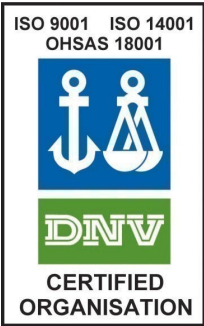




WÄRTSILÄ NETHERLANDS B.V.

Asset Management Services

James Wattlaan 23
5151 DP Drunen
The Netherlands



Company / customer	Canadian Coast Guard	Project number	SNL/20064
Project description	Single Line Diagram	Installation name	Amundsen
Functional Location	100038868	Cable_plan	
Part number		Drawing	
Project name Make Type Classification Approval no. Cabinets	SNL20064 Amundsen - Single Line Wärtsilä IEC ABS	Main Voltage (VAC/DC)	100..240VAC
		Main Current (Amp)	
		Frequency (Hz)	60Hz
		Back-up Voltage (VAC/DC)	24VDC
Revision history*		Back-up Current (Amp)	
		Created on:	4/19/2021
		Edit date:	7/7/2021
		Engineer:	ISO012
Revision	Revision description	By work station:	ISO012
		Revision date	Revision by

* only last 4 revisions are displayed

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

Colour coding and description

all spare cores to be terminated to earth!
all wiring halogen free!

Load to wiring gauge table

Max load VDS wiring,
at an ambient temperature of 45 °C
according to IEC 92

Note:

Cabinet wiring 0~24VDC: 1mm² *

Cabinet wiring 230VAC: 2.5 mm² *

Cores 400VAC wiring: 1.5mm² *

* unless specified in drawing.

All wires halogen free

All terminals belong to terminalstrip X0 unless indicated otherwise

Letter codes

Letter	Description (IEC 61346-2)
A	Other equipment
B	Photocell, temp/press./prox. sensor
C	Capacitor
D	Reserved for future standards
E	(Cabinet) lighting, heating, misc.
F	Fuse, circuit breakers
G	Generator, battery
H	Reserved for future standards
I	Not to be used
J	Reserved for future standards
K	Control circuit and timer relays
L	Inductors, coils
M	Motors, actuator
N	Reserved for future standards
O	Not to be used
P	Signalling, indication, meas. equip.
Q	Main voltage contactors, isolators
R	Resistor, diode
S	Push button, switch
T	Transformers, current transformers
U	Isolator or cable tray
V	Elektrofilter
W	Cable, conductor
X	Terminals, plugs, sockets
Y	Brake, clutch, valve
Z	RFI filters

Cable Type Standards

Power Cables

Instrumentation Cable

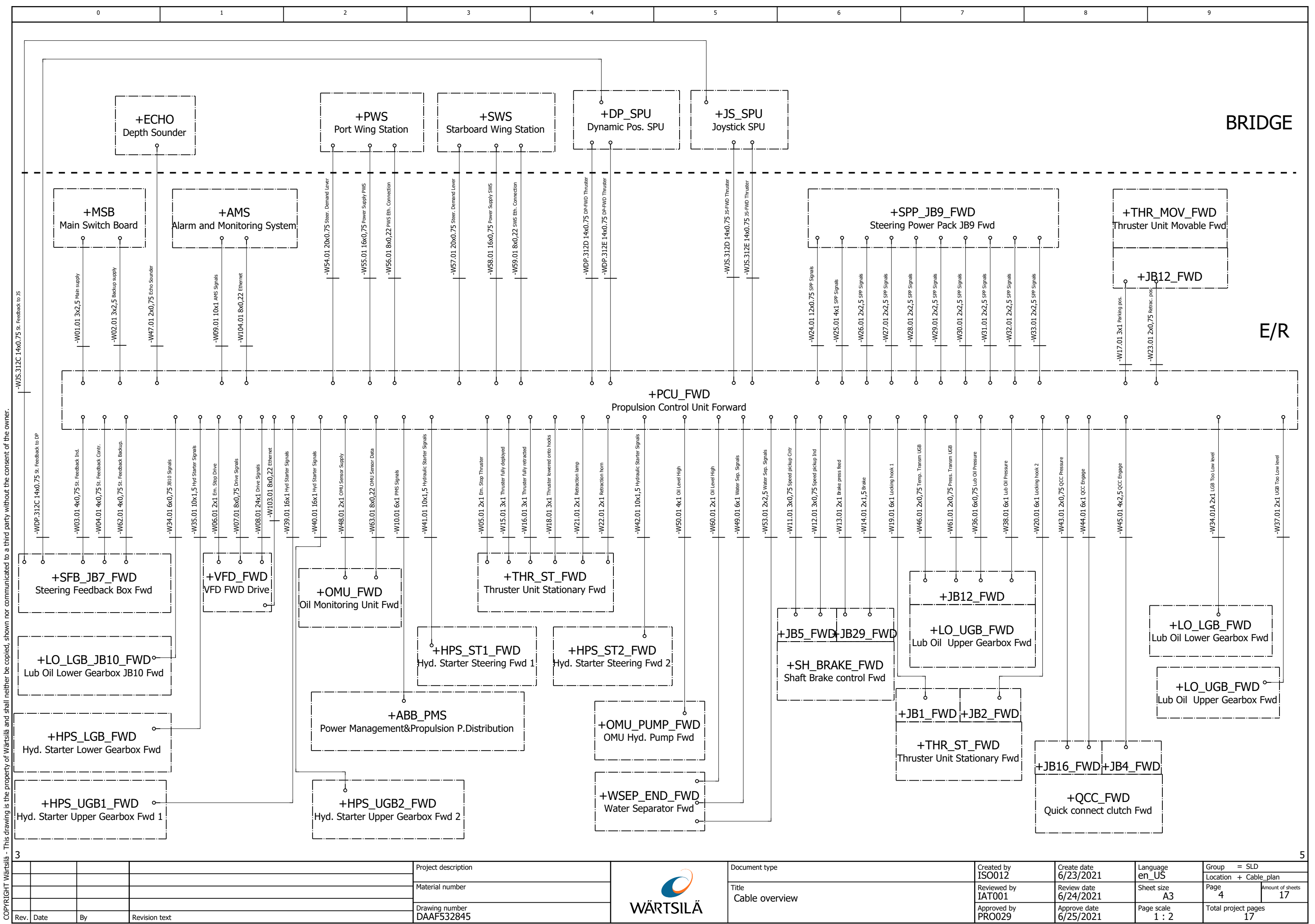
Code	Description	Type
P1	POWER / CONTROL CABLE, NON SCREENED	YARD
P2	POWER / CONTROL CABLE, SCREENED	YARD
P3	POWER / CONTROL CABLE, FLEXIBLE, NON SCREENED	YARD
P4	POWER / CONTROL CABLE, FLEXIBLE, SCREENED	YARD
P5	POWER / CONTROL CABLE, FIRE-RESISTANT, NON SCREENED	YARD
P6	POWER / CONTROL CABLE, FIRE-RESISTANT, SCREENED	YARD
P7	CONTROL CABLE, FLEXIBLE, SCREENED	YARD
P8	POWER / CONTROL CABLE, FLEXIBLE, SCREENED EMC	YARD

Code	Description	Type
I3	INSTRUMENT CABLE, PAIRS, OVERALL SCREENED	YARD
I4	INSTUMENT CABLE, PAIRS, OVERALL SCREENED & INDIVIDUAL SCREENED	YARD
I5	INSTRUMENT CABLE, PAIRS, FIRE RESISTANT, OVERALL SCREENED	YARD
I6	INSTRUMENT CABLE, FLEXIBLE, SCREENED	YARD
I8	INSTRUMENT CABLE, FLEXIBLE, SCREENED EMC	YARD

Others

Code	Description	Type
COAX	SPECIFICATION RG 58: EXTERNAL SHEATH: DIAMETER APPROX.: BEND RADIUS APPROX.: OUTER SHEATH THICKNESS: MATERIAL: OPERATING TEMP.: MIL -C-17 CU-BRAIDING, TIN-PLATED 10 MM 60 MM 2.3 MM PUR, UV-STABILIZED, SILICONE AND TALCUM-FREE -10°C ... + 80°C / 14 ... 176°F	YARD

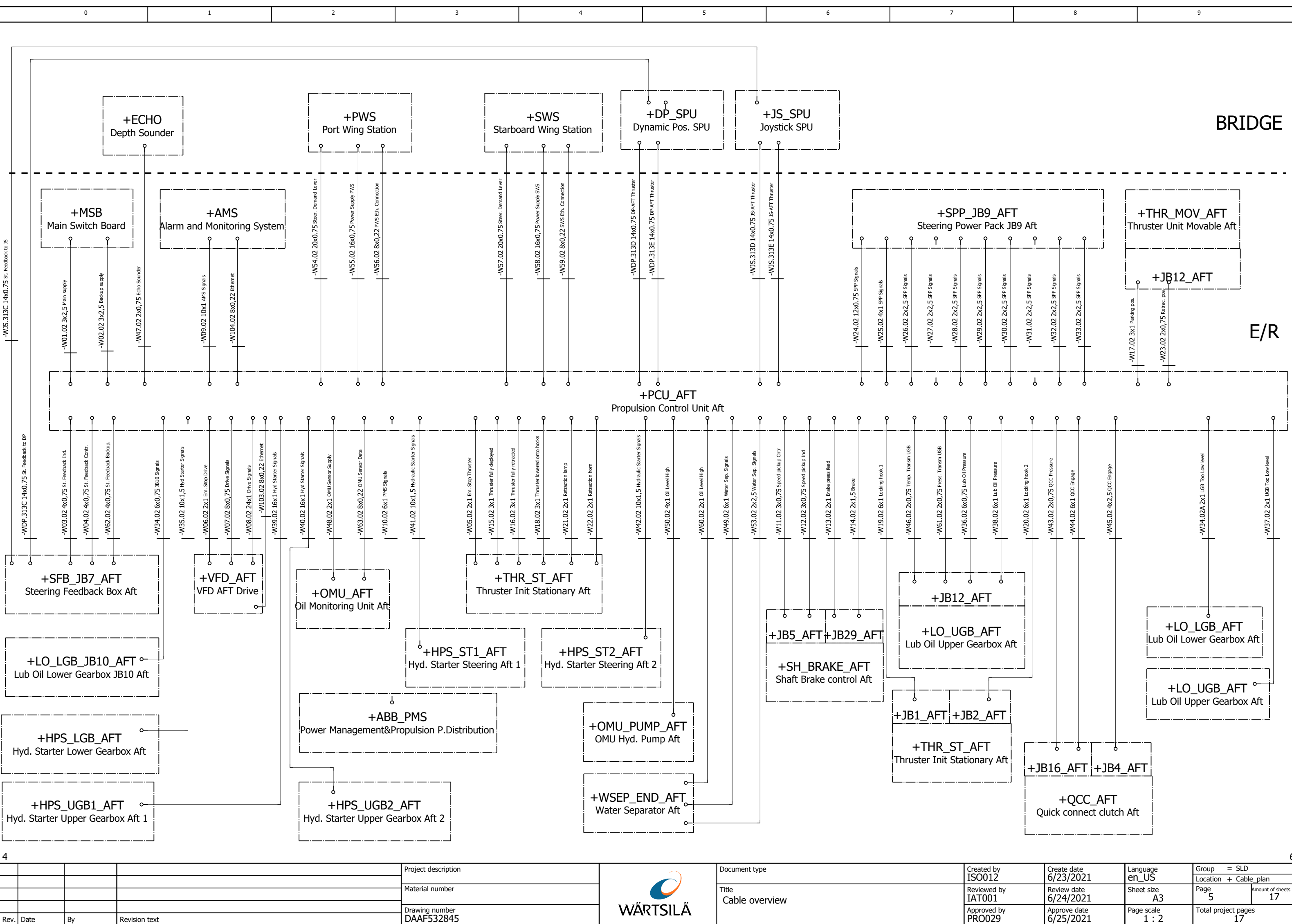
COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.



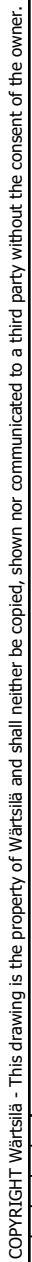
COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

