



TYPE APPROVAL CERTIFICATE

Certificate No. : CPH04189-FP001 **Initial Approval** : 25th February, 1992
Product : Cable Transit
Manufacturer : Roxtec International AB
Box 540, S-371 23 Karlskrona, Sweden

Product Description : Single and Multi Cable Transit System
- Type : GH Series, R Series, RS Series
- Intended for : A-60/A-30 Class Sandwich Panel bulkheads

See "Appendix 1"

Approval Condition : See "Appendix 1"

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt.8, Ch.1 of the Rules for Classification of Steel Ships and IMO 2010 FTP Code Annex 1, Part 3.

This Certificate is valid until 11th December, 2024

Issued at Busan, Korea on 12th December, 2019



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME19035050645) and certificate No.(CPH04189-FP001).



KOREAN REGISTER OF SHIPPING

*General Manager of
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Appendix 1

Product Description and/or Approval Condition

Certificate No : CPH04189-FP001

Date of Issue : 12th December, 2019

A. Product Description

1. Product Specification

- 1) The cable transits consist of steel frame(or steel sleeve) and specific sealing system and the frames(or sleeves) are bolted to the sandwich panel bulkhead.
- 2) The cable transits are fully insulated with A-60 Class mineral wool insulation(Density : 100 kg/m³) at exposed or unexposed side.
- 3) Tested sandwich panel : C.I.S-100 (A-60) manufactured by Norac AS with a thickness of 100 mm and a density of 30.62 Kg/m³

Type	Size of Frame (or Sleeve)	Sealing Type	Frame(or Sleeve) Installation Side	Max. Dia. of Cable(mm)	Approved Class
GH Series	GH 2x1 ~ GH 8+8x3	RM Modules	Unexposed	10 ~ 82	A-60
GH Series	GH 2x1 ~ GH 8+8x3	RM Modules	Exposed	10 ~ 82	A-30
R Series	SLFR 50	R 50	Exposed	10	A-60
R Series	SLFR 50 ~ SLFR 200	R 50 ~ R 200	Unexposed	10 ~ 30	A-60
R Series	SLFR 200	R 200	Exposed	10 ~ 30	A-30
RS Series	SLFRS 31 ~ SLFRS 125	RS 31 ~ RS 125	Either Sides	10 ~ 82	A-60

► For more details see the approved drawings and/or relevant test reports.

2. Approved Drawings and Documents

- 1) Drawings no. for GH Series : S1036261(Rev.A), S1036268(Rev.A), S1036269(Rev.A), S1036270(Rev.B), etc.
 - 2) Drawings no. for R Series : S1036259(Rev.A), S1036263(Rev.A), S1036265(Rev.A), S1036266(Rev.A), etc.
 - 3) Drawings no. for RS Series : S1036260(Rev.A), S1036262(Rev.A), S1036264(Rev.B), S1036267(Rev.B), etc.
- (Total 34 sheets)

3. Test Reports, etc.

- Test Report No. 3P07871 Rev.1 dated on 11 Oct. 2014 issued by SP Technical Research Institute of Sweden

B. Approval Condition

1. Application & Limitation

- 1) The sandwich panel bulkhead for these cable transits is to be type approved in accordance with "2010 FTP Code, Annex 1, Part3" regardless of this Approval.
- 2) Installation on board is to be in accordance with the manufacturer's instructions and approved drawings.
- 3) Unless specifically stated in product specification of this certificate, the penetration does not allow to be used for watertight deck and bulkhead.
- 4) Approval Certificate for Manufacturer (Cert. no. : CPH04189-PA001) is to be retained validly apart from this Approval.

2. Individual Product Cert. and Drawing Approval Requirement

- Individual Product Certification is not required.

3. Marking

- The product or packing is to be marked with manufacturer name and type designation

Appendix 1

Product Description and/or Approval Condition

Certificate No : CPH04189-FP001

Date of Issue : 12th December, 2019

on a suitable position.

4. Others

- N/A

< End of page >

