

Test Specifications Distributor-type Fuel-injection Pumps

Testoil-ISO 4113

VE 4/9 F 2300 R 82; VE ... R 82-1
0 460 494 071 0 460 494 114

supersedes 08.84
company: Opel
engine: 2033-1,6 l

Overflow temperature 45° C

All test specifications are valid only for Bosch Fuel-injection Pump Test Benches and Testers

Test Instructions and Test Equipment

Pre-stroke setting - mm

see VDT-W-460/..

1. Settings	Rot. speed rev/min	Settings	Charge-air press. bar (kgf/cm ²)	Difference in delivery cm ³
1.1 Timing device travel	1500	3,1-3,5 mm		
1.2 Supply-pump pressure	1500	5,0-5,6 bar (kgf/cm ²)		
1.3 Full-load delivery with charge-air pressure	-		cm ³ /1000 strokes	2,5
Full-load delivery without charge-air pressure	1500	29,0-30,0 cm ³ /1000 strokes		
1.4 Idle regulation	450	6,0-10,0 cm ³ /1000 strokes		2,5
1.5 Full-speed regulation	2625	17,0-23,0 cm ³ /1000 strokes		
1.6 Start	100	min. 40,0 cm ³ /1000 strokes		
1.7 Load-dependent port-closing	**			

2. Test Specifications

checking values in brackets ()

2.1 Timing device	n = rev/min	1200	1500	2300
	mm	1,5-2,3 (1,2-2,6)	(2,6-4,0)	6,5-7,3 (6,2-7,6)
2.2 Supply pump	n = rev/min	600		2300
	bar (kgf/cm ²)	2,4-3,0		7,3-7,9
Overflow delivery	n = rev/min	500		2300
	cm ³ /10 s	55-138 (40-153)		55-138 (40-153)

2.3 Fuel deliveries

Speed control lever	Rot. speed rev/min	Fuel delivery cm ³ /1000 strokes	Charge-air press. bar (kgf/cm ²)
End stop	3000	max. 5,0	
	2785	7,0-13,0 (6,0-14,0)	
	2625	(16,0-24,0)	
	2300	27,1-29,1 (25,8-30,4)	
	1500	(27,2-31,8)	
	600	22,5-25,5 (21,0-27,0)	
switch-off	2300	0	
Idle stop	1200	max. 1,0	
	650	2,0-7,0 (0,5-8,5)	
	450	(4,0-12,0)	
End stop	350	min. 28	
	500	max. 28	
2.4 Solenoid	cut-in voltage min. 10 V rated voltage 12 V.		

3. Dimensions

Designation	for assembly and adjustment mm
K	3,2-3,4
KF	5,7-5,9
MS	1,2-1,4
SVS	max. 2,0
*	1,8-2,4
XK	22,3-23,3
XL	11,0-14,9
Observations	
* operating stroke (cold-start accel.)	
**Observe VDT-I-460/138	