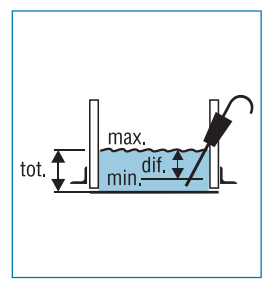
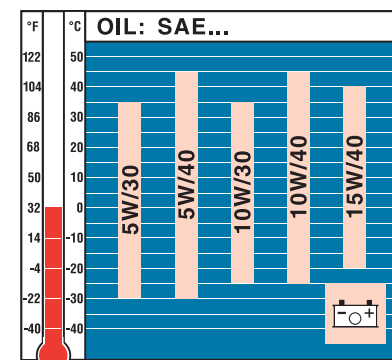


API: CD • CE • CF • CF-4 • CG-4
ACEA: B2 • E2

	tot. /	diff. /	tot. /	diff. /	tot. /	diff. /	tot. /	diff. /
1 B 20 (V) • 1 B 27 (V)	0.9	0.5	2.6	1.6	—	—	—	—
1 B 30 (V)	1.1	0.5	2.8	1.8	—	—	—	—
1 B 40 (V) • 1 B 50 (V)	1.5	0.8	3.2	2.2	—	—	—	—
E 572 • 672 • 573 • 673	1.0	0.6	—	—	—	—	—	—
E • ES 71 • 75 • 79	1.2	0.7	—	—	—	—	—	—
E • ES 780	2.0	1.0	—	—	—	—	—	—
E • ES 785 • 786	1.8	0.8	—	—	—	—	—	—
E 80 • 85 • 88 • 89	2.6	0.6	—	—	—	—	—	—
1 D 30 • 31 • 35 • 40 • 41	—	—	1.2	0.4	2.8	2.0	4.4	3.6
1 D 50	—	—	1.5	0.5	—	—	—	—
1 D 60 • 80 • 81 • 90	—	—	1.9	0.9	3.2	2.2	4.5	3.5
1 D 90V	1.6	0.7	—	—	—	—	—	—
2 G 30 • 40	2.5	0.8	3.0	0.8	—	—	—	—
Z 788 • 789 • 790	—	—	4.2	2.5	5.5	3.8	—	—
2 L • M 30 • 31 • 40 • 41 S	1	5.5 A	2.5	8.5 C	5.0	—	—	—
2 L • M 30 • 31 • 40 • 41 C • Z	1	4.5 A	2.0	7.5 C	4.5	—	—	—
3 L • M 30 • 31 • 40 • 41 S	1	8.5 A	3.5	11.0 D	6.5	—	—	—
3 L • M 30 • 31 • 40 • 41 C • Z	1	8.0 A	3.0	10.5 D	6.0	—	—	—
4 L • M 30 • 31 • 40 • 41 S	1	—	—	14.0 D	9.0	—	—	—
4 L • M 30 • 31 • 40 • 41 C • Z	1	—	—	13.0 D	8.0	—	—	—
E 108	3.0	1.4	—	—	—	—	—	—
Z 108	5.5	2.0	5.8	3.0	—	—	—	—
D 108	7.5	3.0	9.0	4.8	—	—	—	—
V 108	9.0	4.0	11.5	5.8	—	—	—	—

2 • 3 • 4 W 35 (T)



tot. /	diff. /
2 W 35	2.5
3 W 35 (T)	3.4
4 W 35 (T)	4.4

2 • 3 • 4 W 35:
API: CF • CF-4 • CG-4
ACEA: B2 • E2

3 • 4 W 35T:
API: CF • CF-4 • CG-4
ACEA: B3 • E2

Nm

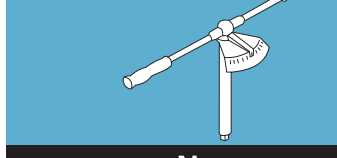
22 - 25	
85	
1 B 20•27•30•40•50	30 - 35
1D 30•31•35•40•41	40 - 50
1D 50•81•90 • L/M 41	50 - 70
1 D 60•80	50 - 70
2 G 30•40	50 - 70

