



Certificate no.:
TAP000030V

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Pipe Flange, Welded Connection

with type designation(s)
BPSAESR3, BPSAESR6

issued to

Boss Paslanmaz Hidrolik Baglanti Elemanlari San. ve Tic. Ltd.Sti
Istanbul, Türkiye

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.6 Piping systems
DNV-OS-D101 – Marine and machinery systems and equipment, Edition July 2021

Application:

Product(s) approved by this certificate is/are accepted for installation on vessels classed by DNV.

Type:	Temperature range:	Max. working press.:
BPSAESR3	-55°C to +400°C	100 bar to 350 bar
BPSAESR6	-55°C to +400°C	320 bar to 420 bar

Issued at **Høvik** on **2025-11-04**

This Certificate is valid until **2030-11-03**.

for **DNV**

DNV local unit: **Istanbul**

Approval Engineer: **Tobias Berntsen**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

The socket weld flanges are designed with O-ring seals in seal plate.
Flanges BPSAESR3 DN10 to DN125 drilled to ISO 6162-1
Flanges BPSAESR6 DN10 to DN80 drilled to ISO 6162-2

Materials:

Flange: 316L
Retain Ring: AISI 302
Bolt and nut: ISO898-1 Grade 10.9 min., SAE J429 Grade 8 min.

Application/Limitation

Flanges covered by this certificate shall not be installed in systems where pressure pulsations might occur.

Flag national authorities may have their own requirements for the products to be installed aboard ships flying their flag. Both the requirements of national authorities and those of the classification rules must be complied with.

Maximum working pressure:

Part No.	Size		Pressure Rating (bar)
	DN	inch	
BPSAESR310	10	3/8"	350
BPSAESR315	15	1/2"	350
BPSAESR320	20	3/4"	350
BPSAESR325	25	1"	320
BPSAESR332	32	1 1/4"	280
BPSAESR340	40	1 1/2"	210
BPSAESR350	50	2"	210
BPSAESR365	65	2 1/2"	175
BPSAESR380	80	3"	160
BPSAESR390	90	3 1/2"	160
BPSAESR3100	100	4"	160
BPSAESR3125	125	5"	100

Part No.	Size		Pressure Rating (bar)
	DN	inch	
BPSAESR610	10	3/8"	420
BPSAESR615	15	1/2"	420
BPSAESR620	20	3/4"	420
BPSAESR625	25	1"	420
BPSAESR632	32	1 1/4"	420
BPSAESR640	40	1 1/2"	420
BPSAESR650	50	2"	420
BPSAESR665	65	2 1/2"	320
BPSAESR680	80	3"	320

Type Approval documentation

Document No.	Rev.	Title
BS024050461	-	Tightness test & repeated assembly test
BS02405462	-	Burst test
BS02405463	-	Fire resistance test
-	-	GAP analysis report for SAE flanges ISO 6162
-	-	SAE Stainless 316L Socket Weld Flanges

Tests carried out

Tightness test, Repeated Assembly Test, Hydraulic Burst Pressure Test, Fire Resistance Tests.

Marking of product

For traceability to this type approval the products are to be marked with:

- manufacturer's name or trade mark
- type designation and size

Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results.

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>.