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THRT

TRT

FDR

Report Date : 05.06.2024 Material : 10121719 Description : ASSY,1/2" MECH GATE VALVE, INTERFACE Revision Level : 00;500000052576 Plant. Base Unit of Measure : EA Gross Weight : 31,1 KG Net Weight : 31.1 KG Basic Material : SEE BOM FOR MATERIALS Commodity Code Export Control Code : Manufacturer Manuf Part No. MIR ID : 79001003 MIR Title : VALVE KIT MIR Desc. : Assembly, MRB Criticality : 3 Traceability type Serial No. Profile Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900130; ROV Extension Kit Attributes Related Drawings : Type:SWD, No:10001225496, Ver:00, Status: IFC ,Descr:ASSY, 1/2" MECH GATE VALVE, INTERFACE Other Related Docs : Type:PDC,No:10001325337,Ver:06,Status:Re-issued Constr,Descr:INTL TEST PROC, PAB DRILL THRU Type:SWA,No:10001111849,Ver:01,Status:Temp. Release ,Descr:INTERFACE - ST - VALV 1/2" - BENTLEY Basic Data Text : NOTES FOR DRAWING 10001225496: 1 - Identify and mantain traceability using a tag; 2 - Refer to 10001325337 for assembly and test procedures; 3 - To use LOCTITE 242 for assembly of item 110 and 140;

4 - To apply torque of 15 lbf.ft for assembly of item 110;

5 - Product specification level acc. to API SPEC. 17D - PSL: N. A.

Characteristics:

Created By : 164216
Division : XMT

Lab / Design Office : Curitiba
MIR ID : 79001003

Material Group : 7900130

SDRL & QM : QM: YES

Traceability Code : SN

X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10080225	MACH, BODY INTERFACE ROV TO VALVE	1,000	EA	V	2
0020	10121720	WELD/MACH,1/2 MECH GATE VALVE,INTFC STEM	1,000	EA	V	3
0030	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	V	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	V	3
0050	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	V	2
0060	BB18-BS0317-05	MACH, ADAPTADOR 3/4" - INTERFACE ROV	1,000	EA	V	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3
0080	BB18-BS0205-10	MACH, ROV INTERFACE BUSHING	1,000	EA		3
0090	BB18-BS0205-44	EIXO - INTERFACE ROV	1,000	EA	V	2
0100	10080229	ROV INTERFACE ADAPTER	1,000	EA	V	3
0110	BBPFC029004	PF CIL SEXT INT 1/2" X 2" AISI 316	2,000	EA		3
0120	BBPOR091001	HVY NUT, 1/2-13, AISI316	4,000	EA		3
0130	BBPFE014006	CSK HEX SCR, 1/2# x 2.1/2#, AISI 316	4,000	EA		3
0140	BBPFC029238	PF CIL SEXT INT 3/8" X 3/4" AISI 316	2,000	EA		3
0150	10104196	POSITION INDICATOR, ROV INTERFACE	1,000	EA	V	3

Report Date : 05.06.2024 Material : 10121896 Description : ASSY, ORIENTATION SLEEVE WITH STABS Revision Level : 06;500000328543 Plant. Base Unit of Measure : EA Gross Weight : 291,7 KG Net Weight : 291.7 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer Manuf Part No. : 70502117 MIR ID MIR Title : XT/TH/THS, ASSEMBLY : Dimensional Control, Visual Inspection, Submitted MIR Desc. Criticality Traceability type Serial No. Profile : — Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7050000; SUBSEA TREE SYSTEMS (WP05) 7050200;XT/TH/THS Assy and Components 7050205;XT System Sub-Assembly Attributes Related Drawings : Type:SWD, No:10001184340, Ver:04, Status:Re-issued Constr, Descr:ASSY, ORIENTATION SLEEVE Other Related Docs : Type:SWA,No:10001131027,Ver:04,Status:Temp. Release ,Descr:ASSY, XMT ORIENTATION SLEEVE Basic Data Text : Notes for the drawing 10001184340: 1 - Identify and maintain traceability using stamp, where indicated. Text height shall be proportional to the component; 2 - Unless otherwise specified, dimensions are for reference only; 3 - Assemble item 0060 with loctite 242; 4 - Deleted;

5 - Product specification level acc. to API spec. 17D = PSL3

Characteristics:

Created By : 164593 Division : XMT Lab / Design Office : Curitiba MIR ID : 70502117 Material Group : 7050205 SDRL & OM : OM: YES Traceability Code : SN X Plant Status : Z9

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10123700	MACH, ORIENTATION SLEEVE BODY	1,000	EA	V	2
0020	10123657	MACH, STAB PLATE, XMT ORIENTATION SLEEVE	1,000	EA		3
0030	10123664	ASSY, 1/2" STAB BODY, XMT ORIENT SLEEVE	6,000	EA	V	2
0040	10123662	ASSY, ANNULUS STAB BODY, XMT SLEEVE	1,000	EA	V	2
0050	10121574	HEXSO SCR,3/4-10x1.3/4,A193 B7M	4,000	EA		2
0060	10121615	HEXSO SCR,1/2-13x1.1/2,A193 B7M	6,000	EA		2
0070	10123671	ASSY, 1/2" STEP STAB BODY, XMT SLEEVE	2,000	EA	V	2
0080	10123668	ASSY, 5" STAB BODY, XMT ORIENT SLEEVE	1,000	EA	V	2
0090	10123666	ASSY, ELECTRICAL STAB, XMT SLEEVE	1,000	EA	V	2
0100	BBPFC029241	HEXSO SCR,3/8-16x1.1/4,AISI316	2,000	EA		3
0110	10114133	SPECIAL NUT,1.1/8-8,17-4-PH-100K	1,000	EA	V	3
0120	10114465	FLG, ELEC STAB, Mach.	1,000	EA	V	3
0140	10114466	SPECIAL CASTLE NUT,1.1/8-8,17-4-PH	1,000	EA	V	3
0150	BB18-BS0163-03	PINO DE ORIENTACAO	2,000	EA	V	3

Report Date : 05.06.2024

Material : 10133996

Description : ASSY, ROV INTERFACE, AX-2 VALVE

Revision Level : 00;500000062891

Plant :

Base Unit of Measure : EA
Gross Weight : 31,3 KG
Net Weight : 31,3 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : - Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : BN
Serial No. Profile : —

Batch Management 🔽

Shelf life: 0 Day

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes

Related Drawings : Type:SWD,No:10001357320,Ver:01,Status:Re-issued Constr,Descr:ASSY, ROV INTERFACE, AX-2 VALVE
Other Related Docs : Type:SWA,No:10001160705,Ver:01,Status:Temp. Release ,Descr:IG - Interface ST2 - Iara & Guara

Basic Data Text : Notes for the drawing 10001357320:

1 - Identify and maintain traceability using a tag;

2 - To use LOCTITE 242 for assembly of the item 70 .

