



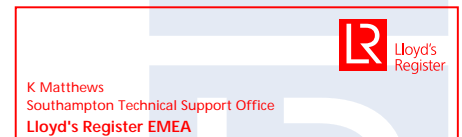
Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 97/ 00046(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Crane Process Flow Technologies Ltd
PLACE OF PRODUCTION	Grange Road Cwmbran Gwent, NP44 3XX United Kingdom (UK)
DESCRIPTION	Diaphragm valves with flanged or screwed connections
TYPE	A (straight or angle) and KB (straight)
STANDARD	Lloyd's Register's Rules and Regulations for the Classification of Ships; BS EN 13397:2002, Industrial valves-diaphragm valves made of metallic materials.
RATINGS	Type A: Size range (mm) DN8 to DN350 Max. pressure (barg) Valves DN8 to DN50 16 Valves DN65 to DN150 10 Valves DN200 to DN350 6 Type KB: Size range (mm) DN15 to DN350 Max. pressure (barg) Valves DN15 to DN100 10 Valves DN125 to DN150 6 Valves DN200 to DN300 3.5 Valves DN350 1.75
Certificate No.	97/ 00046(E4)
Issue Date	11 July 2017
Expiry Date	22 April 2022
Sheet	1 of 2



K Matthews
Southampton Technical Support Office
Lloyd's Register EMEA

*Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS*

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



APPLICATIONS

For marine applications, the diaphragm valves may be used in the following piping systems:
Domestic hot and cold water systems;
Sanitary systems;
Main and auxiliary cooling water lines;
Ballast systems (except ship side valves or as shut-off valves for deep tanks);
Fresh water systems;
Deck wash systems;
Air conditioning systems;
Compressed air systems (low pressure lines not exceeding 100 psig and not as stop valves on air receivers).

Operational limitations

1. Valves are not to be used as ship side valves or in fire lines.
2. Valve body/ bonnet material to comply with LR Rules as applicable.
3. Diaphragm materials to be suitable for the intended fluid service.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 97/ 00046(E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate

All other details remain as the previous Certificate No. 97/ 00046(E3) to which this extension should be attached.

Certificate No. 97/ 00046(E4)

Issue Date 11 July 2017

Expiry Date 22 April 2022

Sheet 2 of 2



K Matthews
Southampton Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group