



INJ-503 (Blue Dot) Injector Information

Part Number:	INJ-503	
Length:	3/4 Length	
Connector:	Bosch Jetronic/Minitimer	
O-Ring Diameter:	14mm Top and Bottom	
Coil Resistance:	12 Ω @ 22°C	
Min Opening Voltage:	10V @ 22°C	
Test Fluid:	N-Heptane	
Fluid Density:	0.684 g/cm ³	
Fluid Viscosity:	0.61 mm ² /s	
Test Temperature:	21±2°C	
Test Pressure:	300, 400 and 500 kPa	
Test Voltage:	6-14 V	
Q _{stat} , Static Flow Rate	1200 cc/min ±1.5%	
Q _{dyn} , Dynamic Flow Rate	87.1mg/pulse @ 7.5ms	
Fuel Compatibility	Gasoline, Ethanol and Methanol	
Spray Pattern	Narrow Cone	
Spray Direction	Straight	

Slope [g/s] vs. Pressure [kPa]

Fuel Pressure

[psi]	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
[kPa]	276	300	345	379	400	414	448	500	552	621
[g/s]	12.58	13.12	14.16	14.85	15.23	15.47	15.99	16.62	17.46	18.52

Injector Offset [ms] vs. Pressure [kPa] vs. Voltage [V]

Fuel Pressure

[psi]	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0	
[kPa]	276	300	345	379	400	414	448	500	552	621	
Voltage [V]	15	0.670	0.689	0.725	0.752	0.769	0.778	0.799	0.833	0.866	0.909
	14	0.836	0.859	0.902	0.935	0.956	0.970	1.004	1.057	1.110	1.180
	13	1.002	1.037	1.101	1.150	1.181	1.211	1.286	1.400	1.515	1.666
	12	1.193	1.252	1.364	1.448	1.500	1.542	1.644	1.799	1.954	2.160
	11	1.504	1.571	1.698	1.794	1.853	1.938	2.144	2.460	2.775	3.194
	10	1.859	1.969	2.176	2.333	2.430	2.562	2.882	3.371	3.861	4.511
	9	2.420	2.582	2.887	3.117	3.259	3.446	3.899	4.593	5.287	6.207
	8	3.286	3.507	3.921	4.234	4.427	4.582	4.960	5.537	6.115	6.881
	7	4.860	5.030	5.348	5.589	5.738	5.984	6.584	7.500	7.500	7.500
	6	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500

Static Flow Rate vs. Pressure [kPa]

Fuel Pressure

(psi)	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
(kPa)	276	300	345	379	400	414	448	500	552	621
[g/min]	13.15	13.71	14.71	15.44	15.87	16.15	16.81	17.76	18.66	19.80
[cc/min]	1155	1204	1292	1356	1394	1419	1477	1560	1640	1739

For Ford/GM Plug and Play data, please visit

<https://www.raceworks.com.au/fuel/injectors/data/INJ-503>



INJ-503 (Red Dot) Injector Information

Part Number:	INJ-503	
Length:	3/4 Length	
Connector:	Bosch Jetronic/Minitimer	
O-Ring Diameter:	14mm Top and Bottom	
Coil Resistance:	12 Ω @ 22°C	
Min Opening Voltage:	10V @ 22°C	
Test Fluid:	N-Heptane	
Fluid Density:	0.684 g/cm ³	
Fluid Viscosity:	0.61 mm ² /s	
Test Temperature:	21±2°C	
Test Pressure:	300, 400 and 500 kPa	
Test Voltage:	6-14 V	
Q _{stat} , Static Flow Rate	1300 cc/min ±1.5%	
Q _{dyn} , Dynamic Flow Rate	91.0mg/pulse @ 7.5ms	
Fuel Compatibility	Gasoline, Ethanol and Methanol	
Spray Pattern	Narrow Cone	
Spray Direction	Straight	

Slope [g/s] vs. Pressure [kPa]

Fuel Pressure

[psi]	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
[kPa]	276	300	345	379	400	414	448	500	552	621
[g/s]	13.30	13.87	14.95	15.64	16.02	16.25	16.74	17.29	18.16	19.27

Injector Offset [ms] vs. Pressure [kPa] vs. Voltage [V]

