

SECTION A - A

ITEM	DESCRIPTION	QTY
1	POWER END ASSEMBLY:	1
2	FLUID CYLINDER:	1
3	SPRING AND DISC ASSEMBLY:	4
4	SEAT:	4
5	CYLINDER:	2
6	PISTON CUP:	2
7	PISTON HOLDER:	2
8	PISTON RETAINER:	2
9	VALVE CAGE:	4
10	RING SEAL: CYLINDER	2
11	UMBRELLA: F/E04	2
12	WASHER: UMBRELLA	2
13	VALVE COVER:	2
14	VALVE COVER CLAMP:	1
15	GASKET: VALVE COVER	2
16	O-RING: UNIFORM #213	6
17	O-RING: UNIFORM #033	2
18	O-RING: UNIFORM #015	2
19	CAP SCREW: HEX HEAD, 1/2 X 1.50 LG	1
20	CAP SCREW: HEX HEAD, 3/8 X 5.00 LG	3
21	CAP SCREW: HEX HEAD, 5/16 X 1.50 LG	2
22	NAMEPLATE:	1
23	SELF TAPPING SCREW:	2
24	CAPLUG: INT 14 (NOT SHOWN)	1
25	CAPLUG: #T-9 (NOT SHOWN)	1

Brown Brothers Engineers Ltd
Member of AxFlow Group
0508 4 BBENG
www.brownbros.co.nz

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UNLESS OTHERWISE SPECIFIED
DO NOT SCALE THIS DRAWING
ALL DIMENSIONS ARE IN INCHES (MM)
BREAK SHARP EDGES .015 (1.381) MAXIMUM
INSIDE CORNER RADIUS .030 (1.762) MAXIMUM
THREADS CONFORM TO FEDERAL STANDARD H-28
TAPERED THREADS CONFORM TO API 6A
BOLT HOLES MUST STRADDLE COMMON CENTERLINE
FINISH 250 RMS
ALL DIA'S CONCENTRIC WITHIN .010 (1.254) T.I.R.

