



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. P-12316  
This Certificate consists of 4 pages

*This is to certify that the*  
**Butterfly Valves**  
*with type designation(s)*  
**Series 30, 31 and S31U**

*Manufactured by*  
**BRAY CONTROLS (UK) Ltd.**  
Inchinnan PA4 9RE, United Kingdom

*is found to comply with*  
Det Norske Veritas' Rules for Classification of Ships  
Det Norske Veritas' Rules for Classification of High Speed and Light Craft.  
Det Norske Veritas' Standards for Certification 2.9 No. 5-794.40

*Application*  
The valves may be used for the following services: Fresh Water and Sea Water Cooling, Sea Water Inlets, Ballast Water, Bilge, Sanitary, Mud, Cargo Oil Transfer, Sanitary, Refrigerated Sea Water, Brine and Compressed Air (limitations see certificate)

Temperature range:	dep. on seat and body material, see cert
Max. working press.:	dep. on size and body material, see cert.
Sizes:	DN 50, 65, 80, 100, 125, 150, 200, 250, 300, 350, 400, 450 and 500 mm

*Place and date*  
Høvik, 2006-09-29  
for DET NORSKE VERITAS AS

*Hanne Anita Hjerpetjønn*  
Hanne Anita Hjerpetjønn  
Head of Section



*Local Office*  
DNV Glasgow

*This Certificate is valid until*  
2010-06-30

*Per Jørgen Tviberg*  
Per Jørgen Tviberg  
Surveyor

Notice: 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.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.