

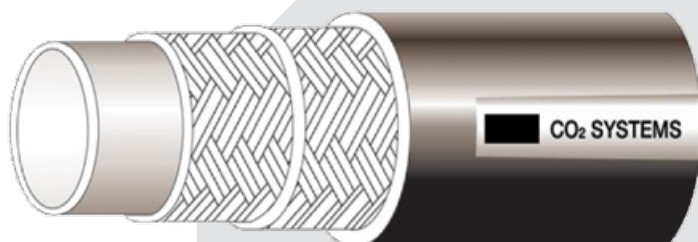
GENERAL CONSTRUCTIONS • IFAISTUS
OMIROS TSAKIROGLOU & CO.

CO₂ HOSES



Thermoplastic Hoses CO₂ System Series

Created for CO₂ fire extinguishing systems at medium pressure, in marine environments.



Thermoplastic CO₂ hoses, certified by LR for ten years replacement.



Type Approval Certificate by
for complete hose assembly with end fittings

- Marked with IMO number and Date of Production.
- Type approval Certificate including Pressure Test, Cold Bend Test, Leakage Test, Visual and Dimensional Inspection and Burst Pressure Test at -60oC.



Lloyd's Register

Type Approval Certificate Extension

This is to certify that Certificate No. 11/00039 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER ZEC SpA

PLACE OF PRODUCTION Via Lungotevere 11
43032 Cortemaggiore (PR)
Italy

DESCRIPTION Thermoplastic hose consisting of an inner core of thermoplastic polymer, polyester fibre reinforcement and a polyurethane outer cover, with end fittings.

TYPE OL7 series

APPLICATION As short joining lengths of flexible hose to accommodate relative movements between permanent pipes in CO₂ fire fighting systems.

As short joining lengths of flexible hose to accommodate relative movements between permanent pipes in hydraulic oil systems, in locations where a source of ignition is not present.

SPECIFIED STANDARDS Lloyd's Register's Rules and Regulations for the Classification of Ships
SAS E17/2010

Certificate No. 11/00039(E1)

Issue Date 18 July 2012

Expiry Date 7 August 2016

Sheet 1 of 2

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

F. F. Moynsey
London Design Support Office
Lloyd's Register EMEA

Lloyd's Register, 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 Group". The Lloyd's Register Group assumes no responsibility and shall not be liable in any manner for any loss, damage or expense caused by reliance on the information or advice in this document or for any loss, damage or expense caused by reliance on the information or advice in this document or for any loss, damage or expense caused by reliance on the information or advice in this document or for any loss, damage or expense caused by reliance on the information or advice in this document.

Lloyd's Register

RATINGS

CO ₂ systems: Hose type	Internal diameter (Inch)	Max. working pressure (bar)
OL7271**	3/16	210
OL7271**	1/4	200
OL7471**	5/16	190
OL7671**	3/8	175
OL7771**	1/2	140
	5/8	105

Hydraulic oil systems: Hose type	Internal diameter (Inch)	Max. working pressure (bar)
OL7271**/OL7200**	3/16	210
OL7271**/OL7200**	1/4	200
OL7471**/OL7400**	5/16	190
OL7671**/OL7600**	3/8	175
OL7771**/OL7700**	1/2	140
OL7871**/OL7800**	5/8	105
OL7971**/OL7900**	3/4	70
	1	70

Note: The last two digits of the hose type denote the colour of the outer cover.

OTHER CONDITIONS

Use of the hydraulic hoses in marine applications is limited to these locations where a fire safe hose is not required.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimens 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 attached Design Approval Document No. 11/00039(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 11/00039 to which this extension should be attached.

Certificate No. 11/00039(E1)

Issue Date 18 July 2012

Expiry Date 7 August 2016

Sheet 2 of 2

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

F. F. Moynsey
London Design Support Office
Lloyd's Register EMEA

Lloyd's Register, 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 Group". The Lloyd's Register Group assumes no responsibility and shall not be liable in any manner for any loss, damage or expense caused by reliance on the information or advice in this document or for any loss, damage or expense caused by reliance on the information or advice in this document or for any loss, damage or expense caused by reliance on the information or advice in this document or for any loss, damage or expense caused by reliance on the information or advice in this document.

General Constructions Ifaistos

ΗΦΑΙΣΤΟΣ

ΕΠΕΞΕΛΕΚΤΙΚΕΣ ΚΑΤΑΣΤΑΣΕΙΣ
ΕΠΙΧΕΙΡΗΣΕΩΝ

ΚΑΤΑΣΤΑΣΕΙΣ ΓΙΑ ΤΗΝ ΕΚΠΟΡΕΥΣΗ
ΤΩΝ ΑΕΡΙΩΝ ΚΑΙ ΤΩΝ ΑΕΡΑΙΩΝ ΜΕΣΩΝ

Burst Pressure

Operator:		Customer	
Date		Description / P.N	
Duration	1 Min	Invoice No	
Pressure	680,0 Bar	Temperature	-67 °C
Vessel		IMO No	

Pressure Diagram

Time (min)	Pressure (Bar)
0.0	0
0.1	0
0.2	0
0.3	0
0.35	0
0.4	50
0.5	250
0.6	450
0.7	600
0.75	650
0.8	100
0.85	0

Around the world, but close to you.



45, Methonis str., 18545
Piraeus, Greece

Tel: +30 210 46 15 699,
+30 210 46 28 964

Fax: +30 210 46 14 078

Email: info@ifaistus.gr
sales@ifaistus.gr

- FULLY EQUIPPED WORKSHOP
- CERTIFIED HOSES FOR CO₂ SYSTEMS
- H.P. RUBBER HOSES – METALLIC HOSES
- INOX FLEXIBLE HOSES
- H.P. METALLIC TUBES
- FLEXIBLE CABLES
- MARINE SPARE PARTS
- SPECIAL CONSTRUCTIONS UPON ORDER