



## Technical Data Sheet IG7 Dakota LHF

last update 2020/09/09



Characteristic	Unit	Value	Note
Injector Version	N° of cylinders	2,3,4	
Material body and treatment		Aluminium	
Relative Pressure	Bar (Psi)	From 0,5 to 3,0 (7 to 43)	Working pressure
		4,5 (65)	Max pressure
Rated voltage (at coil)	Volt	10,8 - 14,4	
Minimum copper wire section for coil connection	mm <sup>2</sup>	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 peak current value	A		
Suggested holding current (±10%)	A	1,4	
Cold Starting Requirements		Increase up to 20% the "peak current time" for first cycles when gas temperature is < 10°C	
Complete OPENING Response Time	ms	1,8	(±10% - total injection time 5 ms) ± 5% tested without nozzle at 14V Dp=1bar T= 25°C
Complete CLOSING Response Time	ms	1,5	
Minimum injection pulse	ms	1,8	tested with 2 mm nozzle diameter at 14V Δp=1bar T= 25°C
Stroke	Micron	520	1 A supply current
Seat Diameter	mm	3,8	
Static flow rate (with max nozzle Φ) for 1 single injector at 20°C (with air)	SLPM (sL/min)	150	at 1 bar inlet pressure
		220	at 2 bar inlet pressure
		300	at 3 bar inlet pressure
Calculated max flow rate (with max nozzle Φ) for 1 single injector CNG at 20°C (G20 CNG fluid)	gr/sec	2,3	at 1 bar inlet pressure
		3,4	at 2 bar inlet pressure
	Kg/h	8,3	at 1 bar inlet pressure
		12	at 2 bar inlet pressure
Calculated max flow rate (with max nozzle Φ) for 1 single injector LPG at 20°C	gr/sec	4	at 1 bar inlet pressure
		5,8	at 2 bar inlet pressure
	Kg/h	14,3	at 1 bar inlet pressure
		21	at 2 bar inlet pressure
Leakage (tested with air)	cc/h	≤ 15	

Noise level	dB	T.B.D	±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	About connecting wire, refer to our drawing, code 114.01.AMP.001
Inlet gas fitting for rubber hose	mm	Ø10 mm / Ø12 mm / Ø14 mm / Ø16 mm	
Outlet gas fitting		Calibrated nozzles M8x1 for rubber hose Ø 4 mm - Ø 5 mm - Ø 6 mm	
Calibrated hole $\varnothing$ range (for nozzles)	Ø	From 1,00 to 3,50 mm (0,25 mm step)	
Approvals		110R-00 67R-01 (-40°C / +120°C)	pending : ISO 15500-2:2016 ISO 15500-7:2015
Principle of operation		Solenoid valve - Normally closed - Mobile Plunger	
Power handling capability LPG	HP/cyl	1 bar up to 60 HP/cyl with 3,8 mm nozzle diameter	
Power handling capability CNG	HP/cyl	2 bar up to 50 HP/cyl with 3,8 mm nozzle diameter	
Coil IP Rating		IP67	

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