API MARINE

BMS4

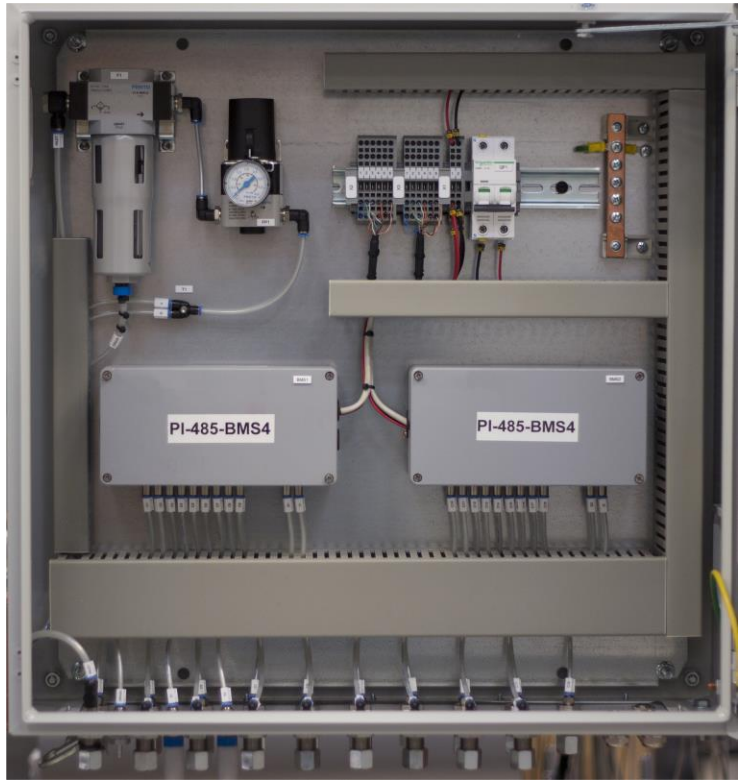
REMOTE SOUNDING SYSTEM FOR BALLAST AND SERVICE TANKS

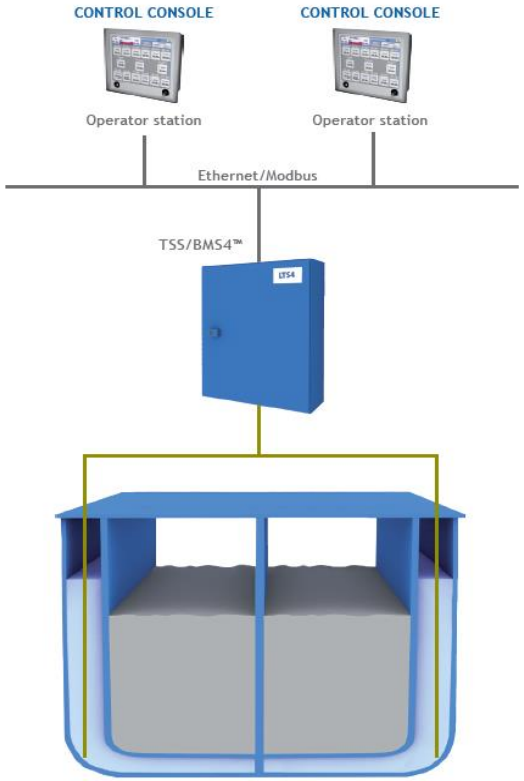
