



EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), designated as a "notified body" under the terms of the Merchant Shipping (Marine Equipment) Regulations 2016 (S.I. 2016 No.1025), did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Fire protection requirements of Marine Equipment Directive (MED) 2014/90/EU subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer (Applicant) Address	Akron Brass Company 343 Venture Blvd Wooster OH 44691 United States of America (USA)
Authorised Representative Address	Fabio Ferrari 12c Hameau de Saint Blaise 05100 Briancon France
Reference/Regulation Item (No & Item designation)	A.1/3.55 DUAL-PURPOSE TYPE NOZZLES (SPRAY/JET TYPE)
Product Type	HOSE NOZZLE
Product Description	Hose Nozzle - Type: 'TURBOJET' Type 3 Dual Purpose Spray/Jet nozzles Model Nos. 1702, 1720, 1733 and 1772
Specified Standard	EN 15182-1:2007 EN 15182-2:2007

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue 18 January 2017 Expiry date 17 March 2020

Certificate No. MED 1550060/M2 Signed 

Sheet No. 1 of 4 Name S. Abraham
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

Note:

This certificate is issued under the authority of the MCA.

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.

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Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 18 January 2017	Quote this reference on all future communications SOUTSO/SFS/TA /RDS/SA/WP26193894 &WP22426494
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ATTACHMENT TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE No. MED 1550060/M2

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

APPROVAL DOCUMENTATION

Akron Brass Company, Engineering Reports for nozzle types 1702, 1720 and 1733 all dated 30 June 2010.

Akron Brass Company Report for Nozzle type 1772 dated 25 November 2013.

Lloyd's Register Chicago Office, USA, Certificate of Test No. CGO0951115/1 dated 18 June 2010.

Akron Brass Company Report for Nozzle type 1772 (for 6 bar nozzle) dated 24 October 2014.

Akron Brass Company Drawings No: D44218_16 (for Nozzle types: 1702, and 1772), No: D45933_07 (for Nozzle type: 1720), No: D47645_01 (Nozzle Body for 6 & 7 bar style 1772 nozzle), No: C47641_00 (Discharge Tube for 6 bar style 1772 nozzle), No: C47642_00 (Discharge Tube for 7 bar style 1772 nozzle), No: C47644_00 (Pattern Sleeve for 6 & 7 bar style 1772 nozzle)

CONDITIONS OF CERTIFICATION

1. Dual purpose type nozzles with spray/jet operation, types: 1702, 1720, 1733 and 1772
2. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D), a Product-Quality assurance system (Module E) or a Product Verification Process (Module F). The wheelmark cannot be affixed to the product until a conformity assessment module is in place
3. Each item, batch or lot of the equipment is to be issued with a "Declaration of Conformity" and have the "Mark of Conformity" affixed after a conformity assessment module is in place
4. Minimum operating performance characteristics:

Model No.1702 (1 inch/25mm dia.)

Pressure (bar)	Jet Flow Rate (Litres/min)	Effective Throw of Jet at 30 Degrees (m)
7	230	26.5
7	150	24
7	100	18
7	50	12



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Model No.1720 (1.5 inch/38mm dia.)

Pressure (bar)	Jet Flow Rate (Litres/min)	Effective Throw of Jet at 30 Degrees (m)
7	475	42.5
7	360	40
7	230	28
7	115	18

Model No.1733 (2.5 inch/65mm dia.)

Pressure (bar)	Jet Flow Rate (Litres/min)	Effective Throw of Jet at 30 Degrees (m)
7	950	40
7	750	39
7	550	36
7	475	34

Model No.1772 (1 inch/25mm dia.)

Pressure (bar)	Jet Flow Rate (Litres/min)	Effective Throw of Jet at 30 Degrees (m)
7	250	32
7	150	27.2
7	100	23.9
7	50	19.2

Model No.1772 (1 inch/25mm dia.)

Minimum Operating Pressure (bar)	Jet Flow Rate (Litres/min)	Effective Throw of Jet at 30 ⁰ (metres)
6	235	27.7
6	167	24.7
6	121	21.9
6	75	20.8

NOTE

Performance testing was generally in accordance with SOLAS II-2, Regulations 10.2.1.6 & 10.2.3.1. The maximum pressure at any hydrant shall not exceed that at which the effective control of a fire hose can be demonstrated.



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PLACE OF PRODUCTION

Akron Brass Company
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United States of America (USA)



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Southampton Technical Support Office, Marine & Offshore
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038