

HELIUM LEAK DETECTION TEST CERTIFICATE

ORDER NO. : 166225433

CERTIFICATE NO. : 166225433-010

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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 Metal Gasket Face Seal Fittings

Material of Construction : SS316L

Each Test Specimens Comprising Following Items :

Sr. No.	Size	Description	Test Specimen No.
1	1/4"	GFSMC-4-4N, GFSC-4, GFSU-4, GFSC-4	GFS-TS-4/1-3
2	1/2"	GFSMC-8-8N, GFSC-8, GFSU-8, GFSC-8	GFS-TS-8/1-3
3	3/4"	GFSMC-12-12N, GFSC-12, GFSU-12, GFSC-12	GFS-TS-12/1-3
4	1"	GFSMC-16-16N, GFSC-16, GFSU-16, GFSC-16	GFS-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 Metal Gasket 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"	GFS-TS-4/1	4.8×10^{-10}	5.9×10^{-9}
	GFS-TS-4/2	5.2×10^{-10}	6.3×10^{-9}
	GFS-TS-4/3	5.5×10^{-10}	5.3×10^{-9}



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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"	GFS-TS-8/1	6.1×10^{-10}	7.2×10^{-9}
	GFS-TS-8/2	5.7×10^{-10}	6.4×10^{-9}
	GFS-TS-8/3	6.4×10^{-10}	7.2×10^{-9}
3/4"	GFS-TS-12/1	6.5×10^{-10}	8.3×10^{-9}
	GFS-TS-12/2	7.7×10^{-10}	7.5×10^{-9}
	GFS-TS-12/3	7.2×10^{-10}	8.3×10^{-9}
1"	GFS-TS-16/1	8.7×10^{-10}	8.5×10^{-9}
	GFS-TS-16/2	7.9×10^{-10}	8.2×10^{-9}
	GFS-TS-16/3	8.3×10^{-10}	8.7×10^{-9}

Comments :

DAWSONS-TECH Metal Gasket 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