Fuel Pressure

[psi]	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0	
[kPa]	276	300	345	379	400	414	448	500	552	621	
Voltage [V]	15	0.736	0.748	0.771	0.788	0.798	0.809	0.837	0.878	0.920	0.976
	14	0.919	0.938	0.973	1.000	1.017	1.031	1.063	1.114	1.164	1.231
	13	1.107	1.152	1.236	1.300	1.339	1.370	1.447	1.565	1.683	1.839
	12	1.359	1.429	1.560	1.659	1.720	1.797	1.984	2.271	2.557	2.937
	11	1.680	1.807	2.046	2.227	2.338	2.425	2.635	2.957	3.278	3.705
	10	2.142	2.330	2.683	2.949	3.114	3.209	3.442	3.797	4.152	4.623
	9	3.115	3.304	3.658	3.926	4.091	4.197	4.456	4.851	5.246	5.771
	8	4.423	4.590	4.903	5.139	5.285	5.595	6.348	7.500	7.500	7.500
	7	5.382	5.792	6.560	7.141	7.500	7.500	7.500	7.500	7.500	7.500
	6	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500

Static Flow Rate vs. Pressure [kPa]

Fuel Pressure

(psi)	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
(kPa)	276	300	345	379	400	414	448	500	552	621
[g/min]	14.23	14.84	16.00	16.84	17.33	17.66	18.42	19.52	20.51	21.76
[cc/min]	1250	1303	1406	1479	1523	1551	1618	1715	1802	1911

For Ford/GM Plug and Play data, please visit

<https://www.raceworks.com.au/fuel/injectors/data/INJ-503>



INJ-503 (Yellow Dot) Injector Information

Part Number:	INJ-503	
Length:	3/4 Length	
Connector:	Bosch Jetronic/Minitimer	
O-Ring Diameter:	14mm Top and Bottom	
Coil Resistance:	12 Ω @ 22°C	
Min Opening Voltage:	10V @ 22°C	
Test Fluid:	N-Heptane	
Fluid Density:	0.684 g/cm ³	
Fluid Viscosity:	0.61 mm ² /s	
Test Temperature:	21±2°C	
Test Pressure:	300, 400 and 500 kPa	
Test Voltage:	6-14 V	
Qstat, Static Flow Rate	1250 cc/min ±1.5%	
Qdyn, Dynamic Flow Rate	88.8mg/pulse @ 7.5ms	
Fuel Compatibility	Gasoline, Ethanol and Methanol	
Spray Pattern	Narrow Cone	
Spray Direction	Straight	

Slope [g/s] vs. Pressure [kPa]

Fuel Pressure

[psi]	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
[kPa]	276	300	345	379	400	414	448	500	552	621
[g/s]	12.85	13.40	14.64	15.39	15.79	16.01	16.46	16.84	17.70	18.77

Injector Offset [ms] vs. Pressure [kPa] vs. Voltage [V]

Fuel Pressure

[psi]	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
[kPa]	276	300	345	379	400	414	448	500	552	621
15	0.663	0.697	0.762	0.810	0.840	0.842	0.847	0.854	0.861	0.871
14	0.831	0.870	0.942	0.997	1.031	1.039	1.059	1.088	1.118	1.158
13	1.038	1.088	1.180	1.249	1.292	1.325	1.406	1.529	1.652	1.816
12	1.224	1.309	1.468	1.589	1.664	1.681	1.723	1.788	1.853	1.939
11	1.588	1.705	1.924	2.090	2.192	2.303	2.572	2.984	3.396	3.943
10	2.001	2.179	2.512	2.764	2.919	3.075	3.453	4.031	4.609	5.376
9	2.791	3.014	3.431	3.746	3.941	4.097	4.477	5.058	5.638	6.409
8	4.083	4.306	4.725	5.042	5.237	5.554	6.323	7.500	7.500	7.500
7	5.276	5.706	6.513	7.123	7.500	7.500	7.500	7.500	7.500	7.500
6	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500

Static Flow Rate vs. Pressure [kPa]

Fuel Pressure

(psi)	40.0	43.5	50.0	55.0	58.0	60.0	65.0	72.5	80.0	90.0
(kPa)	276	300	345	379	400	414	448	500	552	621
[g/min]	13.76	14.35	15.56	16.39	16.86	17.15	17.81	18.65	19.60	20.79
[cc/min]	1209	1260	1367	1440	1481	1507	1565	1639	1722	1826

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<https://www.raceworks.com.au/fuel/injectors/data/INJ-503>