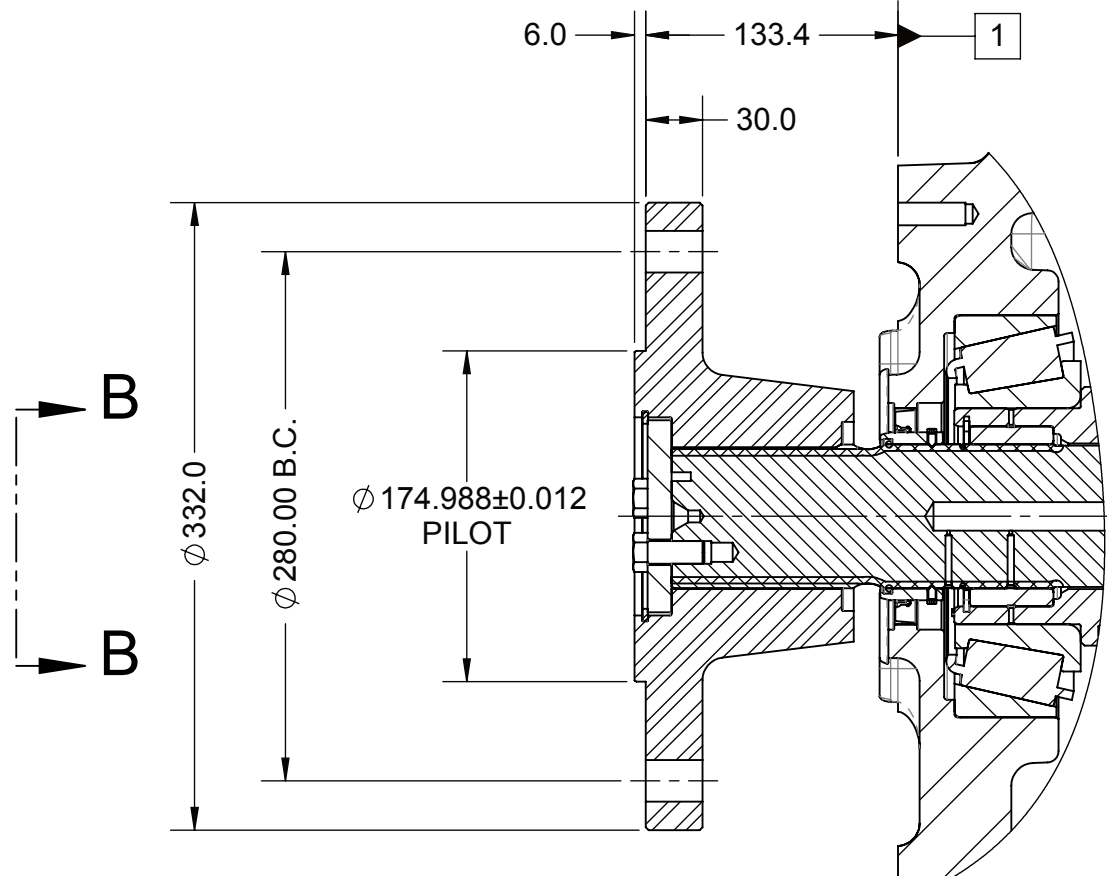


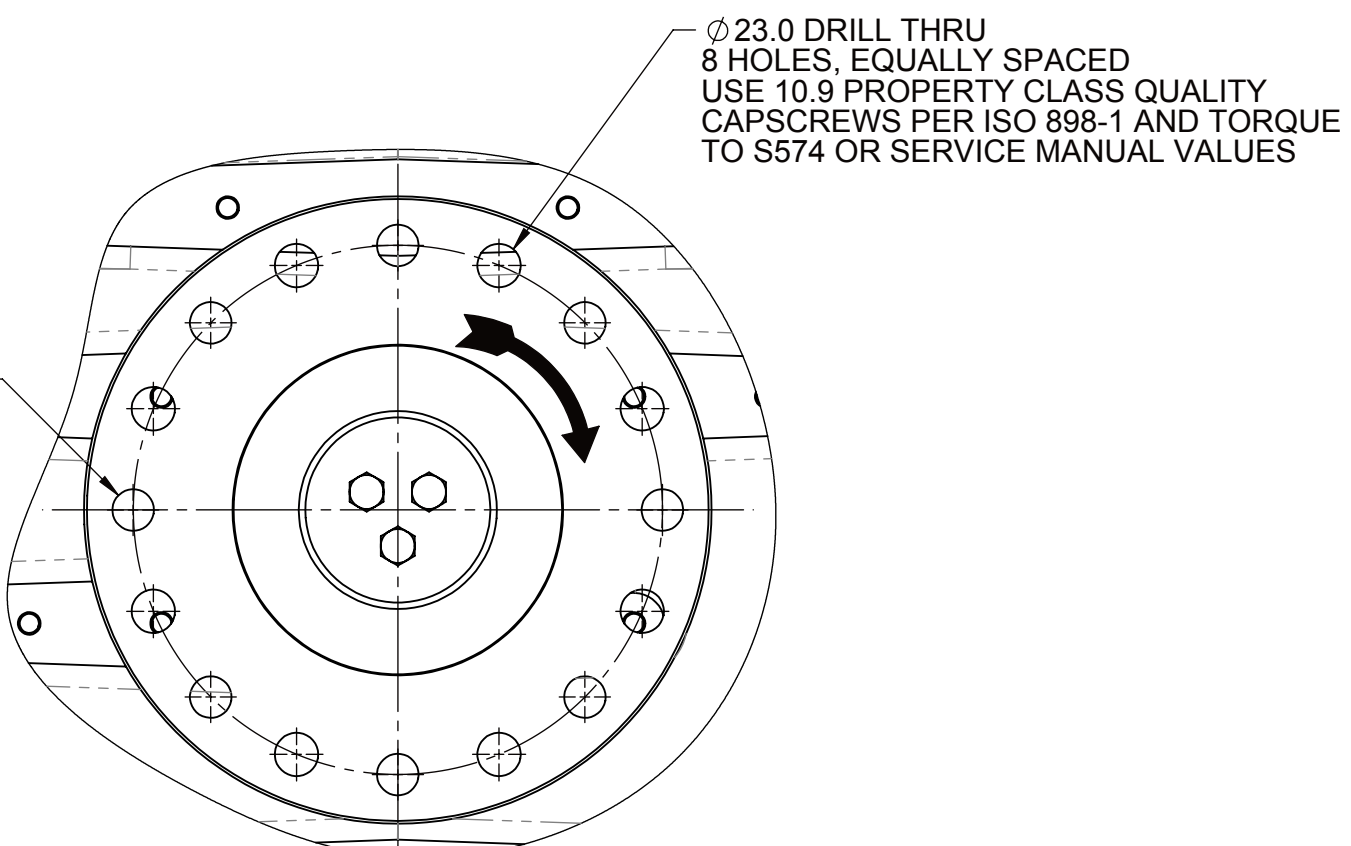
- 1 INPUT GROUP MOUNTING FACE
2 PTO GROUP MOUNTING FACE
3 LEFT BRACKET MOUNTING FACE
4 RIGHT BRACKET MOUNTING FACE
5 PUMP MOUNTING FACE

NOTES:

