

Type Approval Certificate



This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. 15 683 - 00 HH

Company Noske-Kaeser GmbH
Schnackenburgallee 47-51
22525 Hamburg, GERMANY

Product Description Pressure water-spraying fire-extinguishing system with 3% AFFF (foam/water drencher system [FDS])

Type HyFEx

Environmental Category None

Technical Data / Range of Application System consisting of HyFEx nozzles* and HyFEx proportioner**, water supply pump(s), foam concentrate, piping and valves.

Min. flow rate: 5 ltr/m2/min
Nozzle working pressure range: 5 to 12 bar
Foam concentrate: 3% AFFF

* Type approval certificate no. 15674-00 HH

** Type approval certificate no. 15681-00 HH

RANGE OF APPLICATION:

Fire extinguishing systems in machinery spaces acc. to FSS Code, Chapter 7, item 2.1, as amended by Res. MSC.217(82).

Test Standard Scope of testing being commensurate with or equivalent to MSC/Circ.1165

Documents - Noske-Kaeser type approval documentation reviewed with ref.-no. 33255/00
- WIS Munster: type approval incl. 1. addendum, approval no. 3/2002
- WIS Munster: trial report no. X 0213-2-A10681Y, extinguishing tests
- WTD 91: final test report no. E91-100/009/99, extinguishing tests

Remarks None

Valid until 2015-09-30

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Type Approval Symbol



File No. II.H.01

Hamburg, 2010-11-01

Germanischer Lloyd

Hanspeter Raschle
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Michael Kämpf
Michael Kämpf

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Certificate No. 15 674 - 00 HH

Company Noske-Kaeser GmbH
Schnackenburgallee 47-51
22525 Hamburg, GERMANY

Product Description Spraying nozzles

Type HyFEx 07, HyFEx 11, HyFEx 15, HyFEx 18, HyFEx 22

Environmental Category None

Technical Data / Range of Application
Nozzle material: stainless steel (1.4571)
Nozzle working pressure range: 5 to 12 bar
Max. installation height: 5 m (> 5m: second nozzle level required)
Spray angle: 130°

Nozzle type details:

HyFEx	Flow at 5 bar [l/min]	N-K Part No.
No. 07	7	3823 2857
No. 11	11	3823 2858
No. 15	15	3823 2859
No. 18	18	3823 2860
No. 22	22	3823 2861

RANGE OF APPLICATION:

Nozzles for use in water-spraying fire-extinguishing systems (deluge type).

Test Standard Scope of testing being commensurate with or equivalent to MSC/Circ.1165

Documents
- Noske-Kaeser type approval documentation reviewed with ref.-no. 33255/00
- WIS Munster: type approval incl. 1. addendum, approval no. 3/2002
- WIS Munster: trial report no. X 0213-2-A10681Y, extinguishing tests
- WTD 91: final test report no. E91-100/009/99, extinguishing tests

Remarks Belongs to type approval certificate no. 15683-00 HH.

Valid until 2015-09-30

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Hamburg, 2010-11-01

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This certificate is issued on the basis of "Guidelines for the Performance of Type Approvals Part 1, Procedure".

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Certificate No. 15 681 - 00 HH
Company Noske-Kaeser GmbH
Schnackenburgallee 47-51
22525 Hamburg, GERMANY

Product Description Proportioners for foam concentrates for fire fighting purposes

Type HyFEx - Foam Liquid Proportioner P1
HyFEx - Foam Liquid Proportioner P2

Environmental Category None

Technical Data / Range of Application CONTROL RANGES:

	Differential pressures (foam concentrate / water) [bar]	Foam concentrate flow [l/h]	
		Proportioner P1	Proportioner P2
range 1	0.10 - 0.95	75 - 1135	680 - 3330
range 2	0.22 - 2.10	125 - 1815	1020 - 4995
range 4	0.40 - 3.90	170 - 2270	1365 - 6660
range 8	0.90 - 8.80	250 - 3635	2045 - 9990

RANGE OF APPLICATION:
Foam/water fire extinguishing installations.

Test Standard Scope of testing being commensurate with or equivalent to MSC/Circ.1165

Documents - Noske-Kaeser type approval documentation reviewed with ref.-no. 33255/00
- WIS Munster: type approval incl. 1. addendum, approval no. 3/2002
- WIS Munster: trial report no. X 0213-2-A10681Y, extinguishing tests
- WTD 91: final test report no. E91-100/009/99, extinguishing tests

Remarks Belongs to type approval certificate no. 15683-00 HH.

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