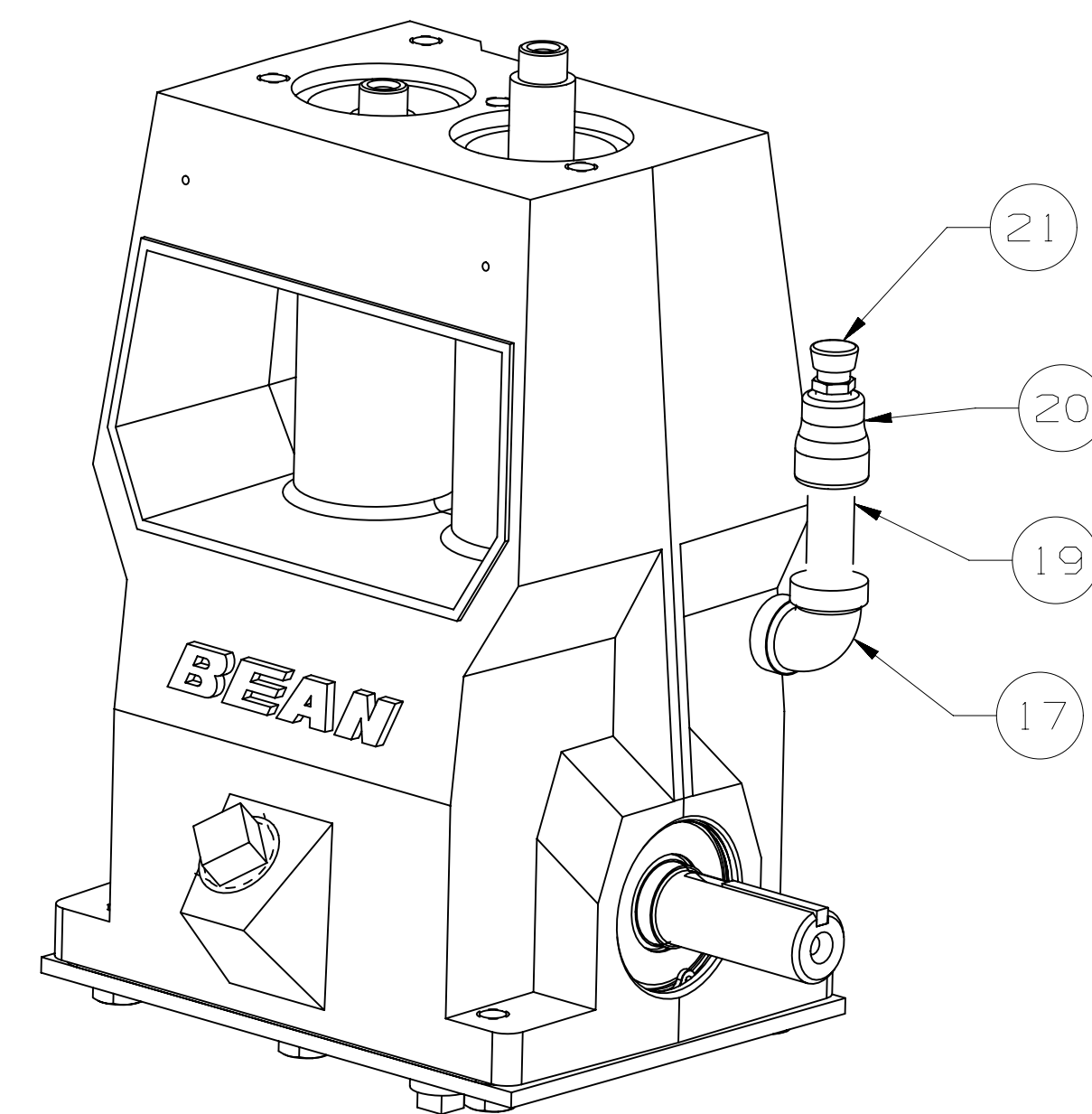
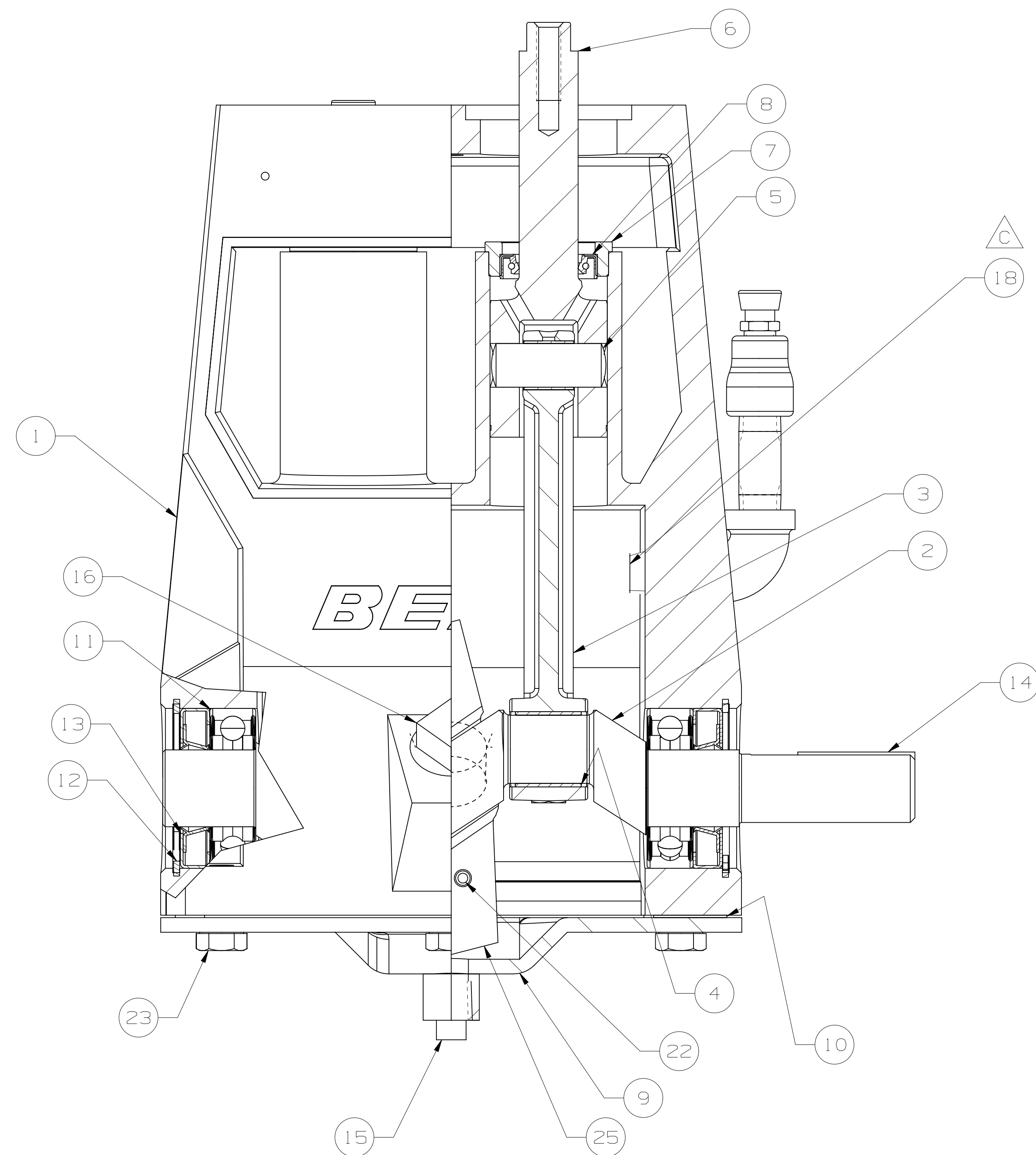
TOLERANCE
.X ± .030 (10.762)
.XX ± .015 (10.381)
.XXX ± .005 (10.127)
ANGLE ± 0° 30'