3 - Product specification level acc. to API spec. 17D = N.A

Characteristics:

Created By : 164593
Division : XMT

Lab / Design Office : Curitiba
MIR ID : 79001003

Material Group : 7900130

SDRL & QM : QM: YES

Traceability Code : BN

X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10104146	INTERFACE VALVE 1/2" 1/4 TURN, SUB-ASSY	1,000	EA	V	2
0020	10077571	ROV INTERFACE, 3/4" - ADAPTER	1,000	EA	✓	3
0030	10133994	MACH, ROV INTERFACE ROD, AX-2 VALVE	1,000	EA	✓	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	V	3
0050	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	V	3
0060	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	V	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3

Report Date : 05.06.2024

Material : 10133998

Description : ASSY, ROV INTERFACE, AX-5 VALVE

Revision Level : 03;500000115393

Plant

Base Unit of Measure : EA Gross Weight : 31,9 KG Net Weight : 31,9 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : - Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : BN
Serial No. Profile : —

Batch Management 🗸

Shelf life: 0 Day

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes

Related Drawings : Type:SWD,No:10001357203,Ver:03,Status:Re-issued Constr,Descr:ASSY, ROV INTERFACE, AX-5 VALVE
Other Related Docs : Type:SWA,No:10001160717,Ver:02,Status:Temp. Release ,Descr:IG - Interface ST5 - Iara & Guara

Basic Data Text : Notes for the drawing 10001357203:

1 - Identify and maintain traceability using a tag;

2 - To use LOCTITE 242 for assembly of the item 70 .

3 - Product specification level acc. to API spec. 17D = N.A

Characteristics:

Created By : 164593
Division : XMT

Lab / Design Office : Curitiba
MIR ID : 79001003

Material Group : 7900130

SDRL & QM : QM: YES

Traceability Code : BN

X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10186607	ASSY, INTERFACE VALVE 1/2" (1/4 TURN)	1,000	EA	✓	3
0020	10077571	ROV INTERFACE, 3/4" - ADAPTER	1,000	EA	✓	3
0030	10133997	MACH, ROV INTERFACE ROD, AX-5 VALVE	1,000	EA	✓	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	V	3
0050	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	V	3
0060	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	✓	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3
0080	10167159	MACH, ROV INTERFACE ADAPTER	1,000	EA	V	3
0090	BBPSC014220	PF S/CAB SEXT INT 3/8" X 1" AISI 316	2,000	EA		3
0100	BBPOR091016	HVY NUT, 3/8-16, AISI316	2,000	EA		3

Report Date : 05.06.2024

Material : 10134010

Description : ASSY, ROV INTERFACE, IQ2-M VALVE

Revision Level : 00;500000062891

Plant

Base Unit of Measure : EA Gross Weight : 31,3 KG Net Weight : 31,3 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : BN
Serial No. Profile : —

Batch Management ✓
Shelf life: 0 Day

Shell lile

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes :

Related Drawings : Type:SWD,No:10001357372,Ver:01,Status:Re-issued Constr,Descr:ASSY, ROV INTERFACE, IQ2-M VALVE
Other Related Docs : Type:SWA,No:10001160708,Ver:01,Status:Temp. Release ,Descr:IG - Interface IQ2 - Iara & Guara

Basic Data Text : Notes for the drawing 10001357372:

1 - Identify and maintain traceability using a tag;

2 - To use LOCTITE 242 for assembly of the item 70 .

3 - Product specification level acc. to API spec. 17D = N.A

Characteristics:

Created By
Division
: XMT

Lab / Design Office
: Curitiba
MIR ID
: 79001003

Material Group
: 7900130

SDRL & QM
: QM: YES

Traceability Code
: BN

X Plant Status
: LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10104146	INTERFACE VALVE 1/2" 1/4 TURN, SUB-ASSY	1,000	EA	V	2
0020	10077571	ROV INTERFACE, 3/4" - ADAPTER	1,000	EA	V	3
0030	10133999	MACH, ROV INTERFACE ROD, IQ2-M VALVE	1,000	EA	✓	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	✓	3
0050	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	✓	3
0060	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	V	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3

Report Date : 05.06.2024

Material : 10134012

Description : ASSY, ROV INTERFACE, ST VALVE

Revision Level : 00;500000062891

Plant

Base Unit of Measure : EA Gross Weight : 31,1 KG Net Weight : 31,1 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : - Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : BN
Serial No. Profile : —

Batch Management ✓

Shelf life : 0 Day

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes :

Related Drawings : Type:SWD,No:10001357468,Ver:01,Status:Re-issued Constr,Descr:ASSY, ROV INTERFACE, ST VALVE
Other Related Docs : Type:SWA,No:10001160720,Ver:01,Status:Temp. Release ,Descr:IG - Interface ST - Iara & Guara

Basic Data Text : Notes for the drawing 10001357468:

1 - Identify and maintain traceability using a tag;

2 - To use LOCTITE 242 for assembly of the item 70 .

3 - Product specification level acc. to API spec. 17D = N.A

Characteristics:

Created By
Division
: XMT

Lab / Design Office
: Curitiba
MIR ID
: 79001003

Material Group
: 7900130

SDRL & QM
: QM: YES

Traceability Code
: BN

X Plant Status
: LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10104146	INTERFACE VALVE 1/2" 1/4 TURN, SUB-ASSY	1,000	EA	V	2
0020	10077571	ROV INTERFACE, 3/4" - ADAPTER	1,000	EA	✓	3
0030	10134011	MACH, ROV INTERFACE ROD, ST VALVE	1,000	EA	✓	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	✓	3
0050	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	✓	3
0060	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	V	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3

Report Date : 05.06.2024

Material : 10134014

Description : ASSY, ROV INTERFACE, DS1 VALVE

Revision Level : 02;500000115393

Plant :

Base Unit of Measure : EA
Gross Weight : KG
Net Weight : 31,9 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : - Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : BN
Serial No. Profile : —

Batch Management ✓
Shelf life: 0 Day

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes

Related Drawings : Type:SWD,No:10001357496,Ver:03,Status:Re-issued Constr,Descr:ASSY, ROV INTERFACE, DS1 VALVE

Other Related Docs : Type:SWA,No:10001160723,Ver:02,Status:Temp. Release ,Descr:Interface DHSV1 - GLNE

Basic Data Text : Notes for the drawing 10001357496:

1 - Identify and maintain traceability using a tag;

2 - Use LOCTITE 242 to assembly the item 70;

3 - Product specification level acc. to API spec. 17D = N.A

Characteristics:

Created By : 164593 Division : XMT Lab / Design Office : Curitiba MIR ID : 79001003 Material Group : 7900130 SDRL & QM : QM: YES Traceability Code : BN X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10104146	INTERFACE VALVE 1/2" 1/4 TURN, SUB-ASSY	1,000	EA	V	2
0020	10077571	ROV INTERFACE, 3/4" - ADAPTER	1,000	EA	V	3
0030	10134013	MACH, ROV INTERFACE ROD, DS1 VALVE	1,000	EA	V	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	V	3
0050	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	V	3
0060	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	V	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3
0080	10167159	MACH, ROV INTERFACE ADAPTER	1,000	EA	V	3
0120	BBPOR091016	HVY NUT, 3/8-16, AISI316	2,000	EA		3
0130	BBPSC014220	PF S/CAB SEXT INT 3/8" X 1" AISI 316	2,000	EA		3

Report Date : 05.06.2024

Material : 10134016

Description : ASSY, ROV INTERFACE, DS2 VALVE

Revision Level : 03;500000115393

Plant

Base Unit of Measure : EA Gross Weight : 32,0 KG Net Weight : 31,9 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : - Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : BN
Serial No. Profile : —

Batch Management 🗸

Shelf life: 0 Day

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes

Related Drawings : Type:SWD,No:10001357484,Ver:03,Status:Re-issued Constr,Descr:ASSY, ROV INTERFACE, DS2 VALVE

Other Related Docs : Type:SWA,No:10001160711,Ver:02,Status:Temp. Release ,Descr:Interface DHSV2 - GLNE

Basic Data Text : Notes for the drawing 10001357484:

1 - Identify and maintain traceability using a tag;

2 - To use LOCTITE 242 for assembly of the item 70;

3 - Product specification level acc. to API spec. 17D = N.A

Characteristics:

