



## ***Confirmation of Product Type Approval***

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 12-JUN-2023. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

**Product Name: Fire Stop System**

**Model Name(s): MCT Brattberg Cable Transit System of type RGS in Jet Fire Resisting Divisions**

**Presented to:**

MCT BRATTBERG AB  
SE-371 92 KARLSKRONA  
Sweden

**Intended Service:**

Marine & Offshore Applications - Cable penetrations in steel Jet Fire Resisting Divisions.

**Description:**

Modular firestop transit system consisting of single and back to back rectangular frames, and multiple frame combinations, (utilizing halogen-free Lycron Standard, AddBlock, U-block, HandiBlock and EMI modules and accessories) welded in steel divisions.

**Tier:**

3

**Ratings:**

Jet Fire Rating as follows: J60 & JF/Cable Transit System/ 228/60 for back to back 200mm & JF/Cable Transit System/180/60 for back to back 300mm frame arrangements as indicated in drawings 140601 to 140606 Maximum marine cable diameter 34mm Maximum metallic pipe diameter 20mm Insulation as indicated J120 & JF/Cable Transit System/ 159/120 for back to back 300mm frame arrangements as indicated in drawing 1160020 Maximum marine cable diameter 110mm Maximum metallic pipe diameter 30mm Insulation as indicated J30 High Heat Flux Test & JF/Cable Transit System/ 82/30 for back to back 300mm frame arrangements as indicated in drawing 1160021 Maximum marine cable diameter 110mm Maximum metallic pipe diameter 30mm Insulation as indicated J60 & JF/Cable Transit System/ 191/45 for single frame with Chartek and mineral wool insulation as indicated in drawing 1170285 Maximum cable diameter 100mm (marine & CLX type) J60 & JF/Cable Transit System/ 191/45 for back to back

frame with Chartek and mineral wool insulation as indicated in drawing 1110990  
Maximum cable diameter 100mm (marine & CLX type)

**Service Restrictions:**

1) Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. 2) The scope of the Type Approval is to comply with MSC.1/Circ. 1221 dated 11 December 2006. 3) Not for use in tank boundaries. 4) Cable sizes and combinations are to be typical of marine installations. 5) Maximum cable and pipe sizes per Ratings section above. 6) All fire rated transits are to be fully insulated in accordance with manufacturer's installation instructions and ABS approved drawings. 7) Hydrocarbon fire resistance ratings are not covered under this PDA.. 8) Maximum size of multiple frame combinations shall be in accordance with applicable H-rated certificate.

**Comments:**

1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. 2) Approval not performed on behalf of any flag Administration. 3) Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as tested/approved prototype. 4) Product should be installed/used in accordance with manufacturer's instructions and limitations. 5) The bulkhead or deck shall be insulated in accordance with applicable regulations. 6) Installation of transits are only permissible where strength and fatigue characteristics are not diminished or where satisfactory structural compensation has been provided. 7) The method specified in ISO 22899-1 has been designed to simulate some of the conditions that occur in an actual jet fire. However, it cannot reproduce them all exactly. The results of this test do not guarantee safety but may be used as elements of a fire risk assessment for structures or plant. This should also take into account all the other factors that are pertinent to an assessment of the fire hazard for a particular end use. The test is not intended to replace the hydrocarbon fire resistance test but is seen as a complementary test. 8) A reduction factor must be applied to the current rating for cables laid close together in a bunch in accordance with 4-8-2/7.7.1 of the ABS SVR or 4-3-3/5.11 of the ABS MODU Rules. 9) Cables shall be type approved in accordance with 4-8-3/9 of the ABS SVR or 4-3-4/7 of the ABS MODU Rules.

**Notes / Documentation:**

140601 Rev. B J60 RGS BTB 200mm FRAME 140602 Rev. 01 J60 RGS BTB 300mm FRAME 140603 Rev. B J60 RGS BTB 200mm FRAME 140604 Rev. 01 J60 RGS BTB 300mm FRAME 140605 Rev. B J60 RGS BTB 200mm FRAME 140606 Rev. 01 J60 RGS BTB 300mm FRAME 1110990 Rev. A J60 RGS BTB 200mm FRAME W/ CHARTEK 1160020 Rev. A J120 RGS BTB 300mm FRAME 1160021 Rev. A J30 HHF RGS BTB 300mm FRAME 1170285 Rev. A J45 191C RGS SINGLE FRAME W/ CHARTEK Health and Safety Laboratory report PE02822 Jet Fire Resistance Test on 300 and 400 mm long 6RGS 8 + 8 Back to Back Cable Transits dated 1 July 2016 SP Fire Research Report F15 20196:1 Resistance to Jet Fire with Increased Heat Load BTB 300/400 RGS BTB 8+8 dated 18 December 2015 SwRI Report 01.16046.01.404 Fire Performance Evaluation of a Penetration System in Accordance with ISO 22899-1 dated January 10, 2011 Health & Safety Laboratory Affidavit Letter dated 30 March 2015 regarding Health & Safety Laboratory Report PS/96/10 dated 5 July 1996 Health & Safety Laboratory Report PS/96/10 Jet-fire Resistance Test on MCT Brattberg 2000 Cable Transit Type RGS 8+8x1 BTB dated 5 July 1996

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 18-HS1742692-PDA, dated 13/Jun/2018 remains valid until 12/Jun/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

**ABS Rules:**

2018 Rules for Condition of Classification, Part 1, 1-1-4/7.7, 1-1-A3, and 1-1-A4, which covers the following: 2018 Rules for Building and Classing Steel Vessels 3-4-1 2018 Rules for Condition of Classification - Offshore Units and Structures, Part 1, 1-1-4/9.7, 1-1-A2, and 1-1-A3, which covers the following: 2018 Rules for

Building and Classing Mobile Offshore Drilling Units, 5-1-1/3.5, 5.17 & 5.21 2018  
Rules for ABS Facilities on Offshore Installations 2-1 & 3-8

**National Standards:****International Standards:**

Jet fire resistance test in accordance with ISO 22899-1: 2007

**Government Authority:****EUMED:****Others:**

<b>Model Certificate</b>	<b>Model Certificate No</b>	<b>Issue Date</b>	<b>Expiry Date</b>
PDA	18-HS1742692-PDA	14-JUN-2018	12-JUN-2023



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.