

THE MERCUISER ENGINE SERIES



**Cummins MerCruiser Diesel**  
The New Wave in Diesel Marine Power







? Cammins Mercruiser Diesel

MerCruiser  
cruisers,

DTS.

Cammins Mercruiser  
Diesel 1500

# Cummins MerCruiser Diesel

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1.7 M5-120



2.8 ES 200



4.2 ES 320

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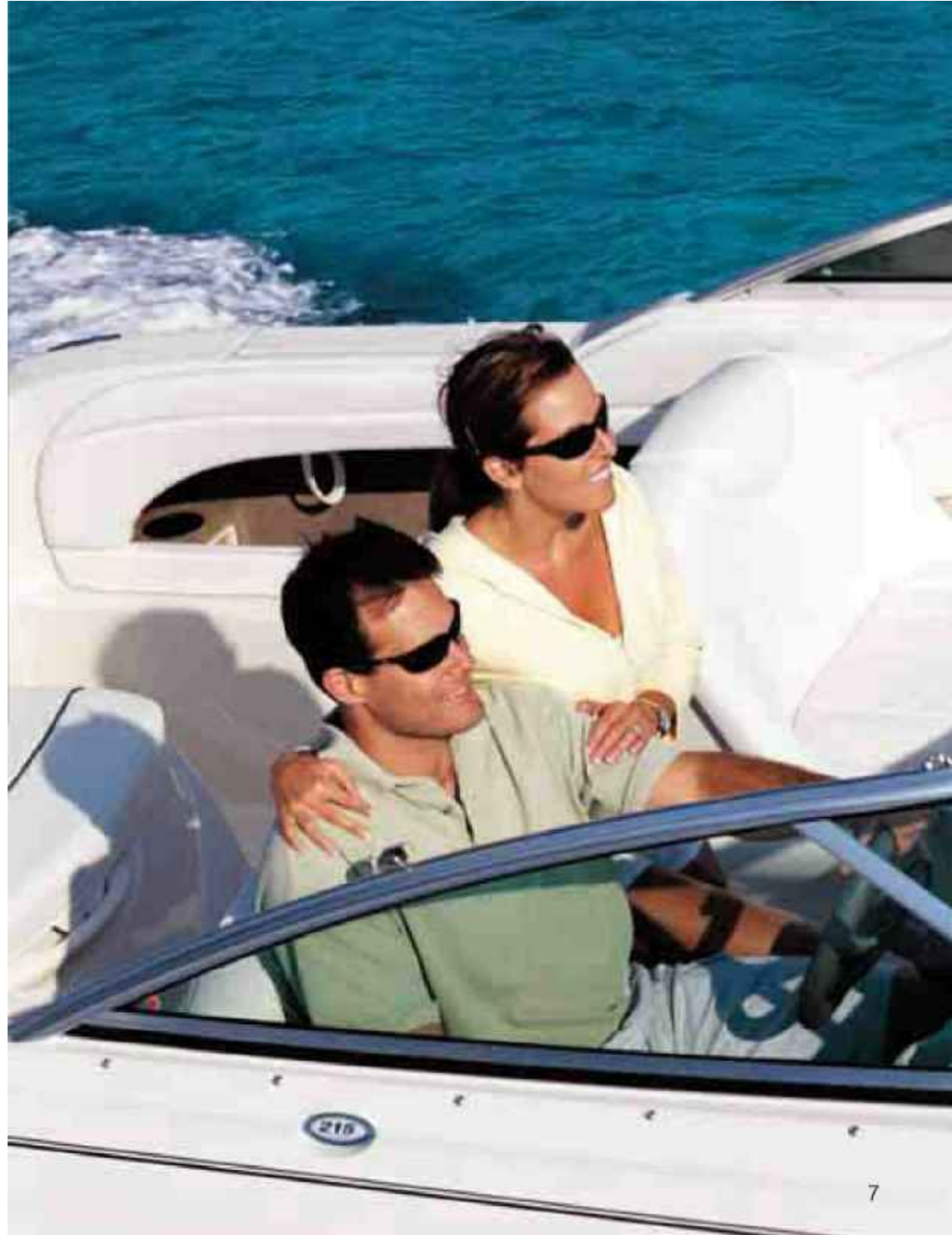
MerCruiser

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Cummins MerCruiser

cruiser.



