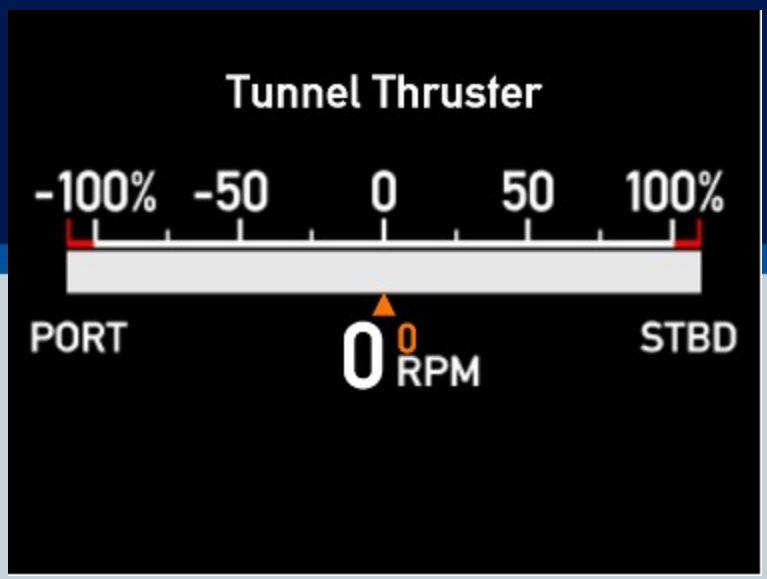
XDi 96 Multi

Tunnel Thruster



Library owner: DEIF STANDARD LIB

Library number: 11

Library version: 2008

Table of Contents

1	**LIBRARY INFORMATION**	3
2	**PRODUCT PROFILES (PP)**	4
3	**VIRTUAL INDICATORS (VI)**	6
4	**DETAILED VIRTUAL INDICATOR (VI) DESCRIPTION**	7

Library description :

This XDi Multi library contains a selection of Tunnel Thruster Multi indicators (VI), respectively for forward and aft bridge applications.
Each virtual indicators has a selection of input/output setup profiles (VS) covering the most common used combination of XDi-net, CANopen, AX1 analogue and DX1 digital inputs. Some VS profile also supports the NX1 NMEA output extension module.
Default CAN setup and dimmer input configurations are available in the selection of product profiles (PP).
Select the VS and PP profile that fits your need for CAN, Analogue or Digital inputs and make the necessary adjustments via the XDi installation menu or user menu.
All indicators present setpoint (commanded value) as default, but this function can be individually disabled from the XDi menu.
With the upgrade to software Platform 2 it is possible to use dimmer from front buttons (Front button option is required) and it is also possible to make external pushbutton dimming using the NX1 module.
Analogue input error (input lost/out of range) indication is implemented in all relevant VS profiles.
GENERAL FOR STANDARD DEIF LIBRARIES:
The default CANbus setup and Dimmer configuration are defined in the selected Product Profile (PP).
In all PP's CAN1 and CAN2 are default set active for CANopen and XDi-net communication.
The CANbus default setting can be changed from XDi installation menu and Dimmer setup can be changed from XDi user menu.
Default monitoring of supply voltage 1 is active, if redundant supply is used monitoring on supply voltage 2 should be activated.

Library status symbols :

	Released & Locked
	Approved
	Pending
	Draft
	Not approved

Timestamp 16-02-2023 14:17:04

Library Specification

Library owner no. :	000001
Library owner name :	DEIF STANDARD LIB
Product type :	XDi 96
Performance class :	Multi
Library number :	11
Library name :	Tunnel Thruster
Library orientation :	Landscape
Library status :	Released & Locked
Library version :	2008
Last changed :	16-02-2023 14:16:53

Library default settings :

180 display rotation :	False
CAN NodeID :	30

Library notes :

16-02-2023/JOL, Ver.2008: In VI013 and 014 profile VS05 is now Obsolete, use VS04 instead.
VS06 is updated to fix a potential Pitch converter conflict.
VS08 is also obsolete, use VS07 instead.
VS07 help text is changed since this VS can be used to input analogue set-point data and share them with another XDi using either VS03, 4 or 6 for actual data input, also shared on XDi-net
Changes has no impact on backward compatibility.

08-02-2023/MAP, Ver. 2007: XDi main software update to Qt v.3.06.1 and Capp software is updated to v.3.06.0, this version supports presentation of UK MER flag mark in surveyor menu in addition to the wheel marking, no other changes are made.

17-01-2023/JOL, Ver.2006: Analogue input lost functionis is implemented in all relevant VS profiles
(where input is 4-20mA).

11-09-2019/JOL, Ver.2005: Library version 4 (Platform 1) is moved to main software Platform 2.
VI017 and VI018 are added. Relevant PP's are updated to support front button dimming.
This library version is backward compatible with previous library versions.

Product profiles (PP)

Default settings of product and system related parameters, as dimmer and CANbus settings are stored in a product profile.

Timestamp 16-02-2023 14:17:04

PP No.	PP Name	Description	Status	Notes
1	PP01 XDi-net	**Front/XDi-net Dimmer** XDi-net active Dimming from front req. Front button option. **Default settings:** Dimmer group 1 Dimming via XDi-net Auto Day/Night Shift at 70% Monitoring supply voltage 1	🔒	CAN bus and dimmer settings can be modified via XDi installation or user menu. External pushbutton dimming is possible using NX1 module. Must be setup in XDi installation menu: NMEA setup/NX button setup.
2	PP02 Analogue	**Analogue Dimmer** Required: AX1 in Slot 1 Dimmer potmeter(+ term 3 -term 1, wiper term 2) Can be reconfigured to voltage input **Default settings:** Dimmer group 1 Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% Shared on XDi-net Monitoring supply voltage 1	🔒	
3	PP03 CAN	**CAN Dimmer** CANopen TPDO dimming **Default settings:** Dimmer group 1 Auto Day/Night Shift at 70% Monitoring supply voltage 1	🔒	
4	PP04 Digital	**Digital Dimmer** Required: DX1 in Slot 1 Digital input 1 up (+term 11,- term 10) Digital input 2 down (+term 8,- term 7) Simultaneous activation of IN1 and IN2 for Day/Night Shift **Default settings:** Dimmer group 1 Shared on XDi-net Monitoring supply voltage 1	🔒	

