



Technical Data Sheet IG4 Dakota LHF

last update 2022/03/11

O.E.M. VERSION



Characteristic	Unit	Value	Note
Injector Version	N° of cylinders	1 - single injector	To be installed in a common rail manifold or in gas-air mixer
Material body and treatment		Aluminium	
Relative Pressure	Bar (Psi)	From 0.5 to 8(7 to 116)	Working pressure
		9 (130)	Max pressure
Rated voltage (at coil)	Volt	10,8 - 14,4	
Minimum copper wire section for coil connection	mm ²	0,75	
Coil type	by encoding	E2 - Grey cap	
Resistance	Ω	2	± 5% at T= 25°
Suggested peak current time (duration)	ms	2,4	
Suggested holding current (±10%)	A	1,4	
Complete OPENING Response Time	ms	2,1	(±10% - total injection time 5 ms) ±5% tested without nozzle at 14V Dp=2bar T= 25°C
Complete CLOSING Response Time	ms	1,4	
Minimum injection pulse	ms	2,2	tested with 2 mm nozzle diameter at 14V Δp=2bar T= 25°C
Stroke	Micron		
Seat Diameter	mm	3,8	
Static flow rate (with max nozzle Φ) at 20°C (with air)	SLPM (sL/min)	140	at 1 bar inlet pressure
		210	at 2 bar inlet pressure
Calculated max flow rate(with max nozzle Φ) CNG at 20°C (G20 CNG fluid)	gr/sec	2,1	at 1 bar inlet pressure
		3,7	at 2 bar inlet pressure
	Kg/h	7,4	at 1 bar inlet pressure
		11,1	at 2 bar inlet pressure
Calculated max flow rate(with max nozzle Φ) LPG at 20°C	gr/sec	3,5	at 1 bar inlet pressure
		5,3	at 2 bar inlet pressure
	Kg/h	12,6	at 1 bar inlet pressure
		18,9	at 2 bar inlet pressure
Leakage (tested with air)	cc/h	≤ 15	

Noise level	dB		±1 dB Rail Test Condition
Compatibility with gas		LPG, CNG	
Driver Stage		Peak and Hold (PWM)	
Coil Connector type		2 way Amp/Delphi super seal female connector with tab contacts	Connector dimensions are shown in the RAIL drawing, code 114.01.AMP.001
Approvals		110R-00 67R-01 (-40°C / +120°C)	
Operating Ambient Temperature Range	°C	-40° + 120° C	
Principle of operation		Solenoid valve - Normally closed - Mobile Plunger	
Power handling capability LPG	HP/cyl	1 bar up to 60 HP/cyl	
Power handling capability CNG	HP/cyl	2 bar up to 50 HP/cyl	
Coil IP Rating		IP67	

RAIL S.r.l - Via A.Grandi 16, 42030 Vezzano Sul Crostolo - Reggio Emilia - Italia