

O-rings in compound

KIFK15 FKM GLT AE1 AED -46°C

supplied by

**Industrial Spares Manufacturing & Trading Company
(ISMAT)**

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: | 19.8 bar/minute |
| Seal Size: | 312 (ISO 3601-1/AS 568) |

Keyur Somani

Senior Scientist

19th November 2018

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 **KIFK 15** supplied by Industrial Spares Manufacturing & Trading Company have been subjected to a multi-cycle RGD test under the conditions detailed below.

| RGD TEST COMMISSIONED BY | | |
|---|---|--|
| ISMAT, 66&77 Functional Developed Plots, Perungudi, Chennai-600096, INDIA | | |
| SEAL COMPOUND DETAILS | | |
| Seal Manufacture | Industrial Spares Manufacturing & Trading Company | |
| Supplied by | Industrial Spares Manufacturing & Trading Company | |
| Compound name/number/reference | KIFK 15 | |
| Elastomer type to ASTM D1418 | FKM GLT AE1 AED -46°C | |
| 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 | 5.28 |
| 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 | 16.0 |
| Groove width | mm | 5.65 |
| Squeeze (average) | % | 10.4 |
| Groove fill (area basis) | % | 82 |
| Number of seals tested | 4 | |
| ISO TEST SEAL RATINGS | | |
| SEAL REPLICATE | RATING | PASS/FAIL |
| 1 | 3000 | Pass |
| 2 | 0000 | Pass |
| 3 | 0000 | Pass |
| 4 | 0000 | Pass |
| OVERALL RATING | PASS | |
| GENERAL | | |
| Test laboratory | Element Materials Technology, Hitchin, U.K. | |
| Test date | 29 th March – 9 th April 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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