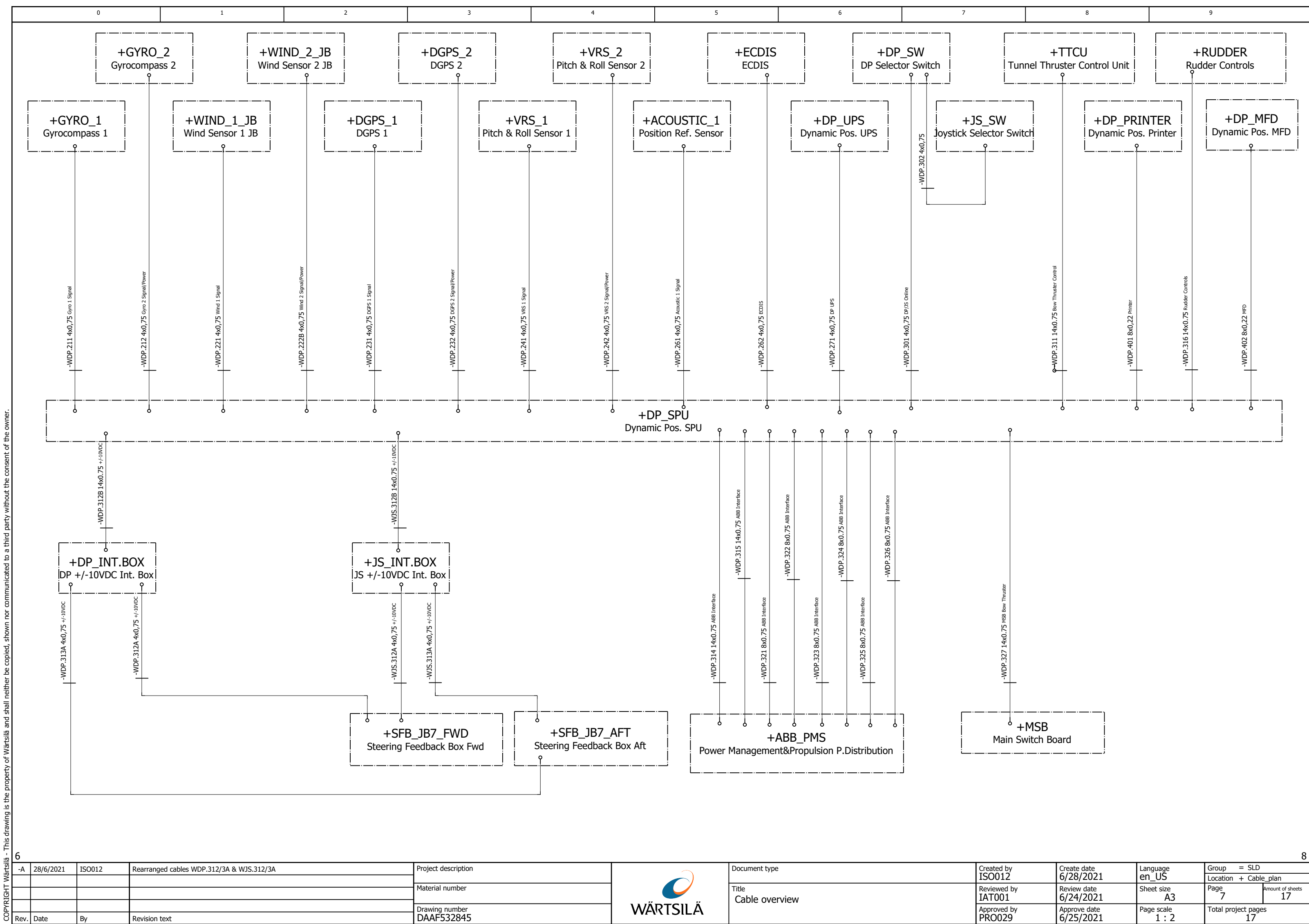
3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</	
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----	--

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.



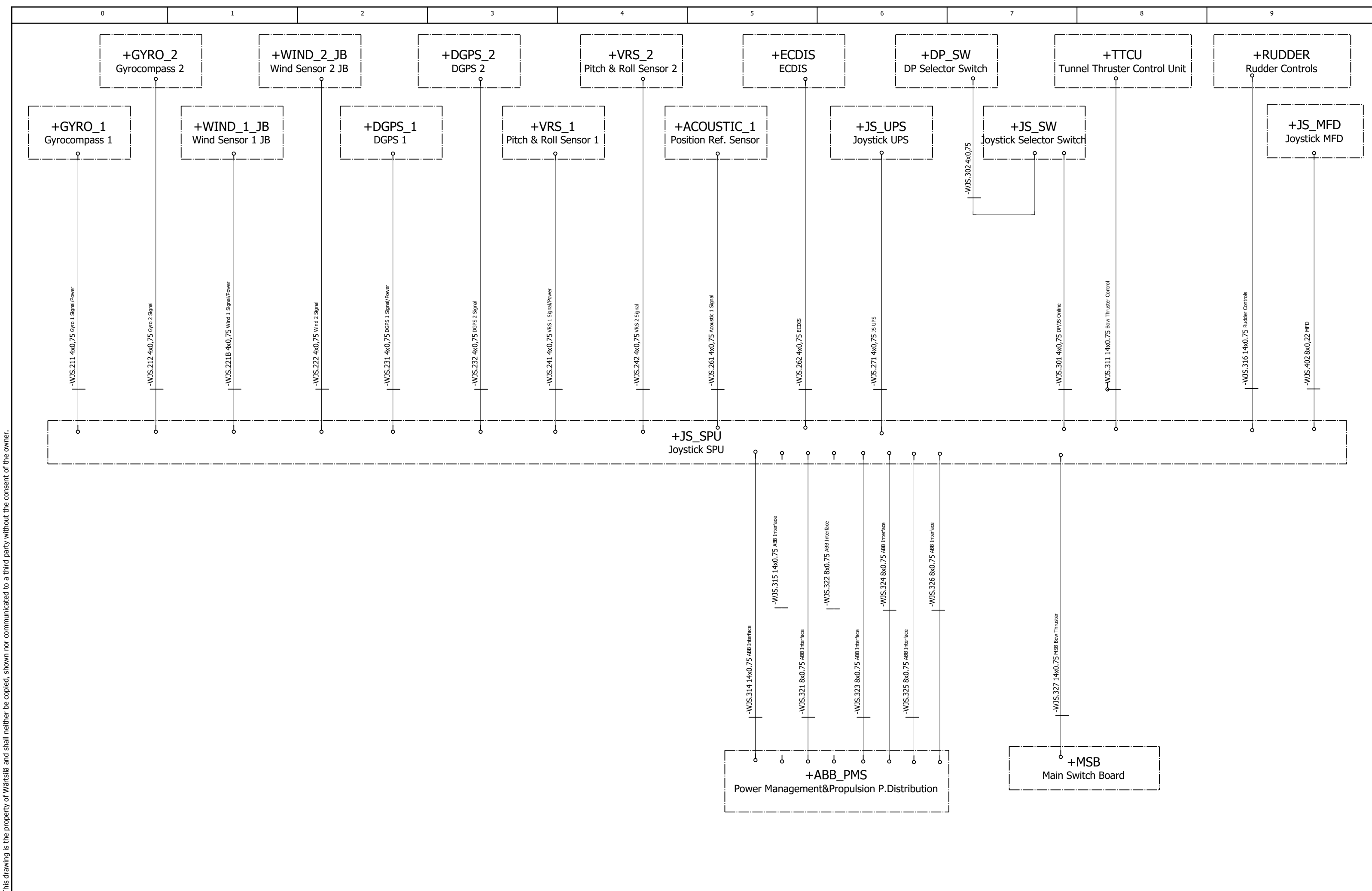
4				Project description			Document type		Created by ISO012	Create date 6/23/2021	Language en_US	Group = SLD	
				Material number			Title Cable overview		Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 5	Amount of sheets 17
				Drawing number DAAF532845					Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 2	Total project pages 17	
Rev.	Date	By	Revision text										





