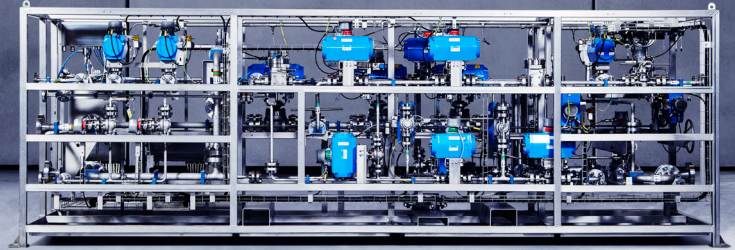


Fuel Valve Train Ammonia



Product information

FuelTech is proud to introduce our Fuel Valve Train NH₃ specially designed for ammonia fuel operation. As the International Maritime Organization (IMO) aims to achieve a significant reduction of at least 40% in vessel-related CO₂ emissions by 2030, it is essential to transition to decarbonized marine fuels. Green ammonia, a zero carbon fuel, is a highly viable solution that has been identified as the ideal fully decarbonized fuel for the shipping industry to fulfill the IMO's CO₂ reduction targets. Our system has been engineered to enable efficient and reliable utilization of this zero-emission fuel in the shipping sector.

The Fuel Valve Train NH₃ is a block and bleed valve configuration designed to provide isolation capability between the ammonia fuel supply system and the dual fuel engine. In case of a normal or emergency shutdown, the Fuel Valve Train will disengage the fuel supply to the engine and send excess fuel from the engine to the recirculation system or vent system. A nitrogen purge connection is incorporated into the Fuel Valve Train. This is needed in order to purge the engine, and is designed to prevent back flow of fuel to the nitrogen source.

The benefits of the Fuel Valve Train include filtration of media as well as temperature and pressure monitoring between the fuel supply system and the engine. The Fuel Valve Train is controlled by the engine control system.

Description

FVT NH₃, 2"

Media Dimensioning

| | |
|--|---|
| FVT Size (Other FVT sizes can be prepared on request) | Main Line: 2" (DN50) Purge and Bleed Line: 1" (DN25) Return Line: 1" (DN25) |
| Material in Contact with Media | Stainless steel |
| Media for Engine | Ammonia (NH ₃) |
| Media for Purge | Nitrogen (N ₂) |
| Nominal Pressure [PN] | 8.300 kPa (83 bar) |
| Design Pressure [PS] | 10.000 kPa (100 bar) |
| Design Flow (Supply) | 11.500 kg/h |
| Media Design Temperature | -34 °C ≤ T ≤ 60 °C |

Physical Dimensions

| | |
|--------------------|-------------------------------|
| Dimensions (LxWxH) | Approx. 5900 x 1500 x 2000 mm |
| Weight | Approx. 3000 kg |

Media Filtration

| | |
|--|--------|
| Fuel Supply Filter (SVT safety filter) | 20 µm |
| Fuel Return Filter (RVT safety filter) | 100 µm |
| Nitrogen (N ₂) Filter | 20 µm |

Environment (IEC 60529)

| | |
|---|-----------|
| IP rating. Electrical Component on Process Unit | Min. IP56 |
| IP rating. Electrical Cabinet | IP66 |

Supply

| | |
|---------------|------------------|
| Power Supply | 24 VDC -25/+30 % |
| Pneumatic Air | 5-9 bar, dry air |

Ex Classification

| | |
|--------------------|---|
| Components | GasGroup IIA, Temp. Class T1 |
| Electrical Cabinet | Electrical cabinet must be installed in safe area. Contains barriers for Ex components placed in hazardous area. |

Classification

| | |
|--------------------------|----------------------|
| Classification Societies | Per Customer Request |
|--------------------------|----------------------|

Please note! ME-LGI-A design requirements are currently being verified and updates may occur. For latest update, contact us on sales@eltronicfueltech.com.