



Lloyd's
Register

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.

This certificate supersedes certificate number 91/20413(E5) issued on 14.11.2016 which is hereby cancelled.

This certificate is issued to:

PRODUCER	ARMATUREN-WOLFF Friedrich H. Wolff GmbH & Co. KG Oehleckerring 29 22419 Hamburg Germany
DESCRIPTION	Flange spring loaded quick opening or quick closing valves of straight or angle type, standard compact or bellow-sealed design, either rope-, hydraulically- or pneumatically activated
TYPES	AW 33005 to 34517, DN 15 - 250 AW 3320F to 3350F, DN 200 - 250
APPLICATION	As quick closing and opening valves in marine, offshore and industrial fields.
STANDARDS	Lloyd's Register Rules and Regulations for the Classification of Ships, 2016

Certificate No.	91 / 20413 (E6)
Issue Date	28 June 2017
Expiry Date	14 November 2021
Sheet	1 of 2

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS



LR031.1.2016.06

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RATINGS

Nominal diameter: DN 15 to DN 250
Quick closing valves type number: AW 33 X Y Z
Quick opening valves type number: AW 34 X Y Z

For X:	Body material:	Pattern:	Nom Pressure:
0	Rg. 5 (2.1096)	straight	PN 16
1	Rg. 5 (2.1096)	angle	PN 16
2	GS-C25 (1.0619)	straight	PN 40
3	GS-C25 (1.0619)	angle	PN 40
4	GGG 40.3 (0.7043)	straight	PN 16
5	GGG 40.3 (0.7043)	angle	PN 16

For Y: 0 - manual actuation
1 - (universal) hydraulic / pneumatic release
2 - pneumatic release (only for classic design)
For Z: 5 - regular design, fire safe (only for quick closing valves)
7 - bellows- sealed design (for quick closing and opening valves)
F - classic design, fire safe (only for quick closing valves)
Disc material : X20Cr13 or G-CuSn5ZnPb

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. ENS 20431-07, Issue No. 2, dated 28.06.2017 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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