



Certificate of Type Approval (RQS)

This is to certify that NIL-COR, LLC
has met the requirements of ABS Product Type Approval for
Valves, FRP Ball & Butterfly

Model Name(s): Nil-Cor Series 300M, 310M, 410M, 500M, and 610M

Presented to:

NIL-COR, LLC
12241 Rockhill Ave. N.E.
Alliance
Ohio 44601
United States of America

Intended Service:

Piping systems as listed in 4-6-3/Table 1 of the 2004 ABS Rules for Building and Classing Steel Vessels, in locations where no fire endurance test is required.

Description:

Series 300M: Graphite-reinforced vinylester body. Flanged Ball Valves - Sizes 1" - 6" Ball Check Valve - Size 1" - 4" Wafer Butterfly Valves - Size 3" - 12" Full Face Wafer Butterfly Valves - Size 3" - 8" Lug Butterfly Valves - Size 3" - 8" Series 310M: Fiberglass - reinforced vinylester body. Flanged Ball Valves - Sizes 1" - 6" Ball Check Valve - Size 1" - 4" Wafer Butterfly Valves - Sizes 3" - 12" Full Face Wafer Butterfly Valves - Size 3" - 8" Lug Butterfly Valves - Size 3" - 8" Series 410M: Fiberglass - reinforced polysulfone body. Flanged Ball Valves - Sizes 1" - 4" Ball Check Valve - Size 1" - 4" Series 500M: Graphite fibre-polyphenylene sulfide body. Flanged Ball Valves - Sizes 1" - 4" Series 610M: Fiberglass - reinforced epoxy body. Flanged Ball Valves - Sizes 1" - 6"

Ratings:

Temperature limits (-)50oF to 250oF (see also service restrictions) Ball Valves & Ball Check Valves: 1", 1 1/2", 2" Dia. - Max Working Pressure - 200psig 3" Dia - Max Working Pressure - 125psig 4" - 6" Dia - Max Working Pressure - 90 psig Butterfly Valves 3"-6" Dia. - Max. Working Pressure - 150 psig 8"-12" Dia. - Max. Working Pressure - 80 psig

Service Restrictions:

Unit Certification is not required for this product (hydrotest certificate to be submitted upon request). 1. Usage limited to applications where "no fire endurance test required" by Table 4-6-3/1 of the ABS Steel vessel Rules and is to be fitted on only open decks and within tanks, cofferdams, void spaces, pipe tunnels and ducts as no fire endurance test or flame spread test has been carried out in accordance with 4-6-3/5.11 and 4-6-3/5.13 of the ABS Steel Vessel Rules AND within the specific system's restrictions. 2. Not to be used in firefighting systems. 3. Manufacturer's chemical resistance guide is to be referenced for chemical applications and temperature limits. 4. Wafer butterfly valves are not to be used for connections to the vessel shell. 5. ONLY Series 300 Graphite-Reinforced Ball & Butterfly Valves are considered conductive (SV Rules 4-6-3/7.7) and can be used in areas classified as 'hazardous' per SV Rules 4-8-4/27 and MODU Rules 4-1-3/1. All other products are to be used only where 'non-conductive' components are required (or in 'non-hazardous areas').

Comments:

All valves are to be hydrostatically tested by the manufacturer to the pressure required by the pressure rating of the valve. The certificate of test is to be submitted upon request.

Notes / Documentation:

Term of Validity:

This product/model is covered under Product Design Assessment (PDA) Certificate # 04-HS455070-PDA, dated 03/Oct/2004. This PDA Certificate expires Oct of 2009. It will remain valid for the 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

ABS Rules:

2004 Steel Vessel Rules 1-1-4/3.7, 4-6-3/5.15 and 4-6-3/7.7, 4-6-3/5.1, 4-6-3/5.5, 4-6-3/5.7, 4-6-3/5.9, 4-6-2/5.9.4

National Standards:


International Standards:

Government Authority:

EUMED:

Others:

None



Manager, ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.