SENSORS & AUTOMATION SYSTEM · POWER GENERATION · DIGITAL SOLUTIONS

Remote Sounding System

WWW.API-MARINE.COM

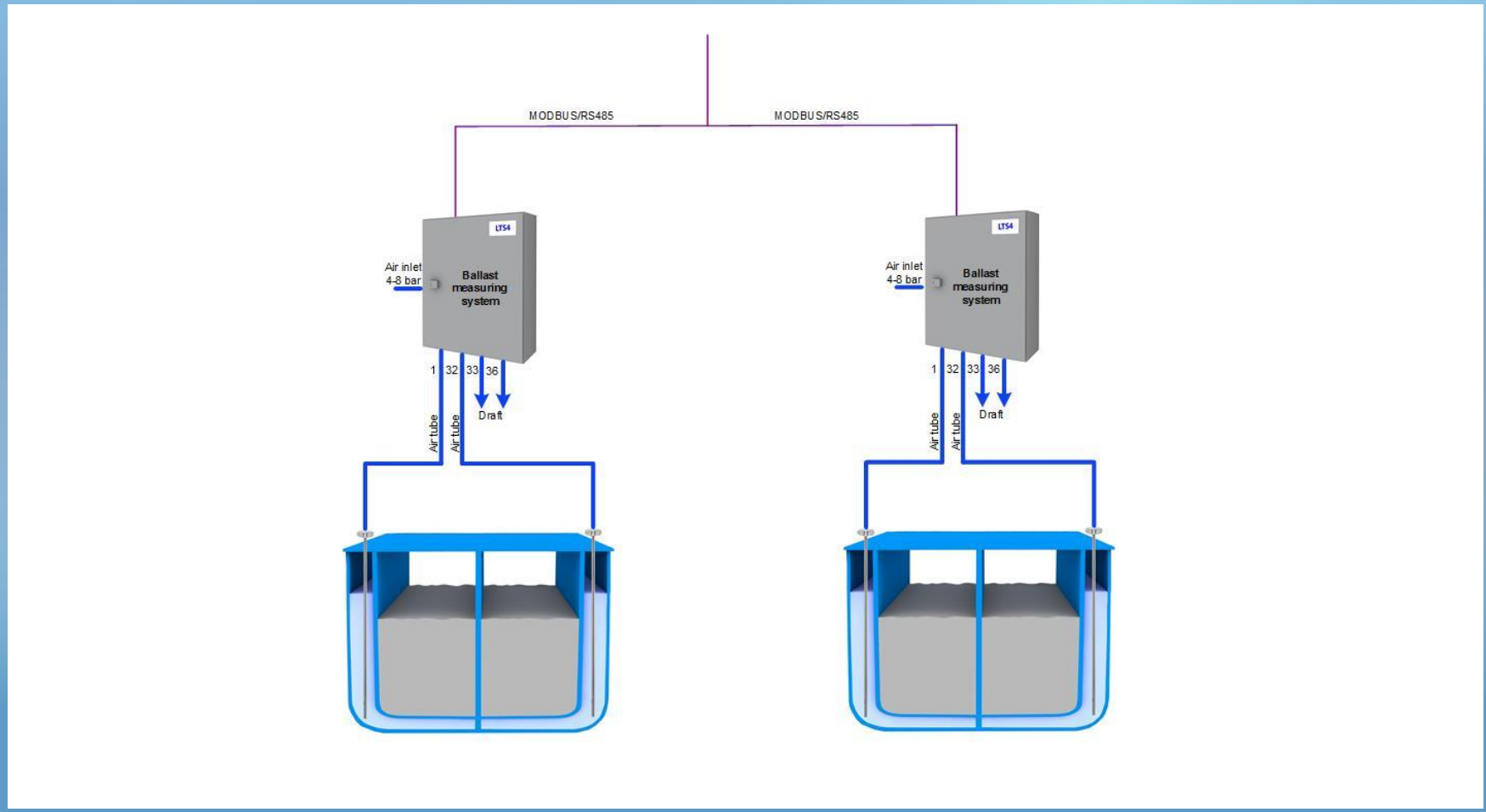
