

# BOSCH-INJ.-PUMP TEST SPECIFICATIONS

Note inst. in remarks column

Test sheet : FOR 2,5  
Edition : 07.07.93  
replaces : 16.02.91  
Calibrating oil : ISO-4113

Injection pump : VE4/11F2000R415  
Type number : 0 460 414 083  
Customer Part-No. :

Customer-specific information  
Customer : FORD (1)=NLK

Engine : 2.5l DI(2)= OHNE NLK

## TEST BENCH REQUIREMENTS

Overflow restricti: 1 463 456 344

Calibrating-oil  
return temp. °C  
with thermometer : 44.00...46.00  
Electronically : 44.00...46.00

Inlet press., bar : 0.30...0.40

Calibrating nozzle-holder  
assembly : 1 688 901 114

Opening  
Pressure bar: 207.00...210.00

Perforated-plate  
diameter mm: 0.4

Test inj. tubing : 1 680 750 073

Outside diameter : 6.00  
x Wall thickness : 2.00  
x Length mm: 450

Start of delivery block  
Piston stroke mm: 0.35  
mm: 0.30...0.40

Outlet : B

Injection-pump setting values  
Test specifications in parentheses

Timing-device travel

Speed 1/min: 1250  
Setting value mm: 4.20...4.60

Shutoff  
electromagnet Volt: 12

Supply-pump pressure

Speed 1/min: 1250  
Setting value bar: 6.90...7.50(1)  
Shutoff  
electromagnet Volt: 12

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

Speed 1/min: 500  
Del. quantity cm<sup>3</sup>/  
1000S.: 25.80...26.20 F

Shutoff  
electromagnet Volt: 12  
Dispersion cm<sup>3</sup>/: 3.0  
1000S.: (4.0)

Low-idle speed regulation

Speed 1/min: 425  
Del. quantity cm<sup>3</sup>/  
1000S.: 6.00...8.00

Shutoff  
electromagnet Volt: 12  
Del. quantity cm<sup>3</sup>/: 3.0  
1000S.: (4.0)

Full-load speed regulation

Speed 1/min: 2200  
Del. quantity cm<sup>3</sup>/  
1000S.: 23.20...25.20

Shutoff  
electromagnet Volt: 12  
Dispersion cm<sup>3</sup>/: 3.0  
1000S.: (4.0)

Start:

Speed 1/min: 100  
Del. quantity cm<sup>3</sup>/: 45.00...85.00  
mind 1000S.: 45.00

Shutoff  
electromagnet Volt: 12

Inspection-pump test specifications  
Test specifications in parentheses

Timing-device characteristic:

1st speed 1/min: 2000  
Charge press hPa: (1)  
TD travel mm: 7.40...8.20  
mm: (7.10...8.60)

electromagnet Volt: 12  
2nd speed 1/min: 1250  
Charge press hPa: (1)