Goliat Development Project

GOLIAT

Review and Acceptance Codes:	
Accepted	1 ☐
Accepted with comments incorporated - Revise and Resubmit	2 ☐
Not Accepted - Revise and resubmit	3 ☐
Issued for Information.	4 ☐
Provisional Acceptance – Interface information Frozen	5 ☐
Signed:	Date:

VOIDED, Replaced by 229A-TRE-ER301-R-RA-0014

Rev.	Date	Description	Prepared	Verified	Approved
V01	21.03.2021	VOID	JIT	HJE	HJE
0	05.05.2014	For information	LT	MB	LT
1	15.10.2013	For approval	LT	MB	LT

eni norge	PO No.: 4600002296		Document Title							
NATIONAL OILWELL VARCO	APL™		**Offloading Hose 1402 S 0513471 Tag no 33LX113 Data Sheet**							
APL doc no. 1635-BAO-P-DS-0014		APL Rev.								
Sub Contr. Logo	Sub Contr doc no. 1635-HWDS-BO-014		Goliat Document number 229A-APL-ER810-L-DS-0014							V01
Sub Contr. Name										
Pages Document	Pages Attached	Tag no.	Proj Code	Orig code	PO Pkg ref.	Disc Code	Doc. type	Seq. no	Rev	
3		33LX113								

HOSE TECHNICAL DATA SHEET

Package No.	Supplier Doc. No.	Rev.
1635 Goliat Project	229A-APL-ER810-L-DS-0014 / 1635-BAO-P-DS-0014	00

Tag No.	33LX113	Location/Module	D10 / Hose
Service	Crude Oil	P.O. No.	ER810
Type & Syze	Mainline Submarine Single Carcass Hose	Job No.	4600002296
Supplier	Bassi Offshore srl	WBS	//
Manufacturer	Bassi Offshore srl		
Model	ADMIRAL 1402 S	Serial No.	0513-471

	General Description		Units
1	Supplier Drawing no:	229A-APL-ER810-R-XS-0011	
2	Manufactured and Tested According to:	API 17K / GMPHOM '09	
3	Nominal Diameter:	500	mm
4	Length:	12180	m
5	Pressure Rating:	40	bar
6	Electrically:	Continuous	Ohm
7	Lining type	Nitrile	
8	Cover:	Cloroprene. Smooth black synthetic rubber, resistant to ozone, abrasion, oil, seawater and sunlight	
9	Preservation	Flange face protected by wooden plate. Body protected by polyethylene cover.	
10	Packing	Pallet	

	Technical data (hose)			
11	Operating Pressure Range:		40	bar
12	Operating Temperature Range:		from -20 to 82	°C
13	Ambient Temperature Range:		from -29 to 52	°C
14	Maximum Flow Velocity:		21	m/s
15	Minimum Burst Pressure:		150	bar
16	Allowable differential collapse pressure		12	bar
17	Max Aromatic Content:		60	%
18	Temporary Elongation:		0,32	%
19	Permanent Elongation:		-0,02	%
20	Minimum Bending Radius:		2	m
21	Hose Weight in Air Empty:		4874	Kg
22	U.W.W. (SW filled submerged in SW)		2464	Kg
23	U.W.W. (FW filled submerged in SW)		2407	Kg
24	Allowable axial load		200	ton
25	Damaging Pull Axial Tension:		260	ton
26	Axial Stiffness Empty Hose:		42000	KN
27	Bending Stiffness Empty Hose:		110	KNm2
28	Torsional Stiffness Empty Hose:		5150	KNm2

	Technical data (fittings)		A-side :	B-side :	
29	Flange type:		SPO Class 600	SPO Class 600	
30	Flange Specification		SPO CF CL600 HXM-540	SPO CF CL600 HXM-540	
31	Flange coating:		HDG	HDG	
32	Gasket contact surface:		RJ	RJ	

	Dimensions		Units			Units
33	I.D. Hose Body:	487,5	mm	O.D. on Body:	672	mm
34	I.D. Hose Fittings:	487,5	mm	O.D. on End:	850	mm

	Materials	A-side :	B-side :	
35	Flange material:	ASTM A694 F52	ASTM A694 F52	
36	Nipple material:	ASTM A694 F52	ASTM A694 F52	