SW=19 mm	SW=22 mm
25	35
1 B 20•27•30•40•50	23-0-23-0-25

1 B 20•27•30•40•50	80 - 100
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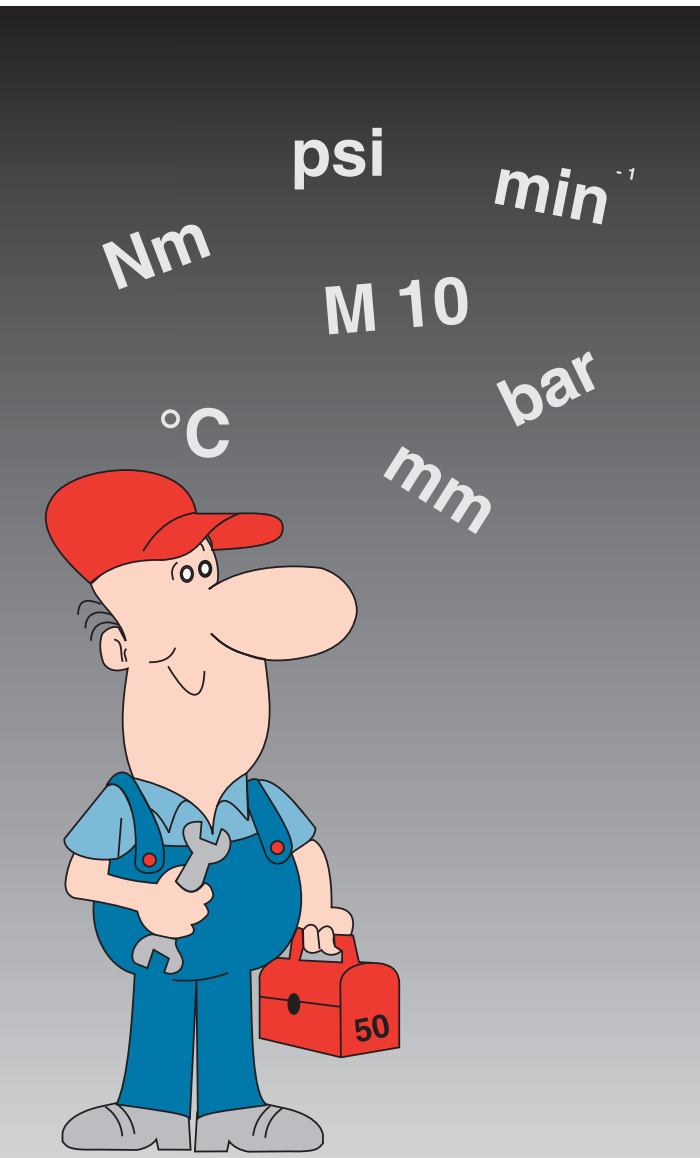
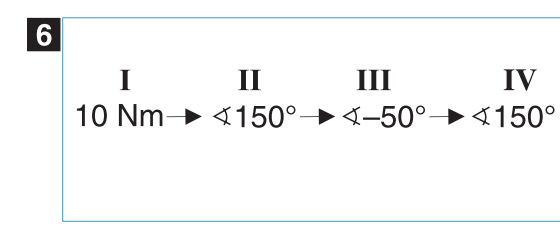
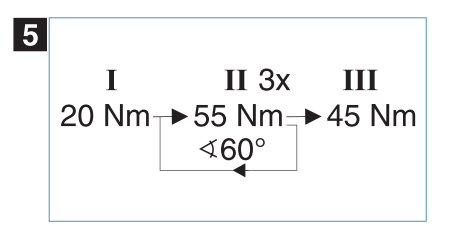
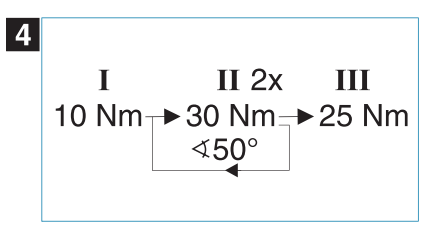
	8.8	10.9	12.9
M 4	2.8	3.9	4.7
M 5	5.5	7.8	9.3
M 6	9.5	13.0	16.0
M 8	23.0	33.0	39.0
M 10	46.0	65.0	78.0
M 12	80.0	110.0	140.0
M 14	130.0	180.0	220.0
M 16	190.0	270.0	330.0
M 18	270.0	380.0	450.0
M 20	380.0	530.0	640.0
M 22	510.0	720.0	860.0