TSS / BMS4™





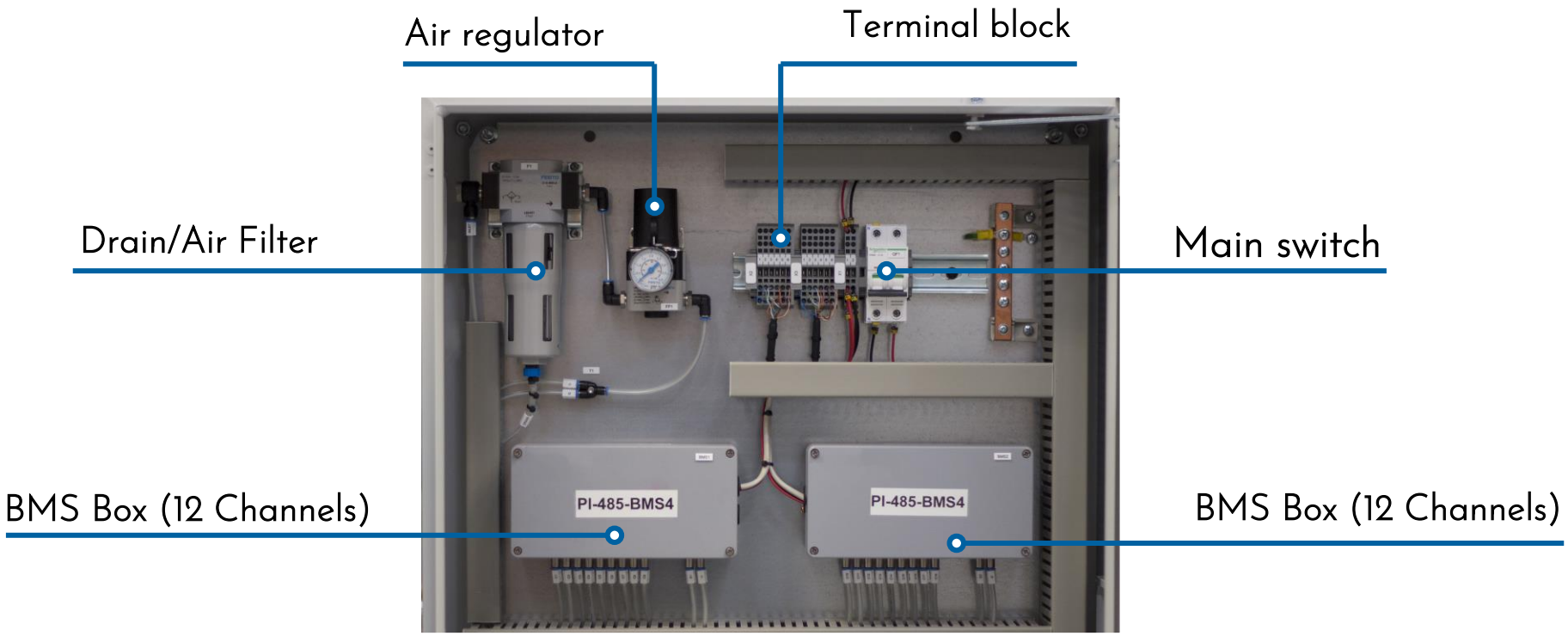
Typical Configuration

BMS4™



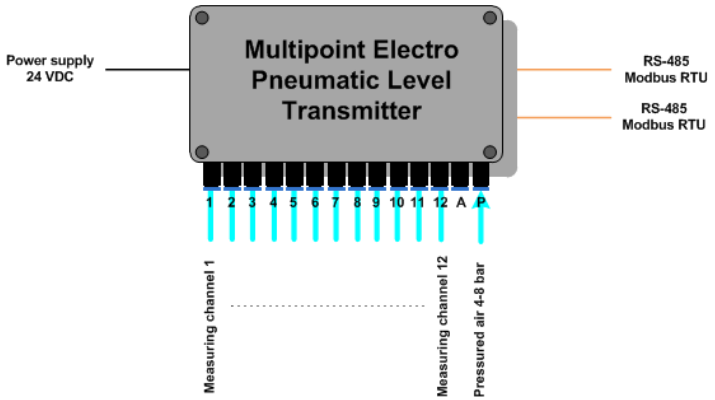
BMS4™ System (24 Tanks)

