

<b>TUPI BV</b>	<b>DATASHEET</b>	No.: I-FD-3010,97-1210-312-FE7-003
	CLIENT: E & P	SHEET: 1 of 2
	JOB: PRESALT FPSOs	-
	AREA: PETROBRAS 71 (P-71)	
ENG-E&P/ IEUEP-II/IEREPL	TITLE: SUBSEA HYDRAULIC UNIT AND DISTRIBUTION RACKS (UH-1210001) – Equipment Datasheet Pumps B-UH-1210001-04A/B (pneumatic LP)	CORPORATE
		IEREPL
CONTRACT NR: FOR 067/2013		TECH. RESP. / CREA No.: Nick Bartels / FE7
ELETRONIC FILE No.: Microsoft Excel / V.97-2003 / I-FD-3010,97-1210-312-FE7-003_A.xls		

### INDEX OF REVISIONS

REV.	DESCRIPTION AND/OR REVISED SHEETS
0	SAME P66 - FOR INFORMATION (THE INFORMATION IN THIS DOCUMENT WAS COPIED FROM P-66 DESIGN: I-FD-3010.92-1210-312-FE7-003 REV.B)
A	SAME P66 - CERTIFIED (THE INFORMATION IN THIS DOCUMENT WAS COPIED FROM P-66 DESIGN: I-FD-3010.92-1210-312-FE7-003 REV.B) – ADF-P71-TB7-FE7-00161

ACEITE DO CERTIFICADO  
 CTF - CONSÓRCIO TOMÉ FERROSTAAL  
 08/04/2015

	REV. 0	REV. A	REV. B	REV. C	REV. D	REV. E	REV. F	REV. G	REV. H
DATE	07/16/2014	01/05/2015							
DESIGN	FE7	FE7							
EXECUTION	FE7	FE7							
CHECK	FE7	FE7							
APPROVAL	ADO	ADO							

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 FORM OWNED TO PETROBRAS N-0381 REV. L

EQUIPMENT DATASHEET				TOP-UP PUMPS			
Sheet 1 of 1				Tag no(s). <b>B-UH-1210001-04A/B</b>			
Rev	<i>General</i>			Rev	<i>Application data</i> <span style="float:right">Unit</span>		
	Frames Hydraulic Scheme	P30946-EI-HPD-101		Service	Water Glycol		
	Customer document nr.	I-DE-3010.97-1210-944-FE7-001		Type of operation	Intermittent		
	Type	Reciprocating		Corrosive service (NACE)	No		
	Make	Maximator		Location	Offshore, Outdoor		
	Model	G 150 (L)		Ambient temperature			
	Number required	2		- Minimum	4	°C	
				- Maximum	45	°C	
	<i>Design data</i>			<i>Mechanical data</i>	<span style="float:right">Unit</span>		
	System design pressure	569	barg	Build size	150		
	System design temperature	+4 to +70	°C	Stroke volume	6,6	cm <sup>3</sup>	
	Pump design pressure	1450	barg	Connections inlet	3/4" BSP		
	Pump design temperature	+4 to +60	°C	Connections outlet	1/2" BSP		
	<i>Process data</i>			Pump body material	1.4305		
	Medium	MacDermid HW525P		Piston material	1.4112 (hardened)		
	Density	1039	kg/m <sup>3</sup>	Fittings material	1.4571		
	Viscosity	1,5 to 4,8	mm <sup>2</sup> /s	Seal material	NBR		
	Max discharge pressure	512	barg	Silencer	Yes		
	Temperature	Ambient		Weight	13,5	kg	
	<i>Performance data</i>			<i>Accessories</i>			
	Max. capacity	1,4	l/min	Air supply			
	Max. air consumption	1,12	Nm <sup>3</sup> /min	- Pressure regulator	Note 2		
	Max. noise level	< 80	dB(A)	- Pressure filter	Note 2		
				- Pressure gauge	Note 2		
				- Shut-off valve	Note 2		
				- Pressure safety valve	Note 2		
<i>Note(s)</i>							
1 Reference documents: SUBSEA HYDRAULIC UNIT AND DISTRIBUTION RACKS (UH-1210001) - design calculations sizing Pumps B-UH-1210001-04A/B; I-MC-3010.97-1210-312-FE7-002 & SUBSEA HYDRAULIC UNIT AND DISTRIBUTION RACKS (UH-1210001) – Performance Curve Pump B-UH-1210001-04A/B (pneumatic LP); I-DE-3010.97-1210-312-FE7-002.							
2 All air supply accessories are part of the instrument air system of the Subsea Hydraulic Unit and Distribution Racks (UH-1210001).							
Rev	Description	Date	By	Process	Checked Mechanical	Instrumentation	Approved
A	SAME P66 - CERTIFIED (THE INFORMATION IN THIS DOCUMENT WAS COPIED FROM P-66 DESIGN: I-FD-3010.92-1210-312-FE7-003 REV.B) – ADF-P71-TB7-FE7-00161	5 Jan '15	RBK	AZw			AZw
O	SAME P66 - FOR INFORMATION (The information in this document was copied from P-66 design: I-FD-3010.92-1210-312-FE7-003 Rev.B)	16 Jul '14	RBK	AZw			AZw
Customer : Consorcio Tome Ferrostaal				Equipment : Subsea HPU			
Customer reference : Presalt FPSO				Project : P-71			
Customer document : I-FD-3010.97-1210-312-FE7-003				Frames reference : EHO 30946			
Customer doc. code : C11-006				Frames document : P30946-EC-EDS-009			
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