PP No.	PP Name	Description	Status	Notes
5	PP05 Lo Analog	**Analogue Dimmer Local** Required: AX1 in Slot 1 Dimmer potmeter(+ term 3 - term 1, wiper term 2) Can be reconfigured to voltage input **Default settings:** Dimmer group: Local Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% (Local - Not shared XDi-net) Monitoring supply voltage 1		
6	PP06 ECR Fixed	**ECR Fixed Dimmer** Dimming setting via button 2 and 3. Front button option can be used. **Default settings:** Dimmer group Local Dimmer level 80% to extend backlight life (Local - Not shared XDi-net) Auto Day/Night Shift at 20% Monitoring supply voltage 1		

Virtual Indicators (VI)

The VI contains the graphical layout of and indicator and defines all data types that are presented on the indicator.

Each VI has at least one VI-setup profile (VS) that defines the input types and default parameter settings.

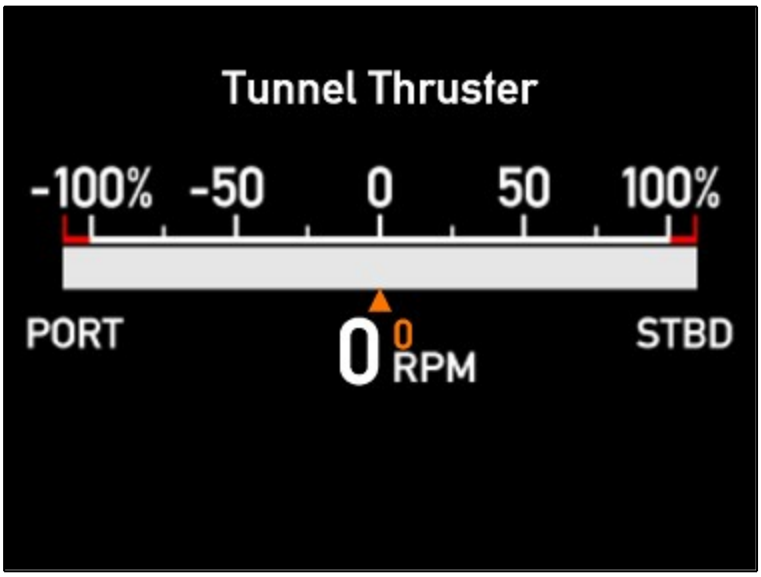
Timestamp **16-02-2023 14:17:04**

VI No.	Name	VI-setup profiles (VS)	Approvals	Status
001	FWD RPM	5		
002	AFT RPM	5		
003	FWD PITCH	4		
004	AFT PITCH	4		
005	FWD THR	3		
006	AFT THR	3		
007	Reserved	1		
008	Reserved	1		
009	Reserved	1		
010	Reserved	1		
011	FWD RPM	5		
012	AFT RPM	5		
013	FWD PITCH	8		
014	AFT PITCH	8		
015	FWD THR	4		
016	AFT THR	4		
017	FWD PITCH	4		
018	AFT PITCH	4		

 Approvals only apply for XDi 192.

Timestamp 16-02-2023 14:17:04

VI 001 **FWD RPM**



Description : **TT FWD RPM**

Tunnel Thruster RPM ±110%
Actual RPM range ±3276
with digital readout

All with set point

Status :

VI Notes : RPM% scale can be configured from the XDi menu to match different input values.
This makes this indicator quit universal.
Setpoint is also presented RPM/RPM%, but this function can be individually disabled.
The bar graph colour is green to starboard and red to portside.

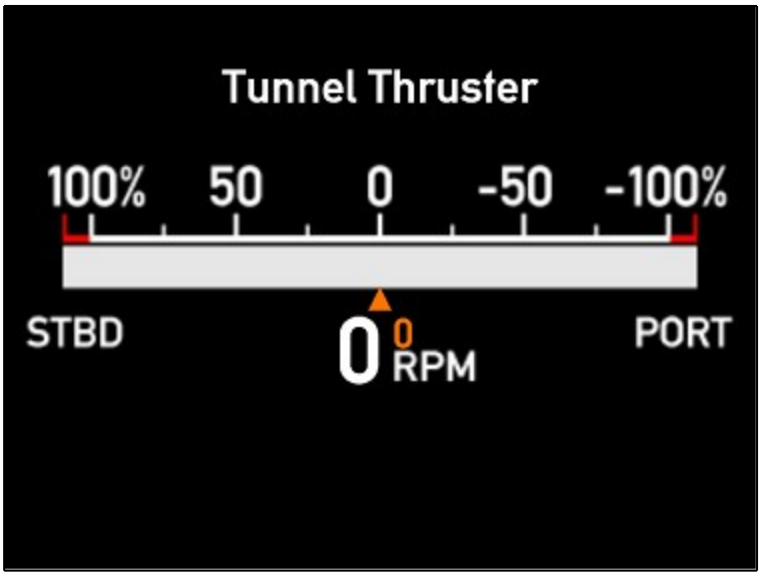
VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Indput XDi-net** RPM: XDi-net RPM%: XDi-net RPM- setpoint: XDi-net RPM%-setpoint: XDi-net	🔒	The XDi-net profile is used when the indicator is a repeater, receiving data from other XDi units or from a CAN controller providing data in XDi-net format. Please note that TPDO's or RPDO's are not retransmitted in XDi-net format, but are used directly by all indicators (e.g. Angle transmitted CAN data), zero or scaling adjustments can be synchronized via XDi-net. Use VS02 if a combination of XDi-net and TPDO inputs (e.g. CAN encoder) are used. This profile has NMEA output support requires NX1 extension module
2	VS02 TPDO	**Input TPDO** or XDi-net RPM/RPM%: TPDO RPM/RPM%- setpoint: TPDO	🔒	TPDO COBID can be changed to any valid TPDO or RPDO COBID via the XDi installation menu. TPDO input can be scaled from menu. This profile can also be used for XDi-net input, if a combination of TPDO and XDi-net is used. TPDO input can be disabled to run pure XDi-net. This profile has NMEA output support requires NX1 extension module
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 RPM/RPM%:AX1 S1i1 4-20mA (+term9, -term8) RPM/RPM% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	Analogue input type and scaling can be changes from XDi installation menu.

VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
4	VS04 Pickup	**Analog Pitch** Required: DX1 in Slot 1 RPM/RPM%: DX1 S1i1: (+term11, -term10) S1i2 (+term9, -term8) RPM/RPM% set: TPDO/XDi	🔒	TPDO COBID and input data scaling can be changed from the XDi installation menu. The TPDO input can be disabled to use XDi-net instead. Digital RPM input scaling can be changes from XDi installation menu.
5	VS05 Analog Set	**use with VS4** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA	🔒	TPDO COBID and input data scaling can be changed from the XDi installation menu. The TPDO input can be disabled to use XDi-net instead. Analogue input type and scaling can be changes from XDi installation menu.

VI 002 **AFT RPM**



Description : **TT AFT RPM**

Tunnel Thruster RPM ±110%
Actual RPM range ±3276
with digital readout

All with set point

Status :

VI Notes : RPM% scale can be configured from the XDi menu to match different input values.
This makes this indicator quit universal.
Setpoint is also presented RPM/RPM%, but this function can be individually disabled.
The bar graph colour is green to starboard and red to portside.

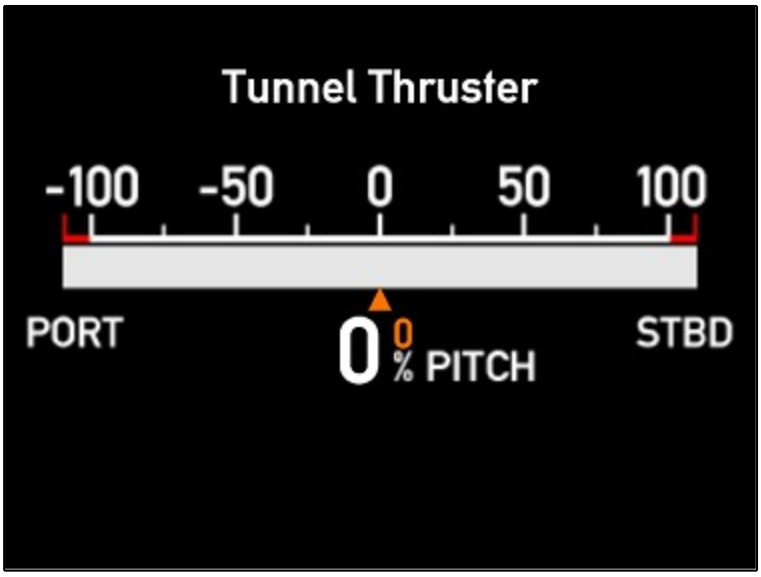
VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Indput XDi-net** RPM: XDi-net RPM%: XDi-net RPM- setpoint: XDi-net RPM%-setpoint: XDi-net	🔒	The XDi-net profile is used when the indicator is a repeater, receiving data from other XDi units or from a CAN controller providing data in XDi-net format. Please note that TPDO's or RPDO's are not retransmitted in XDi-net format, but are used directly by all indicators (e.g. Angle transmitted CAN data), zero or scaling adjustments can be synchronized via XDi-net. Use VS02 if a combination of XDi-net and TPDO inputs (e.g. CAN encoder) are used. This profile has NMEA output support requires NX1 extension module
2	VS02 TPDO	**Input TPDO** or XDi-net RPM/RPM%: TPDO RPM/RPM%- setpoint: TPDO	🔒	TPDO COBID can be changed to any valid TPDO or RPDO COBID via the XDi installation menu. TPDO input can be scaled from menu. This profile can also be used for XDi-net input, if a combination of TPDO and XDi-net is used. TPDO input can be disabled to run pure XDi-net. This profile has NMEA output support requires NX1 extension module
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 RPM/RPM%:AX1 S1i1 4-20mA (+term9, -term8) RPM/RPM% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	Analogue input type and scaling can be changes from XDi installation menu.

VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
4	VS04 Pickup	**Analog Pitch** Required: DX1 in Slot 1 RPM/RPM%: DX1 S1i1: (+term11, -term10) S1i2 (+term9, -term8) RPM/RPM% set: TPDO/XDi	🔒	TPDO COBID and input data scaling can be changed from the XDi installation menu. The TPDO input can be disabled to use XDi-net instead. Digital RPM input scaling can be changes from XDi installation menu.
5	VS05 Analog Set	**use with VS4** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA	🔒	TPDO COBID and input data scaling can be changed from the XDi installation menu. The TPDO input can be disabled to use XDi-net instead. Analogue input type and scaling can be changes from XDi installation menu.

VI 003 **FWD PITCH**



Description : **TT FWD PITCH**

Tunnel Thruster Pitch ±110%
Actual Pitch range ±200%
with digital readout

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.

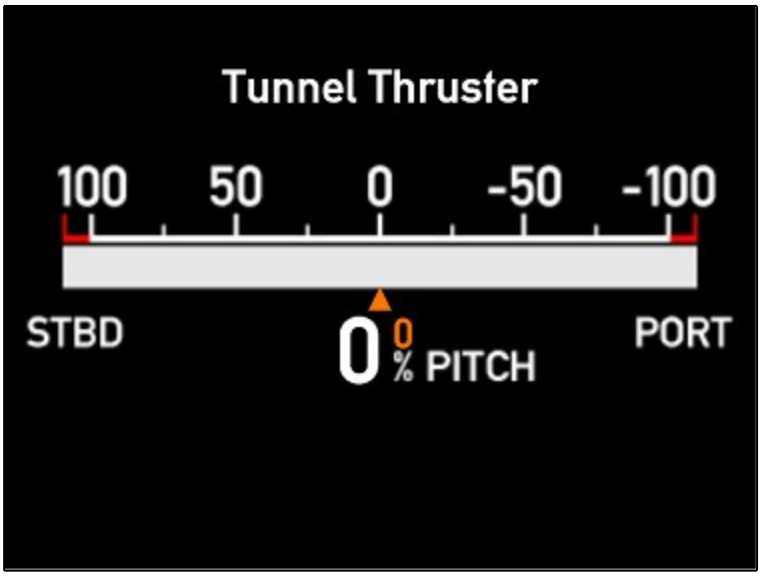
VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Pitch%: XDi-net Pitch% set: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	**Input TPDO** or XDi-net Pitch%: TPDO/(RTC) Pitch% set: TPDO/(RTC)		See similar VS profile for VI001

VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Pitch%: AX1 S1i1 4-20mA (+term9, -term8) Pitch% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
4	VS04 RTC Pitch	**Analog set** Required: AX1 in Slot 1 Pitch%: TPDO/(RTC)/XDi Pitch%/Pitch% set: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA		See similar VS profile for VI001

VI 004 **AFT PITCH**



Description : **TT AFT PITCH**

Tunnel Thruster Pitch ±110%
Actual Pitch range ±200%
with digital readout

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.

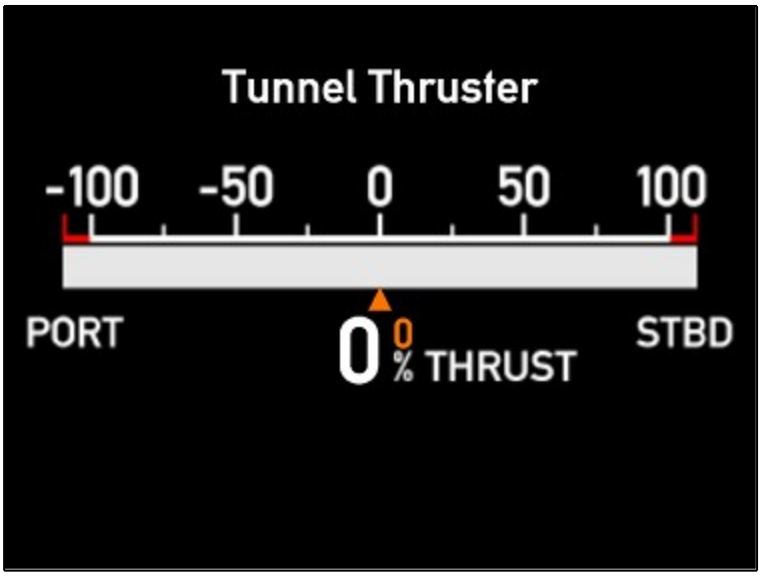
VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Pitch%: XDi-net Pitch% set: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	**Input TPDO** or XDi-net Pitch%: TPDO/(RTC) Pitch% set: TPDO/(RTC)		See similar VS profile for VI001

VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Pitch%: AX1 S1i1 4-20mA (+term9, -term8) Pitch% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
4	VS04 RTC Pitch	**Analog set** Required: AX1 in Slot 1 Pitch%: TPDO/(RTC)/XDi Pitch%/Pitch% set: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA		See similar VS profile for VI001

VI 005 **FWD THR**



Description : **TT FWD THR**

Tunnel Thruster ±110%
Actual Thrust range ±200%
with digital readout

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.
Thrust indication is not part of MED!

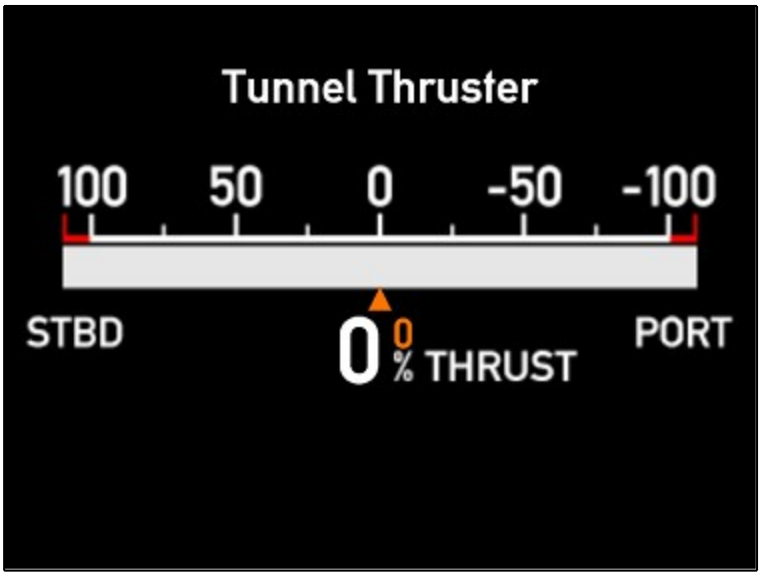
VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Thrust%: XDi-net Thrust% set: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	**Input TPDO** or XDi-net Thrust%: TPDO Thrust% set: TPDO		See similar VS profile for VI001

VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Thrust%: AX1 S1i1 4-20mA (+term9, -term8) Thrust% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001

VI 006 **AFT THR**



Description : **TT AFT THR**

Tunnel Thruster ±110%
Actual Thrust range ±200%
with digital readout

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.
Thrust indication is not part of MED!

VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Thrust%: XDi-net Thrust% set: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	**Input TPDO** or XDi-net Thrust%: TPDO Thrust% set: TPDO		See similar VS profile for VI001

VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Thrust%: AX1 S1i1 4-20mA (+term9, -term8) Thrust% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001

VI 007 **Reserved**

Description : **Reserved**

Reserved for future use

Status :

VI Notes :

VI-setup profiles (VS) for VI007

VS No.	Name	Description	Status	Notes
1	Setup	**Setup** Add description Add description.		

VI 008 **Reserved**

Description : **Reserved**

Reserved for future use

Status :

VI Notes :

VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
1	Setup	**Setup** Add description Add description.		

VI 009 **Reserved**

Description : **Reserved**

Reserved for future use

Status :

VI Notes :

VI-setup profiles (VS) for VI009

VS No.	Name	Description	Status	Notes
1	Setup	**Setup** Add description Add description.		