BMS4™



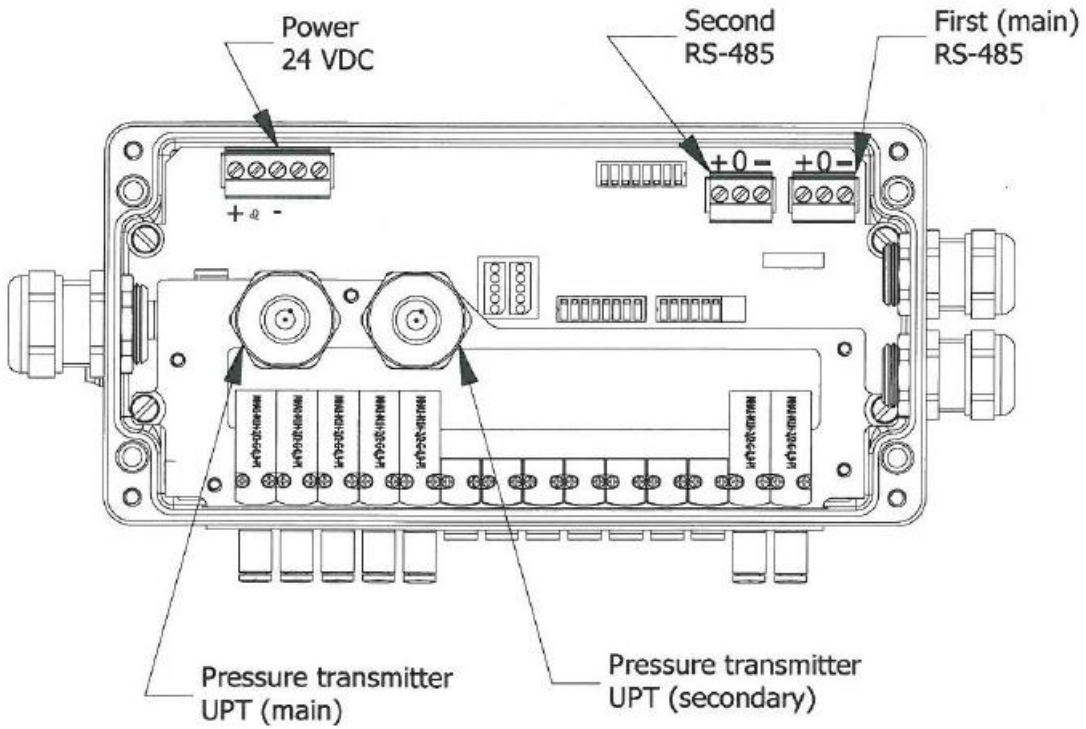
BMS4™ Overview

BMS4™



BMS4™ Overview

BMS4™



API MARINE

WWW.API-MARINE.COM

Remote Sounding System – Features and Functions

TSS / BMS4™

- Electro Pneumatic level and draft measurement system suitable for all types of vessels
- Compact and fully integrated system
- Competitive pricing / low investment cost
- Flexible and modular concept and design
- Standard configurations 12, 24, 36 and 48 channels

API MARINE

WWW.API-MARINE.COM

Remote Sounding System – Features and Functions

TSS / BMS4™

- Low air consumption & less dependant on air quality
- Automatic calibration of sensor during operation
- No electrical parts in Ex zone
- Intelligent scanning feature
- Easy installation

