



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Bridgestone Corporation
Address	1 Kashio-cho, Totsuka-ku, Yokohama, Kanagawa, 244-8510, Japan
Place of Production	Bridgestone Flowtech Corporation 1-3-1 Minami-Shinozaki, Kazo, 347-0017, Japan
Place of Production	Bridgestone Corporation Seki Plant : 20 Shinhasama, Seki, Gifu, 501-3923, Japan
Place of Production	Bridgestone Corporation Kumamoto Plant : 600 Kawasaki, Tamana, Kumamoto, 865-0007, Japan
Type	Flexible Hoses
Description	Flexible rubber hose assemblies Inner tube : Oil resistant synthetic rubber Reinforcement : Single or plural layers of wire braid and wire spiral Outer cover : Oil resistant and weather resistant synthetic rubber Coupling : Threaded (parallel & taper) and flanged
Trade Name	"PASCALART" (PA) series & "EPOQU" (EQ) series
Application	Marine

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Specified Standard	Part 5, Chapter 12, Section 7 of Lloyd's Register Rules for the Classification of Ships (July 2025) JIS B8363 Test Codes: JIS K6330, ISO 1402, ISO 6802, ISO 6803, ISO 15540 & ISO 15541
Ratings	<u>PA series</u> Sizes (Inside Dia.) PA07, PA10, PA14, PA21 & PA28 : 6.3 mm ~ 50.8 mm PA17 : 6.3 mm ~ 25.4 mm Maximum working pressure : 7.0 MPa ~ 28.0 MPa Service temperature Hydraulic oil : -40 °C ~ +100 °C Water : 0 °C ~ +50 °C <u>EQ series</u> Sizes (Inside Dia.) EQ17, EQ25 & EQ28 : 12.7 mm ~ 38.1 mm EQ21 & EQ31 : 12.7 mm ~ 50.8 mm Maximum working pressure : 17.0 MPa ~ 31.0 MPa Service temperature : -40 °C ~ +120 °C
Additional Tests	Pressure test, Burst test, Impulse test and Fire resistance test
Other Conditions	1. The use of flexible hoses should be restricted to short joining length only between various items of machinery and the permanent piping systems where some degree of flexibility is essential. 2. The flexible hoses should be fitted in readily visible positions. 3. Hose assemblies with couplings made of carbon steel are not to be used at temperatures below -10°C unless the material is normalized.

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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 Group Limited of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR21343505TA

The Design Appraisal Document LR26160046TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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