Technical Data Sheet IG7 Dakota LP

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^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 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	1,7	(±10% - total injection time 5 ms) ± 5% tested without nozzle at 14V Dp=1 bar 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	470	1 A supply current
Seat Diameter	mm	3,3	
Static flow rate (with max nozzle Φ) for 1 single injector at 20°C (with air)	SLPM (sL/min)	115	at 1 bar inlet pressure
		170	at 2 bar inlet pressure
Calculated max flow rate(with max nozzle Φ) for 1 single injector CNG at 20°C (G20 CNG fluid)	gr/sec	1,7	at 1 bar inlet pressure
		2,54	at 2 bar inlet pressure
	Kg/h	6,2	at 1 bar inlet pressure
		9,4	at 2 bar inlet pressure
Calculated max flow rate(with max nozzle Φ) for 1 single injector LPG at 20°C	gr/sec	2,8	at 1 bar inlet pressure
		4,1	at 2 bar inlet pressure
Calculated max flow rate(with max nozzle Φ) for 1 single injector LPG at 20°C	Kg/h	10,3	at 1 bar inlet pressure
		14,8	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 fermale connector with tab contacts	About connecting wire, refer to our drawing, code 114.01.AMP.001
Inlet gas fitting for rubber hose	mm	∅10 mm /∅12 mm / ∅14 mm / ∅16 mm	
Outlet gas fitting		Calibrated nozzles M8x1 for rubber hose ∅ 4 mm - ∅ 5 mm - ∅ 6 mm	
Calibrated hole ⌀ range (for nozzles)	∅	From 1,00 to 3,25 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 40 HP/cyl	
Power handling capability CNG	HP/cyl	2 bar up to 35 HP/cyl	
Coil IP Rating		IP67	