Created By : 164593
Division : XMT

Lab / Design Office : Curitiba
MIR ID : 79001003

Material Group : 7900130

SDRL & QM : QM: YES

Traceability Code : BN

X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10104146	INTERFACE VALVE 1/2" 1/4 TURN, SUB-ASSY	1,000	EA	✓	2
0020	10077571	ROV INTERFACE, 3/4" - ADAPTER	1,000	EA	✓	3
0030	10134015	MACH, ROV INTERFACE ROD, DS2 VALVE	1,000	EA	✓	3
0040	BB18-BS0205-37	MACH, ROD GUIDE	1,000	EA	V	3
0050	BB18-BS0205-45	MACH, JOINT BLOCK	2,000	EA	V	3
0060	BB18-BS0205-46	MACH, FIXING PIN	4,000	EA	✓	2
0070	BBPSC014287	PF S/CAB SEXT INT 3/8" X 7/16" AISI 316	4,000	EA		3
0080	10167159	MACH, ROV INTERFACE ADAPTER	1,000	EA	V	3
0120	BBPOR091016	HVY NUT, 3/8-16, AISI316	2,000	EA		3
0130	BBPSC014220	PF S/CAB SEXT INT 3/8" X 1" AISI 316	2,000	EA		3

Report Date : 05.06.2024

Material : 10186607

Description : ASSY, INTERFACE VALVE 1/2" (1/4 TURN)

Revision Level : 00;500000080321

Plant :

Base Unit of Measure : EA
Gross Weight : 24,8 KG
Net Weight : 24,8 KG

Basic Material : SEE BOM FOR MATERIALS

Commodity Code : Export Control Code :

Manufacturer : - Manuf.Part No. :

MIR ID : 79001003
MIR Title : VALVE KIT
MIR Desc. : Assembly, MRB

Criticality : 3
Traceability type : SN
Serial No. Profile : —

Batch Management

Shelf life: 0 Day

QM Control Key : Inspection Setup :

Classification : MACS_MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7900000; SHARED

7900100; Valve&Actuator #Kit, SubAss&Component

7900130; ROV Extension Kit

Attributes

Related Drawings : Type:SWD,No:10001886823,Ver:00,Status:IFC ,Descr:ASSY, VALVE 1/2" INTERFACE (1/4 TURN)

Other Related Docs : Type:SWA,No:10001886815,Ver:01,Status:Temp. Release ,Descr:VALVE 1/2" INTERFACE (1/4 TURN)

Basic Data Text : NOTES FOR THE DRAWING 10001886823:

1 - IDENTIFY AND MAINTAIN TRACEABILITY USING A TAG;

2 - TO USE LOCTITE 242 FOR ASSEMBLY OF ITEM 50 AND 80;

3 - TO APPLY TORQUE OF 15 lbf.ft FOR ASSEMBLY OF ITEM 50;

4 - PRODUCT SPECIFICATION LEVEL ACC. TO API SPEC. 17D = N.A

Characteristics:

Created By : 164566
Division : XMT

Lab / Design Office : Curitiba
MIR ID : 79001003

Material Group : 7900130

SDRL & QM : QM: YES

Traceability Code : SN

X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10080225	MACH, BODY INTERFACE ROV TO VALVE	1,000	EA	V	2
0020	BB18-BS0205-10	MACH, ROV INTERFACE BUSHING	1,000	EA		3
0030	BB18-BS0205-44	EIXO - INTERFACE ROV	1,000	EA	✓	2
0040	10080229	ROV INTERFACE ADAPTER	1,000	EA	V	3
0050	BBPFC029004	PF CIL SEXT INT 1/2" X 2" AISI 316	2,000	EA		3
0060	BBPOR091001	HVY NUT, 1/2-13, AISI316	4,000	EA		3
0070	BBPFE014006	CSK HEX SCR, 1/2# x 2.1/2#, AISI 316	4,000	EA		3
0080	BBPFC029238	PF CIL SEXT INT 3/8" X 3/4" AISI 316	2,000	EA		3
0090	10186603	WLDMT, POSITION INDICATOR, 1/4 TURN	1,000	EA		4

Report Date : 05.06.2024 Material : 10197528 Description : ACTUATOR, 2"-10K, 3000M, 718, SE/TP, ASSY Revision Level : 13;500000324132 Plant. Base Unit of Measure : EA Gross Weight : KG Net Weight : 243.8 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer Manuf . Part No. MIR ID : 79001001 MIR Title : ACTUATOR ASSEMBLY, HYDRAULIC : Assembly, Test, MRB, ITP MIR Desc. Criticality Traceability type Serial No. Profile Batch Management

✓ Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900115; Actuator Attributes Related Drawings : Type:SWD,No:10002071807,Ver:03,Status:Re-issued Constr,Descr:ACTUATOR Type:SWD,No:10002152317,Ver:02,Status:Re-issued Constr,Descr:TOP ASSY, ACTUATOR W/ EXT STEM Type:SWD, No:10004335000, Ver:00, Status:IFC ,Descr:ACTUATOR, HYDRAULIC Other Related Docs : Type:PDC,No:10000854229,Ver:00,Status:IFC ,Descr:CALCULATION REPORT Type:PDC,No:10004342944,Ver:02,Status:Re-issued Constr,Descr:ASSEMBLY PROCEDURE Type:SWA,No:10002028436,Ver:03,Status:Temp. Release ,Descr:ASSY, ACTUATOR W/ EXT STEM Type:PDC,No:10002615521,Ver:11,Status:Re-issued Constr,Descr:FAT PROCEDURE Type:SWA,No:10004334990,Ver:00,Status:Temp. Release ,Descr:ACTUATOR, GENERIC, ASSY STEPS Type:PDC,No:10001366134,Ver:01,Status:Re-issued Constr,Descr:SDRL (STANDARD) Type:SWA,No:10004336572,Ver:00,Status:Temp. Release ,Descr:ACTUATOR, GENERIC, ASSY STEPS Type:PDC.No:10004342945.Ver:01.Status:Re-issued Constr.Descr:DISASSEMBLY PROCEDURE Type:PDC,No:10002802371,Ver:09,Status:Re-issued Constr,Descr:FLUSHING PROCEDURE Type:SWA,No:10004337381,Ver:00,Status:Temp. Release ,Descr:ACTUATOR, GENERIC, ASSY STEPS Basic Data Text : 1) PRIOR TO ASSEMBLY ALL PARTS SHALL BE THOROUGHLY CLEANED AND INSPECTED TO RULE OUT DAMAGE AND

DEFECTS.

2) ASSEMBLY SHALL BE PERFORMED IN A CLEAN ROOM OR CLEAN ENVIRONMENT SEPARATED FROM OTHER MANUFACTURING.

