

ENGINE TYPES	ENGINES WITH CARBURETTORS					
	A6 6-cyl. OHV		B 16 A 4-cyl. OHV	B 16 B 4-cyl. OHV	B 36 AV 8-cyl. OHV	ED 6-cyl. Side-Valve
	Early prod.	Late prod.				
Output, b.h.p. at r.p.m.	105/3000	115/3000	60/4500	85/5500	120/4000	90/3600
Max. torque, kgm (lb. ft.) at r.p.m.	30/1000	34,6/1000	11,3/2500	12/3500	26/2200	22/1400
Capacity, litres	4,70		1,58	1,58	3,56	3,67
Standard bore, mm	95,25		79,37	79,37	84,14	84,14
Stroke, mm	110		80	80	80	110
Compression ratio	6,2	7,0	7,4	8,2	7,6	6,5
Compression pressure, kg/cm ² (p.s.i.) r.p.m.	9,0/180	10,0/180	9,5-10,5/200	10-11/200	10-11/200	9,0/200
Cylinder liners, replaceable	D r y		—	—	—	—
Piston clearance, mm ¹⁾ Clearance measured in direction of piston thrust gudgeon pin removed	0,05-0,07		0,03-0,05	0,03-0,05	0,04-0,06	0,04-0,06 (M) 0,06-0,08 (Z)
Gudgeon pins, standard, diam. mm	28		19	19	22	22
Compression rings, number and height	1- ³ / ₃₂ " chrom 2- ¹ / ₈ "		1-1,97 mm chrom. 1-1,97 mm	1-1,97 mm chrom. 1-1,97 mm	1-1,98 mm chrom. 1-1,98 mm	1- ³ / ₃₂ " chrom 2- ¹ / ₈ "
Oil rings, number and height	1- ³ / ₁₆ "		1-4,73 mm	1-4,73 mm	(² / _{0,6} + expanding) = ^{5,04} / _{mm}	1- ³ / ₁₆ "
Valves, intake, disc diam. mm	42		37	37	40	42
„ clearance, stem-guide, mm	0,032-0,068		0,031-0,061	0,031-0,061	0,025-0,055	0,020-0,071
„ exhaust, disc diam. mm	39		34	34	35	37
„ clearance, stem-guide, mm	0,082-0,118		0,060-0,090	0,060-0,090	0,065-0,095	0,020-0,071
Valve clearances (hot engine) {intake, mm exhaust, mm	{intake, mm 0,40 exhaust, mm 0,45		{intake, mm 0,40 exhaust, mm 0,45	{intake, mm 0,50 exhaust, mm 0,50	{intake, mm 0,45 exhaust, mm 0,45	{intake, mm 0,25 exhaust, mm 0,35
Crankshaft, no. of main bearings	7		3	3	5	7
Main bearing, journals, stand. diam. mm	69,971-69,990		53,950-53,960	53,950-53,960	63,442-63,454	60,271-60,284
Crankshaft bearing journals, stand. diam. mm	59,990-60,000		47,589-47,600	47,589-47,600	54,090-54,102	53,950-53,960
Camshaft, no. of bearings	4		3	3	5	4
Camshaft setting, inlet valve opens	b. t. d. c. 10°/0,68		a. t. d. c. 10°/1,1	0°/1,15	a. t. d. c. 10°/1,1	b. t. d. c. 2°+4°/0,35
Firing order	1-5-3-6-2-4		1-3-4-2	1-3-4-2	1-8-4-3-6-5-7-2	1-5-3-6-2-4
Ignition timing	2° b. t. d. c. (83 okt. ROR) 7° b. t. d. c. (93 okt. ROR) 2° a. t. d. c. (83 okt.)		4° b. t. d. c. (93 okt. ROR) 2° a. t. d. c. (83 okt.)	4° b. t. d. c. (93 okt. ROR)	6° b. t. d. c. (93 okt. ROR)	0-2° b. t. d. c. (83 okt. ROR)
Distributor contact breaker gap, mm	0,4-0,5		0,4-0,5	0,4-0,5	0,3-0,4	0,4-0,5
Spark plug gap, mm inches	0,7-0,8		0,7-0,8	0,7	0,7-0,8	0,7-0,8
Oil capacity when changing oil, filter emptied, litres (Imp. pints)	8,5		3,5	3,5	5,5	5,5-7
Oil pressure, (hot engine) kg/cm ²	2-3		2,5-3,5 at 2000 rpm	2,5-3,5 at 2000 rpm	3-4 at 2000 rpm	1,5-2,5

1) The letter indicates the make: M = Mahle, W = Wellworthy, Z = Zollner

All engines: Valve seat angle 45°, valve seat width 1,5 mm (0.06"), light alloy pistons with exception of T-D 96 AS where inlet valve angle is 30°

2) With In 1132/11 injer 28° for l
3) With Bc

Big Volvo engines in production

See also 200 no. 1 b)

