

Common rail injector test

Date

23/03/2016 14:19:25

Test step	Actuation time (μs)	Pressure (MPa)	Measure- ment time (s)	Injected fuel quantity		Return quantity		Evaluation
				Set value (mm³/H)	Actual value (mm³/H)	Set value (mm³/H)	Actual value (mm³/H)	
EM	490	80	10	19.1 ± 4.3	---	--- ± ---	---	---

Serial number: 3

	Set value	Actual value	Evaluation
Actuator resistance	170 - 200kΩ	192.5kΩ	✓

Test step	Actuation time (μs)	Pressure (MPa)	Measure- ment time (s)	Injected fuel quantity		Return quantity		Evaluation
				Set value (mm³/H)	Actual value (mm³/H)	Set value (mm³/H)	Actual value (mm³/H)	
Leak test	0	160	60	--- ± ---	---	--- ± ---	714.85	✗
Start test	2500	30	10	65.0 ± 35.0	---	--- ± ---	---	---
Back pressure	2500	30	40	--- ± ---	---	--- ± ---	---	---
ISA detection	700	160	40	5.0 ± 5.0	---	--- ± ---	---	---
VL	555	160	10	46.5 ± 6.5	---	11.0 ± 4.0	---	---
VE	175	120	10	1.9 ± 1.5	---	--- ± ---	---	---
LL	490	30	10	3.8 ± 2.7	---	--- ± ---	---	---
EM	490	80	10	19.1 ± 4.3	---	--- ± ---	---	---

Serial number: 4

	Set value	Actual value	Evaluation
ISA code	G	G	✓
Actuator resistance	170 - 200kΩ	192.5kΩ	✓

Test step	Actuation time (μs)	Pressure (MPa)	Measure- ment time (s)	Injected fuel quantity		Return quantity		Evaluation
				Set value (mm³/H)	Actual value (mm³/H)	Set value (mm³/H)	Actual value (mm³/H)	
Leak test	0	160	60	--- ± ---	---	--- ± ---	---	✓
Start test	2500	30	10	65.0 ± 35.0	80.07	--- ± ---	---	✓
Back pressure	2500	30	40	--- ± ---	83.23	--- ± ---	---	---
ISA detection	700	160	40	5.0 ± 5.0	0.00	--- ± ---	---	✓
VL	555	160	10	46.5 ± 6.5	48.18	11.0 ± 4.0	10.74	✓
VE	175	120	10	1.9 ± 1.5	1.54	--- ± ---	---	✓
LL	490	30	10	3.8 ± 2.7	3.88	--- ± ---	---	✓
EM	490	80	10	19.1 ± 4.3	19.53	--- ± ---	---	✓

Serial number: 5

	Set value	Actual value	Evaluation
ISA code	G	G	✓
Actuator resistance	170 - 200kΩ	192.5kΩ	✓

Test step	Actuation time (μs)	Pressure (MPa)	Measure- ment time (s)	Injected fuel quantity		Return quantity		Evaluation
				Set value (mm³/H)	Actual value (mm³/H)	Set value (mm³/H)	Actual value (mm³/H)	
Leak test	0	160	60	--- ± ---	---	--- ± ---	---	✓
Start test	2500	30	10	65.0 ± 35.0	90.80	--- ± ---	---	✓