

BOSCH-INJ.-PUMP TEST SPECIFICATIONS

Note inst. in remarks column

Test sheet : VWV 1,6U
 Edition : 2.11.87
 replaces : 4.84
 Calibrating oil : ISO 4113
 Injection pump : VE 4/ 9F2100 R48
 Type number : 0 460 494 039
 Customer-specific information
 Customer : VW
 Engine : EA 162/1,6L

TEST BENCH REQUIREMENTS

Calibrating-oil
 return temp. °C
 with thermometer : 40...48
 electronically : 42...50
 Inlet press., bar : 0.35
 Calibrating nozzle-holder
 assembly : 1 688 901 000
 Opening
 pressure bar : 147...150
 Test inj. tubing : 1 680 750 017
 Outside diameter : 6
 x Wall thickness : 2
 x Length mm : 840
 Start of delivery
 Prestroke mm : -
 (from BDC) : -

Injection-pump setting values
 Test specifications in parentheses

Timing-device travel:

Speed 1/min: 1500
 Setting value mm: 3,3...3,7

Supply-pump pressure:

Speed 1/min: 1500
 Setting value bar: 4,8...5,4

Full-load del. w/out charge press.:

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Speed 1/min: 1500
 Del. quantity cm³/
 1000H.: 33,0...34,0
 Dispersion cm³/
 1000H.: (3,0)

Low-idle speed regulation:

Speed 1/min: 415
 Del. quantity cm³/
 1000H.: 6,0...10,0
 Dispersion cm³/
 1000H.: (3,0)

Full-load speed regulation:

Speed 1/min: 2300
 Del. quantity cm³/
 1000H.: 12,5...16,5

Start:

Speed 1/min: 100
 Del. quantity : -
 mind cm³/1000H.: 35,0

Inspection-pump test specifications
 Test specifications in parentheses

1st speed 1/min: 1000
 TD travel mm: 1,4...2,2
 mm: (1,1...2,5)
 2nd speed 1/min: 1500
 TD travel mm: 3,3...3,7
 mm: (2,8...4,2)
 3rd speed 1/min: 2100
 TD travel mm: 5,4...6,2
 mm: (5,1...6,5)

Supply-pump pressure characteristic:

1st speed 1/min: 600
 Supply-pump
 pressure bar: 2,6...3,2
 2nd speed 1/min: 1500
 Supply-pump
 pressure bar: 4,8...5,4
 3rd speed 1/min: 2100
 Supply-pump
 pressure bar: 6,3...6,9

Overflow quantity at overflow valve:

1st speed 1/min: 600
 Overflow : 41...111
 quantity cm³/10s: (26...126)
 2nd speed 1/min: 2100
 Overflow : 55...138
 quantity cm³/10s: (40...153)