DNV·GL

Certificate No:
TAP0000241

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hydraulic valve position indicator / indicating system

with type designation(s)
HyH 651-625

Issued to
Pleiger Maschinenbau GmbH & Co. KG
Witten, Nordrhein-Westfalen, Germany

is found to comply with
DNV GL rules for classification – Ships Pt.4 Ch.6 Piping systems

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2020-06-04**
This Certificate is valid until **2025-06-03**.
DNV GL local station: **Essen**

for **DNV GL**

Approval Engineer: **Hagen Markus**

Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-032068-1**
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Product description

Position indicating system in combination with hydraulic remote operated valves.

The system consists of the following main components:

Component	Installation position	Drawing / Reference
HyH 651-625 Flow indicator incorporating a by-pass and pilot valve, flow switch, pressure switch	Valve control cabinet	- SP-M-H-A-003 - MVL-2971
Pressure switch	Main hydraulic oil pressure line	Pos. S1 in the Pleiger "Functional Diagram Remote operated valves Open/close controlled", 12/2008

Technical Data

	Flow indicator HyH 651-625	Pressure switch
Service pressure	120bar	80bar
Test pressure	180bar	600bar
Max. volume flow	60 l/min	n.a.
Max. temperature	80°C	120°C[1]
Operating / Max. voltage	24V / 30V	42V / 42V
Max. current	100mA	4A
Switch point	> 100 cm³ / min	n.a.
Vibration proof	n.a.	10g (test range 5 - 200Hz Sine)

Notes
[1] 100°C for sealing NBR

Application/Limitation

The position indicating system of type HyH 651-625 is type approved for position indication of hydraulic remote-controlled valves.
References DNV GL Rules Pt.4, Ch.6 – Section 3 – 1.2 Operation of valves, Section 4 – 9.4 Anti-heeling arrangements.

Type Approval documentation

Tests carried out

Operational test at 120bar and 10^4 Cycles, Accelerated climate test.

Marking of product

The HyH 651-625 Flow indicator system do not bear any marking since it is part of the valve control cabinet which is provided with name plate as follows:

Scope of marking	**Example**
Manufacturer name	Pleiger
Type	HYH3546-03
Order No.	VMF-901483
Serial number (Project number)	1912-407
Production year	2019

Periodical assessment

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNVGL-CP-0338, Sec.4.

To check the validity of this certificate, please look it up in https://approvalfinder.dnvgl.com

End of certificate