VI 010 **Reserved**

Description : **Reserved**

Reserved for future use

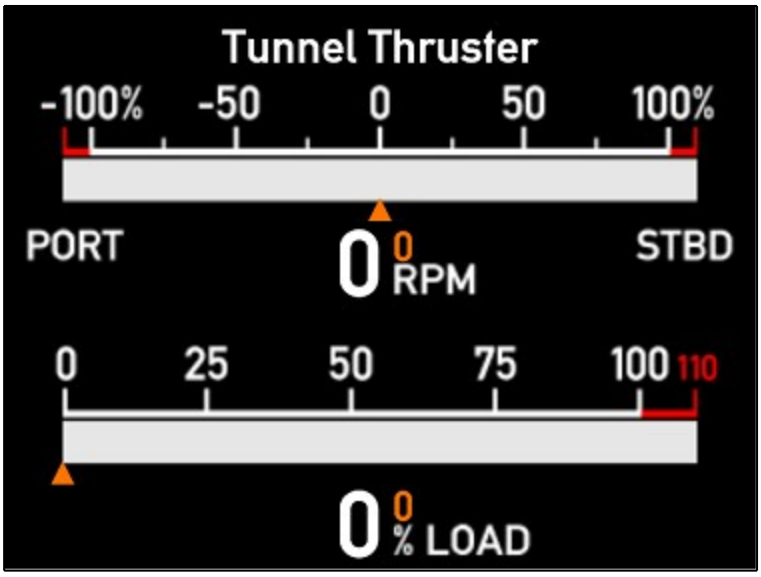
Status :

VI Notes :

VI-setup profiles (VS) for VI010

VS No.	Name	Description	Status	Notes
1	Setup	**Setup** Add description Add description.		

VI 011 **FWD RPM**



Description : **TT FWD RPM**

Thruster RPM ±110%
Actual RPM range ±3276
Thruster Load 0...110%
Actual Load ±200%

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.

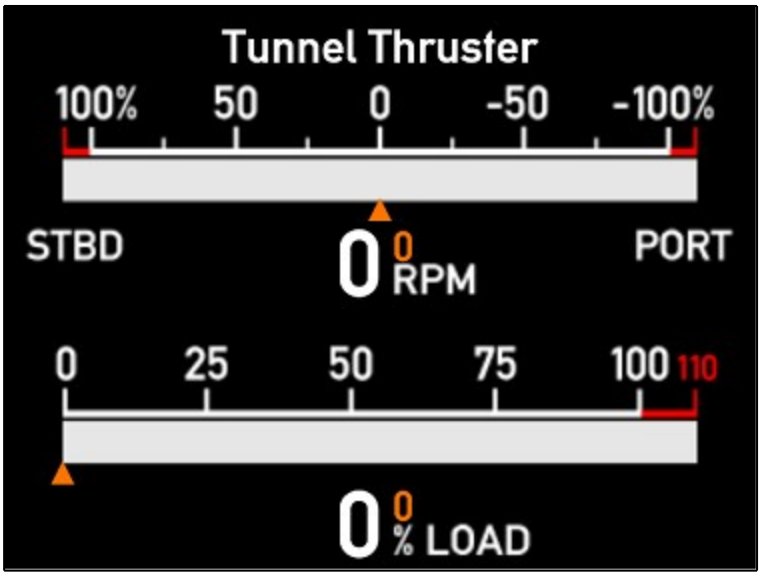
VI-setup profiles (VS) for VI011

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** RPM/RPM%: XDi-net RPM/RPM% set: XDi-net Load%: XDi-net Load% set: XDi-net		See similar VS profile for VI001

VI-setup profiles (VS) for VI011

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**Input TPDO** or XDi-net RPM/RPM%: TPDO RPM/RPM% set: TPDO Load%: TPDO Load% set: TPDO	🔒	See similar VS profile for VI001
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 RPM/RPM%: AX1 S1i1 4-20mA (+term9, -term8) RPM/RPM% set: TPDO/XDi Load%: AX1 S1i2 4-20mA (+term5, -term4) Load% set: TPDO/XDi AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
4	VS04 DX-RPM	**Pickup** Required: DX1 in Slot 1 RPM/RPM%: DX1 S2i1: (+term11, -term10) S1i2: (+term8, -term7) RPM/RPM% set: TPDO/XDi Load%: TPDO/XDi Load% set: TPDO/XDi	🔒	See similar VS profile for VI001
5	VS05 Analog Set	**Use with VS3-4** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) Load%: TPDO/XDi Load% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001

VI 012 **AFT RPM**



Description : **TT AFT RPM**

Thruster RPM ±110%
Actual RPM range ±3276
Thruster Load 0...110%
Actual Load ±200%

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.

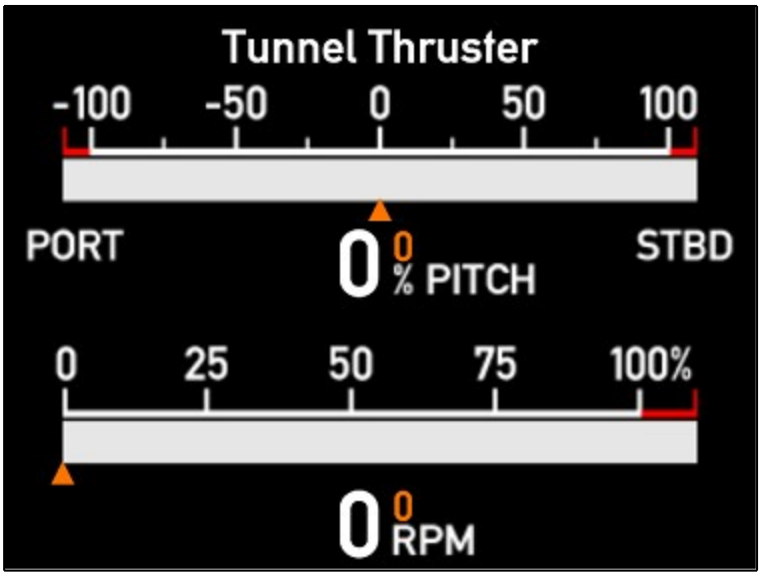
VI-setup profiles (VS) for VI012

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** RPM/RPM%: XDi-net RPM/RPM% set: XDi-net Load%: XDi-net Load% set: XDi-net		See similar VS profile for VI001

