

ABS GROUP LIMITED THE PRESSURE EQUIPMENT DIRECTIVE EC TYPE-EXAMINATION CERTIFICATE

CERTIFICATE NUMBER:

0528-2002-002-PED-T

OFFICE:

LONDON

This is to certify that ABS Group Ltd, a Notified Body appointed under the requirements of the Pressure Equipment Directive 97/23/EC and The Pressure Equipment Regulations 1999 of the United Kingdom, did undertake an EC Type Examination of the subject equipment in accordance with the requirements of the said Directive and Regulations. The equipment was found to be in compliance.

This certificate is issued to:

Circle Seals Controls, Inc.

Address:

2301 Wardlow Circle

Corona CA 92880 United States

Description of the equipment:

5300 Series Relief Valves

Type:

Safety Relief Valves

Standard:

ASME/ANSI B31.1

Maximum allowable pressure:

3074 psi (211.9 bar): Gas Service 9850 psi (679.13 bar): Liquid Service:

5300-4-BB, 5300-4-G1G1 & 5300-6 BB brass models only

10500 psi (723.95 bar): Liquid Service:

5300-8-BB brass model only

8450 psi (58.26 bar): Liquid Service: 5300-12-BB brass model only

9000 psi (620.53 bar): Liquid Service:

5300-2-PP brass model only

9200 psi (634.32 bar): Liquid Service:

5300-4-PP brass model only

10500 psi (723.95 bar): Liquid Service:

5300-4-BB, 5300-6-BB, 5300-8-BB, 5300-12-BB &

5300-4-G1G1 stainless steel models only 10100 psi (696.37 bar): Liquid Service: 5300-2-PP stainless steel model only 10325 psi (711.88 bar): Liquid Service: 5300-4-PP stainless steel model only

Maximum allowable temperature:

350°F (176.67°C) (Stainless Steel)

100.4°F (38°C) (Brass)

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Attachment B - Rev 0

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This certificate is granted subject to the condition that it is understood and agreed that nothing herein contained shall be deemed to relieve any designer, manufacturer, seller, supplier, repairer or operator of any warranty, express or implied and ABS Group Ltd liability shall be limited to the acts or omissions of its employees, agents and subcontractors. Under no circumstance whatsoever shall ABS Group Ltd be liable for any injury or damage to any person or property occurring by reason of negligent operation or any defect in materials, machinery, equipment or other items other than defects ascertainable by normally accepted testing standards, and only upon those items actually inspected by ABS Group Ltd and which are covered by this certificate or report.



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Minimum allowable temperature:

-20°F (-29°C)

Capacity / Nominal Diameter:

5300-BB Series:

5300-4, 5300-6, 5300-8 & 5300-12

5300-PP Series: 5300-2 & 5300-4

5300-G1G1 Series:

5300-4

Category under the Regulations:

IV

Prototype Examined:

Equipment:

Relief Valve

Type:

PED5349B-2PP-A

Serial Number:

1

ABS Group Ltd. report numbers:

2002-6260-H

Maximum allowable pressure:

1525 psi

Maximum allowable temperature:

350°F brass

100°F stainless steel

Minimum allowable temperature:

-20°F

Capacity / Nominal Diameter:

3/4" NPT Male inlet

Technical Documents Reviewed:

Refer to Attached Schedule

Name of representative:

Michael Cooper

Signature: MlCoeps

Date of Issue:

17 December 2002

Date of Expiry:

16 December 2012

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ABS GROUP LIMITED THE PRESSURE EQUIPMENT DIRECTIVE SCHEDULE TO TYPE EXAMINATION CERTIFICATE

REFERENCE NUMBER:

11112069

DATE: 17 December 2002

Technical Documents Reviewed:

Technical Documentation CheckSheet

5300 series Relief valves Summary Page

Catalogue Pages Stress Calculations

PED rating

Operating & Installation Instructions

Hazard Analysis No. 500

5300-*** 5300-4BB

5300-6BB

5300-8BB

5300-12BB

5300-16BB 5300-8JJ

5300-4LL

5300-2PP

5300-4PP

5300-8VV 5300-4G1G1

20004 Poppet

26191 Poppet

12530 Body

20000 Body

20010 Body

20011 Body

20012 Body

20014 Body

20015 Body

20020 Body 20022 Body

20024 Poppet

26190 Poppet

26902 Body

41552 Body

PED5300 sheet 1

PED5300 sheet 2

National Board Test Report 16314A Particular Material Appraisal: ASTM B16

Particular Material Appraisal: ASTM A479 316

TSZ-105-99-P02 Check Sheet A

Rev A

02/07/02

Rev B

Rev C

Rev D

Rev C

Rev C

02/07/02

Rev A

Rev D

Rev F

Rev C Rev C

Rev B

10/12/90

9/9/81

Rev A

11/8/94

9/9/81

2/1/85 5/5/82

Rev B

8/11/89

99/08/12

Rev A

98/03/30

10/19/92

02/07/03

02/05/06

02/05/06

13 December 2002 16 October 2002

16 October 2002

M. H. Cooper For ABS Group Ltd.