



TYPE APPROVAL CERTIFICATE
No. MAC132119XT

This is to certify that the product identified below satisfies the requirements of the standard quoted under "Reference standard"

<i>Description</i>	Metallic flexible hoses
<i>Type</i>	KZ 100B
<i>Manufacturer</i>	KUZU FLEX METAL SAN VE TIC.AS BURSA SERBEST BLG
<i>Place of manufacture</i>	- kuzu flex ATA MAH.,SERBEST BOLGE, GELINCIK CAD. NO.1 GEMLIK 16600 BURSA TURKEY
<i>Reference standards</i>	Part C, Chapter 1, Section 10 of RINA Rules

Issued in **ISTANBUL** on **January 14, 2020**. *This Certificate is valid until* **November 3, 2021**

RINA Services S.p.A.

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE

No. **MAC132119XT**

Enclosure - Page 1 of 2

KZ 100B

AUTHORIZED ASSEMBLER : SITEF SERVICE SRL

Address: VIA A. DI SANTE - NUCLEO INDU.LE SANT'ATTO

Teramo - ITALY

TECHNICAL DOCUMENTATION EXAMINATION

- KUZUFLEX Industrial Hose Catalogue P.14, P.15
- RINA Approved Drawings No. ISMC1298, ISMC1299
- RINA Filed Drawings No. ISMC1263, ISMC1264, ... , ISMC1297
- RINA Test Report No. 2012XT89-01 issued on 09/05/2012 and 2016XT89-01 issued on 28/10/2016.

Materials/Components

Flexible hose : Stainless steel AISI 321 or AISI 316L

Braid : Stainless steel AISI 321, AISI 316L or AISI 304

Technical characteristics

Temperature range : from -200 to +550 °C

Maximum design pressure as per the following table :

Maximum design pressure at 20 °C (bar)

Nominal Diameter	Working Pressure (bar)
DN 6	150
DN 8	140
DN 10	100
DN 12	70
DN 16	65
DN 20	43
DN 25	49
DN 32	35
DN 40	38
DN 50	26
DN 65	25
DN 80	16
DN 100	10

For temperatures higher than 100 °C, the maximum design pressure is to be reduced by a factor ratio between the maximum allowable stress at 20 °C and the maximum allowable stress at the considered temperature.

TYPE APPROVAL CERTIFICATE

No. **MAC078316XT**

Enclosure - Page 2 of 2

KZ 100B

Fields of application

- sprinkler systems
- fuel oil systems
- lubricating oil systems
- fresh and sea water cooling systems
- sanitary water systems
- compressed air systems
- inert gas systems
- steam and condensed systems
- heating and cooling systems

Acceptance Conditions

The installation on board is to be made in accordance with the Manufacturer's instructions.

The acceptance of the a.m. products on board ship and other units classed with RINA is subject to the satisfactory outcome of testings as per the RINA Rules.

Hoses are to be marked with the maximum design pressure.

Remarks

None

ISTANBUL 14.01.2020