COPYRIGHT WÄRTSILÄ

-A	28/6/2021	ISO012	Rearranged cables WDP.312/3A & WJS.312/3A	Project description	 WÄRTSILÄ	Document type	Created by ISO012	Create date 6/28/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 7	Location + Cable_plan Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 2	Total project pages 17	
Rev.	Date	By	Revision text								



COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

Cable overview

Wärtsilä_f10
6/23/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-W01.01	MSB	PCU_FWD	P1 0.6/1kV 3x2.5 mm2	3	2,5		Main supply
-W01.02	MSB	PCU_AFT	P1 0.6/1kV 3x2.5 mm2	3	2,5		=
-W02.01	MSB	PCU_FWD	P1 0.6/1kV 3x2.5 mm2	3	2,5		Backup supply
-W02.02	MSB	PCU_AFT	P1 0.6/1kV 3x2.5 mm2	3	2,5		=
-W03.01	SFB_JB7_FWD	PCU_FWD	I3 2x2x0.75 mm2	4	0,75		St. Feedback Ind.
-W03.02	SFB_JB7_AFT	PCU_AFT	I3 2x2x0.75 mm2	4	0,75		=
-W04.01	SFB_JB7_FWD	PCU_FWD	I3 2x2x0.75 mm2	4	0,75		St. Feedback Contr.
-W04.02	SFB_JB7_AFT	PCU_AFT	I3 2x2x0.75 mm2	4	0,75		=
-W05.01	PCU_FWD	Thruster unit Stationary Fwd	P2 0.6/1kV 2x1 mm2	2	1		Em. Stop Thruster
-W05.02	PCU_AFT	Thruster unit Stationary Aft	P2 0.6/1kV 2x1 mm2	2	1		=
-W06.01	PCU_FWD	VFD_FWD	P1 0.6/1kV 2x1 mm2	2	1		Em. Stop Drive
-W06.02	PCU_AFT	VFD_AFT	P1 0.6/1kV 2x1 mm2	2	1		=
-W07.01	PCU_FWD	VFD_FWD	I3 4x2x0.75 mm2	8	0,75		Drive Signals
-W07.02	PCU_AFT	VFD_AFT	I3 4x2x0.75 mm2	8	0,75		=
-W08.01	PCU_FWD	VFD_FWD	P1 0.6/1kV 24x1 mm2	24	1		=
-W08.02	PCU_AFT	VFD_AFT	P1 0.6/1kV 24x1 mm2	24	1		=
-W09.01	PCU_FWD	AMS	P1 0.6/1kV 10x1 mm2	10	1		AMS Signals
-W09.02	PCU_AFT	AMS	P1 0.6/1kV 10x1 mm2	10	1		=
-W10.01	ABB Power Management	PCU_FWD	P2 0.6/1kV 6x1 mm2	6	1		PMS Signals
-W10.02	ABB Power Management	PCU_AFT	P2 0.6/1kV 6x1 mm2	6	1		=
-W11.01	JB5_FWD	PCU_FWD	I3 1x3x0.75 mm2	3	0,75		Speed pickup Cntr
-W11.02	JB5_AFT	PCU_AFT	I3 1x3x0.75 mm2	3	0,75		=
-W12.01	JB5_FWD	PCU_FWD	I3 1x3x0.75 mm2	3	0,75		Speed pickup Ind
-W12.02	JB5_AFT	PCU_AFT	I3 1x3x0.75 mm2	3	0,75		=
-W13.01	JB29_FWD	PCU_FWD	P2 0.6/1kV 2x1 mm2	2	1		Brake press feed
-W13.02	JB29_AFT	PCU_AFT	P2 0.6/1kV 2x1 mm2	2	1		=
-W14.01	JB29_FWD	PCU_FWD	P2 0.6/1kV 2x1.5 mm2	2	1,5		Brake
-W14.02	JB29_AFT	PCU_AFT	P2 0.6/1kV 2x1.5 mm2	2	1,5		=
-W15.01	PCU_FWD	Thruster unit Stationary Fwd	P2 0.6/1kV 3x1 mm2	3	1		Thruster fully deployed

				Project description		Document type	Created by ISO012	Create date 6/23/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview : W01.01 - W15.01	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 9	Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Total project pages 17	
Rev.	Date	By	Revision text								

Cable overview

Wärtsilä_f10
6/23/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-W15.02	PCU_AFT	Thruster unit Stationary Aft	P2 0.6/1kV 3x1 mm2	3	1		Thruster fully deployed
-W16.01	PCU_FWD	Thruster unit Stationary Fwd	P2 0.6/1kV 3x1 mm2	3	1		Thruster fully retracted
-W16.02	PCU_AFT	Thruster unit Stationary Aft	P2 0.6/1kV 3x1 mm2	3	1		=
-W17.01	PCU_FWD	JB12_FWD	P2 0.6/1kV 3x1 mm2	3	1		Parking pos.
-W17.02	PCU_AFT	JB12_AFT	P2 0.6/1kV 3x1 mm2	3	1		=
-W18.01	Thruster unit Stationary Fwd	PCU_FWD	P2 0.6/1kV 3x1 mm2	3	1		Thruster lowered onto hocks
-W18.02	Thruster unit Stationary Aft	PCU_AFT	P2 0.6/1kV 3x1 mm2	3	1		=
-W19.01	PCU_FWD	JB1_FWD	P2 0.6/1kV 6x1 mm2	6	1		Locking hook 1
-W19.02	PCU_AFT	JB1_AFT	P2 0.6/1kV 6x1 mm2	6	1		=
-W20.01	PCU_FWD	JB2_FWD	P2 0.6/1kV 6x1 mm2	6	1		Locking hook 2
-W20.02	PCU_AFT	JB2_AFT	P2 0.6/1kV 6x1 mm2	6	1		=
-W21.01	PCU_FWD	Thruster unit Stationary Fwd	P2 0.6/1kV 2x1 mm2	2	1		Retraction lamp
-W21.02	PCU_AFT	Thruster unit Stationary Aft	P2 0.6/1kV 2x1 mm2	2	1		=
-W22.01	Thruster unit Stationary Fwd	PCU_FWD	P2 0.6/1kV 2x1 mm2	2	1		Retraction horn
-W22.02	Thruster unit Stationary Aft	PCU_AFT	P2 0.6/1kV 2x1 mm2	2	1		=
-W23.01	PCU_FWD	JB12_FWD	I3 1x2x0.75 mm2	2	0,75		Retrac. pos.
-W23.02	PCU_AFT	JB12_AFT	I3 1x2x0.75 mm2	2	0,75		=
-W24.01	PCU_FWD	SPP_JB9_FWD	I3 6x2x0.75 mm2	12	0.75		SPP Signals
-W24.02	PCU_AFT	SPP_JB9_AFT	I3 6x2x0.75 mm2	12	0.75		=
-W25.01	PCU_FWD	SPP_JB9_FWD	P2 0.6/1kV 4x1 mm2	4	1		=
-W25.02	PCU_AFT	SPP_JB9_AFT	P2 0.6/1kV 4x1 mm2	4	1		=
-W26.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W26.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W27.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W27.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W28.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W28.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W29.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W29.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

