

**POTVRDA O TIPNOM ODOBRENJU**  
*TYPE APPROVAL CERTIFICATE*Br / No **01-008895/016125**

Potvrđuje se da je ovaj proizvod, u skladu s Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda, odobren za ugradnju na brodove i postrojenja pod nadzorom Hrvatskog registra brodova.  
*This is to certify that this product on the basis of the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products, is approved for use on board ships and installations under supervision of the Croatian Register of Shipping.*

**TIP I OPIS PROIZVODA:***TYPE AND DESCRIPTION OF PRODUCT:***PROLAZI ZA PLASTIČNE CIJEVI KROZ PROTUPOŽARNE KONSTRUKCIJE KLASJE „A“:**

- tip AP-1, AP-2 i AP-3 za pregrade i palube;
- tip PP-4 i PP-5 za palube.

*PLASTIC PIPE PENETRATIONS THROUGH “A” CLASS FIRE DIVISIONS:*

- type AP-1, AP-2 and AP-3 for bulkheads and decks;
- type PP-4 and PP-5 for decks.

**PROIZVOĐAČ:***MANUFACTURER:***ĐUVLA P.T.O.**

Liburnijska 10  
52100 Pula  
HRVATSKA • CROATIA

**PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:***THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:*

**Pravila za klasifikaciju brodova, Dio 17. – Protupožarna zaštita; Međunarodna Konvencija o zaštiti ljudskog života na moru SOLAS 1974, s izmjenama; IMO FTP Kodeks; IMO Rezolucija A.754(18).**

*Rules for the Classification of ships, Part 17 – Fire protection; International Convention for the Safety of Life at Sea SOLAS 1974, as amended; IMO FTP Code; IMO Resolution A.754(18).*

**DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEĐINI.***FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.*

**ODOBRENJE VRIJEDI DO: 2015-05-16**  
*APPROVAL IS VALID UNTIL:*

**Mjesto i datum Split, 2011-10-19**  
*Place and date*

**M.P.**  
*(Seal)*

\_\_\_\_\_  
Goran Begović, dipl.ing.

**Napomena: Ova potvrda nije valjana ako se proizvod ili način njegove proizvodnje promijenio u odnosu na tipno ispitani proizvod. Proizvođač treba obavijestiti Hrvatski registar brodova o bilo kojoj izmjeni na proizvodu kako bi ishodio valjanu potvrdu.**

*Note: 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 Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.*

**PODROBNIJI OPIS PROIZVODA:***DETAILED PRODUCT DESCRIPTION:***Prolazi tip „AP-1, AP-2 i AP-3“ za pregrade i palube:**

sastoje se od čelične prirubnice zavarene na pregradu ili palubu, te rukavca debljine 1,8 mm tip SHIMOCO FR 412 NERO 71, zaklinjenog te spojenog vijcima za prirubnicu. U unutrašnjosti rukavca se nalaze ekspanzirajuće košuljice tip PROMOSEAL –PL debljine 2 mm. Rukavac je zabrtvljen brtvama tipa SAVATECH i silikonom tipa PROMA-SEAL.

**Prolazi tip „PP-4 i PP-5“ za palube:**

sastoje se od čelične prirubnice zavarene na čeličnu cijev (koja prolazi kroz palubu), te čeličnog rukavca debljine 1,5 mm, zaklinjenog te spojenog vijcima za prirubnicu. U unutrašnjosti rukavca se nalaze ekspanzirajuće košuljice tip PROMOSEAL –PL debljine 2 mm. Rukavac je zabrtvljen brtvama tipa SAVATECH.

**Penetrations type “AP-1, AP-2 and AP-3” for bulkheads and decks:**

Composed of steel flange welded to the bulkhead or deck, and 1.8 mm thick sleeve with type designation SHIMOCO FR 412 NERO 71 bolted to the flange and tightened by fixing cleat. The sleeve is fitted with different number of 2 mm thick intumescent material with type designation PROMOSEAL –PL between the sleeve and pipe. The sleeve is sealed with gaskets with type designation SAVATECH and silicon with type designation PROMA-SEAL.

**Penetrations type “PP-4 and PP-5” for decks:**

Composed of steel flange welded on steel pipe (penetrating deck) and 1.5 mm thick steel sleeve bolted to the flange and tightened by fixing cleat. The sleeve is fitted with different number of 2 mm thick intumescent material with type designation PROMOSEAL –PL between the sleeve and plastic pipe. The sleeve is sealed with gaskets with type designation SAVATECH.

**PODRUČJE PRIMJENE / POSEBNI I GRANIČNI UVJETI:***APPLICATION / LIMITATIONS:*

**Prolazi za odobrene termoplastične cijevi (PVC, PE, ABS, PB, PP, PVDF) promjera 20÷110 mm na protupožarnim konstrukcijama klase „A-60“. Uz svaki proizvod mora se isporučiti upute za ugradnju, korištenje i održavanje.**

*Penetrations for approved thermoplastic pipes (PVC, PE, ABS, PB, PP, PVDF) with diameter 20÷110 mm in fire divisions of “A-60” class. Each product to be supplied with its manual for installation, use and maintenance.*

**DOKUMENTACIJA ZA TIPNO ODOBRENJE:***TYPE APPROVAL DOCUMENTATION:*

**Ispitivanja u skladu s IMO FTP Kodeksom (IMO Rezolucijom A.754(18)) izvršio je Laboratorij za toplinska mjerenja, Zagreb-Lučko, Hrvatska. Rezultati ispitivanja navedeni su u Test Report I-2552/06-2 od 2006-03-20 i Test Report I-2552/06-3 od 2006-03-28. Prolazi tip „AP-1, AP-2 i AP-3“ za pregrade i palube moraju izvedeni biti prema nacrtima DUV-B-115-06 Rev. C, str. 1 do 6, od 2006-03-18 (pregrade); DUV-TS-13-06 Rev. C, str.1/1, od 2006-03-22 (palube). Prolazi tip „PP-4 i PP-5“ kroz palube moraju biti izvedeni prema nacrtu DUV-D-215-06 Rev. D, str. 1 do 6, od 2006-06-28.**

*The testing in accordance with IMO FTP Code (IMO Resolution A.754(18)) have been carried out by Laboratorij za toplinska mjerenja, Zagreb-Lučko, Croatia. The testing results have been stated in the Test Report I-2552/06-2 dated 2006-03-20 and Test Report I-2552/06-3 dated 2006-03-28. Penetrations type „AP-1, AP-2 and AP-3“ to be constructed in accordance with the drawings DUV-B-115-06 Rev. C, page 1 to 6, dated 2006-03-18 (bulkheads); DUV-TS-13-06 Rev. C, page 1/1, dated 2006-03-22 (decks). Penetrations type „PP-4 and PP-5“ through decks to be constructed in accordance with the drawing DUV-D-215-06 Rev. D, page 1 to 6, dated 2006-06-28.*

**OZNAČAVANJE PROIZVODA:***MARKING OF PRODUCT:*

**Proizvod se mora označiti imenom proizvođača, oznakom proizvoda i protupožarnom klasom te žigom HRB.**

*The product shall be marked with name of manufacturer, type designation, fire-technical rating and CRS stamp.*

**UVJETI ZA CERTIFIKACIJU:***CONDITIONS FOR CERTIFICATION:*

**Hrvatski registar brodova izdaje posebnu potvrdu o nadzoru za svaku pojedinu proizvedenu količinu.**

*Croatian Register of Shipping shall issue particular certificate on supervision for each manufactured quantity.*

Raščlana

17.20

Zamjenjuje potvrdu

01-006060