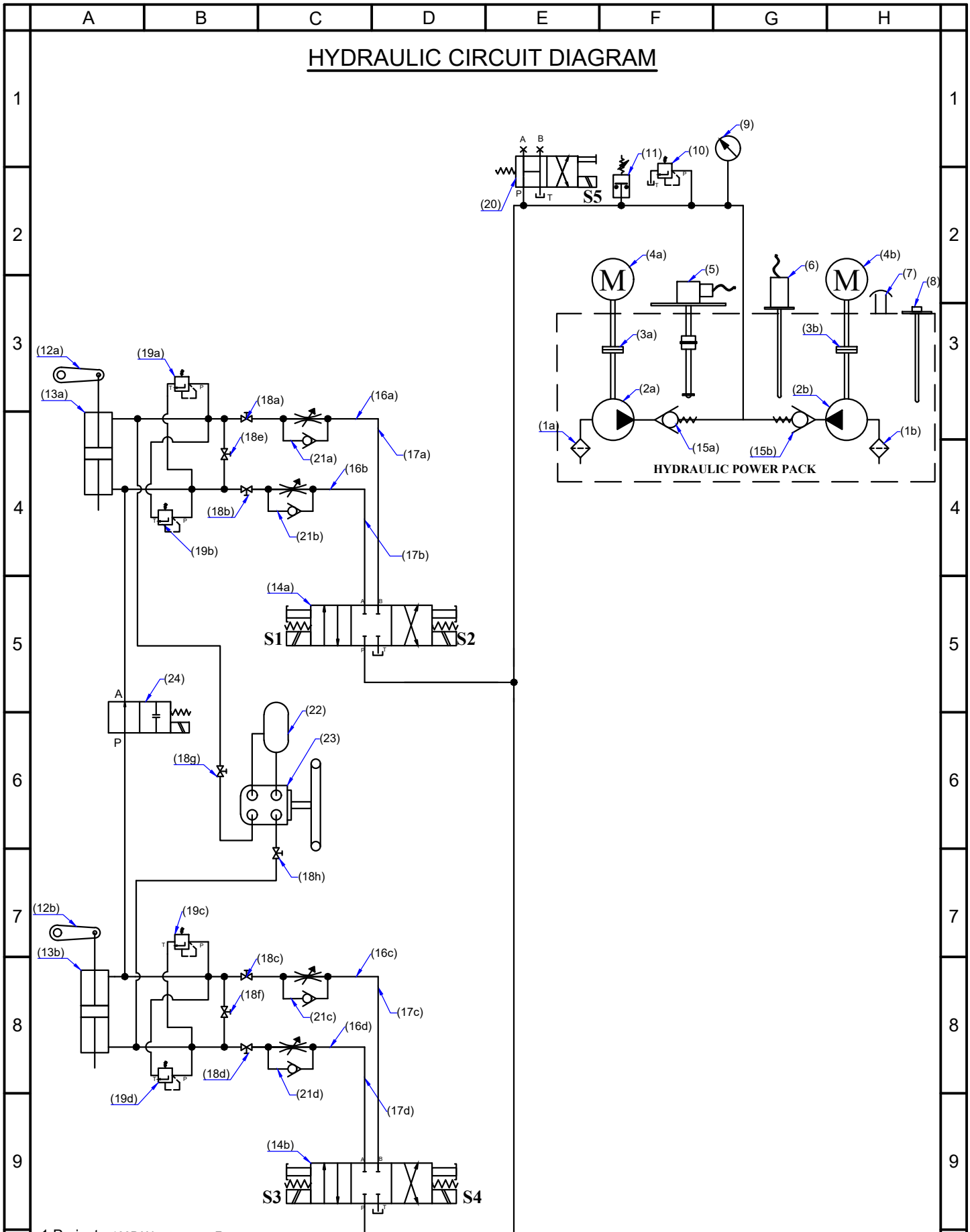



HYDRAULIC CIRCUIT DIAGRAM



- 1. Project:- 100PAX catamaran Ferry
- 2. Yard No:- BY123-BY145
- 3. Owner: KMRL
- 4. Builder: Cochin Shipyard Ltd.
