Greenville, SC	**CNG FUEL INJECTOR PRODUCT DATA SHEET**	Part Number: **01D166B** PDS Issue: 3 Page 1 of 1

Approved By: Ed Heatherington Date: Dec 14, 2010

CUSTOMER: ---
CUSTOMER PART NUMBER: ---
CUSTOMER I D NUMBER: 01D166B
SMP Greenville I D NUMBER: 110R-000086

APPLICATION:
Applications: Compressed Natural Gas
Type Application: Original Equipment and Aftermarket

SPECIFICATION:

DESCRIPTION:

Impedance	4.6 Ohms
Outline Type	D3000 Series
Outline Drawing No	U7005-5141
Spray Type	No Insert

TEST CONDITIONS:

Engineering Test Stand	SP40
Voltage	14.00 ± 0.05 VDC
Pulse Period (Frequency)	10.0 ms (100 Hz)
Drive Circuit Type	Peak and Hold
Drive Card Number	U9122-627
Peak/Hold Current Levels	4A / 1A
Test Fluid Type	n-Heptane
Test Fluid Spec	ULS-02-02-008
Pressure	3.0 ± 0.01 Bar
Temperature	20° ± 1°C

PERFORMANCE SPECIFICATION:

Static Flow Rate	1235.00 gm/min ± 5%
Dynamic Flow Rate	53.00 mg/pulse ± 7% @ 3.0 ms Pulse Width
Coil Resistance @ 20°C	4.6 ± 0.50 Ohms
Insulation Resistance	350K ohms Minimum @ 750 VDC

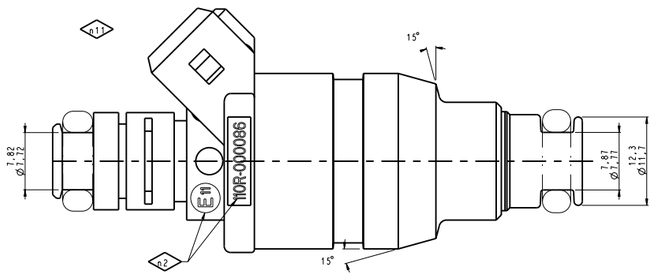
APPLICATION CONDITIONS:

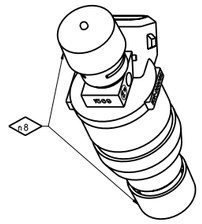
Operating Voltage	Nominal 28 Volt
Maximum Operating Pressure	8.28 bar (120 psi) differential inlet to outlet
Maximum Opening Pressure	≥15.17 bar (220 psi) differential inlet to outlet
Operating Temperature Range	-40°C to 125°C
Typical CNG Oil Content	25 – 30 ppm

NOTE: Operate the injectors exclusively with Compressed Natural Gas (CNG) with a minimum oil content of 25 ppm. A lower or no oil content may lead to premature failure.

ALTERATION RECORD	Issue: PCRN No: Date:	1 5587 Sep 09	2 5844 Mar 10	3 6518 Dec 10								

DRAWING NO.:
U7005-5141

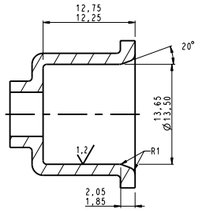


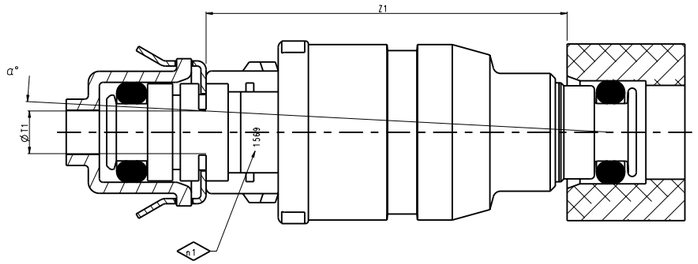


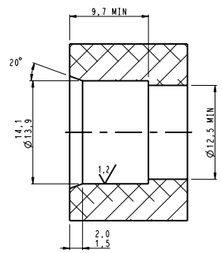
NOTES:

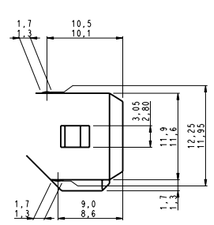
1. DATE OF MANUFACTURE. FIRST THREE CHARACTERS DENOTE DAY OF YEAR; FORTH CHARACTER DENOTES YEAR; DATE CODE 1569 REPRESENTS 156th DAY OF 2009.
2. ECE REGULATION #110 TYPE APPROVAL MARK: E11 110R-000086. ECE REGULATION #110 MANUFACTURE MARK: SMP
3. SMP IDENTIFICATION NUMBER.
4. THE COPYRIGHT NOTE IS WAVED FOR THIS DRAWING.
5. THE O-RINGS MUST BE LUBRICATED SPARINGLY BEFORE THE INJECTORS ARE INSTALLED. THE REST OF THE INJECTOR MUST BE FREE FROM LUBRICANT. LUBRICANT SPECIFICATION TO BE MUTUALLY AGREED UPON BY SMP GREENVILLE AND THE CUSTOMER.
6. IDENTIFICATION RING, IF REQUIRED.
7. SEE 'SMP Inc. PE CUSTOMER SPECIFICATION UPS-030 AND GASOLINE INJECTOR PRODUCT DATA SHEET' FOR PERFORMANCE INFORMATION.
8. DUST CAP PART NUMBER U9122-327 AT BOTH ENDS.
9. USE FEMALE ELECTRICAL CONNECTOR TYCO ELECTRONICS C-963040-1 OR EQUIVALENT "JUNIOR POWER TIMER" SPLASH PROOF CONNECTOR ASSY WITH LOCK AND SEAL.
10. OPERATE THE INJECTORS EXCLUSIVELY WITH COMPRESSED NATURAL GAS (CNG) WITH A MINIMUM OIL CONTENT OF 25 ppm. A LOWER OR NO OIL CONTENT MAY LEAD TO PREMATURE FAILURE.
11. MASS: 85 GRAMS.

