



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE

Certificate No. TA17027M

This is to certify that the undernoted product(s)/manufacturing process has/have been approved /type tested in accordance with the relevant requirements of "Rules for the Survey and Construction of Steel Ships" and "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".

This certificate is issued to

Manufacturer:	SHO-BOND MATERIAL CO., LTD.
Product description	Slip on Joint – Grip Type
Model:	316-Type, G-Type, GX-Type
Approval No.:	17FV103B
Valid until:	19 January 2022

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 20 January 2017.

Y. Shibata
General Manager
Machinery Department

• Particulars and conditions:

Model	Nominal Dia.	Design Press. (MPa)	Design Temp. (°C)	Casing Material	Kind of Fluid
316-Type	20A	1.6 ^{*1}	80(EPDM) 70(NBR)	SUS316	Fresh water Compressed air
	25A				
	32A				
	40A				
	50A	1.4 ^{*1}			
	65A				
	80A				
	100A				
125A	1.2 ^{*1}				
150A					
200A	1.0 ^{*1}				
G-Type	20A	1.6 ^{*2}	90(EPDM) 80(NBR)	SUS304	Fresh water Compressed air
	25A				
	32A				
	40A				
	50A				
	65A				
	80A	1.4 ^{*2}			
	100A				
	125A				
	150A				
	200A				
	250A				
300A					
350A	1.0				
400A	0.8				

*1. In case where the internal fluid is air, the design pressure is 0.7 MPa.

*2. In case where the internal fluid is air, the design pressure is 1.0 MPa.

• **Particulars and conditions:**

Model	Nominal Dia.	Design Press. (MPa)	Design Temp. (°C)	Casing Material	Kind of Fluid
GX-Type	20A	1.6 ^{*3}	90(EPDM)	SUS304	Fresh water Compressed air
	25A				
	32A				
	40A				
	50A				
	65A				
	80A				
	100A				
	125A				
	150A	1.3 ^{*3}			
200A					

***3. In case where the internal fluid is air, the design pressure is 1.0 MPa.**

• **Limitations:**

The installation of mechanical joints is to be in accordance with the manufacturer's assembly instructions and the requirements of 12.3.3, Chapter 12, Part D of the Society's Rules.

• **Documents:**

Drawing No.:NK15-20, NK15-21, NK16-04, NK16-05, NK16-06, NK16-09, NK16-10

Test Plan, Test Report

• **Type Approval Test:**

Tightness test, Vibration (fatigue) test, Burst pressure test, Pull-out test, Vacuum test,
Repeated assembly test

• **Notice:**

Any significant changes in design or construction of the above items may render this certificate invalid.

- The End -