



Lloyd's  
Register

## Type Approval Certificate Extension

*This is to certify* that Certificate No. 13/60003(E2) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

|                            |  |
|----------------------------|--|
| <b>PRODUCER</b>            | Tube-Mac Piping Technologies Ltd.<br>853 Arvin Avenue<br>Stoney Creek, Ontario<br>L8E 5N8<br>Canada  |
| <b>PLACE OF PRODUCTION</b> | Tube-Mac Piping Technologies Ltd.<br>853 Arvin Avenue<br>Stoney Creek, Ontario<br>L8E 5N8<br>Canada  |
| <b>DESCRIPTION</b>         | PYPLOK Mechanically attached fittings compression coupling,<br>360° radial swage with o-ring seals.  |
| <b>TYPE</b>                | Carbon Steel, Stainless Steel (SS316), Copper Nickel (70/30<br>Cu/Ni)  |
| <b>APPLICATION</b>         | For application in Class I, II and III piping systems.   |
| <b>STANDARD</b>            | Lloyd's Register Type Approval System Test Specification<br>Number 2 – May 2015<br><br>ISO 19921(2005) – Ships and marine technology – Fire resistance<br>of metallic pipe components with resilient and elastomeric seals |
| <b>Certificate No.</b>     | 13/60003(E3)   |
| <b>Issue Date</b>          | 14 November 2017   |
| <b>Expiry Date</b>         | 14 November 2022   |
| <b>Sheet</b>               | 1 of 3   |



Alicia Nash  
Americas Technical Support Office

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– Test methods

\* Note: Material has not been tested to ISO 19921(2005)

**RATINGS**

|  | <b>Diameters</b>          | <b>Max Working Pressure (bar)</b> |
|--|---------------------------|-----------------------------------|
| Carbon Steel                                 | NPS – (1/4 " - 3")        | 340 - 52                          |
|  | OD Tube – (1/4" – 3")     | 390 - 52                          |
|  | Metric – (6 – 60 mm)      | 370 - 52                          |
| Temp Range of Viton Seals:<br>-20°C to 200°C |                           |                                   |
| Stainless Steel<br>(SS316)                   | NPS – (1/4 " - 3")        | 410 - 52                          |
|  | OD Tube – (1/4" – 3")     | 480 - 52                          |
|  | Metric – (6 – 60 mm)      | 450 - 52                          |
| Temp Range of Viton Seals:<br>-20°C to 200°C |                           |                                   |
| *Copper Nickel<br>(70/30 CuNi)               | NPS – (1/4 " - 2 1/4")    | 270 - 15                          |
|  | OD Tube – (1/4" – 2 1/4") | 310 - 15                          |
|  | Metric – (6 – 60 mm)      | 290 – 15                          |
| Temp Range of Viton Seals:<br>-20°C to 200°C |                           |                                   |

*"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 Canada Limited of any modification or changes to the equipment in order to obtain a valid certificate."*

**Certificate No.** 13/60003(E3)  
**Issue Date** 14 November 2017  
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**Sheet** 2 of 3



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*The attached Design Appraisal Document No. 13/60003(E3) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 13/60003(E2) to which this extension should be attached.

|                        |                  |
|------------------------|------------------|
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| <b>Sheet</b>           | 3 of 3           |



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