Certificate No: LR21343505TA
Issue Date: 16/05/2021
Expiry Date: 15/05/2026

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	Tokyo Nihonbashi Tower 13F, 2-7-1, Nihonbashi, Chuo-ku, Tokyo, 103-6014, Japan
Place of Production	Bridgestone Flowtech Corporation 1-3-1 Minami-Shinozaki, Kazo, Saitama, 347-0017, Japan
Place of Production	Bridgestone Corporation Seki Plant, 20, Shin-Sakoma, 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

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Yasushi Sawada

Lead Surveyor to Lloyd's Register Group Ltd
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Application Marine

Specified Standard Part 5, Chapter 12, Section 7 of Lloyd's Register Rules for the Classification of Ships (July 2020)
JIS B8363
Test Codes: JIS K6330, ISO 1402, ISO 6802, ISO 6803, ISO 15540& ISO 15541

Ratings

PA series
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

EQ series
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.

The valid reports of the audit assessment of the Production Quality Assurance system (PQA) are to be retained for each place of production.

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

Previous Version: 11/10030(E2)

The Design Appraisal Document LR21343505TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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