10 Nm = 1 mkg



Nm

1 B 20 • 1 B 20 V	25	4	—	21-22	—	350 + 20	—	9.6	—	—
1 B 27 • 1 B 27 V	10+$\leq 180^\circ$	—	—	21-22	—	350 + 20	—	9.6	—	—
1 B 30 • 1 B 30 V	45	5	—	29	—	350 + 20	—	9.6	—	—
1 B 40 • 1 B 40 V	45	5	—	40-42	—	40 + 2	—	9.6	—	—
1 B 50 • 1 B 50 V	10+$\leq 250^\circ$	6	—	40-42	—	40 + 2	—	9.6	—	—
E 572 • 672 • 573 • 673	35	—	35	40	22	70	—	—	—	—
E • ES 71 • 75 • 79 • 780	50	—	—	60	65	300-350	60	60	—	—
E • ES 785 • 786	60	—	—	60	65	300-350	60	60	—	—
E 80 • 85 • 88 • 89	65	—	—	60	65	300-350	—	—	—	—
1 D 30 • 31 • 35 • 40 • 41 • 50	50	—	—	40	40	68	—	11	—	—
1 D 60 • 80 • 81 • 90 V	80	—	—	85	75	M12(6x):115 M14(5x):190	—	11	—	—
E 950	80	—	—	60	65	145	90	—	—	—
2 G 30 • 40	55	—	23	40	—	280	—	—	10	—
Z 788 • 789 • 790	50	—	M8:25 M9:50	60	65	145	190	—	110	—
2 • 3 • 4 L 30	50	—	—	60	65	135	30	—	—	90
2 • 3 • 4 L • M 31 • 40 • 41	65	—	—	M10:60 M11:115	65	200	30	—	—	90
E • Z • D • V 108	50	—	45	75	110	145	360	—	110	—
2 • 3 • 4 W 35 (T)	—	—	9 + 1	21,4 ± 1	—	65 ± 5	—	—	—	9.5 ± 1 3.5 + 0.5