VI-setup profiles (VS) for VI012

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**Input TPDO** or XDi-net RPM/RPM%: TPDO RPM/RPM% set: TPDO Load%: TPDO Load% set: TPDO	🔒	See similar VS profile for VI001
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 RPM/RPM%: AX1 S1i1 4-20mA (+term9, -term8) RPM/RPM% set: TPDO/XDi Load%: AX1 S1i2 4-20mA (+term5, -term4) Load% set: TPDO/XDi AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
4	VS04 DX-RPM	**Pickup** Required: DX1 in Slot 1 RPM/RPM%: DX1 S2i1: (+term11, -term10) S1i2: (+term8, -term7) RPM/RPM% set: TPDO/XDi Load%: TPDO/XDi Load% set: TPDO/XDi	🔒	See similar VS profile for VI001
5	VS05 Analog Set	**Use with VS3-4** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) Load%: TPDO/XDi Load% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001

VI 013 **FWD PITCH**



Description : **TT FWD PITCH**

Thruster Pitch ±110%
Actual Pitch range ±200%
Thruster RPM 0...110%
Actual RPM range ±3276

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.

VI-setup profiles (VS) for VI013

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** RPM/RPM%: XDi-net RPM/RPM% set: XDi-net Pitch%: XDi-net Pitch% set: XDi-net		See similar VS profile for VI001

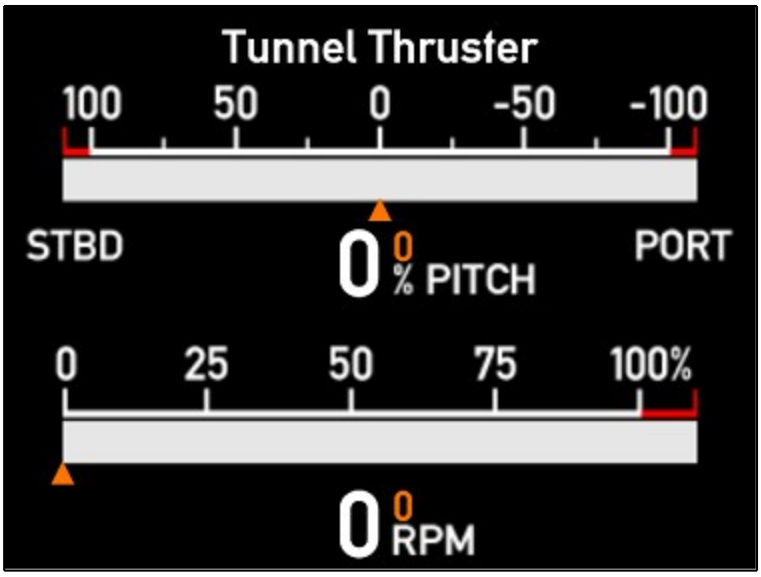
VI-setup profiles (VS) for VI013

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**Input TPDO** or XDi-net RPM/RPM%: TPDO RPM/RPM% set: TPDO Pitch%: TPDO Pitch% set: TPDO	🔒	See similar VS profile for VI001
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 RPM/RPM%: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA RPM/RPM% set: TPDO/XDi Pitch%: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Pitch% set: TPDO/XDi	🔒	See similar VS profile for VI001
4	VS04 DX-RPM	**Pickup** Required: DX1 in Slot 1 RPM/RPM%: DX1 S1i1: (+term11, -term10) RPM/RPM% set: TPDO/XDi Pitch%: TPDO/(RTC)/XDi Pitch% set: TPDO/XDi	🔒	See similar VS profile for VI001
5	VS05 Obsolete	**Obsolite** **Use VI04 instead !** Required: DX1 in Slot 1 RPM/RPM%: DX1 S1i1: (+term11, -term10) RPM/RPM% set: TPDO/XDi Pitch%: TPDO/(RTC) Pitch% set: TPDO/XDi	🔒	This profile is not needed, function is now exactly the same as VS04.

VI-setup profiles (VS) for VI013

VS No.	Name	Description	Status	Notes
6	VS06 RTC-RPM	**Analog RPM** Required: AX1 in Slot 1 RPM/RPM%: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA RPM/RPM% set: TPDO/XDi Pitch%: TPDO/(RTC) Pitch% set: TPDO/XDi		See similar VS profile for VI001
7	VS07 Analog set	**Use with** **VS03,4 or 6** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) Pitch%: TPDO/(RTC)/XDi Pitch% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 in lost below 3.5mA		See similar VS profile for VI001
8	VS08 Obsolete	**Obsolete** **Use VI07 instead !** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) Pitch%: TPDO/(RTC)/XDi Pitch% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		This profile is not needed, function is now exactly the same as VS07.

VI 014 **AFT PITCH**



Description : **TT AFT PITCH**

Thruster Pitch ±110%
Actual Pitch range ±200%
Thruster RPM 0...110%
Actual RPM range ±3276

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.

VI-setup profiles (VS) for VI014

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** RPM/RPM%: XDi-net RPM/RPM% set: XDi-net Pitch%: XDi-net Pitch% set: XDi-net		See similar VS profile for VI001