DESCRIPTION: PUMP ASSEMBLY: A0413 RH, W/1 NPT X 1/2 NPT FLUID END, ABRASIVE SERVICE PISTON, DISC VALVE ASSEMBLIES

DRAWN BY: WILLIAMS, ANTHONY	DATE: 17-FEB-2011
DRAFTING CHECK: LOUDERMILK, STEVE	DATE: 18-AUG-2011
DESIGN REVIEW: MCCLAIN, MATHEW	DATE: 30-AUG-2011
MANUFACTURING APPROVAL:	DATE:
APPROVED BY: LYON, TIM	DATE: 21-SEP-2011


LATEST ECN NO. 5026111
DRAWING NUMBER DUS00004967
SHEET 1/2

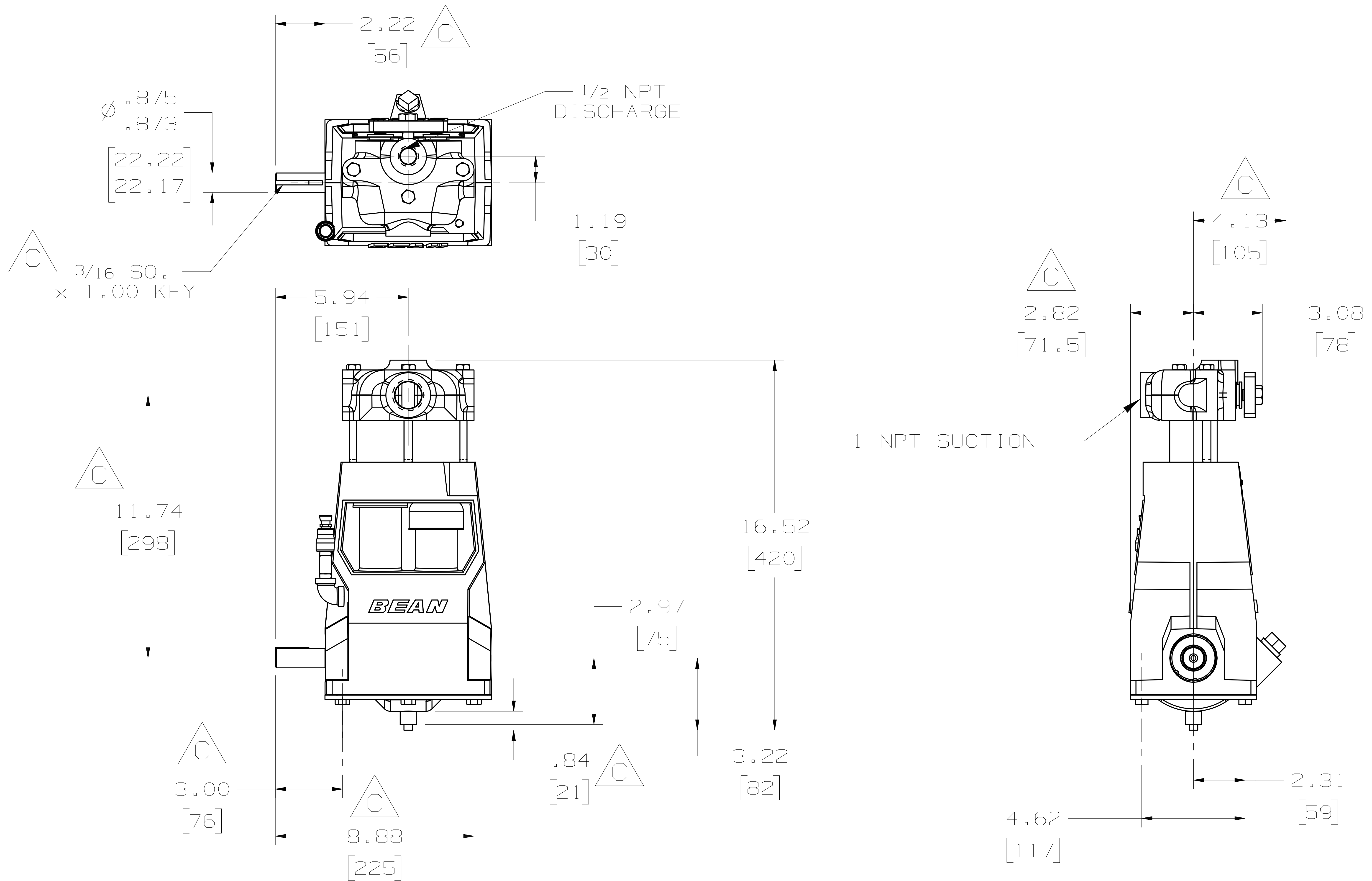
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ITEM	DESCRIPTION	QTY
1	POWER FRAME :	1
2	CRANKSHAFT :	1
3	CONNECTING ROD :	2
4	ROD BEARING: HALF SHELL	4
5	WRIST PIN:	2
6	CROSSHEAD:	2
7	SEAL HOLDER:	2
8	SEAL: PONY ROD	2
9	BACK COVER:	1
10	GASKET: BACK COVER	1
11	BALL BEARING:	2
12	RETAINING RING:	2
13	SHAFT SEAL:	2
14	KEY: 3/16 SQ X 1.5 LG	1
15	PIPE PLUG: 1/4 NPT	1
16	PIPE PLUG: SQ HEAD, 3/4 NPT	1
17	ELBOW: 1/4 FEMALE NPT	1
18	NIPPLE: 1/4 SCH 40, 1/4 NPT X 1.25	1
19	NIPPLE: 1/4 S40, 1/4 NPT X 2.00LG	1
20	REDUCER: 1/4 NPT X 1/8 NPT	1
21	LUBE VENT: 1/8 PTF	1
22	CAP SCREW: HEX HD #10 X .75 LG	2
23	CAP SCREW: HEX HEAD, 3/8 X .75 LG	6
24	BOLTING STRIP: NOT SHOWN	1
25	OIL SLINGER: RH	1
26	HEX NUT: #10 NOT SHOWN	2