STAMP/ETCH THE FOLLOWING INFORMATION ON THE NAMEPLATE (ITEM 310):

NOM.SIZE: 2-1/16"
M/N: 10197528
S/N: _____
RATED WP: 690 BAR
RATED CP: 207/345 BAR
RATED WATER DEPTH: 3000 M

PSL: 3G

TEMP RATING: -18°C TO 150°C

MATR CLASS: 718 HH
MANUFACTURER: ____*

DATE: _____

* Assembly facility

Characteristics:

Actuation Spring Type : Coil
Actuation Type : Hydraulic
Additional Features : Bonnet Test Port
Additional Features : Stem Extension

Application : XMT
Created By : 184789
Division : XMT
Hydraulic Operating Pressure : 207 (3 000)

Hydraulic Operating Pressure : 345 (5 000) Lab / Design Office : Curitiba MIR ID : 79001001 Material Group : 7900115 Material Trim : Inconel 718 Max. Rated Temperature (°C) : 150 °C Min. Rated Temperature (°C) : -18 °C Nominal Bore (inch) : 2 1/16 Rated Water Depth (m) : 3.000 m Rated Work Pressure (bar/psi): 690 (10 000) SDRL & QM OM: YES

Standard Material : Standard (Green)

Traceability Code : SN X Plant Status : PM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10197527	BONNET, 2-1/16"-10K, 718, SE/TP, ASSY	1,000	EA	V	1
0020	10080173	SPRING CANISTER ASSEMBLY, 2-1/16"	1,000	EA	✓	2
0030	10080181	CYLINDER 2 1/16", F/M	1,000	EA	V	2
0040	10080180	PISTON, 2-1/16",F/M,OD=259MM, L=302MM	1,000	EA	V	2
0050	10080179	PISTON RETAINER RING, 2-1/16", OD=263, L=45	1,000	EA	V	2

0060	10080177	OVERRIDE STEM RETAINER, 31,75MM, F/M	1,000	EA	✓	2
0070	10080176	ROV OVERRIDE INTERFACE, 2-1/16",F/M,L254	1,000	EA	V	2
0080	10080175	OVERRIDE STEM, 2 1/16", F/M	1,000	EA	V	2
0090	10080174	OVERRIDE STEM GUIDE, 31,75MM, F/M	1,000	EA	V	3
0100	10291393	SPRING CHAMBER SEAL, CYL BORE, Ø120MM	1,000	EA		2
0110	10091809	SUPPORT RING, OR STEM 31,75MM, 718, F/M	3,000	EA	V	2
0120	10299012	ENVIRONMENTAL SEAL, CYL ROD, 31.75MM	1,000	EA		2
0130	10083706	INDICATOR RETAINER RING, OR STEM 31,75, FM	1,000	EA	V	3
0140	10276504	INDICATOR, ACTUATOR, F/M	1,000	EA	V	3
0150	10133031	SHCS HEX, M10X35, A4-80	4,000	EA		2
0160	10091872	WEARBAND, 31,75x36,75x9,5, RTS	1,000	EA		2
0170	10082039	WEARBAND, 120x125x14,8, RTS	2,000	EA		2
0180	10082637	PLUG, 1/4", 56KPSI, PLAA2528020A	2,000	EA		3
0190	10094478	WIPER-I, 32,75X40,45X6,49, PEEK	1,000	EA		2
0200	10291395	HYDRAULIC SEAL, CYLINDER BORE, Ø120MM	2,000	EA		2
0210	10299014	HYDRAULIC SEAL, CYL ROD, 31,75MM	2,000	EA		2
0220	10091544	CIRCLIP, 1.625", CIRTEQ NJ-162	3,000	EA		3
0230	BS0000894	PLUG 3/8" MP(M) CPX60	6,000	EA		2
0240	BS0000821	GLAND 3/8 MP(M) CGLX60	6,000	EA		2
0250	10277497	SCREW HEX, M12 x 45, L7, ELZN	28,000	EA		1
0260	10093540	SCREW SET, CUP, M8 x 20, A4-80	2,000	EA		2
0270	10093557	O-RING, 221,62x5,33, HNBR85A	1,000	EA		1
0280	10093558	O-RING, 240,67x5,33, HNBR85A	1,000	EA		1
0290	10276008	BU-RING, 242,01x251,31x1,93, NBR90A	1,000	EA		2
0300	BB15-HS0005-63	VALVE, RELIEF, 1/4 CIRCLE SEAL 532T1-2M-50	1,000	EA		2
0310	10269234	NAMEPLATE, SMALL, ACTUATOR	1,000	EA		4
0320	BB7178042	NAIL, EASY-DRIVE, .116 DIA X 1/4 LG, #4,	2,000	EA		4
L	. L	t.	·			

Report Date : 05.06.2024 Material : 10202735 Description : VALVE KIT, MS200, 5"-10K, 3000M, 718, TP Revision Level : 03;500000168309 Plant. Base Unit of Measure : EA Gross Weight : 1.086,0 KG : 1.086,0 KG Net Weight Basic Material : SEE BOM FOR MATERIALS Commodity Code Export Control Code : Manufacturer : -Manuf . Part. No. MIR ID : 79001003 MIR Title : VALVE KIT MIR Desc. : Assembly, MRB Criticality : 1 Traceability type Serial No. Profile : -Batch Management

✓ Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900110; Valve Kit Attributes Related Drawings : Type:SWD,No:10002117404,Ver:02,Status:Re-issued Constr,Descr:VALVE KIT, MS200 Type:SWD,No:10003709938,Ver:01,Status:Re-issued Constr,Descr:ACTUATOR & VLV COMP KIT, GENERIC Type:SWD,No:10003489108,Ver:01,Status:Re-issued Constr,Descr:ACTUATOR AND VALVE COMP KIT Other Related Docs : Type:PDC,No:10002913734,Ver:02,Status:Re-issued Constr,Descr:DISASSEMBLY PROCEDURE Type:PDC,No:10003708261,Ver:01,Status:Re-issued Constr,Descr:ASSY PROC, KIT DE VÁLVULA NO BLOCO Type:PDC,No:10003661027,Ver:05,Status:Re-issued Constr,Descr:ASSEMBLY PROCEDURE Type:SWA,No:10003489110,Ver:01,Status:Temp. Release ,Descr:ACTUATOR & VLV COMP KIT, GENERIC Type:PDC,No:10001435302,Ver:00,Status:IFC ,Descr:FMECA Type:PDC,No:10002165243,Ver:00,Status:IFC ,Descr:DISASSY PROC, ACTUATOR N/ VALVE KIT Type:PDC,No:10002691433,Ver:02,Status:Re-issued Constr,Descr:OPERATION AND MAINTENANCE MANUAL Type:SWA,No:10002114382,Ver:02,Status:Temp. Release ,Descr:ASSY, VALVE N/ ACT KIT,5.1/8 FSC,SLNE II : 1) PRIOR TO ASSEMBLY ALL PARTS SHALL BE THOROUGHLY CLEANED AND INSPECTED Basic Data Text TO RULE OUT DAMAGE AND DEFECTS.

2) ASSEMBLY SHALL BE PERFORMED IN A CLEAN ROOM OR CLEAN ENVIRONMENT SEPARATE FROM OTHER MANUFACTURING

Characteristics:

Actuation Type : Hydraulic
Additional Features : Bonnet Test Port
Additional Features : Gate PEEK Pads

Application : XMT
Created By : 184789
Division : XMT

Gate Position : Normally Closed

Lab / Design Office Curitiba MIR ID 79001003 Material Group 7900110 Material Trim Inconel 718 Max. Rated Temperature (°C) : 150 °C Min. Rated Temperature (°C) : -18 °C Model Type MS200 Nominal Bore (inch) 5 1/8 Rated Water Depth (m) : 3.000 m Rated Work Pressure (bar/psi) : 690 (10 000) OM: YES SDRL & QM

Standard Material : Non-Standard (Yellow)

Traceability Code : SN X Plant Status : Z9

BoM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10079735	ACTUATOR, 5"-10K, 3000M, 718, TP, ASSY	1,000	EA	✓	1
0020	10298533	VALVE COMP KIT, MS200, 5"-10K, 718, PP	1,000	EA	✓	1
0030	10097416	O-RING, 253,59x3,53, HNBR85A	1,000	EA		2

