

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Solenoid Valve

with type designation(s)
as listed on page 2

Issued to

Parker Hannifin Manufacturing Switzerland SA
Carouge GE GE, Switzerland

is found to comply with

Application :

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

Temperature	A
Humidity	B
Vibration	B
EMC	A
Enclosure	C

Issued at **Hamburg** on **2017-08-21**

This Certificate is valid until **2022-08-20**.

DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Holger Jansen**

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Joannis Papanuskas
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.



Job Id: **262.1-003991-4**
Certificate No: **TAA00001CZ**

Product description

The type approval covers the following types, with or without prefix "E", "U" or "7".

121A	131A	221G	321B	331B	341B	347N	441N
121C	131E		321F	331F	341F	347P	441P
121F	131F		321G	332B	341L		
121G	131K		321H	332F	341N		
121K	131V		321K		341P		
121V	131T		322B		343B		
121Z	131X		322G				
122A	132T		322H				
122F	133A						
122K	133K						
	133V						
	133T						
	133X						

Application/Limitation

The approval is valid only for valves listed with coil No. 481000-8W, 481044-14W, 483824-19W or 483541-20W with coil housing 4538, 4538.02, 8520 or 8760 - or with coil 481865-8W, 483764-9W, 491514-13/16W or 492425-14W with feature coil 2995 - or with ATEX/IECEx coils 492300-6W, 492310-6W, 492965.01-N7, 492670-8W, 495870-8W, 495875-6W, 495880-14W, 495905-8W, 495910-N7, 496110-9W, 496155-1W, 496555-6W, 496560-8W, 496565-N7.

The approval does not include valves equipped with: manual operator, NTC-resistor, coils with armature, regulator or external control.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Medium compatible with the concerned solenoid valve.

Type Approval documentation

Tests carried out

Applicable tests according to class guidelines DNVGL-CG-0339, November 2016.

Place of manufacture

Parker Hanifin Manufacturing S.r.l.
Via Enrico Fermi 5
20060 Gessate (MI)
ITALY

Marking of product

The product to be marked with model, plant and year of production (ww-yy)

Periodical assessment

Job Id: **262.1-003991-4**
Certificate No: **TAA00001CZ**

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

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to 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.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE