

"ELAD" LLC



Technical Certificate for BERGIN industrial hoses for gas (LNG, LPG, Oxygen)

Present hoses are manufactured according to Russian GOST 9356-75.

We produce 2 classes of the gas hose:

1. Class I – for the town gas

Usage: For transferring acetylene, town gas, propane and butane under a pressure of 0.63 MPa.

Ingredients: Inner layer material - NBR, outer layer material - NBR+CR.

Features: NBR - Nitrile-Butadiene Rubber makes hose more stable against fuels and oils. It soaks isooctane-toluene mix about 18-20% of its weight whereas hoses of other trademarks soak up to 30% of their weight. It means you should not worry that compressor oil or other aggressive fluids will get in the hose and destroy it.

CR - Chloroprene Rubber gives increased ozone resistance to the hose.

Burst pressure: 3P, where P – operating pressure.

Options:

Product code	Inner diameter, mm	Outer diameter, mm	Operating pressure, MPa	Burst pressure, MPa	Operating ambient temperature range, °C
BG1006	10	18	0,63	1,89	-60 ... +100

BERGIN INDUSTRIAL HOSE FOR COMPRESSED AIR

Operating gases:

- Acetylene according to Russian GOST 5457-75
- Town gas according to Russian GOST 5542-2014
- Propane according to Russian GOST 20448-90
- Butane according to Russian GOST 20448-90

2. Class III – welding hose

Usage: For transferring oxygen under pressure of 2 MPa to the cutting/welding machine.

Ingredients: inner layer material - SBR+PE, outer layer material - SBR+PE.

Features: SBR - Styrene-Butadiene Rubber gives hardness and at the same time better flexibility to the hose.

PE – Polyethylene gives a firm frame to the hose.

Burst pressure: 3P, where P – operating pressure.

Options:

Product code	Inner diameter, mm	Outer diameter, mm	Operating pressure, MPa	Burst pressure, MPa	Operating ambient temperature range, °C
BG0620	6,3	13	2	6	-50 ... +80
BG0920	9	18	2	6	-50 ... +80

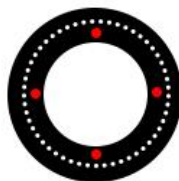
Operating gases:

- Oxygen according to Russian GOST 5583-78

Technical features:

Usually in this type of hoses thread-wound reinforcement is only used. Bergin hoses have a unique patented design: four additional longitudinal crosswise-wound threads are used in addition to thread winding.

With this elaboration Bergin hoses provide better constancy of geometrical parameters. Also, during the vulcanization process additional threads allow to control the lengthwise shrinkage ratio, and the hose is less stretched during installation.

Schematic structure of the hose:



Gas III, BERGIN, GOST 9356-75



Hose exterior:



Storage and care conditions:

General operating conditions:

It is necessary to supply fluid to the hose under pressure that is not higher than operating pressure. Working pressure change should be made gradually so that the hoses do not undergo to the shock pressure. Hoses must not be kinked or driven over. Hoses must not be dragged over sharp or abrasive surfaces. Large hoses should be handled with use of reels and drums if possible. It is necessary to check the hose for tears regularly. All hoses should be checked regularly in terms of operational safety. If the hose is damaged it must be replaced for safety reasons.

Storage conditions:

Hoses should be stored in cool, dry and ventilated place. Storage in places unprotected from weather conditions is prohibited. Storage in heated places should be made at a distance of at least 1 meter away from the heat source. Avoid storage in humid areas if possible. Do not expose to the direct sunlight.

Important note:

The manufacturer does not guarantee the safety of use of these hoses if they are used under operating conditions other than specified in this certificate or storage and maintenance conditions were violated.

Date: 20.03.2017

Dimitrovgrad, Russia



"ELAD" LLC Chief Technologist:

A handwritten signature in brown ink, appearing to be "I.A. Bitukova".

/ I.A. Bitukova /



**VOLUNTARY CERTIFICATION SYSTEM
«REGISTER OF CERTIFIED SYSTEMS»
№ POCC RU.31010.04ЖЗМ0**

**CERTIFICATION AUTHORITY OF MANAGEMENT SYSTEMS
«DKS-ULYANOVSK» SIMBIRSK CERTIFICATION CENTER LLC
38, Mayakovskogo str., Ulyanovsk, 432030, Russian Federation
POCC RU.31010.04.ЖЗМ0/OC.09.2015**

CERTIFICATE OF CONFORMITY

Issue 1. QMS certified since April 2017

is given to **Limited Liability Company «Elad»
(LLC «Elad»)**

179-V, Gogol str., Dimitrovgrad,
Ulyanovsk region, 433504, Russian Federation

THIS CERTIFICATE CERTIFIES THAT:

Quality Management System as applied to production and supply
of reinforced and non-reinforced rubber technical products
(excluding par.7.3 in the part of product design)

COMPLIES WITH THE REQUIREMENTS OF

GOST ISO 9001-2011 (ISO 9001:2008)

Registration № POCC RU.31010.04.ЖЗМ0/OC.09-02310-2017

Date of registration April 20, 2017

It is valid until April 20, 2020

**Deputy Chief of the certification
authority of management systems**



U. V. Maslova

Commission Chairman

G. S. Gasparyan

Clarification regarding certification scope and applicability of management system requirements can be enquired of the above-mentioned organization. The certificate is valid since it was registered on site www.dks-rus.ru and if it is maintained by performance of surveillance audits.