API MARINE

WWW.API-MARINE.COM

Remote Sounding System – Features and Functions

TSS / BMS4™

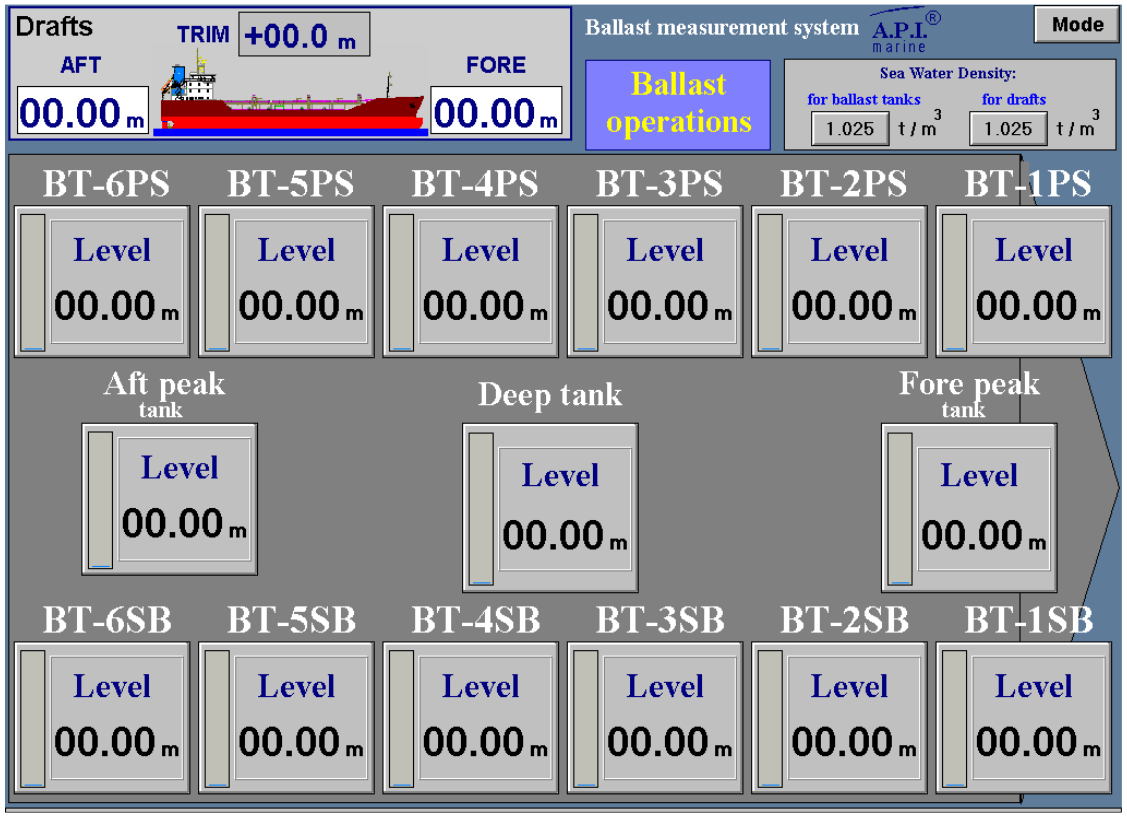
- Standard RS485 MODBUS output / easy interfacing
- Automatic cleaning (purging) of pipes
- Reliable and proven system
- Virtually maintenance free
- Ideal for retrofit installations
- Can easily be adapted to existing / onboard installations

