

## O-rings in compound

**KIFK11 FKM AED -18°C**

**supplied by**

**Industrial Spares Manufacturing & Trading Co.  
(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 <sub>4</sub> / CO <sub>2</sub>
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)

*Keyur Somani*

Senior Scientist

*19<sup>th</sup> 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 **KIFK11 FKM AED -18°C** supplied by Industrial Spares Manufacturing & Trading Co. 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 Co.	
Supplied by	Industrial Spares Manufacturing & Trading Co.	
Compound name/number/reference	KIFK11 FKM AED -18°C	
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	5.36

**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 <sub>4</sub> /CO <sub>2</sub>

**SEAL HOUSING DETAILS CONDITIONS**

Seal compression direction	Radial	
Groove ID	mm	25.44
Groove OD	mm	15.95
Groove width	mm	5.68
Squeeze (average)	%	11.4
Groove fill (area basis)	%	84
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	30 <sup>th</sup> August – 7 <sup>th</sup> September 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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