

HELIUM LEAK DETECTION TEST CERTIFICATE

ORDER NO. : 166225433

CERTIFICATE NO. : 166225433-011

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NAME OF MANUFACTURER : M/s. DAWSONS-TECH COMPONENTS LLP
 Unit No. DD - 6 & 7, Khan Real Industrial Estate,
 N. H. 08, Pelhar, Vasai Phata, Vasai (East),
 Dist. Palghar - 401208, Maharashtra, INDIA.

Product Name : DAWSONS-TECH 'O' Ring Face Seal Fittings
Material of Construction : SS316L
'O' Ring Seal : FKM

Each Test Specimens Comprising Following Items :

Sr. No.	Size	Description	Test Specimen No.
1	1/4"	ORFMC-4-4N, ORFSUC-4, ORFU-4, ORFBN-4	ORF-TS-4/1-3
2	1/2"	ORFMC-8-8N, ORFSUC-8, ORFU-8, ORFBN-8	ORF-TS-8/1-3
3	3/4"	ORFSMC-12-12N, ORFU-12, ORFBN-12	ORF-TS-12/1-3
4	1"	ORFSMC-16-16N, ORFU-16, ORFBN-16	ORF-TS-16/1-3

- Total No. of Test Specimen of each size : 3 Nos.
- Each Test Specimen assembled in accordance with DAWSONS-TECH installation instructions.

Testing Parameters :

- Helium Leak Detector Machine No. : ASM 142 "Alcatel" France
- Testing Method and Mode : Normal High Vacuum Testing Method (Spray Method).
- Inlet Pressure : 10^{-3} Torr l/s.
- Leak Rate Acceptance Criteria : 10^{-6} Torr l/s.
- Time Period for Applying the High Vacuum to Test Assembly : 3 Minutes.
- Holding Time After Insertion of Helium Gas : 3 Minutes.
- Temperature During Test : Ambient.
- Verification of Material Properties : Material Test Certificate Reviewed.
- Verification of Dimensions : Verified inspection report with relevant drawing of each components.

Test Results :

The Test Results are shown below for the Helium Leak Detection Test of DAWSONS-TECH 'O' Ring Face Seal Fittings.

Test Assembly Size	Test Assembly No.	Recorded Leak Rate Torr l/s	
		Before Insertion of Helium Gas	After Insertion of Helium Gas
1/4"	ORF-TS-4/1	1.1×10^{-10}	7.4×10^{-10}
	ORF-TS-4/2	1.3×10^{-10}	7.8×10^{-10}
	ORF-TS-4/3	1.1×10^{-10}	7.3×10^{-10}



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Test Assembly Size	Test Assembly No.	Recorded Leak Rate Torr l/s	
		Before Insertion of Helium Gas	After Insertion of Helium Gas
1/2"	ORF-TS-8/1	1.4×10^{-10}	7.5×10^{-10}
	ORF-TS-8/2	1.3×10^{-10}	8.0×10^{-10}
	ORF-TS-8/3	1.3×10^{-10}	8.1×10^{-10}
3/4"	ORF-TS-12/1	1.4×10^{-10}	8.4×10^{-10}
	ORF-TS-12/2	1.3×10^{-10}	7.9×10^{-10}
	ORF-TS-12/3	1.2×10^{-10}	8.3×10^{-10}
1"	ORF-TS-16/1	2.1×10^{-10}	8.6×10^{-10}
	ORF-TS-16/2	1.9×10^{-10}	8.1×10^{-10}
	ORF-TS-16/3	1.6×10^{-10}	8.8×10^{-10}

Comments :

DAWSONS-TECH 'O' Ring Face Seal Fittings are qualified under Helium Leak Detection Test.

For, TUV Rheinland (India) Pvt. Ltd.


 Malcolm Dadina
 (General Manager - Industrial Services)

Date : 28/01/2020