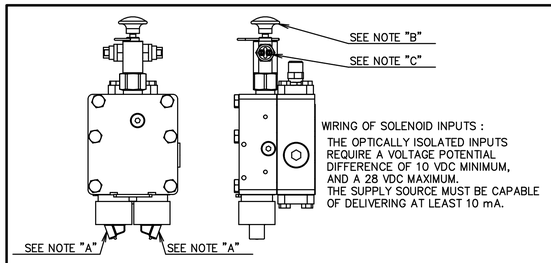
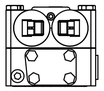


WIRING OF SOLENOID INPUTS :
THE OPTICALLY ISOLATED INPUTS REQUIRE A VOLTAGE POTENTIAL DIFFERENCE OF 10 VDC MINIMUM, AND A 28 VDC MAXIMUM. THE SUPPLY SOURCE MUST BE CAPABLE OF DELIVERING AT LEAST 10 mA.

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 SYSTEMS OR MODULES.



B. MANUAL DIRECTIONAL CONTROL VALVE OPERATION
1. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION, PUSH TO ENGAGE SECONDARY SHAFT CLUTCH
2. WITH MANUAL DIRECTIONAL CONTROL VALVE IN CENTERED POSITION, PULL TO ENGAGE PRIMARY SHAFT CLUTCH

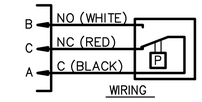
C. MANUAL DIRECTIONAL CONTROL VALVE MODE SWITCH
1. SWITCH IS NORMALLY CLOSED WHEN MANUAL DIRECTIONAL CONTROL VALVE IS IN THE CENTERED POSITION AND OPEN WHEN LEVER IS ACTUATED FROM CENTERED POSITION
2. CURRENT = 20 AMPS MAX.
3. FOR WIRING SCHEMATIC, REFER TO CONTROL MODULE DRAWING.

CONTROL VALVE (GENERAL PURPOSE VALVE)

HYDRAULIC PTO PUMP DRIVE SPECIFICATIONS		
PTO CAPACITY	WORKING TORQUE = 600 x L/40 (N·m) L = Length of pump spline	
	OPERATING SPEED 600~1800 min^{-1}	
	SHAFT ROTATION SAME AS ENGINE ROTATION	
	ACCEPTS SAE J744 SIZE "C" PUMP	
SPLINE DATA	DP	12/24
	NO. OF TEETH	14
	NOMINAL PITCH CIRCLE DIA.	29.633
	PRESS. ANGLE	30°
	TIP DIA.	27.548 $^{+0.021}_{0}$
	ROOT DIA.	32.560 $^{0}_{-0.040}$
	ARC TOOTH SPACE	3.325 $^{+0.076}_{+0.056}$

