

PIPING SYMBOL LIST (PIPE AND PIPE JOINTS)

PAGE

5 / 51

HULL NO

H-1025/26/27/28/34/35

DWG. NO

MM104010MB

NO.	SYMBOL	SYMBOL DESIGNATION	NO.	SYMBOL	SYMBOL DESIGNATION
1. GENERAL CONVENTIONAL SYMBOL			2.18		PENETRATING WATERTIGHT BULKHEAD & DECK CROSSING
1.1		PIPE	2.19		PENETRATING NON WATER-TIGHT BULKHEAD & DECK CROSSING
1.2		PIPE WITH INDICATION OF DIRECTION OF FLOW	2.20		DRAIN PIPE LED TO BILGE
1.3		APPLIANCES	2.21		DRESSER (OR FLEXIBLE) TYPE EXPANSION PIPE JOINT
1.4		INDICATING AND MEASURING INSTRUMENTS			
1.5		OFF PAGE CONNECTOR			
1.6		MAKER SUPPLY ITEM	3. VALVES, COCKS AND FLAPS		
2. PIPES AND PIPE JOINTS			3.1		VALVE, STRAIGHT THROUGH
2.1		CROSSING PIPES NOT CONNECTED	3.2		VALVE, ANGLE
2.2		CROSSING PIPES CONNECTED	3.3		VALVE, THREE WAY
2.3		BRANCH PIPES	3.4		CHECK VALVE (FLAP) STRAIGHT
2.4		TEE PIECE (FLANGED END)	3.5		CHECK VALVE (FLAP) ANGLE
2.5		TEE PIECE (WELDED END)	3.6		CHECK VALVE (FLAP) STRAIGHT, SCREW DOWN
2.6		FLEXIBLE JOINT FLEXIBLE PIPE JOINT	3.7		CHECK VALVE (FLAP) ANGLE, SCREW DOWN
2.7		FLANGED JOINT	3.8		SWING, STRAIGHT THROUGH
2.8		SLEEVE JOINT	3.9		SWING, ANGLE
2.9		REDUCER	3.10		PRESSURE REDUCING VALVE
2.10		SCREWED JOINT	3.11		SAFETY VALVE (RELIEF)
2.11		WELDED JOINT	3.12		SAFETY VALVE ANGLE (RELIEF)
2.12		SLEEVE TYPE EXPANSION PIPE JOINT	3.13		SELF-CLOSING VALVE STRAIGHT THROUGH
2.13		BELLOWS TYPE EXPANSION PIPE JOINT	3.14		SELF-CLOSING VALVE ANGLE
2.14		EXPANSION BEND PIPE	3.15		REGULATING VALVE
2.15		BLANK FLANGE	3.16		QUICK OPEN VALVE
2.16		SPECTACLE FLANGE (OPEN)	3.17		QUICK CLOSING VALVE
2.17		SPECTACLE FLANGE (CLOSE)	3.18		BUTTERFLY VALVE
			3.19		GATE VALVE

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PAGE


















































6 / 51

HULL NO

H-1025/26/27/28/34/35

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NO.	SYMBOL	SYMBOL DESIGNATION	NO.	SYMBOL	SYMBOL DESIGNATION
3.20		HOSE VALVE STRAIGHT THROUGH	4. CONTROL AND REGULATION PARTS		
3.21		HOSE VALVE ANGLE	4.1		HAND OPERATED
3.22		FOOT VALVE	4.2		HAND OPERATED (LOCKED OPEN)
3.23		NEEDLE VALVE AND V- PORT VALVE. STRAIGHT THROUGH	4.3		HAND OPERATED (LOCKED CLOSE)
3.24		NEEDLE VALVE AND V- PORT VALVE. ANGLE	4.4		REMOTE CONTROL
3.25		COCK, STRAIGHT THROUGH	4.5		SPRING
3.26		COCK, ANGLE	4.6		MASS
3.27		COCK, THREE-WAY L-PORT IN PLUG	4.7		FLOAT
3.28		COCK, THREE-WAY T-PORT IN PLUG	4.8		PNEUMATIC PISTON
3.29		COCK, FOUR-WAY STRAIGHT THROUGH IN PLUG	4.9		HYDRAULIC OPERATED
3.30		LOCKED COCK	4.10		DIAPHRAGM OPERATED
3.31		BREATHER VALVE	4.11		DIAPHRAGM WITH POSITIONER
3.32		AUTO VENT VALVE	4.12		ELECTRIC ACTUATOR
3.33		MANIFOLD VALVE	4.13		AIR MOTOR DRIVEN
3.34		STORM VALVE STRAIGHT THROUGH	4.14		SOLENOID ACTUATOR
3.35		STORM VALVE ANGLE	4.15		PNEUMATIC DRIVEN
3.36		NON-RETURN VALVE W/HOSE CONNECTION	4.16		ELECTRO-PNEUMATIC ACTUATOR
3.37		BALL VALVE	5. FITTINGS		
3.38		PRESSURE GAUGE & VACUUM GAUGE VALVE	5.1		ROSE BOX
3.39		BALL CHECK WITHOUT SPRING VALVE	5.2		MUD BOX
3.40		BALL CHECK WITH SPRING VALVE	5.3		SIMPLEX WATER STRAINER
3.41		BALL VALVE WITH QUICK COUPLING	5.4		SIMPLEX OIL STRAINER
3.42		DIRECT TYPE TEMP. CONTROL VALVE	5.5		DUPLEX OIL STRAINER
3.43		FLAP CHECK VALVE	5.6		SEPARATOR
3.44		EM'CY SHUT-OFF VALVE	5.7		DRAIN TRAP
			5.8		Y-TYPE STRAINER

