

# APPROVAL CERTIFICATE

DNV·GL

This is to certify, that the undernoted products have been approved in accordance with the relevant requirements of the DNV GL Approval System.

Certificate No.	<b>94 894 - 10 HH</b>
Company	<b>Festo AG &amp; Co. KG</b> <b>Ruiter Straße 82</b> <b>73734 Esslingen, GERMANY</b>
Product	<b>PNEUMATIC COMPONENTS</b> <b>COMPRESSED AIR SERVICE UNITS</b>
Type	<b>FILTER REGULATOR LFR-...-D-..., FILTER LF-...-D-..., FILTER/PRESSURE</b> <b>REGULATING VALVE/LUBRICATOR FRC-...-D-..., LUBRICATOR LOE-...-D-...</b>
Technical Data / Application	<b>RANGE OF APPLICATION</b>  <b>The above mentioned cylinders are approved for compressed air systems belonging to pipe class III under consideration of the GL Rules for Classification and Construction I. Ship Technology, Part 1, Chapter 2, Section 11 as applicable.</b>  <ul style="list-style-type: none"> <li>• The selection of the products for the corresponding service and the right installation are to be in accordance with the instructions of the manufacturer.</li> </ul>
Approval Standard	<ul style="list-style-type: none"> <li>• <b>GL- Rules I-1-2 Machinery Installation, Section 11: 2009, VI-7-8 Test Requirements for Components and Systems of Mechanical Engineering: 2013.</b></li> </ul>
Documents	<ul style="list-style-type: none"> <li>• <b>Test Report No.: FN 942025-2, dated: 1997-04</b></li> <li>• <b>Technical Data and Specifications according to Catalogue FESTO: <a href="http://www.festo.com/cat">www.festo.com/cat</a> (catalogue in various languages is constantly updated)</b></li> <li>• <b>ISO 9001:2008, dated: 2013-11-13</b></li> <li>• <b>DNVGL-Ref-No.: 15-003948</b></li> </ul>
Remarks	<ul style="list-style-type: none"> <li>• <b>TECHNICAL DATA see page 2</b></li> </ul>

Valid until **2020-07-07**  
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 File No. **XI.B.07**  
**Hamburg, 2015-06-02**

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## TECHNICAL DATA

Type	LFR-D	LF-D
Connection	G1/8 to G1	
Press. Reg. Range [bar]	0.5 to 12 or 7	-
Supply press. [bar]	1 to 16	0 to 16
Supply press. AKA [bar]	2 to 12	2 to 12
Supply press. MICRO [bar]	1 to 10	0 to 10
Temp. Range [°C]	-10 to 60	
Housing	die-cast Zn	
Housing MICRO	wrought-alloy AL	die-cast AL
Bowl	polycarbonate with metal bowl guard	
Seals	NBR	

Type	FRC-D	LOE-D
Connection	G1/8 to G1	
Press. Reg. Range [bar]	0.5 to 12 or 7	-
Supply press. [bar]	1 to 16	0 to 16
Supply press. AKA [bar]	2 to 12	-
Supply press. MICRO [bar]	1 to 10	0 to 10-
Temp. Range [°C]	-10 to 60	
Housing	die-cast Zn	
Housing MICRO	wrought-alloy AL	die-cast A
Bowl	polycarbonate with metal bowl guard	
Seals	NBR	

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