Cable overview

Wärtsilä_f10
6/23/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-W30.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		SPP Signals
-W30.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W31.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W31.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W32.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W32.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W33.01	PCU_FWD	SPP_JB9_FWD	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W33.02	PCU_AFT	SPP_JB9_AFT	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W34.01	JB10_FWD	PCU_FWD	I3 3x2x0.75 mm2	6	0,75		JB10 Signals
-W34.01A	PCU_FWD	Lub Oil LGB Fwd	P2 0.6/1kV 2x1 mm2	2	1		LGB Too Low level
-W34.02	JB10_AFT	PCU_AFT	I3 3x2x0.75 mm2	6	0,75		JB10 Signals
-W34.02A	PCU_AFT	Lub Oil LGB Aft	P2 0.6/1kV 2x1 mm2	2	1		LGB Too Low level
-W35.01	Hyd. Starter LGB Fwd	PCU_FWD	P1 0.6/1kV 10x1.5 mm2	10	1,5		Hyd Starter Signals
-W35.02	Hyd. Starter LGB Aft	PCU_AFT	P1 0.6/1kV 10x1.5 mm2	10	1,5		=
-W36.01	JB12_FWD	PCU_FWD	I3 3x2x0.75 mm2	6	0,75		Lub Oil Pressure
-W36.02	JB12_AFT	PCU_AFT	I3 3x2x0.75 mm2	6	0,75		=
-W37.01	Lub Oil UGB Fwd	PCU_FWD	P2 0.6/1kV 2x1 mm2	2	1		UGB Too Low level
-W37.02	Lub Oil UGB Aft	PCU_AFT	P2 0.6/1kV 2x1 mm2	2	1		=
-W38.01	JB12_FWD	PCU_FWD	P2 0.6/1kV 6x1 mm2	6	1		Lub Oil Pressure
-W38.02	JB12_AFT	PCU_AFT	P2 0.6/1kV 6x1 mm2	6	1		=
-W39.01	Hydr. Starter UGB Fwd 1	PCU_FWD	P2 0.6/1kV 16x1 mm2	16	1		Hyd Starter Signals
-W39.02	Hydr. Starter UGB 1 Aft	PCU_AFT	P2 0.6/1kV 16x1 mm2	16	1		=
-W40.01	Hydr. Starter UGB Fwd 2	PCU_FWD	P2 0.6/1kV 16x1 mm2	16	1		=
-W40.02	Hydr. Starter UGB 2 Aft	PCU_AFT	P2 0.6/1kV 16x1 mm2	16	1		=
-W41.01	PCU_FWD	Hyd Starter Steering 1 Fwd	P2 0.6/1kV 10x1.5 mm2	10	1,5		Hydraulic Starter Signals
-W41.02	PCU_AFT	Hyd Starter Steering Aft 1	P2 0.6/1kV 10x1.5 mm2	10	1,5		=
-W42.01	PCU_FWD	Hyd Starter Steering 2 Fwd	P2 0.6/1kV 10x1.5 mm2	10	1,5		=
-W42.02	PCU_AFT	Hyd Starter Steering Aft 2	P2 0.6/1kV 10x1.5 mm2	10	1,5		=
-W43.01	JB16_FWD	PCU_FWD	I3 1x2x0.75 mm2	2	0,75		QCC Pressure

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

				Project description		Document type	Created by ISO012	Create date 6/23/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview : W30.01 - W43.01	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 11	Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Total project pages 17	
Rev.	Date	By	Revision text								

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

Rev.	Date	By	Revision text

Project description
Material number
Drawing number DAAF532845



Document type
Title Cable overview : W43.02 - W59.02

Created by ISO012	Create date 6/23/2021	Language en_US	Group = SLD
Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Location + Cable_plan
Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Page 12 Amount of sheets 17 Total project pages 17