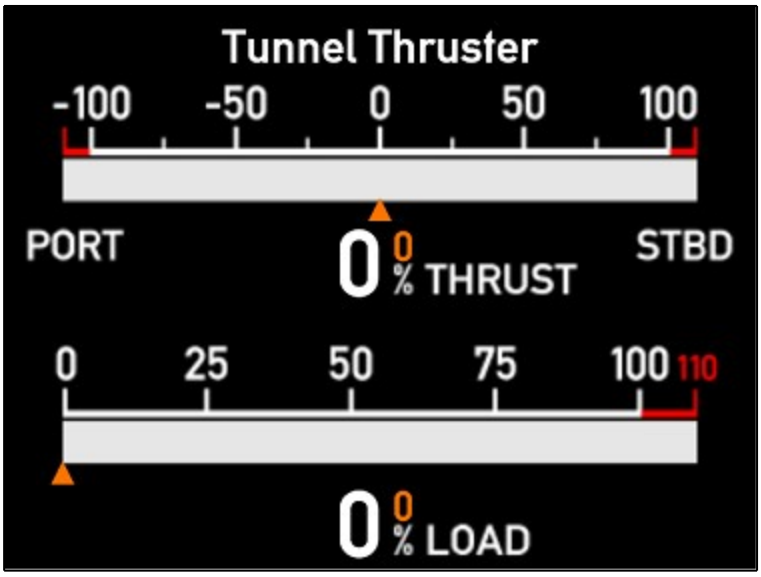
VI-setup profiles (VS) for VI014

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**Input TPDO** or XDi-net RPM/RPM%: TPDO RPM/RPM% set: TPDO Pitch%: TPDO Pitch% set: TPDO	🔒	See similar VS profile for VI001
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 RPM/RPM%: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA RPM/RPM% set: TPDO/XDi Pitch%: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA Pitch% set: TPDO/XDi	🔒	See similar VS profile for VI001
4	VS04 DX-RPM	**Pickup** Required: DX1 in Slot 1 RPM/RPM%: DX1 S1i1: (+term11, -term10) RPM/RPM% set: TPDO/XDi Pitch%: TPDO/(RTC)/XDi Pitch% set: TPDO/XDi	🔒	See similar VS profile for VI001
5	VS05 Obsolete	**Obsolete** **Use VS04 instead** Required: DX1 in Slot 1 RPM/RPM%: DX1 S1i1: (+term11, -term10) RPM/RPM% set: TPDO/XDi Pitch%: TPDO/(RTC) Pitch% set: TPDO/XDi	🔒	This profile is not needed, function is now exactly the same as VS04.

VI-setup profiles (VS) for VI014

VS No.	Name	Description	Status	Notes
6	VS06 RTC-RPM	**Analog RPM** Required: AX1 in Slot 1 RPM/RPM%: AX1 S1i1 4-20mA (+term9, -term8) AX1 input lost below 3.5mA RPM/RPM% set: TPDO/XDi Pitch%: TPDO/(RTC) Pitch% set: TPDO/XDi		See similar VS profile for VI001
7	VS07 Analog set	**Use with** **VS03, 4 or 6** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) Pitch%: TPDO/(RTC)/XDi Pitch% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
8	VS08 Obsolete	**Obsolete** **Use VS07 instead** Required: AX1 in Slot 1 RPM/RPM%: TPDO/XDi RPM/RPM% set: AX1 S1i1 4-20mA (+term9, -term8) Pitch%: TPDO/(RTC)/XDi Pitch% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		This profile is not needed, function is now exactly the same as VS04.

VI 015 **FWD THR**



Description : **TT FWD THR**

Thruster ±110%
Actual Thrust range ±200%
Thruster Load 0...110%
Actual Load ±200%

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.
Thrust indication is not part of MED!

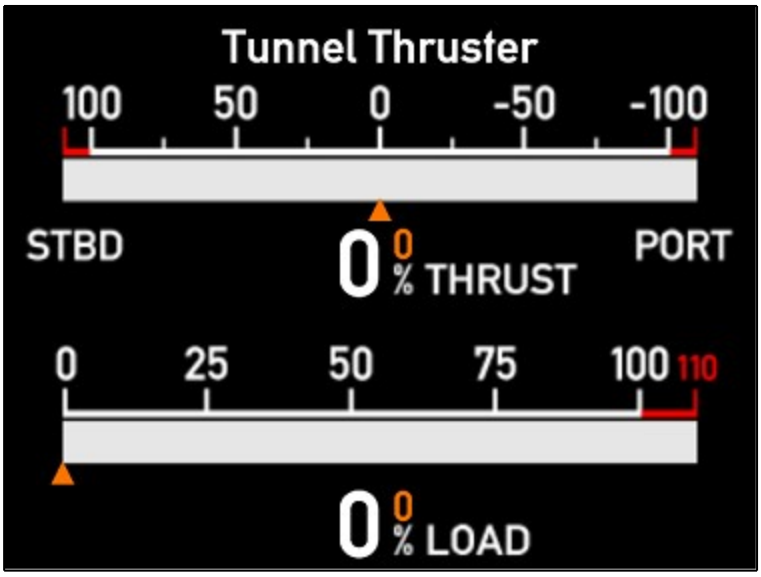
VI-setup profiles (VS) for VI015

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Thrust%: XDi-net Thrust% set:XDi-net Load%: XDi-net Load% set: XDi-net		See similar VS profile for VI001

VI-setup profiles (VS) for VI015

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**Input TPDO** or XDi-net Thrust%: TPDO Thrust% set: TPDO Load%: TPDO Load% set: TPDO	🔒	See similar VS profile for VI001
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Thrust%: AX1 S1i1 4-20mA (+term9, -term8) Thrust% set: TPDO/XDi Load%: AX1 S1i2 4-20mA (+term5, -term4) Load% set: TPDO/XDi AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
4	VS04 Analog set	**Use with VS3** Required: AX1 in Slot 1 Thrust%: TPDO/XDi Thrust% set: AX1 S1i1 4-20mA (+term9, -term8) Load%: TPDO/XDi Load% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001

VI 016 **AFT THR**



Description : **TT AFT THR**

Thruster ±110%
Actual Thrust range ±200%
Thruster Load 0...110%
Actual Load ±200%

All with set point

Status :

VI Notes : The bar graph colour is green to starboard and red to portside.
Thrust indication is not part of MED!

