

## Technical Data Sheet Energia EG4 Single Injector

last update 2020/11/12

Characteristic	Unit	Value	Note
Injector Version	N° of cylinders	1 - single injector	
Material body and treatment		Brass	
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 holding current	A	1,4	
Complete OPENING Response Time	ms	2	±5% tested with max nozzle diameter at 14V Δp=2 bar T= 25°C
Complete CLOSING Response Time	ms	1,4	
Minimum injection pulse	ms	2,4	14V Δp=2bar T= 25°C
Seat Diameter	mm	3,3	
Static flow rate (with max nozzle Φ) 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) 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) LPG at 20°C	gr/sec	2,8	at 1 bar inlet pressure
		4,1	at 2 bar inlet pressure
	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		±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		T.B.D.	
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 40 HP/cyl	
Power handling capability CNG	HP/cyl	2 bar up to 35 HP/cyl	
Coil IP Rating		IP67	