



Technical Data Sheet IG7 Dakota HP

last update 2021/05/19



Characteristic	Unit	Value	Note
Injector Version	N° of cylinders	2,3,4	
Material body and treatment		Aluminium black anodized	
Relative Pressure	Bar (Psi)	From 0,5 to 7,0 (7 to 100)	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	3	
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	1,9	±5% tested with max nozzle diameter at 14V Δp=7 bar T= 25°C
Complete CLOSING Response Time	ms	1,3	
Minimum injection pulse	ms	2,5	
Stroke	Micron	300	1 A supply current
Seat Diameter	mm	2	
Static flow rate (with max nozzle Φ) for 1 single injector at 20°C (with air)	SLPM (sL/min)	205	at 7 bar inlet pressure
Calculated max flow rate (with max nozzle Φ) for 1 single injector CNG at 20°C (G20 CNG fluid)	gr/sec	3	at 7 bar inlet pressure
	Kg/h	11	at 7 bar inlet pressure
Leakage (tested with air)	cc/h	≤ 15	
Noise level	dB	T.B.D	±1 dB Rail Test Condition
Compatibility with gas		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 range (for nozzles)	Ø	From 1,00 to 2,00 mm (0,25 mm step)	
Approvals			110R-00 to be done pending : ISO 15500-2:2016 ISO 15500-7:2015
Operating Ambient Temp Range	°C	-40° + 120° C	
Principle of operation		Solenoid valve - Normally closed - Mobile Plunger	
Power handling capability LPG	HP/cyl		
Power handling capability CNG	HP/cyl	7 bar up to 58 HP/cyl	
Coil IP Rating		IP67	

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