

EU RO MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE

This Certificate is issued to

Eugen Seitz AG
Wetzikon, ZH, Switzerland

for

Solenoid Valve Assembly

with type designation(s)

1116, 755

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Solenoid Valve Assembly

Intended service

The certificate covers approval of mechanical parts and electric hardware of the solenoid valves to be installed on pneumatic control systems on board ships.

Type	Temperature range	Max. working press.	Design
1116	See page 2	32 bar	DN 7
755	See page 2	32 bar	DN 10

This Certificate is valid until **2023-06-21**.

Issued at **Høvik** on **2018-06-22**

DNV GL local station: **Hamburg**

for **DNV GL**

Approval Engineer: **Adel Samiei**

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Marianne Spæren Marveng
Head of Section



Job Id: **262.4-000078-2**
Certificate No: **MRP0000005**

Product description

Types 755 and 1116 solenoid valves controlled by an electric solenoid, used as a pilot solenoid valve installed on engines used in marine applications for two stroke large bore engines to drive an air intake valve used to start the engine. Both types use the same pilot components and are built up in the manner with the same materials.

Flow direction: Open position: P1 to P2 / Closed position: P2 to P3

Response time 30 ms at room temperature (15°C to 25°C) and nominal voltage

Response time over the temperature range and the voltage range is less than 50 ms.

Reverse time is less than 30 ms.

Life time: 500000 cycles in 10 years

The degree of protection: IP 54 according to EN 60259

Manufactured by

Eugen Seitz AG, Wetzikon, ZH, Switzerland

Application/Limitation

Valves covered by this certificate are not approved to be installed in weather exposed area. (reference is made to IACS UR E10 Table E10.1 note 3)

Flag national authorities may have their own requirements for the products to be installed aboard ships flying their flag. Both the requirements of national authorities and those of the classification Rules must be complied with.

Type Approval documentation

Marking of product

Each component covered by this certificate shall be marked before shipment for identification. As a minimum, following items are to be marked at the suitable places:

Rating plate of waterproof material fitted to the assembly marked with: manufacturer's name or trade, type designation, power supply, insulation class, degree of protection, explosion protection type, rated pressure, medium, date of manufacturing, serial number

Tests Carried out

Hydrostatic test, burst pressure test, measurement of temperature rise, degrees of protection, leakage test, life test, operating temperatures, visual inspection, conducted low frequency interference, performance test, external power supply failure/Emergency operation, power supply variations, dry heat, damp heat, vibration, inclination, high voltage, insulation resistance, low temperature cold, flame retardant

Periodical assessment

The manufacturer shall apply annually for periodical assessment to DNVGL. A survey will be carried out to confirm that the production under the MR TAC and the quality assurance scheme are being satisfactory maintained.