

O-rings in compound

FKM98 PLT ED - Z162

supplied by

O-ring one SRL

have been tested according to the requirements of

**NORSOK M-710 Edition 3 and ISO 23936-2
(Rapid gas decompression resistance)**

PASSED

| | |
|---------------------|--|
| Test gas: | 90 / 10 mol% CH ₄ / CO ₂ |
| Test temperature: | 100 ±2 °C |
| Test pressure: | 150 bar (15 MPa) |
| Number of cycles: | 8 |
| Decompression rate: | 20.1 bar/minute |
| Seal Size: | 312 (ISO 3601-1/AS 568) |

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Senior Scientist

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Date

Element Hitchin has been assessed to BS EN ISO 9001 by the British Standards Institution (BSI) and is a registered firm under the BSI Quality Assurance scheme for the provision of professional and technical services.



Element Materials Technology

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Element Hitchin verify that O-rings in compound **FKM98 PLT ED - Z162** supplied by Industrial Spaces Manufacturing & Trading Co. have been subjected to a multi-cycle RGD test under the conditions detailed below.

RGD TEST COMMISSIONED BY

O-ring one SRL

SEAL COMPOUND DETAILS

| | | |
|--------------------------------|---------------------|------|
| Seal Manufacture | O-ring one SRL | |
| Supplied by | O-ring one SRL | |
| Compound name/number/reference | FKM98 PLT ED - Z162 | |
| Elastomer type to ASTM D1418 | FKM | |
| Lot/Batch No. | Not Disclosed | |
| Seal type | O-ring | |
| Manufacturing method | Not disclosed | |
| Seal size (ISO3601-1/AS 568) | 312 | |
| CSD (nominal) | mm | 5.33 |
| Mean CSD (actual, radial) | mm | 5.30 |

RGD TEST CONDITIONS

| | | |
|------------------------------|----------------------|--|
| Temperature | °C | 100 ±2 |
| Pressure | MPa (bar) | 15 +2/-0 (150 +10/-5) |
| No. of cycles | | 8 |
| Dwell between cycles | hour | 1 |
| Decompression rate (average) | MPa/min (bar/minute) | 2.0 (20) |
| Gas type | mol% | 90/10 CH ₄ /CO ₂ |

SEAL HOUSING DETAILS CONDITIONS

| | | |
|----------------------------|--------|-------|
| Seal compression direction | Radial | |
| Groove ID | mm | 25.4 |
| Groove OD | mm | 15.95 |
| Groove width | mm | 5.68 |
| Squeeze (average) | % | 10.5 |
| Groove fill (area basis) | % | 82 |
| Number of seals tested | 4 | |


ISO TEST SEAL RATINGS

| SEAL REPLICATE | RATING | PASS/FAIL |
|----------------|--------|-----------|
| 1 | 0000 | Pass |
| 2 | 0000 | Pass |
| 3 | 0000 | Pass |
| 4 | 0000 | Pass |

OVERALL RATING PASS

GENERAL

| | | |
|----------------------------------|---|-----|
| Test laboratory | Element Materials Technology, Hitchin, U.K. | |
| Test date | 12th October 2018 to 19th October 2018 | |
| Test gas certified and available | YES/NO | YES |
| Transducer calibration available | YES/NO | YES |
| P/T log available | YES/NO | YES |

| | |
|---------------------------------|---|
| TEST LABORATORY STAMP/SIGNATURE |  Element Hitchin, UK |
|---------------------------------|---|

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