Cable overview

Wärtsilä_f10
6/23/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-W43.02	JB16_AFT	PCU_AFT	I3 1x2x0.75 mm2	2	0,75		QCC Pressure
-W44.01	JB16_FWD	PCU_FWD	P2 0.6/1kV 6x1 mm2	6	1		QCC Engage
-W44.02	JB16_AFT	PCU_AFT	P2 0.6/1kV 6x1 mm2	6	1		=
-W45.01	JB4_FWD	PCU_FWD	P1 0.6/1kV 4x2.5 mm2	4	2,5		=
-W45.02	JB4_AFT	PCU_AFT	P1 0.6/1kV 4x2.5 mm2	4	2,5		=
-W46.01	JB12_FWD	PCU_FWD	I3 1x2x0.75 mm2	2	0,75		Temp. Transm UGB
-W46.02	JB12_AFT	PCU_AFT	I3 1x2x0.75 mm2	2	0,75		=
-W47.01	PCU_FWD	Depth Sounder	I3 1x2x0.75 mm2	2	0,75		Echo Sounder
-W47.02	PCU_AFT	Depth Sounder	I3 1x2x0.75 mm2	2	0,75		=
-W48.01	OMU Fwd	PCU_FWD	P2 0.6/1kV 2x1 mm2	2	1		OMU Sensor Supply
-W48.02	OMU Aft	PCU_AFT	P2 0.6/1kV 2x1 mm2	2	1		=
-W49.01	PCU_FWD	Water Separator JB30 Fwd	P2 0.6/1kV 6x1 mm2	6	1		Water Sep. Signals
-W49.02	PCU_AFT	Water Separator JB30 Aft	P2 0.6/1kV 6x1 mm2	6	1		=
-W50.01	OMU Hyd Pump Fwd	PCU_FWD	P2 0.6/1kV 4x1 mm2	4	1		Oil Level High
-W50.02	OMU Hyd Pump Aft	PCU_AFT	P2 0.6/1kV 4x1 mm2	4	1		=
-W53.01	PCU_FWD	Water Separator Fwd	P1 0.6/1kV 2x2.5 mm2	2	2,5		Water Sep. Signals
-W53.02	PCU_AFT	Water Separator Aft	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W54.01	PCU_FWD	PWS	I3 10x2x0.75 mm2	20	0.75		Steer. Demand Lever
-W54.02	PCU_AFT	PWS	I3 10x2x0.75 mm2	20	0.75		=
-W55.01	PCU_FWD	PWS	P2 0.6/1kV 16x0.75 mm2	16	0,75		Power Supply PWS
-W55.02	PCU_AFT	PWS	P2 0.6/1kV 16x0.75 mm2	16	0,75		=
-W56.01	PCU_FWD	PWS	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		PWS Eth. Connection
-W56.02	PCU_AFT	PWS	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		=
-W57.01	PCU_FWD	SWS	I3 10x2x0.75 mm2	20	0.75		Steer. Demand Lever
-W57.02	PCU_AFT	SWS	I3 10x2x0.75 mm2	20	0.75		=
-W58.01	PCU_FWD	PWS	P2 0.6/1kV 16x0.75 mm2	16	0,75		Power Supply SWS
-W58.02	PCU_AFT	PWS	P2 0.6/1kV 16x0.75 mm2	16	0,75		=
-W59.01	PCU_FWD	SWS	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		SWS Eth. Connection
-W59.02	PCU_AFT	SWS	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		=

Cable overview

Wärtsilä_f10
7/7/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-W60.01	Water Separator Fwd	PCU_FWD	P2 0.6/1kV 2x1 mm2	2	1		Oil Level High
-W60.02	Water Separator Aft	PCU_AFT	P2 0.6/1kV 2x1 mm2	2	1		=
-W61.01	JB12_FWD	PCU_FWD	I3 1x2x0.75 mm2	2	0,75		Press. Transm UGB
-W61.02	JB12_AFT	PCU_AFT	I3 1x2x0.75 mm2	2	0,75		=
-W62.01	SFB_JB7_FWD	PCU_FWD	I3 2x2x0.75 mm2	4	0,75		St. Feedback Backup.
-W62.02	SFB_JB7_AFT	PCU_AFT	I3 2x2x0.75 mm2	4	0,75		=
-W63.01	OMU Fwd	PCU_FWD	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		OMU Sensor Data
-W63.02	OMU Aft	PCU_AFT	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		=
-W85.01	Water Separator Fwd	MSB 400VAC	P2 0.6/1kV 4x2.5 mm2	4	2.5		400VAC Supply
-W85.02	Water Separator Aft	MSB 400VAC	P2 0.6/1kV 4x2.5 mm2	4	2.5		=
-W86.01	MSB 440VAC	Hydr. Starter UGB 1 Fwd	P2 0.6/1kV 4x4 mm2	4	4		440VAC Supply
-W86.02	Hydr. Starter UGB 1 Aft	MSB 440VAC	P2 0.6/1kV 4x4 mm2	4	4		=
-W87.01	MSB 440VAC	Hydr. Starter UGB 2 Fwd	P2 0.6/1kV 4x4 mm2	4	4		=
-W87.02	Hydr. Starter UGB 2 Aft	MSB 440VAC	P2 0.6/1kV 4x4 mm2	4	4		=
-W88.01	MSB 230VAC	Hydr. Starter UGB 1 Fwd	P2 0.6/1kV 3x1.5 mm2	3	1,5		230VAC Supply
-W88.02	Hydr. Starter UGB 1 Aft	MSB 230VAC	P2 0.6/1kV 3x1.5 mm2	3	1,5		=
-W89.01	MSB 230VAC	Hydr. Starter UGB 2 Fwd	P2 0.6/1kV 3x1.5 mm2	3	1,5		=
-W89.02	Hydr. Starter UGB 2 Aft	MSB 230VAC	P2 0.6/1kV 3x1.5 mm2	3	1,5		=
-W90.01	Hydr. Starter UGB 1 Fwd	Water Separator Fwd	P2 0.6/1kV 2x1 mm2	2	1		24VAC
-W90.02	Hydr. Starter UGB 1 Aft	Water Separator Aft	P2 0.6/1kV 2x1 mm2	2	1		=
-W91.01	MSB 230VAC	Hydr. Starter Steer. 1 Fwd	P2 0.6/1kV 3x1.5 mm2	3	1,5		230VAC Supply
-W91.02	Hydr. Starter Steer. 1 Aft	MSB 230VAC	P2 0.6/1kV 3x1.5 mm2	3	1,5		=
-W92.01	MSB 440VAC	Hydr. Starter Steer. 2 Fwd	P2 0.6/1kV 4x10 mm2	4	10		440VAC Supply
-W92.02	Hydr. Starter Steer. 2 Aft	MSB 440VAC	P2 0.6/1kV 4x10 mm2	4	10		=
-W93.01	MSB 230VAC	Hydr. Starter Steer. 2 Fwd	P2 0.6/1kV 3x1.5 mm2	3	1,5		230VAC Supply
-W93.02	Hydr. Starter Steer. 2 Aft	MSB 230VAC	P2 0.6/1kV 3x1.5 mm2	3	1,5		=
-W94.01	MSB 440VAC	Hyd. Starter LGB Fwd	P2 0.6/1kV 4x2.5 mm2	4	2.5		440VAC Supply
-W94.02	Hyd. Starter LGB Aft	MSB 440VAC	P2 0.6/1kV 4x2.5 mm2	4	2.5		=
-W95.01	MSB 230VAC	Hyd. Starter LGB Fwd	P2 0.6/1kV 3x1.5 mm2	3	1,5		230VAC Supply

				Project description		Document type	Created by ISO012	Create date 7/7/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview : W60.01 - W95.01	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 13	Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Total project pages 17	
Rev.	Date	By	Revision text								