Report Date : 05.06.2024 Material : 10203628 Description : VALVE KIT.MS200, 2"-10K.3000M.718, SE.TP : 04;500000168309 Revision Level Plant. Base Unit of Measure : EA Gross Weight : 249,9 KG Net Weight : 249.9 KG Basic Material : SEE BOM FOR MATERIALS Commodity Code Export Control Code : Manufacturer Manuf . Part No. MIR ID : 79001003 MIR Title : VALVE KIT MIR Desc. : Assembly, MRB Criticality Traceability type Serial No. Profile Batch Management

✓ Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator#Kit, SubAss&Component 7900110; Valve Kit. Attributes Related Drawings : Type:SWD, No:10003709938, Ver:01, Status: Re-issued Constr, Descr: ACTUATOR & VLV COMP KIT, GENERIC Type:SWD,No:10002117474,Ver:02,Status:Re-issued Constr,Descr:VALVE KIT, MS200 Type:SWD,No:10003489108,Ver:01,Status:Re-issued Constr,Descr:ACTUATOR AND VALVE COMP KIT Other Related Docs : Type:PDC,No:10001010431,Ver:04,Status:Re-issued Constr,Descr:CALCULATION REPORT, FASTENER Type:PDC,No:10002913734,Ver:02,Status:Re-issued Constr,Descr:DISASSEMBLY PROCEDURE Type:PDC, No:10003708261, Ver:01, Status: Re-issued Constr, Descr: ASSY PROC, KIT DE VÁLVULA NO BLOCO Type:PDC,No:10003661027,Ver:05,Status:Re-issued Constr,Descr:ASSEMBLY PROCEDURE Type:SWA,No:10002115565,Ver:02,Status:Temp. Release ,Descr:ASSY, ACTUATOR & GATE KIT, 2.1/16 FSC GV Type:SWA,No:10003489110,Ver:01,Status:Temp. Release ,Descr:ACTUATOR & VLV COMP KIT, GENERIC Type:PDC,No:10001435302,Ver:00,Status:IFC ,Descr:FMECA Type:PDC.No:10002691433.Ver:02.Status:Re-issued Constr.Descr:OPERATION AND MAINTENANCE MANUAL Type:PDC,No:10003323430,Ver:06,Status:Re-issued Constr,Descr:FAT Type:PDC,No:10002184355,Ver:00,Status:IFC ,Descr:DISASSY PROC, ACTUATOR N/ VALVE KIT Basic Data Text : 1 - Prior to assembly, all parts shall be thoroughly cleaned and

inspected to rule out damage and defects.

2 - Assembly shall be performed in a clean room or clean environment separate from other manufacturing

Characteristics:

Actuation Type : Hydraulic
Additional Features : Gate PEEK Pads
Additional Features : Bonnet Test Port
Additional Features : Stem Extension

Application : XMT
Created By : 184789
Division : XMT

Gate Position : Normally Closed

Curitiba Lab / Design Office MIR ID 79001003 Material Group 7900110 Material Trim Inconel 718 Max. Rated Temperature (°C) : 150 °C Min. Rated Temperature (°C) : -18 °C Model Type MS200 Nominal Bore (inch) : 2 1/16 Rated Water Depth (m) : 3.000 m Rated Work Pressure (bar/psi) : 690 (10 000) SDRL & QM OM: YES

Standard Material : Standard (Green)

Traceability Code : SN X Plant Status : PM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10197528	ACTUATOR, 2"-10K, 3000M, 718, SE/TP,ASSY	1,000	EA	✓	1
0020	10294588	VALVE COMP KIT, MS200, 2"-10K, 718, PP	1,000	EA	✓	1
0030	10097415	O-RING, 136,12x3,53, HNBR85A	1,000	EA		1

Report Date : 05.06.2024 Material : 10203779 Description : ASSY, ACTUATOR/VALVE, 5-1/8", KIT Revision Level : 01;500000332222 Plant. Base Unit of Measure : EA Gross Weight : 1.137,6 KG Net Weight : 1.137,6 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer : -Manuf Part No. MIR ID : 79001084 MIR Title : VALVES AND ACTUATORS, ASSEMBLY MIR Desc. : Dimensional Control, ITP, Submitted Criticality : 2 Traceability type Serial No. Profile : -Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900110; Valve Kit Attributes Related Drawings : Type:SWD, No:10002118045, Ver:00, Status: IFC ,Descr:ASSY, ACTUATOR VALVE KIT 5-1/8"-10K Other Related Docs : Type:SWA,No:10002117843,Ver:00,Status:Temp. Release ,Descr:ASSY, ACTUADOR/VALVE, 5-1/8", KIT Type:PDC,No:10002244734,Ver:01,Status:IFC ,Descr:ASSEMBLY PROCEDURE Basic Data Text : ACTUATOR/VALVE, 254MM EXTENSION, 5-1/8"-10K, 2600M, ASSEMBLY # ACCORDING TO ASSEMBLY DRAWING 10002118045: 1) PRIOR TO ASSEMBLY ALL PARTS SHALL BE THOROUGHLY CLEANED AND INSPECTED TO RULE OUT DAMAGE AND DEFECTS. 2) ASSEMBLY SHALL BE PERFORMED IN A CLEAN ROOM OR CLEAN ENVIRONMENT SEPARATE FROM OTHER MANUFACTURING ACC TO ASSEMBLY PROCEDURE 10002244734 3) PRODUCT SPECIFICATION LEVEL PER ISO 13628-4 = PSL 3G 4) STAMP/ETCH THE FOLLOWING INFORMATION ON THE NAMEPLATE (ITEM 70):

> NOM.SIZE: 5-1/8" M/N: 10203779

S/N: _____

RATED WP: 689 BAR
RATED CP: 207/345 BAR
RATED WATER DEPTH: 2600 M

PSL: 3G PR2

TEMP RATING: -18 TO 135°C

MATR CLASS: HH
MANUFACTURER: _____
DATE: ____

Characteristics:

Created By : 164216
Division : XMT

Lab / Design Office : Curitiba
MIR ID : 79001084
Material Group : 7900110
SDRL & QM : QM: YES
Traceability Code : SN
X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10202735	VALVE KIT, MS200, 5"-10K, 3000M, 718, TP	1,000	EA	V	1
0020	10098403	OVERRIDE EXT ADAPTER,5 -1/8", 254MM, F/M	1,000	EA	V	2
0030	10098404	OVERRIDE STEM EXTENSION	1,000	EA	V	2
0040	10085331	SCREW SET, CONE, M8 x 8, A4-80	4,000	EA		2
0050	10097795	BOLT, HEX HEAD, M20X70, GR L7, XYLAN	12,000	EA		2
0060	BB7178042	NAIL, EASY-DRIVE, .116 DIA X 1/4 LG, #4,	2,000	EA		4
0070	10104971	NAMEPLATE, ACTUATOR	1,000	EA		4

Report Date : 05.06.2024 Material : 10203954 Description : ASSY, ACTUATOR VALVE KIT 2-1/16" - 10K Revision Level : 02;500000332222 Plant. Base Unit of Measure : EA Gross Weight : KG Net Weight : 267.6 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer : -Manuf Part No. MIR ID : 79001084 MIR Title : VALVES AND ACTUATORS, ASSEMBLY : Dimensional Control, ITP, Submitted MIR Desc. Criticality Traceability type Serial No. Profile : -Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900110; Valve Kit. Attributes Related Drawings : Type:SWD, No:10002181325, Ver:00, Status: IFC ,Descr:ASSY, ACTUATOR VALVE KIT 2-1/16" - 10K Other Related Docs : Type:SWA,No:10002119775,Ver:00,Status:Temp. Release ,Descr:ACTUATOR VALVE WITH 412,5mm EXT Type:PDC, No:10002300255, Ver:02, Status:Re-issued Constr, Descr:ASSY PROC, ACTUATOR/VLV W/ 412,5MM EXT : Notes for the drawing 10002181325: Basic Data Text 1) Identify and maintain traceability using vibrating electric engraver or low stress stamp, where indicated. Text height shall be proportional to the component; 1.1) Stamp/Etch the following information on the nameplate (item 80): NOM.SIZE: 2-1/16" M/N: 10203954 S/N: ____ RATED WP: 10000 PSI RATED CP: 3000/5000 PSI RATED WATER DEPTH: 2500 M

PSL: 3G PR2

TEMP RATING: -18 TO 135°C

MATR CLASS: HH
MANUFACTURER: _____

DATE:____

2) Prior to assembly all parts shall be thoroughly cleaned and inspected to rule out damage and defects.