API MARINE

Operation System

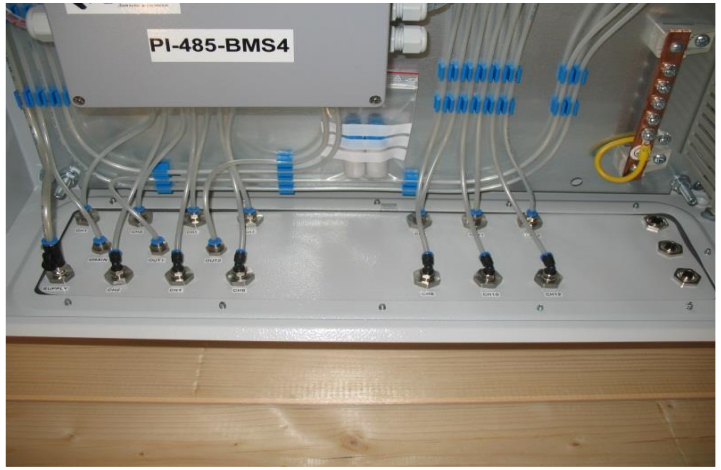
WWW.API-MARINE.COM

BMS4™



Installation Aspects

BMS4™



- Designed for installation on ship
- Cabling, mounting etc.
- Easy installation

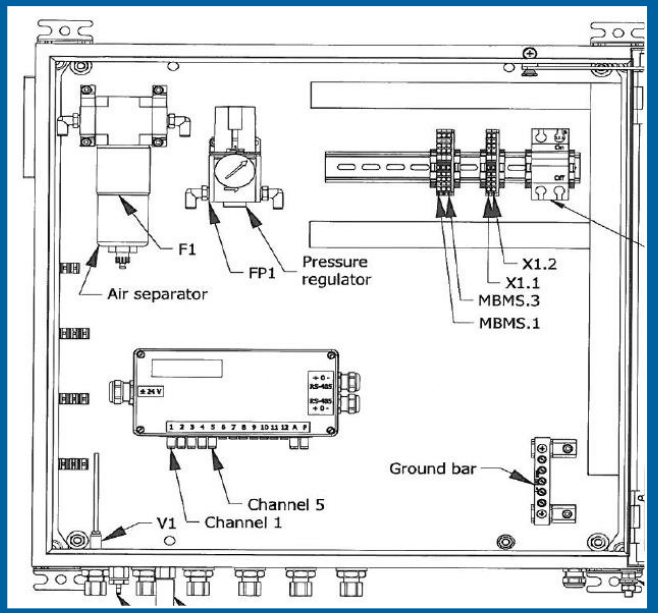
Scope of Supply (1-12 Tanks)

WWW.API-MARINE.COM

BMS4™ System

System consisting of Local Technological Station LTS4 (for wall mounting)

- BMS4 Module with 1-12 Measuring channels (1 pc)
- Air Separator Unit
- Pressure Regulator Unit
- Measurement error: <0.25% of the max. value of the measuring range
- Power supply: 24 VDC.
- Output: Modbus RTU, RS485 2-wires
- Pneumatic connection: 10mm x 1mm stainless steel tubing
- Filter and pressure reducer with manometer is provided for air inlet.
- Shut-off valve for air supply.
- Low pressure alarm switch (NC).
- Atmospheric correction for pressure sensors.
- Air pressure injected in cabinet: 4-8 bar.
- Automatic system calibration
- Working air pressure less than 2 bar
- Cabinet dimensions: 600x600x210mm.
- Manuals and documentation.
- Standard Spares and tools



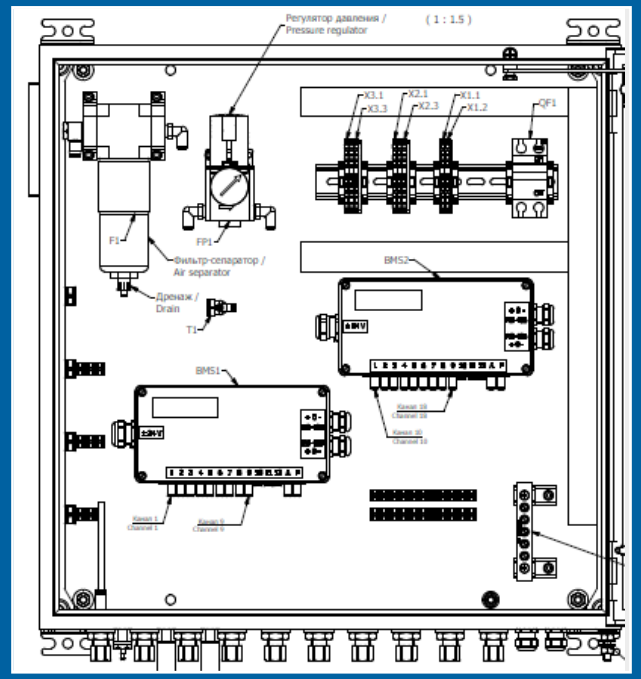
Scope of Supply (1-24 Tanks)

