

Type Approval Certificate Extension

This is to certify that Certificate No. 03/00081 for the undemoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Bermad CS Ltd 4070E Leaverton Ct. Anaheim, CA 92807 United States of America (USA)
DESCRIPTION	Hydraulically-operated Valves
TYPE	700 Series
SPECIFIED STANDARDS	Lloyd's Register's Rules and Regulations for the Classification of Ships; ASME/ANSI B 16.34 – 1988; 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.
APPLICATION	Fire protection systems for industrial, marine and offshore installations, for use in deluge water and foam systems, pressure control deluge, remote-operated monitors, pressure control, pressure sustaining, sprinkler systems, pressure reducing hydrants and fire pump relief systems

Certificate No.	03/00081(E1)
Issue Date	5 September 2008
Expiry Date	7 August 2013
Sheet	1 of 3



P. F Moysey
London Design Support Services
Lloyd's Register EMEA

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

RATINGS

Diameter (inch):	1½ to 20
(DN):	35 to 500
Design Pressure (bar):	50
Working Pressure (bar):	≤21
(PSI):	≤300
Working Temperature (°C):	≤60

Optional body materials:

Epoxy-coated Ductile Iron to ASTM A536 Grade 65-45-12 or EN1563;

Cast Ni Al Bronze to ASTM B148 Grade C95800;

Cast Marine Bronze to ASTM B584 Grade C90500;

Cast Steel to ASTM A216 Grade WCB;

Cast Stainless Steel to ASTM A351 Grade CF8M;

Cast Nickel Alloy to ASTM A494 Grade CX2MW;

Austenitic Stainless Steel to ASTM A744 Grade CN7M (UTS > 448 MPa);

Duplex Stainless Steel to ASTM A890 Grade A5;

Titanium to ASTM B367 Grade C2.

OTHER CONDITIONS

Fittings are to be selected and installed in accordance with the manufacturer's instructions and recommendations.

Material impact tests and weld non-destructive tests are to be carried out in accordance with the Rules.

Due care should be taken not to over-stress the fittings when tightening the bolts.

The piping system is to be tested in accordance with the Rules on completion of installation.

Certificate No.	03/00081(E1)
Issue Date	5 September 2008
Expiry Date	7 August 2013
Sheet	2 of 3



P. F. Moysey
London Design Support Services
Lloyd's Register EMEA

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

"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. 03/00081(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 03/00081 to which this extension should be attached.

Certificate No.	03/00081(E1)
Issue Date	5 September 2008
Expiry Date	7 August 2013
Sheet	3 of 3



P. F Moysey
London Design Support Services
Lloyd's Register EMEA

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

Lloyd's Register, 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 Group'. The Lloyd's Register Group 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 Group 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.