- A. PROPORTIONAL CONTROL VALVE OPERATION.
1. WARNING DO NOT CONNECT VALVE COIL DIRECTLY TO BATTERY/POWER SUPPLY VOLTAGE.
2. OPERATION TO BE PERFORMED WITH ONLY TWIN-DISC CONTROL SYSTEM MODULES.
- B. MANUAL DIRECTIONAL CONTROL VALVE OPERATION.
1. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION, PUSH TO ENGAGE PRIMARY CLUTCH.
2. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION, PULL TO ENGAGE SECONDARY CLUTCH.
- C. MANUAL DIRECTIONAL CONTROL VALVE MODE SWITCH.
1. SWITCH IS NORMALLY CLOSED WHEN MANUAL DIRECTIONAL CONTROL VALVE IS IN THE CENTERED POSITION AND OPEN WHEN LEVER IS ACTUATED FROM CENTERED POSITION.
2. CURRENT = 20 AMPS MAX.
3. FOR WIRING SCHEMATIC, REFER TO CONTROL MODULE DRAWING.
- D. REFERENCE S930 FOR TWIN DISC REQUIREMENTS FOR PRESSURE AND ALARM LEVELS.
- E. UNLESS OTHERWISE SPECIFIED, FASTENER TORQUE VALUES PER S574 STANDARD.
- F. ALL POINTS AVAILABLE FOR TESTING ARE CODED



SECTION A-A



VIEW B-B

EYEBOLTS
FOR LIFTING MARINE TRANSMISSION ONLY.
EQUALIZE LOAD ON BOTH EYEBOLTS
TO LIFT MARINE TRANSMISSION

WATER OUTLET FROM HEAT EXCHANGER
M42 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 108 ±10Nm

WATER INLET TO HEAT EXCHANGER
M42 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 108 ±10Nm

SECONDARY CLUTCH (FIRST)
PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ±2 Nm

SECONDARY CLUTCH (SECOND)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ±1.5 Nm

TEMPERATURE AND
LUBE PRESSURE PORT
M18 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 34 ±3 Nm

PTO CLUTCH PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ±1.5 Nm

MAIN PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
CONNECT OIL PRESSURE GAUGE LINE HERE.
TIGHTENING TORQUE 16 ±1.5 Nm

PRIMARY CLUTCH (SECOND)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ±1.5 Nm

MAIN PRESSURE PORT
1/2-20 UNF INCH THREAD PORT
CONFORMS TO J1926
CONNECT OIL PRESSURE
GAUGE LINE HERE.
TIGHTENING TORQUE 20 ±3Nm
BOTH SIDES

SECONDARY CLUTCH (FIRST)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ±1.5 Nm

MANUAL DIRECTIONAL
CONTROL VALVE
5 mm TRAVEL FROM CENTERED
POSITION (EACH DIRECTION)
SEE NOTE 'B'

PRIMARY CLUTCH (FIRST)
PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ±2 Nm

TEMPERATURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
BEFORE HEAT EXCHANGER
TIGHTENING TORQUE 20 ±2 Nm

INPUT SPEED SENSOR PORT
5/8-18 UNF THREAD
TARGET WHEEL: 61 TEETH

OIL LEVEL GAUGE

PRIMARY CLUTCH SHAFT

DIRECTION OF OUTPUT
FLANGE ROTATION
(R/L: ENGINES DRIVING
THRU PRIMARY CLUTCH)

74.0
FOR CUSTOMER MACHINING

AUXILIARY LUBE SUCTION PORT
FLANGE SIZE 38 PER ISO 6162 (CODE 61)
M12X1.75 TAP, 33.0 DEEP

OIL DRAIN
M33 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 88 ±8 Nm
15 mm CLEARANCE REQUIRED
TO REMOVE PLUG

OIL STRAINER
M12X1.75 TAP, 10.0 DEEP
123 mm CLEARANCE REQUIRED
TO REMOVE STRAINER

OIL STRAINER
M12X1.75 TAP, 10.0 DEEP
54 mm CLEARANCE REQUIRED
TO REMOVE STRAINER

M12 X 1.75 TAP, 24.0 DEEP
8 HOLES, 4 EACH SIDE

TEMPERATURE AND
LUBE PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
FOR USE WITH OPTIONAL
TRAILING PUMP
TIGHTENING TORQUE 20 ±2 Nm

22mm CLEARANCE
REQUIRED TO
REMOVE PUMP

ENGAGES SECONDARY
SHAFT CLUTCH
SEE NOTE 'A'

ENGAGES PRIMARY
SHAFT CLUTCH
SEE NOTE 'A'

WATER DRAIN
M10 X 1.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 12 ±1 Nm

MAIN PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ±2 Nm

LUBE PORT (AUXILIARY)
M27 X 2.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 75 ±7 Nm

HYDRAULIC PTO
SAE J744 127-2/4, 38-4

SECONDARY CLUTCH SHAFT

CENTER OF
GRAVITY

OIL STRAINER
M12X1.75 TAP, 10.0 DEEP
123 mm CLEARANCE REQUIRED
TO REMOVE STRAINER

OIL STRAINER
M12X1.75 TAP, 10.0 DEEP
54 mm CLEARANCE REQUIRED
TO REMOVE STRAINER

M12 X 1.75 TAP, 24.0 DEEP
8 HOLES, 4 EACH SIDE

TEMPERATURE AND
LUBE PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
FOR USE WITH OPTIONAL
TRAILING PUMP
TIGHTENING TORQUE 20 ±2 Nm

22mm CLEARANCE
REQUIRED TO
REMOVE PUMP

ENGAGES SECONDARY
SHAFT CLUTCH
SEE NOTE 'A'

ENGAGES PRIMARY
SHAFT CLUTCH
SEE NOTE 'A'

WATER DRAIN
M10 X 1.0 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 12 ±1 Nm

PRIMARY CLUTCH (FIRST)
PRESSURE PORT
M12 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 16 ±1.5 Nm

MAIN PRESSURE PORT
M14 X 1.5 METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE 20 ±2 Nm

1017820P HYDRAULIC PTO.
SEE DRAWING 1017820P
FOR ADDITIONAL
INFORMATION
AND LIMITATIONS.

PTO OIL DRAIN
M12X1.75 THREAD
METRIC PORT
CONFORMS TO ISO 6149
TIGHTENING TORQUE: 16 ±1.5 Nm

GREASE FITTING

OUTPUT SPEED
SENSOR BRACKET
TARGET WHEEL: 60 TEETH

OIL FILTER
24 mm CLEARANCE REQUIRED
TO REMOVE FILTER CANISTER.
TIGHTEN FILTER AN ADDITIONAL
1/2 OF TURN AFTER FILTER
GASKET MAKES CONTACT

M24 X 3.0 TAP, 40.0 DEEP
20 HOLES (10 EACH SIDE)
USE ALL 20 HOLES FOR MOUNTING UNIT.
USE 8.8 PROPERTY CLASS CAPSCREWS
PER ISO 898-1 AND TORQUE TO S574 OR
SERVICE MANUAL VALUE

EQUIPMENT SHOWN:
- MGX-5321DC PER 1022203C ASSEMBLY
- 1017769 FREESTANDING INPUT HUB
- QP VALVE WITH EC050 PROFILE MODULE
- RAW WATER HEAT EXCHANGER
- HYDRAULIC PTO SAE J744 127-2/4, 38-4
- STANDARD PUMP GROUP
- 1017084 COMPANION FLANGE ASSY

FIRST USE ASSEMBLY: FIRST USE MODEL: MRM8017001 SIMILAR TO:	WEIGHT: 1628 UNIT: kg	THIRD ANGLE PROJECTION	MATERIAL: HEAT TREAT:	DATE: 9/23/2019 SCALE: 1:4 DRAWN BY: JTC CHECKED BY: JTC APPROVED BY: JTC	REVISIONS: 1 11/17/2021 DATE	TWIN DISC RACINE, WI 53403 - USA 1026064S SHEET 1 OF 1 REV: A
NOTES: THIS PRINT CONTAINS PROPRIETARY INFORMATION AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. ALL RIGHTS ARE RESERVED. FOR MORE INFORMATION, CONTACT: TWIN DISC, INC. 5050 WISCONSIN DRIVE, SUITE 100, RACINE, WI 53403-1000, USA. TEL: 920.885.1100 FAX: 920.885.1101						DESCRIPTION: INSTALLATION MGX-5321DC