



Low-flashpoint Fuel Supply Valve Train for methanol fuel operation

The Low-flashpoint Fuel Supply Valve Train (LFSVT) from Eltronic FuelTech A/S represents an integrated solution that combines a Low-flashpoint Fuel Supply System (LFSS) with a Fuel Valve Train (FVT). The solution is engineered for methanol fuel utilization and designed to fit 4-stroke auxiliary engines and other methanol consumer such as boilers and fuel cells.

The LFSVT assumes overall control of crucial parameters including flow rate, temperature, and safety, thereby encompassing a comprehensive range of functions.

The engine load signal supplied from SaCos controls the internal pump speed under specific engine load conditions. The goal is to minimize the amount of bypass fuel through (1PVC5662) to <10% and thereby optimize the energy use. To ensure adequate fuel flow to the engine a minor buffer/bypass is needed when the engine load changes.

Description	LFSVT
Media Dimensioning	
LFSVT size	Inlet: Pump, 1" (DN25) Outlet: Pump, ½" (DN15) Nitrogen: ½" (DN15) Drain: ½" (DN15)
Material in contact with media	316/316L Stainless steel
Media for engine	Methanol, MeOH
Media for purge	Nitrogen, N ₂
Nominal working pressure for fuel supply [PN]	Methanol: 1.300 kPa (13 bar)
Design pressure [PS]	1.600 kPa (16 bar)
Test pressue [PT]	2.400 kPa (24 bar)
Max. pressure hysteresis	50 kPa (0,5 bar)
Design flow at 1,1 bara inlet pressure (45°C):	950kg/h
Design flow at 1,3-5 bara inlet pressure (45°C):	1300kg/h
Maximum flow capacity	2.000 kg/h
Minimum flow @ PS	0 kg/h
Ambient temperature	-25°C to +55°C
Fuel temperature inlet	-10°C to +55°C
Fuel temperature outlet	25°C to 50°C
Absolute filter fineness	10µm
Physical Dimensions	
Frame dimensions (WxHxD)	2780 x 1950 x 1085 mm
Supply	
Voltage supply	Main power: 3 x 400 VAC ±10%
Voltage frequency	50 Hz ±10%
Power supply current consumption	Plant: 2 A Safety: 2 A