

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Pilot Device**

with type designation(s)

Push Buttons and Switches, Type: Shortron S

Issued to

Georg Schlegel GmbH & Co. KG
Dürmentingen, Germany

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2017-09-19**This Certificate is valid until **2022-09-18**.DNV GL local station: **Augsburg**for **DNV GL**Approval Engineer: **Nicolay Horn**

Andreas Kristoffersen
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.



Product description

Shortron S/ Shortron S taktil – Juwel; Push Buttons and Switches for flush-mounting in front of switchboard.

1.1. Shortron

Types: Actuator familiy „Shortron“ z.B.
Short travel actuator S(VA)(SW)(T)(TLR)(WA)(WB)(SSA...)
(N)(STA)(STB)(L)(I)(II)(O)(OO)(OI)(P)(AU)
Short tactile travel actuator S(VA)(SW)C(T)(TLR)(...)(L)(F)
Short tactile travel actuator SVACFT(L)(X)(F)(P)
Pilot light S(Q)(QR)(VA)(SW)N(Q)(P)(Z)(Kxx)

1.2. Shortron actuators

Types: Actuator familiy „Shortron“ z.B.
Short travel actuator S(Q)(QR)(VA)(SW)(C)(T)...
Pilot light S(Q)(QR)(VA)(SW)N(Q)...

	AC	DC
Rated insulation Voltage (Ui)	250 V	250 V
Rated operation voltage (Ue)	240 V / 120 V	250 V / 125 V / 60 V / 24 V
Rated current	3 A / 1.5 A	2 A / 1 A / 0.55 A / 0.27 A
Ingres protection	IP65 or IP66	IP65 or IP66

For detailed information see "SCHLEGEL – Typenschlüssel".

Application/Limitation

For flush-mounting in front of switchboards and enclosures onboard ships and offshore units. Indoor application only.

Type Approval documentation

Tests carried out

IP test in accordance with IEC 60529, Type tests in accordance UL /IEC 60947-5-1 & IEC 61058, cold test (IEC / EN 60068-2-1), Dry heat test (IEC 60068-2-2 & DNVGL -CG-0339), vibration test (IEC 60068-2-6 & DNVGL -CG-0339), damp heat test (IEC 60068-2-30 & DNVGL -CG-0339).

Marking of product

Schlegel - Type designation - Ratings (if applicable)
(On the body or packaging unit of the device)

Periodical assessment

The scope of the Periodical assessment is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results Routines (RT) checked (if not available tests according RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.



Job Id: **262.1-019540-1**
Certificate No: **TAE000027J**

Survey to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE