

## BOSCH-INJ.-PUMP TEST SPECIFICATIONS

Note inst. in remarks column

Test sheet : OPE 1,6 E  
Edition : 14.11.88  
replaces : 06.07.88  
Calibrating oil : ISO 4113

Injection pump : VE 4/ 9F2300 R215  
Type number : 0 460 494 174

Customer-specific information  
Customer : OPEL

### 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): -

Indicator setting:  
Piston stroke mm : 0.90  
Outlet : D

Injection-pump setting values  
Test specifications in parentheses

Timing-device travel:

Speed 1/min: 1500  
Setting value mm: 3,7...4,1

Supply-pump pressure:

Speed 1/min: 1500  
Setting value bar: 4,9...5,5

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

Speed 1/min : 1500  
Del.quantity cm<sup>3</sup>/  
1000H.: 30,8...31,8  
Dispersion cm<sup>3</sup>/  
1000H.: (2,5)

Low-idle speed regulation:

Speed 1/min: 425  
Del.quantity cm<sup>3</sup>/  
1000H.: 6,0...10,0  
Dispersion cm<sup>3</sup>/  
1000H.: (3,0)

Full-load speed regulation:

Speed 1/min: 2575  
Del.quantity cm<sup>3</sup>/  
1000H.: 17,0...23,0

Start:

Speed 1/min: 100  
Del.quantity : -  
mind cm<sup>3</sup>/1000H.: 40,0

Load-dependent start of delivery:

Speed 1/min: 1500

Inspection-pump test specifications  
Test specifications in parentheses

Timing-device characteristic:

1st speed 1/min: 1000  
TD travel mm: 1,5...2,3  
mm: (1,2...2,6)

2nd speed 1/min: 1500  
TD travel mm: 3,7...4,1  
mm: (3,2...4,6)

3rd speed 1/min: 2300  
TD travel mm: 6,9...7,7  
mm: (6,6...8,0)

Supply-pump pressure characteristic:

1st speed 1/min: 400  
Supply-pump  
pressure bar: 1,7...2,3

2nd speed 1/min: 1000  
Supply-pump  
pressure bar: 3,5...4,1

3rd speed 1/min: 2300  
Supply-pump  
pressure bar: 7,0...7,6

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