- 3) Assembly shall be performed in a clean room or clean enviroment separate from other manufacturing acc. to assembly procedure 10002300255;
- 4) Product specification level acc. to API spec. 17D = PSL3G

Characteristics:

Created By : 183013 Division : XMT : Curitiba Lab / Design Office MIR ID : 79001084 Material Group : 7900110 : QM: YES SDRL & QM : SN Traceability Code : LM X Plant Status

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10203628	VALVE KIT,MS200, 2"-10K,3000M,718, SE,TP	1,000	EA	✓	1
0020	10085319	OVERRIDE EXT ADAPTER,2-1/16",412.5MM,F/M	1,000	EA	✓	2
0030	10239652	HEX SCR,M12x45,A320 L7	8,000	EA		2
0040	10085330	OVERRIDE STEM EXT. , 2-1/16" ACTUATOR	1,000	EA	V	2
0050	10085331	SCREW SET, CONE, M8 x 8, A4-80	4,000	EA		2
0060	10080174	OVERRIDE STEM GUIDE, 31,75MM, F/M	1,000	EA	V	3
0070	10094478	WIPER-I, 32,75X40,45X6,49, PEEK	1,000	EA		2
0080	10104971	NAMEPLATE, ACTUATOR	1,000	EA		4
0090	BB7178042	NAIL, EASY-DRIVE, .116 DIA X 1/4 LG, #4,	2,000	EA		4

Report Date : 05.06.2024 Material : 10235747 Description : ASSY, STAB 2", TREE CAP Revision Level : 02;500000330031 Plant. Base Unit of Measure : EA Gross Weight : 5,8 KG Net Weight : 5.8 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer : -Manuf Part No. MIR ID : 70502117 MIR Title : XT/TH/THS, ASSEMBLY MIR Desc. : Dimensional Control, Visual Inspection, Submitted Criticality Traceability type Serial No. Profile : — Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7050000; SUBSEA TREE SYSTEMS (WP05) 7050200;XT/TH/THS Assy and Components 7050205;XT System Sub-Assembly Attributes Related Drawings : Type:SWD,No:10002540110,Ver:01,Status:Re-issued Constr,Descr:ASSY, STAB 2" Other Related Docs : Type:SWA,No:10002531529,Ver:01,Status:Accessible ,Descr:ASSY, STAB BORE 2, SLNE II Basic Data Text : Notes for the drawing 10002540110: 1 - Identify and maintain traceability using stamp. Text height shall be proportional to the component; 2 - Forced assembling between itens 050 and 070; 3 - Product specification level acc. to API spec. 17D = PSL3; 4 - Apply chemistry lock (loctite or similar) in threads; 5 - Tap until the screw stop. Don't apply torque;

6 - After assembling, protect the indicated region at colision or dirt.

Characteristics:

Created By : 183013 Division : XMT Lab / Design Office : Curitiba MIR ID : 70502117 Material Group : 7050205 SDRL & QM : QM: YES Traceability Code : SN X Plant Status : LM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10108532	MACH, UPPER BODY, STAB 2"	1,000	EA	V	2
0020	10235746	MACH, LOCKING STEM, STAB 2", SLNE II	1,000	EA	✓	3
0030	10117543	MACH, LOWER BODY, STAB BORE 2"	1,000	EA	✓	2
0040	10098007	METAL x METAL SEAL, 2", UNS N07718, MACH	1,000	EA	V	1
0050	10075673	DOG PIN, 17-4 PH, MACH	4,000	EA	V	2
0060	10075782	UPPER CAP PISTON, Ø80,0 X 52,0, MACH	1,000	EA	✓	2
0070	10057189	MACH, DOG	1,000	EA	✓	1
0080	10126443	MACH, SPECIAL NUT, STAB - BORE 2"	1,000	EA	✓	3
0090	10057154	STAB GUIDE, BORE 2", ACETAL, MACH	1,000	EA	✓	3
0100	10065198	HEX SET FC,1/4-28x3/8,AISI316	2,000	EA		3
0110	BBPSC014257	PF S/CAB SEXT INT 1/4" X 3/4" AISI 316	1,000	EA		3
0120	BBPFS070238	HEX SCR, 3/8-16x3/4-FT, AISI316	4,000	EA		3
0130	10108733	O-RING REF PARKER 2-210 90 SH	2,000	EA		2
0140	10063637	O-RING, 47,29x2,62, FKM90A	1,000	EA		2
0150	10104827	O-RING REF PARKER 2-214 90 SH A	2,000	EA		2
0160	10104825	O-RING REF PARKER 2-222 90 SH A	3,000	EA		2
0170	10104823	O-RING, PARKER 2-326 90 SH A	1,000	EA		2
0180	10145984	HEX SET FL,1/4-20x5/8,AISI316	3,000	EA		3

Report Date : 05.06.2024

Material : 10240750

Description : SEAL PLATE 12"-2x5"+ 2HC28 ASSY
Revision Level : 05;500000152678
Plant :

Base Unit of Measure : EA
Gross Weight : 31,8 KG
Net Weight : 36,4 KG

Basic Material : See BoM for Materials

Commodity Code : Export Control Code :

Manufacturer : Manuf.Part No. :

MIR ID : 71003003

MIR Title : SEAL PLATE/MAGAZINE
MIR Desc. : Assembly, MRB, ITP

Criticality : 1
Traceability type : SN
Serial No. Profile : —

Batch Management ✓
Shelf life: 0 Day

QM Control Key : Inspection Setup :

Classification : MACS MCLASS; Subsea MACS

7000000; SUBSEA SUB-ASSEMBLIES

7100000; CONN SYSTEMS & PIPELINE PRODUCTS (WP10)

7100300; Clamp Connectors

7100320; Seal Cassette/Plate/Magazine

Attributes :

Related Drawings : Type:SWD,No:10002610469,Ver:05,Status:Re-issued Constr,Descr:SEAL MAGAZINE FCM 12"-2x5"+2HC28

Type:SWD,No:10002514005,Ver:02,Status:Re-issued Constr,Descr:SEAL MAGAZINE FCM 12"-5"+2HC28

Other Related Docs : Type:PDC,No:10000244886,Ver:07,Status:Re-issued Constr,Descr:SDRL Tie-in Component - Non Welded

Type:PDC,No:10003013798,Ver:00,Status:IFC ,Descr:FEA SEAL-PLATE 12"-2x5"

Type:SWA,No:10002610125,Ver:00,Status:Temp. Release ,Descr:SEAL MAGAZINE FCM 12#-2x5#+ 2HC28

Basic Data Text

Characteristics:

