



# CONTROLLER 3 EVO OXYGEN BAM

## Composition

The **CONTROLLER 3 EVO OXYGEN BAM** is comprised of **GR80SGR OXY** braided rings, consisting of expanded graphite wires with a dedicated metal reinforcement. This material ensures minimal weight loss even in the most extreme conditions, meeting the stringent requirements of **EN14772** - section 6.7. BAM approved No. 2-28/2015 E for use with both liquid and gaseous oxygen.

## Characteristics

The **CONTROLLER 3 EVO OXYGEN BAM** offers a unique combination of strength and durability, with a low friction coefficient ensuring smooth and reliable operation. Its reinforced structure and the quality of the graphite used make it ideal for high-temperature and pressure applications.

## Applications

Specifically designed for industrial valves in oxygen service, the **CONTROLLER 3 EVO OXYGEN BAM** is the ideal choice to ensure effective stem sealing in critical environments. It provides superior performance and exceptional durability, making it essential for oxygen-sensitive industrial applications.

## Tech Data

| Maximum Temperature °C | Maximum Oxygen Pressure bar |
|------------------------|-----------------------------|
| up to 60               | 350                         |
| >60 up to 300          | 220                         |

- Never use the product at its maximum rated temperature and pressure. Consult the manufacturer for further information.



## CONTROLLER 3 EVO OXYGEN BAM

The **CONTROLLER 3 EVO OXYGEN BAM** is an innovative gland packing designed specifically for industrial valves in oxygen service. Made from high-quality expanded mineral graphite and reinforced with special metal, this product offers reliable and safe performance in oxygen environments.

**Report**  
on Testing a Normmetallic Material  
for Reactivity with Gaseous Oxygen and with Liquid Oxygen



Reference Number: 2-28/2015 E

Copy: 1<sup>st</sup> Copy of 2 Copies

Customer: CARRARA S.p.A.  
Via Provinciale, 1/E  
25030 Adro (BS)  
Italy

Order Date: December 17, 2014

Reference: Order No.: 1411897

Receipt of Order: January 5, 2015

Test Samples: Sealing material die-formed braided flexible graphite packing ZGR80SGR OXY, batch 1422509, BAM Order No.: 2\_152\_422

Receipt of Samples: January 5, 2015

Test Date: February 12 to May 29, 2015

Test Location: BAM - Working Group "Safe Handling of Oxygen", building no. 41, room no. 073 and no. 120

Test Procedure or Requirement: DIN EN 1797:2002-02  
"Cryogenic Vessels - Gas/Material Compatibility"

According to: ISO 21010:2014  
"Cryogenic Vessels - Gas/Material Compatibility"

Annex of pamphlet M 034-1 (BGI 617-1)

"List of normmetallic materials compatible with oxygen"

by BAM Federal Institute for Material Research and Testing,  
by Bundesgesellschaft für Materialforschung und -prüfung,  
Edition: March 2014.

TRGS 407: Technical Rules for Hazardous Substances  
"Regelungen mit Gasen - Gefährdungsbeurteilung und  
Gefährdungsmaßnahmen"

chapter 3: "Informationsbestimmung und  
Gefährdungsbeurteilung" and  
chapter 4: "Sicherheitsmaßnahmen bei Tätigkeiten mit Gasen"

Edition: June 2013

Safety Related  
Maximum Operating  
Conditions: See chapter 4 "Summary and Evaluation"

All pressures of this report are excess pressures.

This test report consists of page 1 to 5 and annex 1 to 4.

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To see a German version of the test report is available, exclusively the German version is binding.

H. Safety in technology and chemistry

TEST REPORT



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