Notes

SW = Seawater; FW = Freshwater

Tipo tubo	Matr	Weight in air empty	UWW: SW / SW	UWW: FW / SW	Tag nr	HDS nr	HIATC nr pack	Lenght	Tem Elong	Perm Elong	Bassi Dwg nr	Tipo flangia A	Tipo flangia B	Mat Fl A	Mat Nippl A	Mat Fl B	Mat Nippl B	Nom Dia End	Nom Dia Body	Flange Spec A	Flange Spec B
		Kg	Kg	Kg																	
ADMIRAL 1402 S	0713450	5 232	2 683	2 626	33LX101	1635-BAO-P-DS-0002	1635-BAO-P-VB-0001	12 190,00	0,42	0,01	A1402S7GC-FOR Rev 12 / 229A-APL-ER810-R-XS-0001 Rev D	CLASS 300	CLASS 300	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	860,00	672,00	ASME B 16,5	ASME B 16,5
ADMIRAL 1401 S	0713480	5 970	3 202	3 145	33LX102	1635-BAO-P-DS-0003	1635-BAO-P-VB-0002	12 200,00	0,43	0,08	A1401S7GC Rev 11 / 229A-APL-ER810-R-XS-0013 Rev A	SPO Class 1500	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	874/850	702,00	SPO CF AF CL1500 IX22	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0313583	4 930	2 492	2 435	33LX127	1635-BAO-P-DS-0028	1635-BAO-P-VB-0027	12 185,00	0,51	0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0313582	5 002	2 526	2 469	33LX126	1635-BAO-P-DS-0027	1635-BAO-P-VB-0026	12 208,00	0,37	- 0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0313581	4 880	2 460	2 403	33LX125	1635-BAO-P-DS-0026	1635-BAO-P-VB-0025	12 185,00	0,53	-	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0313580	4 746	2 425	2 368	33LX124	1635-BAO-P-DS-0025	1635-BAO-P-VB-0024	12 184,00	0,50	0,03	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513579	4 830	2 427	2 370	33LX123	1635-BAO-P-DS-0024	1635-BAO-P-VB-0023	12 193,00	0,43	0,05	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513578	4 866	2 468	2 411	33LX122	1635-BAO-P-DS-0023	1635-BAO-P-VB-0022	12 185,00	0,46	0,05	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513577	4 880	2 488	2 431	33LX121	1635-BAO-P-DS-0022	1635-BAO-P-VB-0021	12 180,00	0,35	0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513576	4 818	2 457	2 400	33LX120	1635-BAO-P-DS-0021	1635-BAO-P-VB-0020	12 210,00	0,49	0,04	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513575	4 776	2 461	2 404	33LX119	1635-BAO-P-DS-0020	1635-BAO-P-VB-0019	12 180,00	0,62	0,08	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513476	4 838	2 450	2 393	33LX118	1635-BAO-P-DS-0019	1635-BAO-P-VB-0018	12 190,00	0,53	-	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513475	4 794	2 384	2 327	33LX117	1635-BAO-P-DS-0018	1635-BAO-P-VB-0017	12 185,00	0,48	-	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513474	4 812	2 420	2 363	33LX116	1635-BAO-P-DS-0017	1635-BAO-P-VB-0016	12 183,00	0,47	-	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513473	4 860	2 470	2 413	33LX115	1635-BAO-P-DS-0016	1635-BAO-P-VB-0015	12 160,00	0,34	-	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513472	4 856	2 444	2 387	33LX114	1635-BAO-P-DS-0015	1635-BAO-P-VB-0014	12 180,00	0,30	-	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513471	4 874	2 464	2 407	33LX113	1635-BAO-P-DS-0014	1635-BAO-P-VB-0013	12 180,00	0,32	- 0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0513470	4 896	2 450	2 393	33LX112	1635-BAO-P-DS-0013	1635-BAO-P-VB-0012	12 177,00	0,45	0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613469	4 792	2 436	2 379	33LX111	1635-BAO-P-DS-0012	1635-BAO-P-VB-0011	12 187,00	0,46	0,04	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613468	4 894	2 448	2 391	33LX110	1635-BAO-P-DS-0011	1635-BAO-P-VB-0010	12 188,00	0,44	0,12	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613467	4 872	2 404	2 347	33LX109	1635-BAO-P-DS-0010	1635-BAO-P-VB-0009	12 192,00	0,50	0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613466	4 882	2 448	2 391	33LX108	1635-BAO-P-DS-0009	1635-BAO-P-VB-0008	12 183,00	0,41	- 0,01	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613465	4 864	2 500	2 443	33LX107	1635-BAO-P-DS-0008	1635-BAO-P-VB-0007	12 175,00	0,56	- 0,02	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613464	4 886	2 458	2 401	33LX106	1635-BAO-P-DS-0007	1635-BAO-P-VB-0006	12 170,00	0,34	- 0,08	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613463	4 868	2 417	2 360	33LX105	1635-BAO-P-DS-0006	1635-BAO-P-VB-0005	12 183,00	0,57	0,07	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613462	4 838	2 561	2 505	SPARE 33LX104	1635-BAO-P-DS-0005	1635-BAO-P-VB-0004	12 184,00	0,34	- 0,05	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S	0613461	4 890	2 459	2 403	SPARE 33LX103	1635-BAO-P-DS-0004	1635-BAO-P-VB-0003	12 195,00	0,52	0,01	A1402S7GC Rev 11 / 229A-APL-ER810-R-XS-0011 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	672,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S PU	0713596	4 956	2 481	2 425	SPARE 33LX128	1635-BAO-P-DS-0029	1635-BAO-P-VB-0028	12 193,00	0,40	0,02	A1402SPU7GC Rev 11 / 229A-APL-ER810-R-XS-0012 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	676,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S PU	0713477	5 026	2 482	2 425	33LX129	1635-BAO-P-DS-0030	1635-BAO-P-VB-0029	12 183,00	0,55	0,02	A1402SPU7GC Rev 11 / 229A-APL-ER810-R-XS-0012 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	676,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S PU	0713478	4 958	2 465	2 408	33LX130	1635-BAO-P-DS-0031	1635-BAO-P-VB-0030	12 183,00	0,55	0,02	A1402SPU7GC Rev 11 / 229A-APL-ER810-R-XS-0012 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	676,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1402 S PU	0713479	5 038	2 487	2 431	33LX131	1635-BAO-P-DS-0032	1635-BAO-P-VB-0031	12 187,00	0,55	0,02	A1402SPU7GC Rev 11 / 229A-APL-ER810-R-XS-0012 Rev A	SPO Class 600	SPO Class 600	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	850,00	676,00	SPO CF CL600 HXM-540	SPO CF CL600 HXM-540
ADMIRAL 1401 S PU	0713481	5 558	2 945	2 895	33LX132	1635-BAO-P-DS-0033	1635-BAO-P-VB-0032	10 700,00	0,62	0,14	A1401SPU7FD Rev 1 / 229A-APL-ER810-R-XS-0015-01 Rev 1	SPO Class 600	SPO Class 1500	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	ASTM A694 F52	880/850	709,00	SPO CF CL600 HXM-540	SPO CF AF CL1500 IX22