



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.

Manufacturer	Dennis Nakakita
Address	,Pozuelo De, Calle Badajoz nº 2, Urb. La Cabaña, Alarcon-Madrid, 28223, Spain
Place of Production	Dennis Nakakita S.A. C/ Mencía s/n. Pol. Industrial Alces, Alcázar de San Juan, 13600, Spain
Type	Butterfly Valves
Description	Flanged, Wafer and Lug Type Butterfly Valves TYPE L & R Series Body Material: Stainless Steel , Carbon Steel, Aluminium Bronze, Bronze, Spheroidal and Grey Cast Iron Disk Material: Steel, Stainless Steel , Nodular Iron, Bronze and Aluminium Bronze Stem Material: Stainless Steel, Bronze Seat Material : Nitrile Rubber, EPDM, VITON & PTFE
Trade Name	L & R Series ,Body Material: Stainless Steel , Carbon Steel, Aluminium Bronze, Bronze, Spheroidal and Grey Cast Iron ,Disk Material: Steel
Application	Marine, Offshore and Industrial Piping Systems

Type Approval Certificate

Specified Standard Lloyd's Register's Rules and Regulations for the Classification of Ships;
Lloyd's Register's Rules and Regulations for the Classification of Mobile Offshore Units;
Lloyd's Register's Rules and Regulations for the Classification of Fixed Offshore Installations;
DIN 3230; ISO 5208; API 598

Ratings

Max. pressure rating (PN):	L Series:	10 bar
	R Series:	25 bar
Nominal diameter(DN):	40 to 1000	
Temperature range depending on the seat material		

Other Conditions Use in marine piping systems and locations where fire endurance test is not required on vessels Classed by LR and subject to the following limitations:

1. Seawater and freshwater cooling systems.
2. Water ballast and freshwater pumping systems.
3. Cargo oil lines on tankers.
4. Bilge suctions for holds in bulk carriers (only when fitted in a pipe tunnel and in association with a non- returned valve).
5. Ship side valves (open/shut indicators to be fitted & the manufacturer's certificate validated by LR for materials equal to or less than 500 mm nominal diameter will be accepted in lieu of LR's materials certificate).
6. As suction valves on double bottom oil fuel tanks (only when located in a closed pipe tunnel or duct keel).
7. As pump suction valves from the main bilge line (only where the butterfly valve is located in the immediate vicinity of the pump and fitted in conjunction with a metal non return valve which is to be on the bilge main side of the butterfly valve).



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Actuators and drive train are outside the scope of this type approval certificate. Actuators should be capable and functionally tested at the specified design parameters and retained fluid.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 97/00180(E4)

The Design Appraisal Document LR2375376TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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