



# PLANIGRAPH V48Z OXYGEN BAM

## Composition

Pure flexible graphite

## Characteristics

Planigraph V48Z OXYGEN graphite gaskets in rings ensure safe and reliable performance in environments with liquid and gaseous oxygen. Certified according to BAM specifications, they provide effective protection against oxidation. When used in stems, assistance from GR80SGR OXYGEN braided wiper rings (BAM report 2-28/2015E) or Planigraph V48ZN OXYGEN nickel-reinforced graphite rings (BAM report 2-1948/2014E) is recommended.



## Applications

Made with highly pure graphite, Planigraph V48Z OXYGEN expanded graphite gaskets in rings offer high quality and reliability for applications involving liquid and gaseous oxygen.

## Tech Data

Maximum Temperature C°	Maximum Oxygen Pressure bar
up to 60	420
> 60 to 280	250

- Never use the product at its maximum rated temperature and pressure. Consult the manufacturer for further information.
- The peak temperature can be sustained only for short exposure periods.
- The dimensional tolerances of the molded products refer to the Carrara S.p.A. standard, unless otherwise agreed.

## Planigraph V48Z OXYGEN BAM

Planigraph V48Z OXYGEN graphite gaskets in rings are BAM certified for use with both liquid and gaseous oxygen. These expanded graphite rings are designed for services involving liquid and gaseous oxygen (BAM report 2-1949/2014 E), serving for stem or as fire-safe seals for closures and as packing for ball valve seats.

**BAM**  
Bundesamt für  
Materialforschung  
und -prüfung

Report  
on Testing a Nonmetallic Material for Reactivity with Oxygen

Reference Number: 2-1949/2014 E  
Copy: 1. Copy of 2 Copies

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

Order Date: August 4, 2014  
Reference: Order No.: 1411295  
Receipt of Order: August 11, 2014

Test Samples: Die-formed graphite gaskets, ring Planigraph V48Z OXY, undressed section, for use as a sealing material in piping, valves and fittings or other components for gaseous oxygen service at temperatures up to 280 °C and for liquid oxygen service;  
BAM-Order No.: 2.1952.220

Receipt of Samples: August 7, 2014  
Test Date: August 22, 2014 to February 6, 2015  
Test Location: BAM - Working Group "Safe Handling of Oxygen",  
building no. 41, room no. 073 and no. 120

Test Procedure or  
Requirement  
According to: DIN EN 1792-2002-02  
„Oxygen Vessels - Gas/Material Compatibility“  
ISO 21010:2004-07  
„Oxygen Vessels - Gas/Material Compatibility“  
Annex of pamphlet M 034-1 (BG 617-1)  
„List of materials for oxygen service“ (BAM),  
Federal Institute for Material Research and Testing, by  
Bundesgesellschaft Rohstoffe und chemische Industrie,  
Editorial: 2004  
TRGS 407 "Technical Rules for Hazardous Substances"  
"Durchführung der Materialprüfung und  
Überprüfung der Materialauswahl"  
chapter 3 "Informationsermittlung und  
Überprüfung der Materialauswahl bei Tätigkeiten mit Gasen"  
Edition: June 2013

All measures of this report are excess pressure.  
This test report only applies to the analysis of the sample. A separate permission is required to use the test results for other purposes or for the publication of the results. The test results  
belong to the BAM and may not be used for other purposes without the written permission of the BAM.  
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**TEST REPORT**



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