Cable overview

Wärtsilä_f10
6/23/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-W95.02	Hyd. Starter LGB Aft	MSB 230VAC	P2 0.6/1kV 3x1.5 mm2	3	1,5		230VAC Supply
-W96.01	AMS	VFD FWD	I3 3x2x0.75 mm2	6	0,75		AMS
-W96.02	AMS	VFD AFT	I3 3x2x0.75 mm2	6	0,75		=
-W98.01	VFD FWD	MSB 230VAC	P2 0.6/1kV 4x2.5 mm2	4	2.5		230VAC Heaters
-W98.02	MSB 230VAC	VFD AFT	P2 0.6/1kV 4x2.5 mm2	4	2.5		=
-W99.01	VFD FWD	UPS 400VAC	P2 0.6/1kV 4x2.5 mm2	4	2.5		230VAC UPS
-W99.02	UPS 400VAC	VFD AFT	P2 0.6/1kV 4x2.5 mm2	4	2.5		=
-W100.01	VFD FWD	FWD Motor	I3 6x2x0.75 mm2	12	0.75		
-W100.02	VFD AFT	AFT Motor	I3 6x2x0.75 mm2	12	0.75		
-W102.01	FWD Motor	MSB 230VAC	P1 0.6/1kV 2x2.5 mm2	2	2,5		Motor ACH
-W102.02	MSB 230VAC	AFT Motor	P1 0.6/1kV 2x2.5 mm2	2	2,5		=
-W103.01	PCU_FWD	VFD_FWD	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		Ethernet
-W103.02			S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		=
-W104.01	AMS	PCU_FWD	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		=
-W104.02	AMS	PCU_AFT	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		=
-WDP.001	MSB 230VAC	Dynamic Position. UPS	P2 0.6/1kV 3x6 mm2	3	6		230VAC Supply
-WDP.011	Dynamic Position. UPS	Dynamic Position. MFD	P2 0.6/1kV 3x4 mm2	3	4		MFD Supp.
-WDP.012	Dynamic Position. UPS	Dynamic Position. SPU	P2 0.6/1kV 3x4 mm2	3	4		SPU Supp.
-WDP.013	Dynamic Position. Printer	Dynamic Position. MFD	P2 0.6/1kV 3x2.5 mm2	3	2,5		Print. Supp.
-WDP.211	Dynamic Position. SPU	Gyro 1	I4 2x2x0.75 mm2	4	0,75		Gyro 1 Signal
-WDP.212	Dynamic Position. SPU	Gyro 1	I4 2x2x0.75 mm2	4	0,75		Gyro 2 Signal/Power
-WDP.221	Dynamic Position. SPU	Wind sensor 1 JB	I4 2x2x0.75 mm2	4	0,75		Wind 1 Signal
-WDP.222B	Dynamic Position. SPU	Wind sensor 2 JB	I4 2x2x0.75 mm2	4	0,75		Wind 2 Signal/Power
-WDP.231	Dynamic Position. SPU	DGPS 1	I4 2x2x0.75 mm2	4	0,75		DGPS 1 Signal
-WDP.232	Dynamic Position. SPU	DGPS 2	I4 2x2x0.75 mm2	4	0,75		DGPS 2 Signal/Power
-WDP.241	Dynamic Position. SPU	VRS 1	I4 2x2x0.75 mm2	4	0,75		VRS 1 Signal
-WDP.242	Dynamic Position. SPU	VRS 2	I4 2x2x0.75 mm2	4	0,75		VRS 2 Signal/Power
-WDP.261	Dynamic Position. SPU	VRS 1	I4 2x2x0.75 mm2	4	0,75		Acoustic 1 Signal
-WDP.262	Dynamic Position. SPU	ECDIS	I4 2x2x0.75 mm2	4	0,75		ECDIS

				Project description		Document type	Created by ISO012	Create date 6/23/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview : W95.02 - WDP.262	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 14	Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Total project pages 17	
Rev.	Date	By	Revision text								

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

Cable overview

Wärtsilä_f10
6/26/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-WDP.271	Dynamic Position. SPU	Dynamic Position. UPS	I4 2x2x0.75 mm2	4	0,75		DP UPS
-WDP.301	Dynamic Position. SPU	DP Select Switch	I4 2x2x0.75 mm2	4	0,75		DP/JS Online
-WDP.302	DP Select Switch	JS Select Switch	I4 2x2x0.75 mm2	4	0,75		
-WDP.311	Dynamic Position. SPU	Tunnel Thruster Control cabinet	I4 7x2x0.75 mm2	14	0.75		Bow Thruster Control
-WDP.312A	SFB_JB7_FWD	DP +/-10VDC Int. Box	I4 2x2x0.75 mm2	4	0,75		+/-10VDC
-WDP.312B	Dynamic Position. SPU	DP +/-10VDC Int. Box	I4 7x2x0.75 mm2	14	0.75		=
-WDP.312C	SFB_JB7_FWD	Dynamic Position. SPU	I3 7x2x0.75 mm2	14	0.75		St. Feedback to DP
-WDP.312D	PCU_FWD	Dynamic Position. SPU	I4 7x2x0.75 mm2	14	0.75		DP-FWD Thruster
-WDP.312E	PCU_FWD	Dynamic Position. SPU	I4 7x2x0.75 mm2	14	0.75		=
-WDP.313A	SFB_JB7_AFT	DP +/-10VDC Int. Box	I4 2x2x0.75 mm2	4	0,75		+/-10VDC
-WDP.313C	SFB_JB7_AFT	Dynamic Position. SPU	I3 7x2x0.75 mm2	14	0.75		St. Feedback to DP
-WDP.313D	PCU_AFT	Dynamic Position. SPU	I4 7x2x0.75 mm2	14	0.75		DP-AFT Thruster
-WDP.313E	PCU_AFT	Dynamic Position. SPU	I4 7x2x0.75 mm2	14	0.75		=
-WDP.314	Dynamic Position. SPU	ABB Power Management	I4 7x2x0.75 mm2	14	0.75		ABB Interface
-WDP.315	ABB Power Management	Dynamic Position. SPU	I4 7x2x0.75 mm2	14	0.75		=
-WDP.316	Dynamic Position. SPU	Rudder Control Cabinet	I4 7x2x0.75 mm2	14	0.75		Rudder Controls
-WDP.321	ABB Power Management	Dynamic Position. SPU	I4 4x2x0.75 mm2	8	0.75		ABB Interface
-WDP.322	ABB Power Management	Dynamic Position. SPU	I4 4x2x0.75 mm2	8	0.75		=
-WDP.323	ABB Power Management	Dynamic Position. SPU	I4 4x2x0.75 mm2	8	0.75		=
-WDP.324	ABB Power Management	Dynamic Position. SPU	I4 4x2x0.75 mm2	8	0.75		=
-WDP.325	ABB Power Management	Dynamic Position. SPU	I4 4x2x0.75 mm2	8	0.75		=
-WDP.326	ABB Power Management	Dynamic Position. SPU	I4 4x2x0.75 mm2	8	0.75		=
-WDP.327	MSB	Dynamic Position. SPU	I4 7x2x0.75 mm2	14	0.75		MSB Bow Thruster
-WDP.401	Dynamic Position. SPU	Dynamic Position. Printer	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		Printer
-WDP.402	Dynamic Position. MFD	Dynamic Position. SPU	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		MFD
-WJS.001	Joystick UPS	MSB 230VAC	P2 0.6/1kV 3x6 mm2	3	6		230VAC Supply
-WJS.011	Joystick MFD	Joystick UPS	P2 0.6/1kV 3x4 mm2	3	4		MFD Supp.
-WJS.012	Joystick SPU	Joystick UPS	P2 0.6/1kV 3x4 mm2	3	4		SPU Supp.
-WJS.101	MSB 24VDC	Wind sensor 1 JB	P2 0.6/1kV 3x2.5 mm2	3	2,5		24VDC Supply