PIPING SYMBOL LIST (PIPE AND PIPE JOINTS)

PAGE

7 / 51







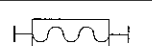



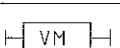

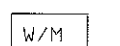
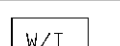

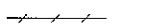


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NO.	SYMBOL	SYMBOL DESIGNATION	NO.	SYMBOL	SYMBOL DESIGNATION
5.9		Y-TYPE STEAM TRAP WITH STRAINER & COCK	5.35		BOSS AND PLUG
5.10		HOPPER WITHOUT COVER	5.36		OIL TRAY, COAMING
5.11		HOPPER WITH HINGED COVER	5.37		SUCTION BELL MOUTH
5.12		SOUNDING HEAD WITH CAP	5.38		ROSE PLATE
5.13		SOUNDING HEAD WITH SELF CLOSING VALVE	5.39		DECK STAND
5.14		SOUNDING HEAD WITH SELF CLOSING VALVE AND TEST COCK	5.40		DRAIN SILENCER
5.15		FILLING CAP	5.41		SPOOL PIECE
5.16		DECK PIECE TYPE SOUNDING PIPE HEAD	5.42		GLYCERINE POT
5.17		AIR VENT PIPE	5.43		VACUUM BREAKER
5.18		GOOSE NECK TYPE AIR VENT HEAD WITHOUT WIRE NET	5.44		WASH BASIN
5.19		GOOSE NECK TYPE AIR VENT HEAD WITH WIRE NET	5.45		WATER CLOSET
5.20		BONNET TYPE AIR VENT HEAD WITHOUT WIRE NET	5.46		RE-CIRCULATING TOILET
5.21		BONNET TYPE AIR VENT HEAD WITH WIRE NET	5.47		URINAL
5.22		SCUPPER	5.48		MIXING FAUCET
5.23		EXPOSED SCUPPER PIECE	5.49		SHOWER
5.24		HAND BILGE SUCTION HEAD	5.50		GLASS LEVEL GAUGE ○ OPEN ⊖ COCK ● SELF CLOSING V/V
5.25		ORIFICE	5.51		FLAT TYPE LEVEL GAUGE ○ OPEN ⊖ COCK ● SELF CLOSING V/V ⤵ AIR VENT
5.26		HOSE COUPLING	5.52		FLOAT TYPE LEVEL GAUGE - FLOAT TYPE - DIAL FLOAT TYPE
5.27		HAND PUMP	5.53		CONTENT METER
5.28		EJECTOR, EDUCTOR, INJECTOR	5.54		MAGNETIC TYPE FLOAT LEVEL GAUGE
5.29		BILGE HAT			
5.30		SIGHT GLASS			
5.31		HULL DISTANCE PIECE			
5.32		FUSING PLUG			
5.33		THERMOMETER POCKET			
5.34		BOSS			

		PIPING SYMBOL LIST (PIPE AND PIPE JOINTS)			PAGE		8 / 51
					HULL NO		H-1025/26/27/28/34/35
					DWG. NO		MM104010MB
NO.	SYMBOL	SYMBOL DESIGNATION		SYMBOL	SYMBOL DESIGNATION		
6. PUMPS, EQUIPMENT			7.5		INSULATION		
6.1		CENTRIFUGAL PUMP	7.6		STEAM TRACING & INSULATION		
6.2		GEAR PUMP	7.7		HEATING COIL		
6.3		SCREW PUMP	7.8		ELECTRIC COIL		
6.4		RECIPROCATING PUMP	7.9		AUXILIARY SWITCH		
6.5		MONO ROTOR PUMP	7.10		CHANGE OVER SWITCH BOX		
6.6		AIR MOTOR DRIVEN PUMP	7.11		LOOP SEAL		
6.7		VANE PUMP	7.12		LOCAL INSTRUMENT		
6.8		DOSING PUMP	7.13		REMOTE CONTROL INSTRUMENT		
6.9		RORARY PUMP	7.13				
6.10		AIR HORN	7.13				
6.11		VISCOSITY METER	7.13				
6.12		FLOW METER	7.13				
6.13		SHELL/TUBE TYPE HEAT EXCHANGER	7.13				
6.14		PLATE TYPE COOLER	7.13				
6.15		WASHING MACHINE	7.13				
6.16		WATER TANK	7.13				
6.17		WATER FOUNTAIN	7.13				
6.18		DOUBLE SINK	7.13				
			7.13				
			7.13				
7. CONTROL & INSTRUMENT			7.13				
7.1		HYDRAULIC OIL LINE	7.13				
7.2		CONTROL AIR LINE	7.13				
7.3		CAPILLARY TUBE	7.13				
7.4		ELECTRIC WIRING	7.13				

FORM NAME : M404-07



INSTRUMENT SYMBOL LIST (CONTROL & INSTRUMENTATION)

PAGE

9 / 51

HULL NO

H-1025/26/27/28/34/35

DWG. NO

MM104010MB

ABBREVIATION	CONTENTS	ABBREVIATION	CONTENTS
AA	AXIAL ROTOR MOVE ALARM	MS	MICRO SWITCH
AD	AXIAL DEVIATION DETECTOR	ODAH	OIL DETECTOR ALARM HIGH
AI	AXIAL ROTOR MOVE INDICATOR	PAL	PRESSURE ALARM LOW
AT	AXIAL ROTOR MOVE TRANSMITTER	PAH	PRESSURE ALARM HIGH
AMS	AUTO/MANUAL SELECTOR	PC	PRESSURE CONTROLLER
CI	COMPOUND GAUGE	PH	PH DETECTOR OR METER
DPI	DIFFERENTIAL PRESSURE INDICATOR	PI	PRESSURE INDICATOR
DPS	DIFFERENTIAL PRESSURE SWITCH	PIAH	PRESSURE INDICATOR ALARM HIGH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER	PIAL	PRESSURE INDICATOR ALARM LOW
FA	FLOW ALARM	PIAHL	PRESSURE INDICATOR ALARM HIGH/LOW
FC	FLOW CONTROLLER	PIC	PRESSURE INDICATING CONTROLLER
FCO	FLOW COUNTER	PR	PRESSURE RECORDER
FD	FLOW DETECTOR	PS	PRESSURE SWITCH
FI	FLOW INDICATOR	PT	PRESSURE TRANSMITTER
FS	FLOW SWITCH	RC	REVOLUTION CONTROLLER
FT	FLOW TRANSMITTER	RCO	REVOLUTION COUNTER
HY	HYDRAZINE DETECTOR OR METER	RI	REVOLUTION INDICATOR
IL	INDICATION LAMP	RT	REVOLUTION TRANSMITTER
LI	LEVEL INDICATOR	SAH	SALINITY ALARM HIGH
LIC	LEVEL INDICATING CONTROLLER	SD	SALINITY DETECTOR
LAH	LEVEL ALARM HIGH	SI	SALINITY INDICATOR
LAL	LEVEL ALARM LOW	SM	SMOKE INDICATOR
LR	LEVEL RECORDER	SMX	SMOKE DETECTOR
LS	LEVEL SWITCH	ST	SALINITY TRANSMITTER
LT	LEVEL TRANSMITTER	S. SV	SOLENOID VALVE
M	ELECTRIC MOTOR	TAH	TEMPERATURE ALARM HIGH



INSTRUMENT SYMBOL LIST (CONTROL & INSTRUMENTATION)

PAGE

10 / 51

HULL NO

H-1025/26/27/28/34/35

DWG. NO

MM104010MB

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TAL	TEMPERATURE ALARM LOW		
TI	TEMPERATURE INDICATOR		
TIC	TEMPERATURE INDICATOR CONTROLLER		
TIAH	TEMPERATURE INDICATOR ALARM HIGH		
TIAL	TEMPERATURE INDICATOR ALARM LOW		
TIAHL	TEMPERATURE INDICATOR ALARM HIGH/LOW		
TM	TORQUE METER		
TR	TEMPERATURE RECORDER		
TS	TEMPERATURE SWITCH		
TT	TEMPERATURE TRANSMITTER		
VAH	VISCOSITY ALARM HIGH		
VAL	VISCOSITY ALARM LOW		
VC	VISCOSITY CONTROLLER		
VCA	VACUUM ALARM		
VCI	VACUUM INDICATOR		
VI	VISCOSITY INDICATOR		
VS	VISCOSITY SWITCH		
VT	VISCOSITY TRANSMITTER		
WD	WATER DETECTOR		
XS	AUXILIARY UNSPECIFIED SWITCH		
ZI	POSITION INDICATOR		
ZS	LIMIT SWITCH		
L	LIGHT		