- 5. Client: Saraswathi Metal Works, Kochi

	MAC ♦ N ♦ HOM SYSTEMS KOCHI - 20	DESIGNATION	DWG. No.	DATE
		Hyd. Cir. Diagram of 100 PAX Catamaran Ferry	MHS-1240B	10-08-2024

	A	B	C	D	E	F	G	H																																																
1	<p><u>SPECIFICATIONS</u></p> <p>1. Tiller Radius : 180mm</p> <p>2. Pump Capacity Electro : 1.8 lpm</p> <p>3. Hyd. Hose Grade : R1 I.D : 3/8"</p> <p>Pipe size :- 12 mm O.D x 8 mm I.D (Yard Supply)</p> <p><u>OPERATING PARAMETERS</u> *Torque rating - 750 N-m for a Tiller Arm having radius 180mm *Working Pressure - 50 bar *Design Pressure - 60 bar *Relief Valve Setting - Lesser than or equal to 60 bar</p> <p>1.Project:- 100PAX catamaran Ferry 2.Yard No:- BY123-BY145 3.Owner: KMRL 4.Builder: Cochin Shipyard Ltd. 5.Client: Saraswathi Metal Works,Kochi</p>			<table border="1"> <thead> <tr> <th>SI No.</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1a,1b.</td><td>Suction Strainer</td></tr> <tr><td>2a,2b.</td><td>Hydraulic pump - 1.8 lpm</td></tr> <tr><td>3a,3b.</td><td>Flexible Coupling-5.1N-m@1500rpm</td></tr> <tr><td>4a,4b.</td><td>Electric Motor-0.5HP,415V AC,50Hz</td></tr> <tr><td>5.</td><td>Oil Level Sensor - sensing depth 200mm</td></tr> <tr><td>6.</td><td>Oil Temp. Sensor</td></tr> <tr><td>7.</td><td>Filler Breather-40 micron filter</td></tr> <tr><td>8.</td><td>Dip Stick</td></tr> <tr><td>9.</td><td>Pressure Gauge - 0 to 100Kg/cm²</td></tr> <tr><td>10</td><td>Pr. Regulating Valve - 0 to 100Kg/cm²</td></tr> <tr><td>11</td><td>Pre.Switch</td></tr> <tr><td>12a,12b</td><td>Tiller Arm (Yard Supply)</td></tr> <tr><td>13a,13b</td><td>Hyd. Actuator-Balanced Model CETO</td></tr> <tr><td>14a,14b.</td><td>4/3 Sol.- Directional Valve - 60lpm@356 kg/cm²</td></tr> <tr><td>15a,15b.</td><td>NRV - 315 bar</td></tr> <tr><td>16a,16b,16c,16d</td><td>Hyd. Hose Grade-R1,I.D.-3/8" (length-1000mm)</td></tr> <tr><td>17a,17b,17c,17d</td><td>Seamless Steel Pipe 12mm O.D (Yard Supply)</td></tr> <tr><td>18a,18b,18c,18d,18e,18f,18g,18h</td><td>Shut-off Valve</td></tr> <tr><td>19a,19b,19c,19d</td><td>Pressure Relief Valve -0 to 200Kg/cm²</td></tr> <tr><td>20</td><td>4/2 Sol.- Directional Valve - 60lpm@356 kg/cm² (For Unloading Purpose)</td></tr> <tr><td>21a,21b,21c,21d</td><td>Flow Control Valve</td></tr> <tr><td>22</td><td>Reservoir</td></tr> <tr><td>23</td><td>Helm Pump</td></tr> <tr><td>24</td><td>2/2 Solenoid Valve</td></tr> </tbody> </table>		SI No.	Description	1a,1b.	Suction Strainer	2a,2b.	Hydraulic pump - 1.8 lpm	3a,3b.	Flexible Coupling-5.1N-m@1500rpm	4a,4b.	Electric Motor-0.5HP,415V AC,50Hz	5.	Oil Level Sensor - sensing depth 200mm	6.	Oil Temp. Sensor	7.	Filler Breather-40 micron filter	8.	Dip Stick	9.	Pressure Gauge - 0 to 100Kg/cm ²	10	Pr. Regulating Valve - 0 to 100Kg/cm ²	11	Pre.Switch	12a,12b	Tiller Arm (Yard Supply)	13a,13b	Hyd. Actuator-Balanced Model CETO	14a,14b.	4/3 Sol.- Directional Valve - 60lpm@356 kg/cm ²	15a,15b.	NRV - 315 bar	16a,16b,16c,16d	Hyd. Hose Grade-R1,I.D.-3/8" (length-1000mm)	17a,17b,17c,17d	Seamless Steel Pipe 12mm O.D (Yard Supply)	18a,18b,18c,18d,18e,18f,18g,18h	Shut-off Valve	19a,19b,19c,19d	Pressure Relief Valve -0 to 200Kg/cm ²	20	4/2 Sol.- Directional Valve - 60lpm@356 kg/cm ² (For Unloading Purpose)	21a,21b,21c,21d	Flow Control Valve	22	Reservoir	23	Helm Pump	24	2/2 Solenoid Valve	1