				Project description		Document type	Created by ISO012	Create date 6/26/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview : WDP.271 - WJS.101	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 15	Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Total project pages 17	
Rev.	Date	By	Revision text								

Cable overview

Wärtsilä_f10
6/26/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-WJS.102	Wind sensor 2 JB	MSB 24VDC	P2 0.6/1kV 3x2.5 mm2	3	2,5		24VDC Supply
-WJS.211	Joystick SPU	Gyro 1	I4 2x2x0.75 mm2	4	0,75		Gyro 1 Signal/Power
-WJS.212	Joystick SPU	Gyro 1	I4 2x2x0.75 mm2	4	0,75		Gyro 2 Signal
-WJS.221B	Joystick SPU	Wind sensor 1 JB	I4 2x2x0.75 mm2	4	0,75		Wind 1 Signal/Power
-WJS.222	Joystick SPU	Wind sensor 2 JB	I4 2x2x0.75 mm2	4	0,75		Wind 2 Signal
-WJS.231	Joystick SPU	DGPS 1	I4 2x2x0.75 mm2	4	0,75		DGPS 1 Signal/Power
-WJS.232	Joystick SPU	DGPS 2	I4 2x2x0.75 mm2	4	0,75		DGPS 2 Signal
-WJS.241	Joystick SPU	VRS 1	I4 2x2x0.75 mm2	4	0,75		VRS 1 Signal/Power
-WJS.242	Joystick SPU	VRS 2	I4 2x2x0.75 mm2	4	0,75		VRS 2 Signal
-WJS.261	Joystick SPU	VRS 1	I4 2x2x0.75 mm2	4	0,75		Acoustic 1 Signal
-WJS.262	Joystick SPU	ECDIS	I4 2x2x0.75 mm2	4	0,75		ECDIS
-WJS.271	Joystick SPU	Joystick UPS	I4 2x2x0.75 mm2	4	0,75		JS UPS
-WJS.301	JS Select Switch	Dynamic Position. SPU	I4 2x2x0.75 mm2	4	0,75		DP/JS Online
-WJS.302	DP Select Switch	JS Select Switch	I4 2x2x0.75 mm2	4	0,75		
-WJS.311	Joystick SPU	Tunnel Thruster Control cabinet	I4 7x2x0.75 mm2	14	0.75		Bow Thruster Control
-WJS.312A	SFB_JB7_FWD	JS +/-10VDC Int. Box	I4 2x2x0.75 mm2	4	0,75		+/-10VDC
-WJS.312B	Dynamic Position. SPU	JS +/-10VDC Int. Box	I4 7x2x0.75 mm2	14	0.75		=
-WJS.312C	SFB_JB7_FWD	Joystick SPU	I3 7x2x0.75 mm2	14	0.75		St. Feedback to JS
-WJS.312D	PCU_FWD	Joystick SPU	I4 7x2x0.75 mm2	14	0.75		JS-FWD Thruster
-WJS.312E	PCU_FWD	Joystick SPU	I4 7x2x0.75 mm2	14	0.75		=
-WJS.313A	SFB_JB7_AFT	JS +/-10VDC Int. Box	I4 2x2x0.75 mm2	4	0,75		+/-10VDC
-WJS.313C	SFB_JB7_AFT	Joystick SPU	I3 7x2x0.75 mm2	14	0.75		St. Feedback to JS
-WJS.313D	PCU_AFT	Joystick SPU	I4 7x2x0.75 mm2	14	0.75		JS-AFT Thruster
-WJS.313E	PCU_AFT	Joystick SPU	I4 7x2x0.75 mm2	14	0.75		=
-WJS.314	Joystick SPU	ABB Power Management	I4 7x2x0.75 mm2	14	0.75		ABB Interface
-WJS.315	ABB Power Management	Joystick SPU	I4 7x2x0.75 mm2	14	0.75		=
-WJS.316	Joystick SPU	Rudder Control Cabinet	I4 7x2x0.75 mm2	14	0.75		Rudder Controls
-WJS.321	ABB Power Management	Joystick SPU	I4 4x2x0.75 mm2	8	0.75		ABB Interface
-WJS.322	ABB Power Management	Joystick SPU	I4 4x2x0.75 mm2	8	0.75		=

COPYRIGHT Wärtsilä - This drawing is the property of Wärtsilä and shall neither be copied, shown nor communicated to a third party without the consent of the owner.

Cable overview

Wärtsilä_f10
6/23/2021 ISO012

Cable designation	from	to	cable type	Conductors	Ø	Length	function text
-WJS.323	ABB Power Management	Joystick SPU	I4 4x2x0.75 mm2	8	0.75		ABB Interface
-WJS.324	ABB Power Management	Joystick SPU	I4 4x2x0.75 mm2	8	0.75		=
-WJS.325	ABB Power Management	Joystick SPU	I4 4x2x0.75 mm2	8	0.75		=
-WJS.326	ABB Power Management	Joystick SPU	I4 4x2x0.75 mm2	8	0.75		=
-WJS.327	Joystick SPU	MSB	I4 7x2x0.75 mm2	14	0.75		MSB Bow Thruster
-WJS.402	Dynamic Position. MFD	Joystick SPU	S/FTP CAT6 4x2x0,22 LRS/DNV	8	0,22		MFD

				Project description		Document type	Created by ISO012	Create date 6/23/2021	Language en_US	Group = SLD	
				Material number		Title Cable overview : WJS.323 - WJS.402	Reviewed by IAT001	Review date 6/24/2021	Sheet size A3	Page 17	Amount of sheets 17
				Drawing number DAAF532845			Approved by PRO029	Approve date 6/25/2021	Page scale 1 : 1	Total project pages 17	
Rev.	Date	By	Revision text								