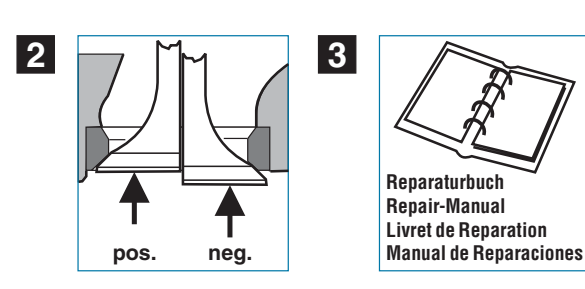


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04 / 2007



	In.			Ex.				I						II				III				r.p.m. ± 10 %									
	nom. mm	max. mm	mm	mm	mm	nom. mm	max. mm	nom. mm	max. mm	mm	nom. mm	max. mm	nom. mm	max. mm	nom. mm	max. mm	nom. mm	max. mm	850	1500	2300	3000	nom.	min.	nom.	min.	nom.	min.	nom.	min.	
1B 20 / 1B 20V	69.00	69.11	62		0.55-0.65	0±0.10	0.40	0±0.10	0.40																						
1B 27 / 1B 27V	74.00	74.11	62	0.1	0.45-0.55	0±0.10	0.40	0±0.10	0.40		0.25-0.45	0.8	0.25-0.45	1.4	0.20-0.45	1.2															2.5
1B 30 / 1B 30V	80.00	80.11	69		0.50-0.55	0±0.10	0.40	0±0.10	0.40																						
1B 40 / 1B 40V	88.00	88.13	76		0.55-0.60	0±0.10	0.40	0±0.10	0.40																						
1B 50 / 1B 50V	93.00	93.11	76		0.55-0.60	0±0.10	0.40	0±0.10	0.40																						
E 572	71.00	71.11	57		0.55-0.65	0.45-0.90	1.1	0.45-0.90	1.1	0.30-0.80	0.25-0.45	0.7	0.25-0.45	1.2	0.20-0.45	1.0															
E 672	73.00	73.11	67																												
E 573 / E 673	75.00	75.11	80		0.65-0.75	0.25-0.55	0.0	0.25-0.55	0.0	0.1-0.3																					
E • ES 71 / 75	82.00	82.11	100		0.80-0.90	0.7-0.2neg	0.0	0.7-0.2neg	0.0	0.1-0.8	0.3-0.5	0.8	0.3-0.5	1.0	0.25-0.5	1.2															
E • ES 79	85.00	85.13	110		0.85-0.95	0.1-0.6	0.9	0.7-1.2	1.5																						
E • ES 785	85.00	85.13	110																												
E • ES 786																															
1D 30	86.00	86.13	65	in.01 ex.0.2	0.65-0.75	0.90-1.45	1.80	0.90-1.45	1.80		0.30-0.45	0.8	0.30-0.45	1.4		1.2															
1D 31																															
1D 35																															
1D 40																															
1D 41	90.00	90.13		0.2		0.6 ± 0.1	0.2	0.6 ± 0.1	0.2	0.10-0.40					0.25-0.40																
1D 50	97.00	97.16	70	in.01 ex.0.2	0.60-0.65	0.90-1.45	1.80	0.90-1.45	1.80		0.30-0.45	1.0	0.30-0.45	1.6		1.4						0.8-1.9	0.6	1.5-2.5	1.2	2.5-3.5	1.8	3.5-4.5	2.5		
1D 60	88.00	88.13																													
1D 80	100.00	100.16	85	0.3	0.65-0.75	0.90-1.45	1.80	0.90-1.45	1.80		0.35-0.55	1.2	0.35-0.55	1.8		1.6															
1D 81	100.00	100.16								1D90 V/W: 0.05-0.10	0.40-0.60	1.2	0.40-0.60	1.8		1.6															
1D 90 / 1D90V	104.00	104.16																													
E 80	80.00	80.13	100		0.80-0.90	0.30-1.10	1.40	0.30-1.10	1.40	0.10-0.50	0.30-0.50	0.8	0.30-0.50	1.4	0.25-0.50	1.2						1.1-1.6	0.6	1.8-2.6	1.2	3.3-4.0	2.2				
E 85	85.00	85.13																													
E 88 / 89	90.00	90.13	105		0.85-0.95	0.50-1.50	1.80	0.50-1.50	1.80		0.40-0.65	1.0	0.40-0.65	1.6	0.30-0.60	1.4															
E 950	95.00	95.13	105		0.90-1.10	1.20-2.00	2.40	1.20-2.00	2.40	0.20-0.60	0.40-0.65	1.0	0.40-0.65	1.6	0.30-0.60	1.4						0.9-1.6	0.6	1.2-2.2	1.0	1.8-3.0	1.4	2.3-4.0	1.8		
2 G 30	88.00	88.13	75		0.60-0.65	0.90-1.50	1.80	0.90-1.50	1.80	0.10-0.20	0.40-0.65	1.0	0.40-0.65	1.6	0.30-0.60	1.4						1.3-2.6	0.6	1.6-4.0	1.0	2.6-5.0	1.6	3.4-5.0	2.2		
2 G 40	92.00	92.13																													
Z 788			90																												
Z 789	90.00	90.13	100		0.85-0.95	0.50-0.90	1.20	0.50-0.90	1.20	0.30-0.50	0.40-0.65	1.0	0.40-0.65	1.6	0.30-0.60	1.4						1.5-2.8	0.6	2.5-4.5	1.4	3.5-5.2	2.0	4.0-5.8	2.5		
Z 790																															
E • Z • D • V 108	108.00	108.16	110		1.10-1.30	0.70-1.50	1.9	0.70-1.50	1.9	0.20-0.40	0.40-0.65	1.2	0.40-0.65	1.8	0.30-0.60	1.6						0.9-1.5	0.6	1.5-2.8	1.0	2.0-3.5	1.4	2.2-3.8	1.6		
2 • 3 • 4 L 30	95.00	95.16	100																												
2 • 3 • 4 L • M 31			90																												
2 • 3 • 4 L • M 40	102.00	102.17	105		0.85-0.95	0.15-0.00	-	0.15-0.00	-	0.15-0.65	0.40-0.65	1.2	0.40-0.65	1.8	0.30-0.60	1.6						1.0-1.8	0.6	1.6-2.5	1.2	2.0-2.8	1.6	2.3-3.0	1.8		
2 • 3 • 4 L • M 41																															
2 • 3 • 4 W 35 (T)	70.00	70.11	90		0.55-0.65	0 ± 0.10	-	0 ± 0.10	-	-	0.25-0.45	0.8	0.25-0.45	1.4	0.20-0.45	1.2														3.5	