WWW.API-MARINE.COM

BMS4™ System

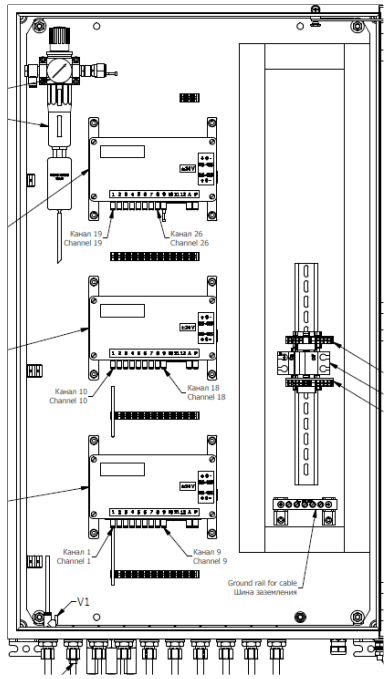
System consisting of Local Technological Station LTS4 (for wall mounting)

- BMS4 Module with 1-24 Measuring channels (2 pc)
- Air Separator Unit
- Pressure Regulator Unit
- Measurement error: <0.25% of the max. value of the measuring range
- Power supply: 24 VDC.
- Output: Modbus RTU, RS485 2-wires
- Pneumatic connection: 10mm x 1mm stainless steel tubing
- Filter and pressure reducer with manometer is provided for air inlet.
- Shut-off valve for air supply.
- Low pressure alarm switch (NC).
- Atmospheric correction for pressure sensors.
- Air pressure injected in cabinet: 4-8 bar.
- Automatic system calibration
- Working air pressure less than 2 bar
- Cabinet dimensions: 600x600x210mm.
- Manuals and documentation.
- Standard Spares and tools

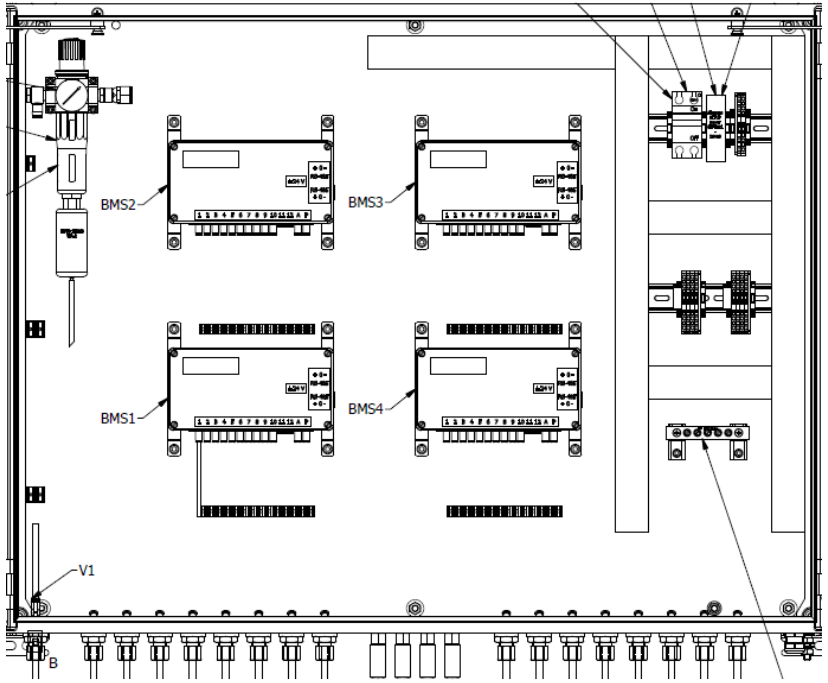


Scope of Supply (1-36 and 1-48 Tanks)

BMS4™ System



BMS4 System (1-36 Tanks)

