

NOTE

1 UNIT MUST BE INSTALLED IN SUCH A POSITION THAT THE CASE DRAIN ASSURES AN OIL LEVEL AT OR ABOVE UNIT CENTERLINE OIL LEVEL MUST BE AT CENTERLINE OR ABOVE BEFORE STARTING

2 OPTIONAL FEATURE LOCATION MAY BE EITHER RIGHT SIDE OR LEFT SIDE

4 DIMENSION APPLIES ONLY WHEN PORT IS PLUGGED

5 BREAKOUT HOLE MUST BE LARGE ENOUGH TO ACCEPT A $\phi 6.80$ GAGE PIN OR BALL

AUXILIARY PORT (OPTIONAL TOP -C1) (BYPASS VALVE OPTIONAL) (PLUG OPTIONAL) (NO PORT OPTIONAL)

AUXILIARY PORT (CHARGE PRESSURE INLET -C2) (PLUG OPTIONAL)

CAUTION THIS BYPASS VALVE IS TO BE USED IN CASE OF EMERGENCY ONLY EXCESS TOWING MAY DAMAGE HYDRAULIC SYSTEM BEFORE TOWING VEHICLE TURN VALVE 90° TO DE-CLUTCH DO NOT TURN WHILE MACHINE IS RUNNING

2 FOR CONTROL SHAFT CONFIGURATION SEE SEPARATE DRAWING

FOR SHAFT CONFIGURATION SEE SEPARATE SHAFT INSTALLATION DRAWING

CASE DRAIN PORT -DI (TOP) (PLUG OPTIONAL)

BYPASS VALVE OPTIONAL SEE SEPARATE BYPASS VALVE INSTALLATION DRAWING

17° MAX STROKE FOR 20.3 cm³/r [1.24 in³/r] DISP UNITS
19.5° MAX STROKE FOR 23.6 cm³/r [1.44 in³/r] DISP UNITS
CAM POS a

17°0' MAX STROKE FOR 20.3 cm³/r [1.24 in³/r] DISP UNITS
19.5° MAX STROKE FOR 23.6 cm³/r [1.44 in³/r] DISP UNITS
CAM POS b

5 DRAIN INTO REAR AUXILIARY FLANGE -D3 (OPTIONAL)

CASE DRAIN INTO FRONT MOUNTING FLANGE -D4 (OPTIONAL)

4X 3/8-16 UNC-2B ∇ 18.3 [0.72] MIN

4 91.2 [3.59]

$\phi 82.63 \pm 0.03$ [3.253 \pm .001]
4X 23.9 [0.94] (OPTIONAL)

GROOVE TO ACCEPT AS568A SIZE O42 [1/16 X 3 1/4 ID] O-RING

FOR SHAFT CONFIGURATION SEE SEPARATE DRAWING

4X 3/8-16 UNC-2B ∇ 15 [0.59] MIN (OPTIONAL)

CASE DRAIN PORT -D2 (BOTTOM) (PLUG OPTIONAL)

PRESSURE PORT B CAM POS b RH ROT
CAM POS a LH ROT

PRESSURE PORT A CAM POS a RH ROT
CAM POS b LH ROT

REVIEWED FOR CLASSIFICATION PER ESP-042

DRAWING BASED ON ANSI Y14.5M-1982

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES MILLIMETERS

TOLERANCES
.X + .0004
.XX + .0008
.XXX + .0015
< + .0025

UNSPECIFIED RADII ARE ---
UNSPECIFIED DRAFT ANGLES ARE ---
DRAWING FORMAT CAD MANUAL

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DRAWN BY/DATE DLL 8-26-99
CHECKED BY/DATE SSW 10-31-00
ENGR BY/DATE SSW 10-31-00
METALLURGY --- BY/DATE ---

UNSPECIFIED DRAFT ANGLES ARE ---
THIRD ANGLE PROJECTION

MATERIAL/HEAT TREAT
TITLE
SERIES 160 PISTON PUMP INSTALLATION

MICROINCHES
DRAFT ANGLES ARE ---
DO NOT SCALE

Danfoss

NUMBER
A-1302-023

ARITHMETICAL AVERAGE
SCALE 1/1 SHEET 1 OF 1

REV	DESCRIPTION	BY	CHK	DATE	ECN/MPS
A	ENGINEERING RELEASE	DLL	SSW	10-2-00	36543
B	REVISED	DLL	SSW	2-26-01	M25102
C	REVISED	DLL	SSW	11-20-02	39352
D	-1)(9C)ADDED DIM $\phi 36.3$ -2)(9G)ADDED NOTE 5 -3)ADDED [1.43] NOTE "REVIEWED FOR CLASSIFICATION PER ESP-042"	NSJ	JEM	08-02-10	M79718A