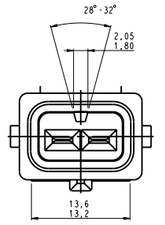
FUEL RAIL TO MANIFOLD POSITIONAL REQUIREMENTS				
α°	3°	2°	1°	0°
ØT1	Ø5,8	Ø3,8	Ø1,9	Ø0
Z1	50,3 - 48,2	50,5 - 48,1	50,6 - 48,0	50,7 - 47,9

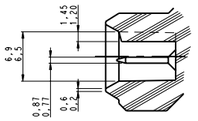


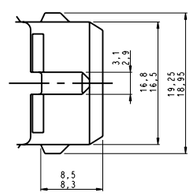


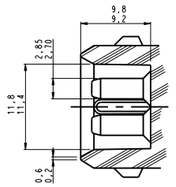


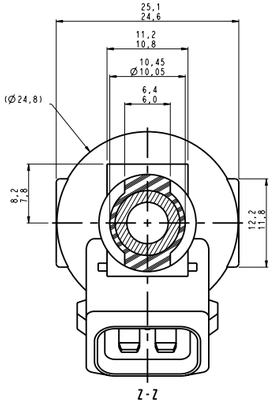


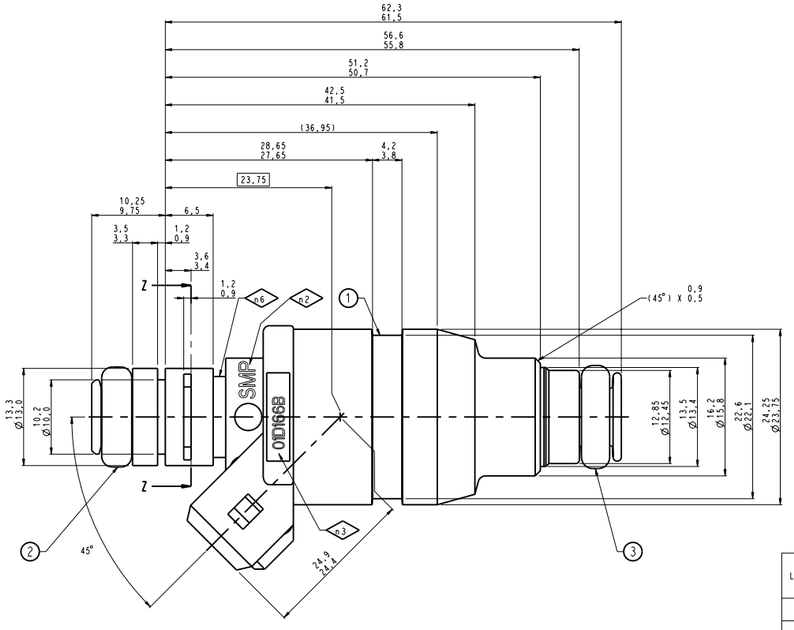












LEVEL	ITEM NUMBER	PART NUMBER	CUSTOMER PART NUMBER	DESCRIPTION	MATERIAL	O-RING	
						ID X SECTION	CORRECTED SQUEEZE
.1	1	01D166B		INJECTOR n.7			
..2	2	U9122-213DA		O-RING, YELLOW n.5	FLUOROSILICONE	Ø7,52 X Ø3,51	20%-12% (0,71-0,39)
..2	3	U9122-666DA		O-RING, BLUE n.5	LOW TEMPERATURE FLUOROCARBON	Ø7,52 X Ø3,51	15%-5% (0,52-0,18)

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS: MILLIMETERS
GENERAL TOLERANCES:
LINEAR ± --- ANGULAR ± ---
SURFACE ROUGHNESS: ---√
REMOVE SHARP EDGES: --- max.
ALL DIAMETERS: Ø--.-

n.10

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SUPERSEDES: ----
SIMILAR TO: U7005-5042
REF DWG NO.: ----

MATERIAL:	FORM:
----	----

MATERIAL SPECIFICATION: ----
HEAT TREATMENT: ----
FINISH: ----

		DATE:
DRAWN:	D.R.GALLUP	18-Sep-09
CHECKED:	E.HEATHERINGTON	18-Sep-09
APPROVED:	C.DEPALLE	18-Sep-09

RELEASE STATUS: **PRODUCTION**

DRAWING, DIMENSIONING, AND TOLERANCING IN ACCORDANCE WITH SMP, INC. UPS-019.

SCALE: 4:1 PROJECTION:

SMP Standard Motor Products, Inc
5150 PELHAM RD
GREENVILLE, SC
29615 USA

PRODUCT ENGINEERING
Pro/E GENERATED DRAWING
MODEL: D.GEN.ASM.CNG.ANYBODY.INSTALL

TITLE: OUTLINE DRAWING
3000 SERIES INJECTOR
CNG APPLICATIONS

FORMAT:	ISSUE DATE:	ISSUE:	SHEET:	DRAWING NO.:
A0	18-Sep-12	8	1/1	U7005-5141