



Lloyd's
Register

Type Approval Certificate

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

This certificate is issued to:

PRODUCER Parker Hannifin Manufacturing Srl

PLACE OF PRODUCTION Via GB Pirelli 6
22070 Veniano (Co)
Italy

DESCRIPTION Fire and oil resistant synthetic rubber four or six wire spiral reinforced flexible hydraulic hoses, with glass fibre sleeve for fire protection, outer steel corrugated sleeve for mechanical shock protection, connected with Parker proprietary crimp fittings.

TYPE H31 BOP, H29 BOP & R35 BOP

APPLICATION For oilfield Blowout Preventer hydraulic control lines

STANDARD API 16D 2nd Edition: Specification for Control Systems for Drilling Well Control Equipment and Control Systems for Diverter Equipment

RATINGS

Type	Nominal diameter [mm]	Max. Working Pressure [bar]
H31 BOP-8	12	420
H31 BOP-12	20	420
H29 BOP-16	25	350
H29 BOP-20	32	350
R35 BOP-24	40	350
R35 BOP-32	50	350

Temperature Range [°C]: -40 to 100

Certificate No. 14/20016

Issue Date 07 April 2014

Expiry Date 06 April 2019

Sheet 1 of 2


Torsten Schröder
Hamburg Technical Support Office
Lloyd's Register EMEA

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

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"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. and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	14/20016
Issue Date	07 April 2014
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Sheet	2 of 2

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Marine Design Appraisal Document

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E-mail: hamburg-technical-support@lr.org

Date
07 April 2014

Please quote this reference number on all future communications
HPC 1461020/30620-14/DS/TS/MCG

**THE LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002
ISSUED TO: PARKER HANNIFIN MANUFACTURING S.R.L.
FOR: FLEXIBLE HOSES, TYPES H31 BOP; H29 BOP AND R35 BOP
TYPE APPROVAL CERTIFICATE NO. 14/20016**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Form LR2571	Application for Type Approval	01.04.2014
-	BOP Hose construction	-
-	BOP System Assembly Process	-
Bul/4480-B43/JK	Blowout Preventer Hose System and Hose Assemblies Parker Bulletin	01.11.2013
-	Specification HS-H29	23.06.2006
-	Specification HS-H31	23.06.2006
-	Specification HS-R42	07.05.2007
-	Compliance declaration of Parker for hoses R35 –R42, sizes 24-32	31.03.2014

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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TEST REPORTS

-	LR Surveillance visit report	05.11.2013
-	Burst pressure tests according to ISO 1402 and API 16D for hose assemblies type Parker BOP-H31-8, BOP-H29-16 & BOP-R35-32 carried out at Parker and witnessed by LR Surveyor	05.11.2013
1445.0AE0200/13	Fire test according API 16D-§10.1.2 Hose Assembly type H31TC-8 BOP at LAPI Laboratorio Prevenzione Incendi S.p.A. in Prato	25.10.2013
549.0AE0200/13 Rev.1	Fire test according API 16D-§10.1.2 Hose Assembly type H29 BOP size 16 at LAPI Laboratorio Prevenzione Incendi S.p.A. in Prato	05.05.2013
1446.0AE0200/13	Fire test according API 16D-§10.1.2 Hose Assembly type R35TC-32 BOP at LAPI Laboratorio Prevenzione Incendi S.p.A. in Prato	25.10.2013

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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 LR Type Approval System Procedure.

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Subject: Pipe and Pipe Couplings
Product: Flexible Pipe Couplings and Hoses

Description of Product		Application	Remarks	Cert. No.																					
Producer/ Licence No.	Type				Details of Approval																				
Parker Hannifin Manufacturing Srl Via GB Pirelli 6 22070 Veniano (Co) Italy	H31 BOP size 8-12 H29 BOP size 16-20 R35 BOP size 24-32	Fire and oil resistant synthetic rubber four or six wire spiral reinforced flexible hydraulic hoses, with glass fibre sleeve for fire protection, outer steel corrugated sleeve for mechanical shock protection, connected with Parker proprietary crimp fittings.	For oilfield Blowout Preventer hydraulic control lines	Expiry Date: 06 April 2019																					
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