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 0508 4 BBENG
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DO NOT SCALE THIS DRAWING BREAK SHARP EDGES .015 [0.381] MAXIMUM INSIDE CORNER RADII .030 [0.762] MAXIMUM ALL SURFACE TEXTURES Ra 250 MICRINCHES [6.3 MICROMETERS] WELDING SYMBOLS PER AWS A2.4-2012 THREADS TO ASME B1 SERIES ALL COAXIAL DIA'S TO .010 [0.254] TIR TO SINGLE AXIS		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES [MILLIMETERS] TOL ON ANGLE +/- 0.5 DEG X +/- .060 [1.524] .X +/- .030 [0.762] .XX +/- .015 [0.381] .XXX +/- .005 [0.127] DIM AND TOL PER ASME Y14.5-2009 THIRD ANGLE PROJECTION		DRAWN BY HIITOLA, ERIC C. DRAFTING CHECKER HIITOLA, ERIC C. DESIGN REVIEWER ROTHE, MICHAEL MANUFACTURING APPROVER APPROVER LYON, TIM		DATE 19-NOV-2019 DATE 19-NOV-2019 DATE 03-DEC-2019 DATE 05-DEC-2019		Copyright TechnipFMC. Unless otherwise agreed in writing, this document and all information contained herein is the confidential and exclusive property of TechnipFMC.			
DESCRIPTION POWER END ASSEMBLY: A04 RH, W/2.25 LG SHAFT, W/ NO MOUNTING HOLES IN BACKCOVER, LUBE VENT		SIZE D SCALE NONE		ECN 5051097		REV C		SHEET 1/1		DWG NO DU500004948	



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**ENGINEERING
DIMENSIONAL
OUTLINE**

DESCRIPTION
PUMP ASSEMBLY; A0413 RH,
W/1 NPT X 1/2 NPT FLUID
END, ABRASIVE SERVICE
PISTON, DISC VALVE
ASSEMBLIES

DRAWN BY: WILLIAMS, ANTHONY	DATE: 17-FEB-2011
DRAFTING CHECK: LOUDERMILK, STEVE	DATE: 18-AUG-2011
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LATEST ECN NO. 5026111	REV. C
DRAWING NUMBER DU500004967	SHEET 2/2

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