

PUMP SPECIFICATION

Rotation: Clockwise
 Plunger Diameter: 6.5 mm
 Roller to roller: 50.50 mm
 Advance Type: Automatic speed.
 Governor type: Mechanical all-speed.
 Gov. Link Length: 52.7 ± 0.2 mm
 Gov.arm hole No.: 1
 Throttle lever link hole : 1
 Drive type: Standard supported.
 ISO Code: 33L1500/1/4600 Pre-ISO: 34/1500/1/4600
 ISO Code: 33L1500/1/4800 Pre-ISO: 34/1500/1/4800

ISO TEST CONDITIONS.

This data is only valid for the test conditions specified and the following test benches: HA3000/HA2500/HA1150/HA1100MkII/HA875
 HA700/HA400/AVM/PGM

Test Fluid: ISO 4113 at 40 ± 2 °C.
 Nozzles: ISO 4010.
 Nozzle opening pressure: 125 +3 -0 bar.
 H.P. pipes: 6 x 2 x 600 mm (ISO 4093.1)
 H.P. Outlet Connections: Original (M14 x 1.5)
 Test machine drive: ADC102
 Test machine drive in unsupported position.
 Inlet feed pressure: 0.1 bar

PRE-TEST NOTES

Timing: -To accurately set the internal and external timing, use the following tools: 1804-003/1804-773E

ISO TEST PROCEDURE

Test	Operation	S/C	RPM	Requirements
1.	Priming	(C)	100	Obtain delivery from all injectors.
			-1500	No air in pump backleak.
2.	Transfer press.	(C)	70	0.5 bar minimum.
3.	Transfer press.	(C)	100	0.8 bar minimum.
4.	T. P Vacuum	(C)	100	0.54 bar vacuum. 30 seconds maximum.
5.	Shut-off lever	(C)	325	0.6 cm ³ max., Shut-off lever closed.
6.	Shut-off op.	(C)	325	0.6 cm ³ max., SIN RD/TOOLS 6
7.	Throttle test	(C)	325	0.8 cm ³ maximum, Throttle closed.
8.	Transfer press.	(C)	1950	4.15 to 4.75 bar.
9.	Max. delivery	(S)	1950	31 to 34 mm ³ /st.
	Pre-set			Max. spread 3.0 mm ³ /st.
10.	Cambox pressure	(C)	1950	0.25 to 0.55 bar. SIN RD/PUMPS 8&18

11.	Advance (Full load)	(S)	1950	4.75 to 5.25 ° (3.8 to 4.2mm) Tool 7244-590, SIN RD/TOOLS 18
12.	Advance (Nil delivery)	(C)	1950	5.75 to 6.75 ° (4.6 to 5.4mm) Shut off lever closed.(Tool 7244-590)
13.	Advance (Full load)	(C)	1600	3 to 3.5 ° (2.4 to 2.8mm) Tool 7244-590, SIN RD/TOOLS 18
14.	Advance (Full load)	(C)	1200	0.75 to 1.75 ° (0.6 to 1.4mm) Tool 7244-590, SIN RD/TOOLS 18
15.	Max. delivery	(S)	1950	33 ± 0.5 mm ³ /st. Max. spread 3.0 mm ³ /st.
16.	Backleakage	(C)	1000	16 to 35 cm ³ per 100 shots. 0.16 to 0.35 litre per minute.
17.	Gov. delivery	(C)	****	Record average delivery.
18.	Gov. operation	(S)	****	20 to 22.5 mm ³ /st.
19.	Gov. cut-off	(C)	****	Maximum 1.4 cm ³ , Line max. 1.7 cm ³ . SIN RD/PUMPS 8&18.
20.	Delivery	(C)	****	Minimum as test(17)
21.	Gov. operation	(S)	See Plate	Maximum 7 mm ³ /st. Line maximum 9mm ³ /st. (Set at half speed of nameplate code)
22.	Advance (Nil delivery)	(C)	2100	6.75 to 7.25 ° (5.4 to 5.8mm) Shut off lever closed.(Tool 7244-590)
23.	Delivery	(C)	70	Minimum 2.8cm ³ .
24.	Internal timing Micrometric	S/C		HP outlet'X', Press 80 bar Tools 1804-003/1804-773E SIN RD/PUMPS 12 & SIN RD/TOOLS 6
25.	External timing	S/C		HP outlet' X',Angle 28°,Press 80 bar Adaptor 7244-028 , Spacer 7244-026D Marker Gauge 7244-027 Torque on driveshaft 0.18 daN.m Tool 1804-498 SIN RD/TOOLS 26

TABLE:

Max. Speed	G	ov.Code	Test(17)	Test(18)	Test(19)	Test(20)
4600		1	2130	2230	2380	2130
4800		1	2250	2350	2500	2250

REFER TO STATEMENT AT END OF EXPLANATORY NOTES REGARDING MAXIMUM FUEL AND SPEED SETTING AND VARIATIONS IN ENGINE PERFORMANCE.