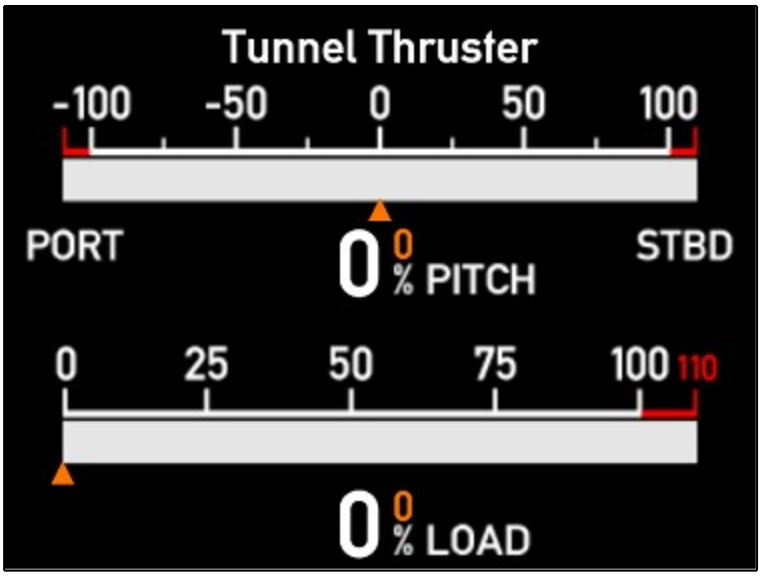
VI-setup profiles (VS) for VI016

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Thrust%: XDi-net Thrust% set:XDi-net Load%: XDi-net Load% set: XDi-net		See similar VS profile for VI001

VI-setup profiles (VS) for VI016

VS No.	Name	Description	Status	Notes
2	VS02 TPDO	**Input TPDO** or XDi-net Thrust%: TPDO Thrust% set: TPDO Load%: TPDO Load% set: TPDO	🔒	See similar VS profile for VI001
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Thrust%: AX1 S1i1 4-20mA (+term9, -term8) Thrust% set: TPDO/XDi Load%: AX1 S1i2 4-20mA (+term5, -term4) Load% set: TPDO/XDi AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001
4	VS04 Analog set	**Use with VS3** Required: AX1 in Slot 1 Thrust%: TPDO/XDi Thrust% set: AX1 S1i1 4-20mA (+term9, -term8) Load%: TPDO/XDi Load% set: AX1 S1i2 4-20mA (+term5, -term4) AX1 input lost below 3.5mA	🔒	See similar VS profile for VI001

VI 017 **FWD PITCH**



Description : **TT FWD PITCH**

Thruster Pitch ±110%
Actual Pitch range ±200%
Load bar graph 0...110%
Digital load max. 0...200%
All with set point

Status :

VI Notes :

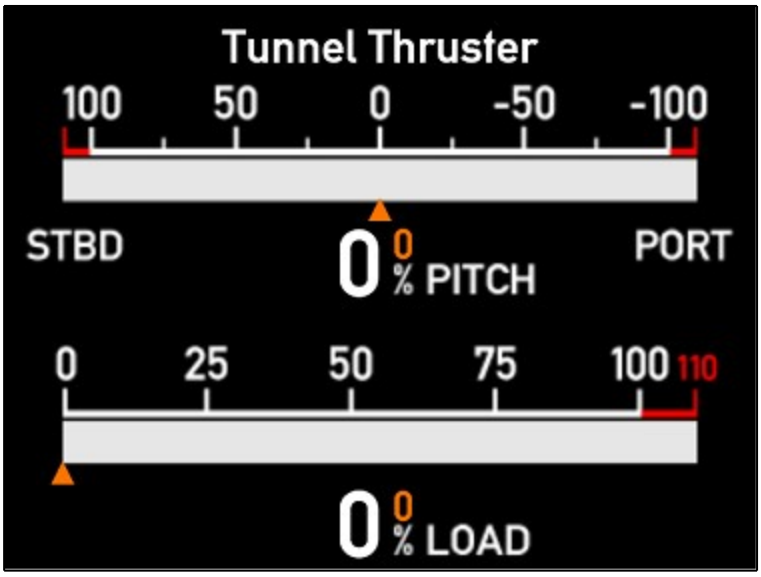
VI-setup profiles (VS) for VI017

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Load%: XDi-net Load% set: XDi-net Pitch%: XDi-net Pitch% set: XDi-net		
2	VS02 TPDO	**Input TPDO** or XDi-net Load%: TPDO Load% set: TPDO Pitch%: TPDO Pitch% set: TPDO		

VI-setup profiles (VS) for VI017

VS No.	Name	Description	Status	Notes
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Load%: AX1 S1i1 4-20mA (+term9, -term8) Load% set: TPDO/XDi Pitch%: AX1 S1i2 4-20mA (+term5, -term4) Pitch% set: TPDO/XDi AX1 input lost below 3.5mA		See VS04 note, how to get analogue set-point values.
4	VS04 Analog set	**Use with VS03** Required: AX1 in Slot 1 Load%: TPDO/XDi-net Load% set: AX1 S1i1 4-20mA (+term9, -term8) Pitch%: TPDO/XDi-net Pitch% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		In a system with 2 XDi96 waterjet indicators this VS profile can be used for analogue input of the set-point values. that will be shared via XDi-net to the other XDi indicator using VS03 for analogue input of actual data.

VI 018 **AFT PITCH**



Description : **TT AFT PITCH**

Thruster Pitch ±110%
Actual Pitch range ±200%
Load bar graph 0...110%
Digital load max. 0...200%
All with set point

Status :

VI Notes :

VI-setup profiles (VS) for VI018

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	**Input XDi-net** Load%: XDi-net Load% set: XDi-net Pitch%: XDi-net Pitch% set: XDi-net		
2	VS02 TPDO	**Input TPDO** or XDi-net Load%: TPDO Load% set: TPDO Pitch%: TPDO Pitch% set: TPDO		

VI-setup profiles (VS) for VI018

VS No.	Name	Description	Status	Notes
3	VS03 Analog	**Analogue** Required: AX1 in Slot 1 Load%: AX1 S1i1 4-20mA (+term9, -term8) Load% set: TPDO/XDi Pitch%: AX1 S1i2 4-20mA (+term5, -term4) Pitch% set: TPDO/XDi AX1 input lost below 3.5mA		See VS04 note, how to get analogue set-point values.
4	VS04 Analog set	**Use with VS03** Required: AX1 in Slot 1 Load%: TPDO/XDi-net Load% set: AX1 S1i1 4-20mA (+term9, -term8) Pitch%: TPDO/XDi-net Pitch% set: AX1 S1i1 4-20mA (+term5, -term4) AX1 input lost below 3.5mA		In a system with 2 XDi96 waterjet indicators this VS profile can be used for analogue input of the set-point values. that will be shared via XDi-net to the other XDi indicator using VS03 for analogue input of actual data.