.13 BEARING, ROLLER STEEL 9020042-004

2905.12 WASHER, NARROW HARDENED-3/4" SAE J429 GR8 STEEL 9200070-003

2905.11 WASHER, HARDENED-1" J429GR8 9200070-005

2905.10 WASHER-5/8" PLATED STEEL 88467237

2905.9 WASHER-5/8" 316 SS 95234621

2905.8 WASHER-1/2" PLATED STEEL 88464214

2542.7 CLAMP RING, TH. BEAR. STEEL 2104624-004

2510.6 SPACER-IMPELLER CHT 360 2114992-021

2200.5 IMPELLER A532 CI III TYPE A HCl 2112711-121

2110.4 SHAFT 316SS 88490379

1915.3 SUCTION SIDE WEARPLATE A532 CL111 TYPE A HCl C-2117249-121

1223.2 SUCTION COVER - 4M223 A278 CL35 CI 2112714-001

1110.1 CASING A532 CI III TYPE A HCl 2112709-121

REF. PART DESCRIPTION MATERIAL NO. PART NUMBER REF. QTY. SPARE PART

P.O. NUMBER: PO-0028525 FLOW: 523.1 GPM

END USER: PARAMOUNT PETROLEUM CORP HEAD: 168.0 FT

JOB: WOPPAR RHP: 37.9

PLANT: N/A EFFICIENCY: 50.9

UNIT: N/A RPM: 1070

SERVICE: PL MATURATOR DISCHARGE FLUID: UNKNOWN

ITEM: P603.1/7 P603.2 TEMPERATURE: 50.9°F

SERIAL No.: 22206M003552-1/2 S.G.: 1.0

CUSTOMER INFORMATION OPERATING CONDITIONS

STATUS OF APPROVAL CERTIFIED

ORDER No. E003552

DRAWN BY SAS DATE 2021-10-11 DWG TITLE SECTIONAL

CHECKED BY CDS DATE 2021-10-11 4M223

APPROVED BY DATE 2021-10-11 PUMP ASSY

SIZE A1/D DRAWING No. CE003552 REV. C

SCALE 0.325 UNITS (IN/MM) SHEET NO. 1/1

4M223-PUMP-E003552

3rd Angle Projection

HARDWARE TORQUE VALUE CHART

REF. NUM.	PART DESCRIPTION	TORQUE (ft-lbs)
6581.52	SEALING NUT HEX-5/8-11 UNC	45
6581.50	NUT, HEAVY HEX-5/8-11 UNC	*
6577.45	CAPSCREW HH-5/8-11 X 1.75 LG	62
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