



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. P-12643

This Certificate consists of 3 pages

*This is to certify that the*  
**Mechanically Operated Control Valve**  
*with type designation(s)*  
**Hydrocontrol R, Hydrocontrol A, Hydrocontrol FR,  
Hydrocontrol F**

*Manufactured by*  
**F.W. Oventrop GmbH & Co. KG**  
**OLSBERG, Germany**

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

### *Application*

The valves may be used in the following systems: Potable Water (only Hydrocontrol R, DN15-32) Heating and Chilled Water

Type:	Temperature range:	Max. working press.:	Sizes:
Hydrocontrol R	0°C to 150°C	16 bar / 25 bar (see cert.)	DN10 - 50 mm
Hydrocontrol A	0°C to 150°C	16 bar / 25 bar (see cert.)	DN10 - 50 mm
Hydrocontrol FR	0°C to 150°C	16 bar	DN50 and 200 mm
Hydrocontrol F	0°C to 150°C	16 bar	DN20 - 50 mm

*Place and date*  
Høvik, 2007-12-07

for DET NORSKE VERITAS AS

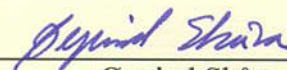


Hanne Anita Hjerpetjønn  
Head of Section



Local Office  
DNV Essen

*This Certificate is valid until*  
2011-12-31



Øyvind Skåra  
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.





Cert. No.: P-12643  
File No.: 794.70  
Job No.: 262.1-004618-1

## Product description

Double regulating and commissioning valves.

Valve body materials and end connections:

Type	End connection	Body material
Hydrocontrol R	Male and female threads	Bronze, B-Norm 567 (acc DIN EN 1982 with restrictions acc. DIN 50930-6 )
Hydrocontrol A	Male and female threads	
Hydrocontrol FR	Flanged	
Hydrocontrol F	Flanged, PN16	Cast Iron, EN-GJL-250 acc. DIN EN 1561

## Application/Limitation

Each product/delivery is to be accompanied by the following documents:

- For valves delivered under this type approval, DNV product certificates are required for valves with DN > 100 mm and PN > 16 bar. For other valves manufacturer's certificate may be accepted.
- Test reports for material used in valve bodies

## Type Approval documentation

- DNV Survey report ESN06553 dated 2003-03-18
- Manufacturers catalogue: "Technical Information Hydrocontrol R" and "Technical Information Hydrocontrol F and FR"
- Drawings: 1060100, 1060103, 106000311r, 106010321, 106010324, 1060104, 106000411r, 106010421, 1060106, 106000611r, 106010621, 1060108, 106000811r, 106010821, 106010824r, 106010824, 1060110, 106001011r, 106011021, 106011024r, 106011024, 1060112, 106001211r, 106011221, 106011224R, 106011224, 1060116, 106001611R, 106011611, 106011624R, 106011624, 1060203, 1060204, 1060206, 1060208, 1060210, 1060212, 1060216, 1060303, 1060304, 1060306, 1060308, 1060310, 1060312, 1060316, 1060503, 106050311R, 106050321, 1060504, 106050411R, 106050421, 1060506, 106050611R, 106050621, 1060508, 106050811R, 106050821, 1060510, 106051011R, 106051021, 1060512, 106051211R, 106051221, 1060516, 106051611R, 106051611, 1060803, 1060804, 1060806, 1060808, 1060810, 1060812, 1060816, 1061004, 165900411, 1061006, 165900611, 1061008, 165900811, 1061010, 165901011, 1061012, 165901211, 1061016, 165901611, 1062556+, 1062356, 106235611R, 106235611, 10623563, 106235612R, 106235612, 1062646, 106254631R, 106254631, 1062647, 106254731R, 106254731, 1062648, 106254831R, 106254831, 1062649, 106254931R, 106254931, 106264925, 1062650, 106255031R, 106255031, 1062946, 165924631, 1062947, 165924731, 1062948, 165924831, 1062949, 165924931, 1062950, 165925031, 1688204, 1688206, 1688208, 1688210, 1688212, 1688272, 1688273, 1688274, 1688275, 1688276, 1688304, 1688306, 1688308, 1688310, 1688312, 1688372, 1688373, 1688374, 1688375, 1688376, 1688450, 1688470
- DNV Retention Survey report dated 2007-11-29

*Cyphor*



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### Tests carried out

Burst test of valve body.

### Marking of product

For traceability to this Type Approval the valves are to be marked:

- Manufacturers name or trademark
- Type designation

### Certificate retention survey

For the retention of the Type Approval, the DNV-surveyor shall perform a survey - every second year and before the expiry date of this certificate - to verify that the conditions for the type approval are complied with.

END OF CERTIFICATE

*Ogthar*