



## Technical Data Sheet IG1 Apache

last update 2020/03/19



Characteristic	Unit	Value		Note
Injector Version	N° of cylinders	2, 3, 4		
Material body and treatment		Aluminium neutral anodized		
Relative Pressure	Bar (Psi)	From 0,5 to 2,0 (7 to 29)		Working pressure
		3,0 (47)		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	A2	A3	
Resistance	Ω	2	3	± 5% at T= 25°
Suggested peak current time (duration)	ms	4,2	4,5	
Suggested peak current value	A	5,1	3,7	
Suggested holding current (±10%)	A	1		
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	2,8	3,2	(±10% - total injection time 5 ms) ± 5% tested without nozzle at 14V Dp=1 bar T= 25°C
Complete CLOSING Response Time	ms	2,8	2,8	
Minimum injection pulse	ms	2,8	3,2	tested with 2 mm nozzle diameter at 14V Δp=1 bar T= 25°C
Stroke	Micron	600		1,7 A supply current
Seat Diameter	mm	4		
Static flow rate (with max nozzle Φ) for 1 single injector at 20°C (with air)	SLPM (sL/min)	156		at 1 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
	Kg/h	8,4		at 1 bar inlet pressure
Calculated max flow rate (with max nozzle Φ) for 1 single injector LPG at 20°C	gr/sec	4,14		at 1 bar inlet pressure
	Kg/h	14,91		at 1 bar inlet pressure

Leakage (tested with air)	cc/h	≤ 15	
Noise level	dB	64	±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 range (for nozzles)	Ø	From 1,00 to 3,25 mm (0,25 mm step)	max flow rate with 3,75 mm nozzle diameter
Approvals		110R-00 67R-01 (-40°C / +120°C) 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 63 HP/cyl with 3,75 mm nozzle diameter	
Power handling capability CNG	HP/cyl	2 bar up to 52 HP/cyl with 3,75 mm nozzle diameter	
Coil IP Rating		IP67	

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