



Lloyd's
Register

Type Approval Certificate Extension

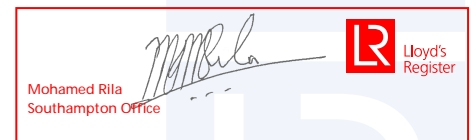
This is to certify that Certificate No. 03/00080(E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Bermad UK Ltd
PLACE OF PRODUCTION	Unit 8, Hungerford Trading Estate, Smitham Bridge Road Hungerford Berkshire RG17 0QP United Kingdom
DESCRIPTION	Hydraulically operated diaphragm valves of elastomeric type with flange grooved or threaded connections.
TYPE	400 Series (Elastomeric type)
SPECIFIED STANDARDS	Lloyd's Register's Rules and Regulations for the Classification of Ships; ASME/ANSI B 16.34 – 2013; Fire tested to ISO 6182 Part 5 – Requirements on test methods for deluge valves; UL-260 – Safety dry pipe and deluge valves for fire protection services.

Certificate No.	03/00080(E3)
Issue Date	13 December 2018
Expiry Date	07 August 2023
Sheet	1 of 3

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



M.H.M.Rila
Southampton Technical Support Office
Marine & Offshore Lloyd's Register

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APPLICATION

For the use in water, seawater and foam fire protection systems. As Deluge Valves, Pressure Control Deluge Valve, Pressure Control Valve, Pressure Sustaining and Relief Valves, Hydrant Valve, and Air Maintenance Device (AMD) trim.

RATINGS	Dimension	1 1/2" (DN 40) to 10" (DN 250)	
	Design Pressure	21 bar	
	Max. working Temperature	EPDM:	90°C
		NBR:	80°C
		NR:	60°C
Body material: Epoxy-coated Ductile Iron to ASTM A536 Grade 65-45-12 or GGG Optional materials: Cast Steel to ASTM A216 Grade WCB; Cast Steel to ASTM A352-03 Grade LCC; Cast Stainless Steel to ASTM A351 Grade CF8M; Cast Ni Al Bronze to ASTM B148 Grade C95800; Duplex Stainless Steel to ASTM A890 Grade 4A and 5A; 254 SMO A351 Grade CK-3MCuN, CN-3MN; Hastelloy C276 ASTM B366 Grade C276; Titanium to ASTM B367 Grade C2			

Certificate No. 03/00080(E3)
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 Southampton Office

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LR031.1.2016.06

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OTHER CONDITIONS


1. Valves are to be selected, installed and tested in accordance with the manufacturer's recommendations and LR's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12.
2. Material impact test and wed-non-destructive tests are to be carried out in accordance with the LR Rules for Materials.
3. The approval does not cover the remote control of the valve linked to the actuator.
4. Due care should be taken not to over stress the fittings when tightening the bolts.
5. The valves are to be marked with the following information:
 - Manufacturer's name or trademark.
 - Pressure rating
 - Temperature range
 - Size

"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. 03/00080(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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