SI No.				Description																																																				
1a,1b.				Suction Strainer																																																				
2a,2b.				Hydraulic pump - 1.8 lpm																																																				
3a,3b.				Flexible Coupling-5.1N-m@1500rpm																																																				
4a,4b.				Electric Motor-0.5HP,415V AC,50Hz																																																				
5.				Oil Level Sensor - sensing depth 200mm																																																				
6.				Oil Temp. Sensor																																																				
7.				Filler Breather-40 micron filter																																																				
8.				Dip Stick																																																				
9.	Pressure Gauge - 0 to 100Kg/cm ²																																																							
10	Pr. Regulating Valve - 0 to 100Kg/cm ²																																																							
11	Pre.Switch																																																							
12a,12b	Tiller Arm (Yard Supply)																																																							
13a,13b	Hyd. Actuator-Balanced Model CETO																																																							
14a,14b.	4/3 Sol.- Directional Valve - 60lpm@356 kg/cm ²																																																							
15a,15b.	NRV - 315 bar																																																							
16a,16b,16c,16d	Hyd. Hose Grade-R1,I.D.-3/8" (length-1000mm)																																																							
17a,17b,17c,17d	Seamless Steel Pipe 12mm O.D (Yard Supply)																																																							
18a,18b,18c,18d,18e,18f,18g,18h	Shut-off Valve																																																							
19a,19b,19c,19d	Pressure Relief Valve -0 to 200Kg/cm ²																																																							
20	4/2 Sol.- Directional Valve - 60lpm@356 kg/cm ² (For Unloading Purpose)																																																							
21a,21b,21c,21d	Flow Control Valve																																																							
22	Reservoir																																																							
23	Helm Pump																																																							
24	2/2 Solenoid Valve																																																							
2	2																																																							
4	4																																																							
5	5																																																							
6	6																																																							
7	7																																																							
10	<table border="1"> <thead> <tr> <th>DESIGNATION</th> <th>DWG. No.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>Hyd. Cir.Diagram of 100 PAX Catamaran Ferry</td> <td>MHS-1240B</td> <td>10-08-2024</td> </tr> </tbody> </table>			DESIGNATION	DWG. No.	DATE	Hyd. Cir.Diagram of 100 PAX Catamaran Ferry	MHS-1240B	10-08-2024	10																																														
DESIGNATION	DWG. No.	DATE																																																						
Hyd. Cir.Diagram of 100 PAX Catamaran Ferry	MHS-1240B	10-08-2024																																																						
	A	B	C	D	E	F	G	H																																																