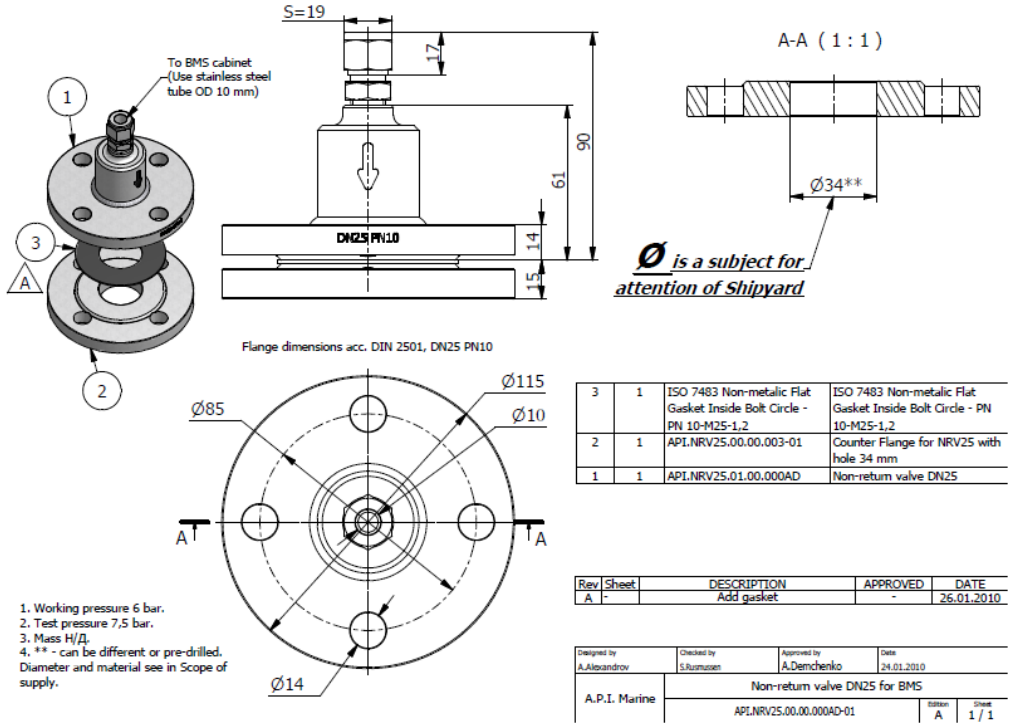


BMS4 System (1-48 Tanks)

Non Return Valve

WWW.API-MARINE.COM

BMS4™



3	1	ISO 7483 Non-metalic Flat Gasket Inside Bolt Circle - PN 10-M25-1,2	ISO 7483 Non-metalic Flat Gasket Inside Bolt Circle - PN 10-M25-1,2
2	1	API.NRV25.00.00.003-01	Counter Flange for NRV25 with hole 34 mm
1	1	API.NRV25.01.00.000AD	Non-return valve DN25

Rev	Sheet	DESCRIPTION	APPROVED	DATE
A	-	Add gasket	-	26.01.2010

1. Working pressure 6 bar.
2. Test pressure 7,5 bar.
3. Mass Н/Д.
4. ** - can be different or pre-drilled. Diameter and material see in Scope of supply.

Designed by	Checked by	Approved by	Date
A.Alexandrov	S.Rusmussen	A.Demchenko	24.01.2010

A.P.I. Marine	Non-return valve DN25 for BMS		
	API.NRV25.00.00.000AD-01	Edition A	Sheet 1 / 1

API MARINE

Retrofit

BMS4™

- Possibility to replace existing older systems
- Tubes, connections etc. may be kept as is
- Easy and cost effective installation

API MARINE

Summary and Highlights

BMS4™

- Competitive price and low investment cost
- Compact and modular design
- Low maintenance cost
- Easy installation

API MARINE

WWW.API-MARINE.COM

SETTING NEW STANDARDS FOR TANK MEASUREMENT TECHNOLOGIES

API MARINE

WWW.API-MARINE.COM

API MARINE

PRECISE, ECO-FRIENDLY AND SECURE SOLUTIONS AT SEA

SENSORS & AUTOMATION SYSTEM · POWER GENERATION · DIGITAL SOLUTIONS