Serial-No.	1/min	°	°	bar	psi	Serial-No.	1/min	°	°	bar	psi
1B 20	[10 - 22]		15.0+1	200+12	2900+175	1D 60 S,Z,T,U	[10 - 15]	n≤3000	19.0+1		250+8 3600+110
1B 20V	[10 - 12]					1D 80 S,Z,T,U	[10 - 15]				
1B 20	[23 - 29]	3000≤n≤3600	14.0+1			1D 60 C	[10 - 15]	n≤3000	21.0+1		250+8 3600+110
1B 20V	[13 - 19]	2000≤n<3000	10.0+1	250+12	3600+175	1D 80 C	[10 - 15]				
1B 20	[30]	1500≤n<2000	8.0+1			1D 60 S,Z,T,U,C	[16 - 26]	n≤3000	21.5+1		250+8 3600+110
1B 20	[30]	3300≤n<3600	12			1D 80 S,Z,T,U	[16 - 24]	n>3000	24.5+1		250+8 3600+110
EPA II	[30]	3000≤n<3300	11			1D 80 C	[16 - 24]	n≤3000	24.0+1		250+8 3600+110
		2700≤n<3000	10	200+10	2900+145			n>3000	25.0+1		250+8 3600+110
		2400≤n<2700	9			1D 81 S,Z,T,U,C	[10 - 19]	n≤3000	20.0+1		
		2100≤n<2400	8			1D 90 S,Z	[10 - 14]	n>3000	23.0+1		235+8 3400+110
		2000≤n<2100	7			1D 90 V,W	[10]				
1B 20	[30]	3300≤n<3600	14			1D 81 S,Z,C	[20 - 23]	1500≤n≤1800	8.0+1		
1B 20V	[30]	3000≤n<3300	13					1800≤n<2700	10.0+1		270+12 3870+175
NON EPA	[30]	2700≤n<3000	12	200+10	2900+145			2700≤n<3000	13.0+1		
		2400≤n<2700	11					3000≤n<3600	15.0+1		
		2100≤n<2400	10			1D 81 S,Z,C	[24]	1500≤n<2200	8.0+1		
		1500≤n<2100	9			EPA II	[24]	2200≤n<2300	9.0+1		
1B 27	[10]	3000≤n<3600	12					2300≤n<2500	10.0+1		250+8 3600+110
EPA II	[10]	2300≤n<3000	10	200+10	2900+145			2500≤n<2600	11.0+1		
		1500≤n<2300	8					2600≤n<2800	12.0+1		
1B 30	[10 - 16]		15.0+1	180+8	2600+110			2800≤n<2900	13.0+1		
1B 30	[17 - 24]	2400≤n<3600	13.0+1			1D 81 S,Z	[24]	3000≤n<3600	16±0.5		
1B 30V	[10 - 15]	1500≤n<2400	10.0+1	220+12	3170+175	NON EPA	[24]	2000≤n<3000	15±0.5		250+8 3600+110
1B 30V	[25]	3400≤n<3600	18±0.5					1500≤n<2000	13±0.5		
1B 30V	[16]	2800≤n<3400	16±0.5	200+10	2900+145	1D 81 C	[24]	2000≤n<3000	15±0.5		250+8 3600+110