Created By : 234718

Division : Tie In & ROV Tool

Lab / Design Office : Fornebu MIR ID : 71003003 Material Group : 7100320

Matl - Basic : SEE BOM FOR MATERIALS

SDRL & QM : QM: YES

Traceability Code : SN X Plant Status : Z9

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10240671	SEAL MAGAZINE FCM 12"-5"+2HC28 MACH	1,000	EA	✓	2
0020	10208584	GUIDE PIN Ø24.4 SEAL PLATE	2,000	EA		2
0030	10208585	CIRCLIP S024M	2,000	EA		4
0040	BB17-MX0008-00	SHCS HEX, M6X16, A4-80	6,000	EA		2
0050	BB18-NT0100-01	LOCKING WASHER, TX SEAL AISI316	6,000	EA		3
0060	BB17-MX0188-04	SHCS HEX, M12X60, A4-80	2,000	EA		2
0070	10008554	SHCS HEX, M16X120, A4-80	4,000	EA		2
0080	10268349	BST GASKET FOR 12" FCM SEAL PLATE	2,000	EA		4

Report Date : 05.06.2024 Material : 10292410 Description : CLAMP CONNECTOR, MKII SI 12" Revision Level : 04;500000169231 Plant. Base Unit of Measure : EA Gross Weight : 630,5 KG Net Weight : 630.2 KG : -Basic Material Commodity Code Export Control Code : : -Manufacturer Manuf . Part No. MIR ID : 71003001 MIR Title : CLAMP CONNECTOR, BASIS ASSEMBLY MIR Desc. : Assembly, ITP, MRB Criticality : 1 Traceability type Serial No. Profile Batch Management

✓ Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7100000; CONN SYSTEMS & PIPELINE PRODUCTS (WP10) 7100300; Clamp Connectors 7100305; Clamp Connector Attributes Related Drawings : Type:SWD, No:10003513571, Ver:00, Status: IFC ,Descr:CLAMP CONNECTOR, MKII SI 12", BASIS ASSY Type:SWD,No:10003523344,Ver:01,Status:Re-issued Constr,Descr:CLAMP CONNECTOR, MKII SI 12" Other Related Docs : Type:PDC,No:10003755215,Ver:05,Status:Re-issued Constr,Descr:QUALIFICATION REPORT Type:PDC,No:10003674493,Ver:04,Status:Re-issued Constr,Descr:OPERATIONS MANUAL Type:PDC,No:10003736109,Ver:00,Status:In Work ,Descr:12 inch MKII clamp connector Type:SWA, No:10003520996, Ver:01, Status:Temp. Release , Descr:ASSEMBLY STEP Type:PDC,No:10003674505,Ver:04,Status:Re-issued Constr,Descr:PHMS-MANUAL, CLAMP CONNECTOR - MKII Type:PDC,No:10003767188,Ver:03,Status:Re-issued Constr,Descr:Analysis Report WP10 Type:PDC,No:10008407039,Ver:01,Status:IFC ,Descr:Leak Tightness Analysis Type:PDC,No:10003674576,Ver:03,Status:Re-issued Constr,Descr:MKII IMPLEMENTATION MANUAL Type:PDC,No:10003706829,Ver:01,Status:IFC .Descr:Lubrication and Corrosion Type:PDC,No:10003388341,Ver:01,Status:IFC ,Descr:Analysis Report 12CC MKII WP10 Type:PDC,No:10003656028,Ver:02,Status:Re-issued Constr,Descr:ASSEMBLY PROCEDURE, CLAMP CONNECTOR Type:PDC,No:10003685852,Ver:00,Status:IFC ,Descr:PRESERVATION AND STRORAGE SUBCOMPONENTS Type:PDC,No:10000226520,Ver:04,Status:Re-issued Constr,Descr:SDRL FOR CLAMP CONNECTORS Type:SWA,No:10003513565,Ver:00,Status:Approval ,Descr:CLAMP CONNECTOR, MKII SI 12"

Type:PDC,No:10003663381,Ver:05,Status:Re-issued Constr,Descr:WORK INSTRUCTION - INSP / PRESERV

Basic Data Text : 1. All subcomponents in the connector shall be preserved and stored in

accordance with 10003685852 prior to assembly

2. The clamp connector shall preserved, handled, maintained, and stored in accordance with the in the PHMS-Manual [10003674505].

Characteristics:

Created By : 315795

Division : Tie In & ROV Tool

Lab / Design Office : Fornebu
MIR ID : 71003001
Material Group : 7100305
Max. Rated Temperature (°C) : 121 °C
SDRL & QM : QM: YES
Seal Plate : No Seal

Seal Plate : No Seal Plate Standard Material : Standard (Green)

System Nominal Size (inch) : 12

System Type : Basis for Clamp Connector

Traceability Code : SN X Plant Status : PM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	BB18-NT0145-03	RING ELEMENT RIGHT, MACHINING	2,000	EA	V	2
0020	10295161	TRAVERSE LEFT THR 12"CC MKII, F/M	1,000	EA	V	2
0030	10295160	TRAVERSE RIGHT THR 12" CC MKII, F/M	1,000	EA	V	2
0040	BB18-NT0145-01	TOP RING ELEMENT, MACHINING	2,000	EA	V	2
0050	BB18-NT0145-02	RING ELEMENT LEFT, MACHINING	2,000	EA	V	2
0060	10292121	JACK SCREW 12" CC MKII SI, MACHINING	1,000	EA	V	1
0070	10293988	HINGE BOLT 12" CC MKII	2,000	EA	V	2
0080	10058689	SHCS HEX, M12X70, L7, EL-ZN	12,000	EA		2
0090	BB18-NT0145-10	CLAMP SEGMENTS, MACHINING	1,000	EA	V	2
0100	BB18-NT0145-08	SEGMENT RETAINING BOLT	12,000	EA	V	3
0110	BB20-MX0001-22	O-RING, 28x8,5, NBR90A	12,000	EA		2
0120	10149396	SHCS HEX, M24X110, L7, EL-ZN	12,000	EA		2
0130	BB18-NT0145-07	DISTANCE SLEEVE, MACHINING	6,000	EA	V	3

Report Date : 05.06.2024 Material : 10294588 Description : VALVE COMP KIT, MS200, 2"-10K, 718, PP Revision Level : 01;500000320848 Plant. Base Unit of Measure : EA Gross Weight : 6,0 KG Net Weight : 6.0 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer : -Manuf . Part No. MIR ID : 79001005 MIR Title : VALVE COMPONENT KIT MIR Desc. : Assembly, MRB Criticality : 1 Traceability type Serial No. Profile Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900120; Valve Component Kit Attributes Related Drawings : Type:SWD,No:10003469435,Ver:01,Status:Re-issued Constr,Descr:VALVE COMPONENT KIT WITH PEEK PADS Other Related Docs : Type:PDC,No:10000929864,Ver:00,Status:IFC ,Descr:SDRL (STANDARD) Type:SWA,No:10003627192,Ver:00,Status:Temp. Release ,Descr:VALVE COMP KIT, 2"-10K, MS200, 718, PP Basic Data Text Characteristics: _____ Additional Features : Gate PEEK Pads Created By : 124461 Division : XMT Gate Position : Normally Closed Lab / Design Office : Tranby : 79001005 MIR ID

Material Trim : Inconel 718
Model Type : MS200

: 7900120

Material Group

Nominal Bore (inch) : 2 1/16
Rated Work Pressure (bar/psi) : 690 (10 000)
SDRL & QM : QM: YES / MIR ID
Standard Material : Standard (Green)

