



Lloyd's  
Register

## Type Approval Certificate

This is to certify that the undernoted product has been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

<b>PRODUCER</b>	Walter Frank & Sons Ltd
<b>PLACE OF PRODUCTION</b>	Hightown Road, Cleckheaton, West Yorkshire, BD 19 5JT United Kingdom
<b>DESCRIPTION</b>	Pressure Reducing Valves
<b>TYPE</b>	<b>PRV 9i (Element Type) &amp; Series 52;</b> Right Angle, Oblique, Bib- Nose and Horizontal Patterns <b>PRV 9i (Compact Type);</b> Bib- Nose Pattern
<b>APPLICATION</b>	Marine/ Offshore/ Industrial
<b>SPECIFIED STANDARDS</b>	Lloyd's Register's Rules and Regulations for the Classification of Ships. ASTM D471 & ASTM D572
<b>RATING</b>	Max. Inlet Pressure (bar); 25 Outlet Pressure (bar); 3.5 - 9 Temperature rating based on seat material (°C); 100 Inlets & outlets nominal diameter (inch); 1.5 - 4

Body and cover material	Gunmetal (LG2 or LG4 BS1400), Aluminium Bronze (CA 104) or equivalent and Stainless Steel
Stem	Bronze
Seal material	Nitrile
Hand wheel	Cast Iron, polyester powder coated

<b>Certificate No.</b>	17/ 00019
<b>Issue Date</b>	08 January 2017
<b>Expiry Date</b>	07 January 2022
<b>Sheet</b>	1 of 2



M.H.M.Rifa  
Southampton Technical Support Office  
Marine & Offshore Lloyd's Register

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

**OTHER CONDITIONS**

Valves are to be selected, installed and tested in accordance with the manufacturer's instructions and Lloyd's Register's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12.

Due care should be taken not to over stress the fittings when tightening the bolts.

*"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"*

*The Design Appraisal Document No. 17/00019 and its supplementary Type Approval Terms and Conditions form part of this Certificate*

**Certificate No.** 17/ 00019  
**Issue Date** 08 January 2017  
**Expiry Date** 07 January 2022  
**Sheet** 2 of 2



M.H.M.Rila  
Southampton Technical Support Office  
Marine & Offshore Lloyd's Register

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



**Lloyd's Register**

**Lloyd's Register EMEA (London Office)**

**LONDON DESIGN SUPPORT OFFICE**

71 Fenchurch Street, London, EC3M 4BS

Telephone 020 7709 9166 Fax 020 7488 4796

Email [tad@lr.org](mailto:tad@lr.org)

Page 1 of 2
Document number 17/00019
Issue number 1

**DESIGN APPRAISAL DOCUMENT**

Date 08 January 2017	Quote this reference on all future communications SOUTSO/ENG/TA/MR/WP27865204
-------------------------	--

**LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2015.**

**Issued to: Walter Frank & Sons Ltd**

**for: Pressure Reducing Valves, Types PRV9i & Series 52**

**TYPE APPROVAL CERTIFICATE No. 17/00019**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2015 and this Design Appraisal Document forms part of the Certificate.

**ADDITIONAL APPROVAL DOCUMENTATION**

Application Checklist (Appendix to Form 2502TA/2502TA MR)	15-Nov-2016
Inspection and Surveillance of Production Facilities: Control No.LIV-16001365	04- Jan-2017
Quality Management System LRQA; LRQ 0850868	
FM Approval Report; Project No: 3053295	07-Dec-2015
FM Approval Report; Project No: 3048380	22-Feb-2013
FM Certificate of Compliance; 3053295	07-Dec-2015
FM Certificate of Compliance; 3048380	22-Feb-2013

<b>PRV9i (Element Type);</b>
PRV 9i Element GA (6" Hand wheel); Code No. 5500G91; Drg. No. 5507034-B
Bill Of Materials; Code No. 5500G91; Drg. No. 5507034-B, Iss-E
PRV9i (Element Type) Data Sheet; Ref. PRV 9i/1
PRV9i Element Type Inspection & Test Procedure; Ref. PRV 9i /2
PRV9i Element Type Installation, Setting and Operating Procedures; Ref. PRV9i /3
PRV9i Element Type Maintenance Procedures Including Recommended Spares; Ref. PRV9i / 4
<b>PRV9i (Compact Type);</b>
PRV 9i Compact GA Inlet Flanged x Inst Female; Drg. No. 58253026-A
Bill Of Materials; Drg. No. 58253026-A
PRV9i (Compact Type) Data Sheet; 58/1
PRV9i (Compact Type) Inspection & Test Procedure; 58/2
PRV9i (Compact Type) Installation, Setting and Operating Procedures; 58/3
PRV9i (Compact Type) Maintenance Procedures Including Recommended Spares; 58/4
<b>Series 52;</b>
Series 52 Valve Sub-Assembly; Drg. No. 52248001-A
Bill Of Materials; Drg. 52248001-A
Rt Ang Valve I/L Flanged O/L 2.5" INST Female BS336, Drg. No. 52248011-A
Oblique Valve Body I/L 3" ASA150 O/L 2.5" NPT Female, Drg No. 52249013-A
Bib Nose Valve I/L 2.5" INST Female BS336, Drg. No. 52253015-A
Bib Nose Valve O/L 2.5" INST Female BS336, Drg. No. 52254017-A
Series 52 Data Sheet; Ref. Pr. 52/1
Series 52 Inspection & Test Procedure; Ref. Pr 52/2
Series 52 Installation and Operating Procedures; Ref. Pr 52/3
Series 52 Maintenance Procedures Including Recommended Spares; Ref. Pr 52/4

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

This is a copy of an electronic document. In the event of any conflict or ambiguity between the copy and the electronic document, which is retained and published by Lloyd's Register, the original electronic and certified version shall always prevail.



**Lloyd's Register**

**Lloyd's Register EMEA (London Office)**

**LONDON DESIGN SUPPORT OFFICE**

71 Fenchurch Street, London, EC3M 4BS

Telephone 020 7709 9166 Fax 020 7488 4796

Email tad@lr.org

Page 2 of 2
Document number 17/00019
Issue number 1

**DESIGN APPRAISAL DOCUMENT**

Date 08 January 2017	Quote this reference on all future communications SOUTSO/ENG/TA/MR/WP27865204
-------------------------	--

**Supplementary Type Approval Terms and Conditions**

*Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.*

*Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.*

*Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.*

*Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.*



**M.H.M.Rila,**  
**Specialist, Engineering Systems**  
**Southampton TSO, Lloyd's Register EMEA**