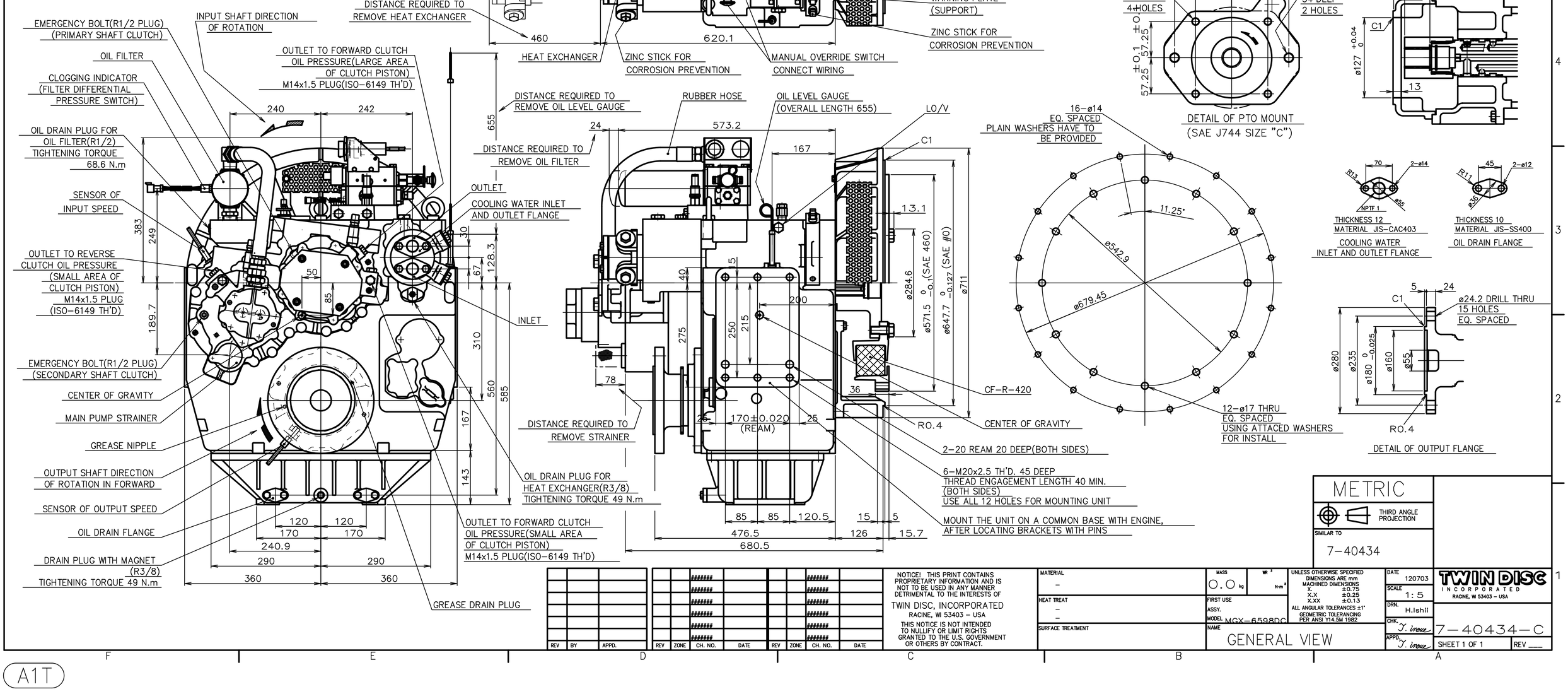
MGX-6598DC MARINE GEAR SPECIFICATIONS		
GEAR RATIO	2.46 3.03 3.48 3.93 4.43	
MASS	TOTAL MASS (DRY)	APPROX. 621 kg
	BASIC UNIT (DRY)	APPROX. 555 kg
	INPUT HOUSING	20 kg
	INPUT COUPLING AND FLANGE	46 kg
	–	– kg
OIL QUANTITY	APPROX. 18 L	
OIL PRESSURE	CLUTCH OIL 2.2~2.4 MPa	AT RATED ENGINE SPEED
	LUBE OIL 0.4~0.6 MPa	OIL TEMP. 65~70°C
OIL VISCOSITY	SAE #40 (MULTI-GRADE OIL IS NOT APPROVED)	
OIL & GREASE CHANGE INTERVAL	THE FIRST OIL CHANGE AT 100 HOURS OF OPERATION AND SUBSEQUENTLY EVERY 1000 HOURS OF OPERATION	
STRAINER	WIRE NETTING	
SHIFTING RESTRICTION	SHIFT TO FORWARD OR REVERSE FROM NEUTRAL AND SHIFT ACROSS NEUTRAL SHALL BE MADE AT ENGINE SPEED LOWER THAN 50% OF THE RATED SPEED	
HEAT EXCHANGER	WATER FLOW (RAW WATER)	80~85 L/min.
	TEMPERATURE OF COOLING WATER	32°C MAX.

SECTIONAL VIEW DWG NO.	7-40435-C
GEAR PUMP TOOTH WIDTH	44 mm



WIRING

6~30 VDC, MAX.CURRENT 100 mA ; 2-POLE
PRESSURE SWITCH POINT=0.28 $^{\pm 0.03}$MPa
BYPASS OPENING AT 0.35 $^{\pm 0.03}$MPa



METRIC
THIRD ANGLE PROJECTION
SIMILAR TO 7-40434

REV	BY	APPD.	REV	ZONE	CH. NO.	DATE	REV	ZONE	CH. NO.	DATE

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MATERIAL –
HEAT TREAT – –
SURFACE TREATMENT
MASS 0.0 kg
WR^2 N·m^2
FIRST USE
ASSY.
MODEL MGX-6598DC
NAME GENERAL VIEW

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE mm
MACHINED DIMENSIONS
X ±0.75
X.X ±0.25
X.XX ±0.13
ALL ANGULAR TOLERANCES ±1°
GEOMETRIC TOLERANCING PER ANSI Y14.5M 1982

DATE 120703
SCALE 1:5
DRN. H.Ishii
CHK. T. Inoue
APPD. T. Inoue

TWIN DISC INCORPORATED RACINE, WI 53403 – USA
7-40434-C
SHEET 1 OF 1 REV ___

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