Traceability Code : SN X Plant Status : PM

BoM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10014964	SEAL, BXTYPE, 108,59x122,40x9,40, NI825	1,000	EA		2
0020	10172627	GATE, MS200, 2-1/16", 10K, 718, ASSY	1,000	EA	✓	2
0030	10117209	SEAT, MS200, 2-1/16",10K, 718, ASSY	2,000	EA	✓	1
0040	10319801	RADIAL SEAL, SEAT, 2-1/16"-10K	2,000	EA		3
0050	10110798	SPRING, SPIRAWAVE, F/ 2", ELGILOY	2,000	EA		1

Report Date : 05.06.2024 Material : 10298533 Description : VALVE COMP KIT, MS200, 5"-10K, 718, PP Revision Level : 01;500000320848 Plant. Base Unit of Measure : EA Gross Weight : 50,4 KG Net Weight : 50.7 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer : -Manuf . Part No. MIR ID : 79001005 MIR Title : VALVE COMPONENT KIT MIR Desc. : Assembly, MRB Criticality : 1 Traceability type Serial No. Profile Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900120; Valve Component Kit Attributes Related Drawings : Type:SWD,No:10003469435,Ver:01,Status:Re-issued Constr,Descr:VALVE COMPONENT KIT WITH PEEK PADS Other Related Docs : Type:SWA,No:10003691426,Ver:00,Status:Temp. Release ,Descr:VALVE COMP KIT Type:PDC,No:10000929864,Ver:00,Status:IFC ,Descr:SDRL (STANDARD) Basic Data Text Characteristics: _____ Additional Features : Gate PEEK Pads Created By : 124461 Division : XMT Gate Position Normally Closed Lab / Design Office : Tranby MIR ID : 79001005

Material Trim : Inconel 718
Model Type : MS200

: 7900120

Material Group

Nominal Bore (inch) : 5 1/8

Rated Work Pressure (bar/psi) : 690 (10 000)

SDRL & QM : QM: YES / MIR ID

Standard Material : Standard (Green)

Traceability Code : SN X Plant Status : PM

BoM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10078918	SEAL, BXTYPE, 205,13x228,09x11,48, NI825	1,000	EA		2
0020	10172625	GATE, MS200, 5-1/8", 10K, 718, ASSY	1,000	EA	✓	2
0030	10116539	SEAT,MS200, 5-1/8", 10K, 718, ASSY & F/M	2,000	EA	✓	2
0040	10355841	RADIAL SEAL, SEAT, 5-1/8"-10K	2,000	EA		3
0050	10110797	SPRING, SPIRAWAVE, F/ 5", ELGILOY	2,000	EA		1

Report Date : 05.06.2024 Material : 10299405 Description : INSULATION CAP, FCM Revision Level : 01;500000167974 Plant. Base Unit of Measure : EA Gross Weight : 25,2 KG Net Weight : 25.2 KG Basic Material : See BoM for Materials Commodity Code Export Control Code : Manufacturer : -Manuf . Part No. MIR ID : 71030002 MIR Title : ASSEMBLY MIR Desc. : Dimensional Control, ITP, Submitted Criticality Traceability type Serial No. Profile Batch Management

✓ Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7100000; CONN SYSTEMS & PIPELINE PRODUCTS (WP10) 7103000; Tie-in Parts & Sub-assemblies 7103030; Sub-assembly Tie-in Caps Attributes Related Drawings : Type:SWD,No:10003726063,Ver:02,Status:Re-issued Constr,Descr:ASSEMBLY DRAWING Other Related Docs : Type:SWA,No:10003652260,Ver:01,Status:Temp. Release ,Descr:INSULATION CAP ASSEMBLY Type:PDC,No:10001099739,Ver:01,Status:Re-issued Constr,Descr:STORING AND SHIPPING SPECIFICATION Type:PDC,No:10000107114,Ver:08,Status:Re-issued Constr,Descr:MAKE-UP OF THREADED CONNECTIONS Basic Data Text : INSULATION CAP, FLOW CONTROL MODULE 1. Documentation shall be delivered in accordance with MIR. - Inspection -and test documentation shall fulfil the requirements of Type 3.1 in EN 10204. 2. Shipping and Transportation specifications apply (10001099739). - To be packaged so protected from dust/environment during shipping

Assembly Instructions

- 3. Assemble according to assembly drawing 10003726063
- 4. Torque bolts according to the Make-up procedure(10000107114)

- 5. To ensure water tightness og cap:
- Heavily grease in between item 10 and 20, as well as 10 and 30 with ALCO-EP-73 PLUS or similar grease.
- Grease threads of item $60\ as\ well$ as the conical side of the head
- of the conical screw. ALCO-EP-73 PLUS or similar grease.
- 6. Remove any excess grease after torque up.

Characteristics:

 Created By
 : 230514

 Division
 : XMT

 Lab / Design Office
 : Tranby

 MIR ID
 : 71030002

 Material Group
 : 7103030

 SDRL & QM
 : QM: YES

Standard Material : Standard (Green)

System Nominal Size (inch) : 12"
System Type : FCM
Traceability Code : SN
X Plant Status : PM

Item No.	Material Number	Description	Quantity	UoM	Assembly	Criticality
0010	10301587	BODY, INSULATION CAP, MACHINING	1,000	EA		3
0020	10301588	PLATE, MACHINING, INSULATION CAP	1,000	EA		3
0030	10301589	INSULATION CAP HANDLE, WELDMENT	1,000	EA		3
0040	10301620	ANODE,0.65kg,TECNOSEAL 00269E/AL	2,000	EA		4
0050	ВВН79260204603	O-RING, 393,07x6,99, NBR70A	1,000	EA		2
0060	BB17-MX0100-07	SCREW SKT, CSK, M10 x 60, A4-80	8,000	EA		2
0070	10261408	NUT HEX, M10, A4-80	8,000	EA		3
0080	BB17-MX0105-20	SCREW HEX, M10 x 20, A4-80	4,000	EA		2
0090	BB17-MX0086-26	WASHER FLAT, M10, ISO 7089, A4	4,000	EA		4

Report Date : 05.06.2024 Material : 10121719 Description : ASSY,1/2" MECH GATE VALVE, INTERFACE Revision Level : 00;500000052576 Plant. Base Unit of Measure : EA Gross Weight : 31,1 KG Net Weight : 31.1 KG Basic Material : SEE BOM FOR MATERIALS Commodity Code Export Control Code : Manufacturer Manuf Part No. MIR ID : 79001003 MIR Title : VALVE KIT MIR Desc. : Assembly, MRB Criticality : 3 Traceability type Serial No. Profile Batch Management Shelf life: 0 Day QM Control Key Inspection Setup Classification : MACS MCLASS; Subsea MACS 7000000; SUBSEA SUB-ASSEMBLIES 7900000; SHARED 7900100; Valve&Actuator #Kit, SubAss&Component 7900130; ROV Extension Kit Attributes Related Drawings : Type:SWD, No:10001225496, Ver:00, Status: IFC ,Descr:ASSY, 1/2" MECH GATE VALVE, INTERFACE Other Related Docs : Type:PDC,No:10001325337,Ver:06,Status:Re-issued Constr,Descr:INTL TEST PROC, PAB DRILL THRU Type:SWA,No:10001111849,Ver:01,Status:Temp. Release ,Descr:INTERFACE - ST - VALV 1/2" - BENTLEY Basic Data Text : NOTES FOR DRAWING 10001225496: 1 - Identify and mantain traceability using a tag; 2 - Refer to 10001325337 for assembly and test procedures; 3 - To use LOCTITE 242 for assembly of item 110 and 140;

4 - To apply torque of 15 lbf.ft for assembly of item 110;

5 - Product specification level acc. to API SPEC. 17D - PSL: N. A.