N. B.
This replaces previous specifications dated June 1956

Group 200 no. 1 a
Engine specifications

WITH CARBURETTORS				DIESEL ENGINES				
16 A	B 16 B	B 36 AV	ED	D 47 A	D 67 A	D 96 AL	D 96 AS	T-D 96 AS
6-cyl. OHV	4-cyl. OHV	8-cyl. OHV	6-cyl. Side-Valve	6-cyl. OHV Direct injection	6-cyl. OHV Direct injection	6-cyl. OHV Direct injection	6-cyl. OHV Direct injection	6-cyl. OHV Direct injection
4500	85/5500	120/4000	90/3600	90/2800	115/2400	150/2200	150/2200	185/2000
12500	12/3500	26/2200	22/1400	28/1400	40/1200	59/1100	59/1100	73/1400
1,58	1,58	3,56	3,67	4,70	6,73	9,60	9,60	9,60
9,37	79,37	84,14	84,14	95,25	104,77	120,65	120,65	120,65
80	80	80	110	110	130	140	140	140
7,4	8,2	7,6	6,5	17	17	17	17	17
10,5/200	10-11/200	10-11/200	9,0/200	27/200	28/200	27/200	27/200	27/200
—	—	—	—	Dry	Wet	Dry	Wet	Wet
0,05	0,03-0,05	0,04-0,06	0,04-0,06 (M) 0,06-0,08 (Z)	0,09-0,11	0,11-0,13 (M) 0,10-0,12 (W)	0,18-0,21	0,17-0,19	0,17-0,19
19	19	22	22	34,925	38	45	45	45
7 mm chrom. 1,97 mm	1-1,97 mm chrom. 1-1,97 mm	1-1,98 mm chrom. 1-1,98 mm	1- ³ / ₃₂ " chrom. 2- ¹ / ₈ "	1- ³ / ₃₂ " chrom. 2- ¹ / ₈ "	1- ³ / ₃₂ " chrom. 2- ¹ / ₈ "	1- ³ / ₃₂ " chrom. 2- ¹ / ₈ "	1- ³ / ₃₂ " chrom. 2- ¹ / ₈ "	1- ³ / ₃₂ " chrom. 2- ¹ / ₈ "
1,73 mm	1-4,73 mm	(² / _{0,6} + ^{5,04} / _{mm}) = ^{5,04} / _{mm} (expanding)	1- ³ / ₁₆ "	2- ³ / ₁₆ "	2- ³ / ₁₆ "	2- ³ / ₁₆ "	2- ³ / ₁₆ "	2- ³ / ₁₆ "
37	37	40	42	39	41	49	49	49
0,061	0,031-0,061	0,025-0,055	0,020-0,071	0,030-0,060	0,032-0,068	0,032-0,068	0,032-0,068	0,032-0,068
34	34	35	37	35	37	43	43	43
0,090	0,060-0,090	0,065-0,095	0,020-0,071	0,055-0,085	0,064-0,100	0,064-0,100	0,064-0,100	0,064-0,100
0,40	0,50	0,45	0,25	0,40	0,40	Hydr. valves lifters req. no adjustment	Hydr. valve lifters req. no adjustment	Hydr. valve lifters req. no adjustment
0,45	0,50	0,45	0,35	0,45	0,45			
3	3	5	7	7	7	7	7	7
53,960	53,950-53,960	63,442-63,454	60,271-60,286	76,149-76,162	82,535-82,550	99,966-99,988	99,966-99,988	99,966-99,988
47,600	47,589-47,600	54,090-54,102	53,950-53,960	63,449-63,462	69,840-69,850	86,003-86,018	86,003-86,018	86,003-86,018
3	3	5	4	4	4	4	4	4
a. t. d. c. 10°/1,1	0°/1,15	a. t. d. c. 10°/1,1	b. t. d. c. 2°+4°/0,35	a. t. d. c. 10°/1,6±0,25	a. t. d. c. 10°/1,6±0,25	a. t. d. c. 10°/1,4±0,25 measured on lifter	a. t. d. c. 10°/1,4±0,25 measured on lifter	a. t. d. c. 10°/1,4±0,25 measured on lifter
4-2	1-3-4-2	1-8-4-3-6-5-7-2	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4
t.d.c. 3 okt. ROR)	4° b. t. d. c. (93 okt. ROR)	6° b. t. d. c. (93 okt. ROR)	0-2° b. t. d. c. (83 okt. ROR)	30°	30°	30° (Inj.) 32° (Bosch)	30° 32°	30°
0,5	0,4-0,5	0,3-0,4	0,4-0,5	—	—	—	—	—
0,8	0,7	0,7-0,8	0,7-0,8	—	—	—	—	—
5	3,5	5,5	5,5-7	10	14	24	18-19	18-19
3,5 00 rpm	2,5-3,5 at 2000 rpm	3-4 at 2000 rpm	1,5-2,5	3-4	3-4	3-4	3-4	3-4

Intake valve seat angle 45°, valve seat angle 30° (D 96 AS where inlet valve angle 0.06"), light alloy pistons with

2) With Injector, Bosch PE6...1129/11 and PE6...1132/11 injection pumps.
28° for bus engines

3) With Bosch PE6...1010/11 injection pump (28° for bus engine)