

Laboratory	Fleetguard Test Laboratory, Gat No. 87/1, 87/2, Village Nandur, Taluka Daund, Pune, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	09.03.2015
Certificate Number	T-0830	Valid Until	08.03.2017
Last Amended on	-	Page	1 of 4

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I. PERFORMANCE TEST				
1.	Air Cleaner and Components	Restriction and Differential Pressure Test Vs Flow Characteristics	ISO 5011: 2014	0.1 kPa to 9.795 kPa
		Initial Efficiency		1 % to 100 %
		Final life Efficiency		1 % to 100 %
		Capacity		
		Mass		2 g to 2500 g
		Flow Rate		2 m ³ /min to 42.5 m ³ /min
		Mass		5 g to 35000 g
		Flow Rate		2 m ³ /min to 42.5 m ³ /min
		Filter Element Vacuum Collapse Test		1.5 kPa to 87.03 kPa
		Leak Resistance		1.5 kPa to 9.795 kPa
2.	Air-Intake System and Components	Restriction and Differential Pressure Test Vs Flow Characteristics	ISO 5011: 2014	0.1 kPa to 9.795 kPa
		Initial Efficiency		1 % to 100 %
		Final life Efficiency		1 % to 100 %
		Capacity		
		Mass		2 g to 2500 g
		Flow Rate		2 m ³ /min to 42.5 m ³ /min
		Mass		5 g to 35000 g
		Flow Rate		2 m ³ /min to 42.5 m ³ /min

Laboratory Fleetguard Test Laboratory, Gat No. 87/1, 87/2, Village Nandur, Taluka Daund, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Testing **Issue Date** 09.03.2015

Certificate Number T-0830 **Valid Until** 08.03.2017

Last Amended on - **Page** 2 of 4

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
3.	Lubricating Oil Filter	Differential Pressure Vs Flow Characteristics: Pressure Flow Rate	ISO 4548-12: 2000 (E) ISO 3968: 2001(E) ISO 16889: 2008	10 kPa (g) to 1723 kPa (g) 1.3 lpm to 8 lpm 12.4 lpm to 109 lpm
		Filtration Efficiency ≥4micron to ≤ 7 micron ≥8micron to ≤ 10 micron ≥11micron to ≤ 40micron		1 % to 100 % 1 % to 100 % 1 % to 100 %
		Contaminant Retention Capacity: Mass Flow Rate		0.012 g to 200 g 1.3 lpm to 8 lpm 12.4 lpm to 109 lpm
		Media Migration: Mass Flow Rate	SAE HS 806: 2009	0.012 g to 200 g 2 lpm to 12 lpm
		Collapse Resistance Differential Pressure	SAE HS 806: 2009	
		Differential Pressure Flow Rate		30 kPa (g) to 5170 kPa (g) 25 lpm to 240 lpm
		Impulse Fatigue Pressure	ISO 4548-5: 2013	Upto 9999999 cycles 0 to 9650 kPa (g) 0.5 Sq. Hz to 3 Sq. Hz 1 Hz Sine to 20 Hz Sine

Laboratory Fleetguard Test Laboratory, Gat No. 87/1, 87/2, Village Nandur, Taluka Daund, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Testing **Issue Date** 09.03.2015

Certificate Number T-0830 **Valid Until** 08.03.2017

Last Amended on - **Page** 3 of 4

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
4.	Fuel Filters	Differential Pressure Vs Flow Characteristics	ISO 19438: 2003	10 kPa (g) to 1723 kPa (g)
		Pressure		1.3 lpm to 8 lpm
		Flow Rate		12.4 lpm to 109 lpm
		Filtration Efficiency	ISO 19438: 2003 and ISO/TS 13353: 2002	1 % to 100 %
		≥4 micron to ≤ 7 micron		1 % to 100 %
		≥8 micron to ≤ 10 micron		1 % to 100 %
		≥11 micron to ≤ 40micron		1 % to 100 %
		Contaminant Retention Capacity: Mass Flow Rate	ISO 19438: 2003	0.012 g to 200 g 1.3 lpm to 8 lpm 12.4 lpm to 109 lpm
Media Migration: Mass Flow Rate	SAE J905: 2009	0.012 g to 200 g 2 lpm to 12 lpm		
Collapse resistance differential pressure: Differential Pressure Flow Rate	SAE J905: 2009 and ISO 4020: 2001	98 kPa (g) to 2569 kPa (g) 1.3 lpm to 12 lpm		
Resistance to Flow Differential Pressure: Pressure Flow Rate	SAE J905: 2009 and ISO 4020: 2001	3 kPa to 500 kPa 2 lpm to 10 lpm		
Initial Single Pass Efficiency	SAE J1985: 2013	≥1 micron to ≤ 5 micron	1 % to 100 %	
≥6 micron to ≤ 10 micron		1 % to 100 %		
≥11 micron to ≤ 20 micron		1 % to 100 %		

Laboratory Fleetguard Test Laboratory, Gat No. 87/1, 87/2, Village Nandur, Taluka Daund, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Testing **Issue Date** 09.03.2015

Certificate Number T-0830 **Valid Until** 08.03.2017

Last Amended on - **Page** 4 of 4

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Fuel Filters	Filter Capacity: Mass Flow Rate	SAE J905: 2009	0.012 g to 200 g 2 lpm to 10 lpm
		Impulse Fatigue: Pressure	ISO 4548-5: 2013	Upto 9999999 cycles 0 to 9650 kPa (g) 0.5 Sq. Hz to 3 Sq. Hz 1 Hz Sine to 20 Hz Sine
5.	Fuel Water Separator	Emulsified Fuel/Water Separation Efficiency	SAE J1488: 2010	2 % to 100 %
		Coarse Droplet Water/Fuel Separation Test Procedure Flow Rate	SAE J1839: 2010 and ISO 4020: 2001	3 lpm to 20 lpm
6.	Air, Fuel and Lube Filters	Resonance detection Resonance Endurance	JIS D 1601: 1995 ISO 4548 -7: 2012	10 Hz to 2500 Hz
		Vibration Endurance Random Vibrations		(0 to 70 G) bare table

-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X