1.7 MS 120





# MerCruiser 1.7 Litre

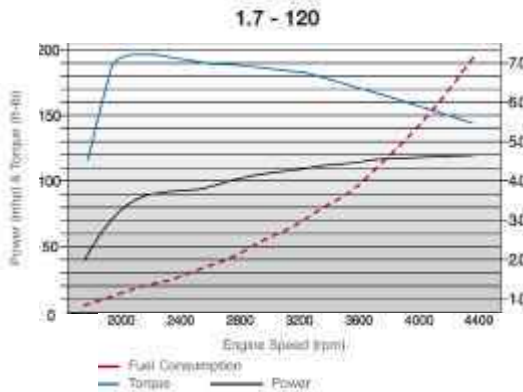


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4.5 9

Cummins  
MerCruiser,



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alpha  
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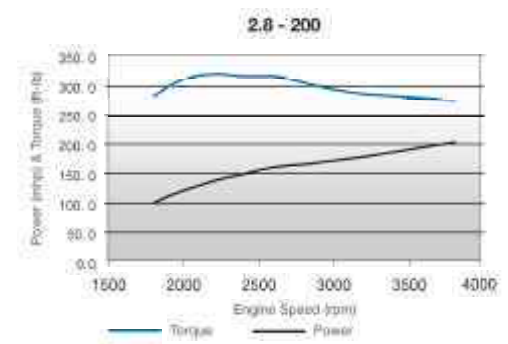
IMO & RCD





, 2.8L

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IMO & RCD



# The MerCruiser Series Diesel Engine 2.8 Litre



Kona 32



# MerCruiser 4.2 Litre



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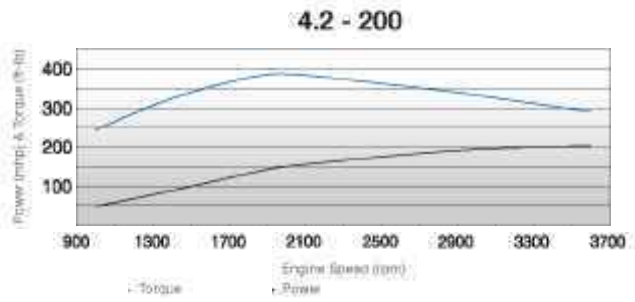
6-  
200 230

Cummins MerCruise,

IMO & RCD



4.2 L





4.2 EI 250

250

C

Cummins MerCruiser

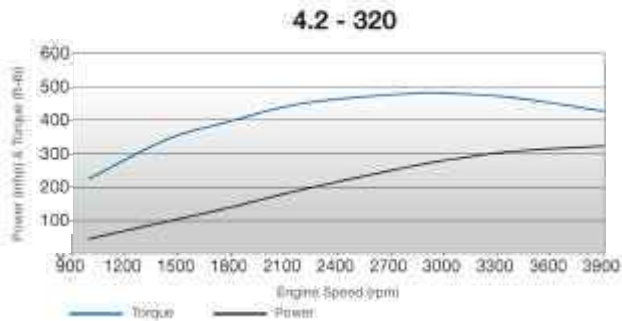


IMO & RCD



4.2 ES 320

320



The MerCruiser Series Diesel Engine 4.2 Litre



# The MerCruiser Engine Series Specifications

	1.7 MS 120	1.7 MI 120	1.7 MJ 120	2.8 ES 170	2.8 EI 170	2.8 EJ 170	2.8 ES 200	2.8 EI 200	2.8 EJ 200	4.2 MS 200
HP (kW)	120 (88)	120 (88)	120 (88)	170 (125)	170 (125)	170 (125)	200 (147)	200 (147)	200 (147)	200 (147)
HP (kW)	115 (84)	116 (85)	115 (84)	162 (119)	165 (122)	162 (119)	191 (141)	194 (142)	191 (141)	191 (141)
	PC	PC	PC	PC	PC	PC	PC	PC	PC	LC
Displacement (cu.in./liters)	103/1.7	103/1.7	103/1.7	169/2.8	169/2.8	169/2.8	169/2.8	169/2.8	169/2.8	254/4.2
Configuration	Inline-4	Inline-4	Inline-4	Inline-4	Inline-4	Inline-4	Inline-4	Inline-4	Inline-4	Inline-6
Stroke (in./mm)	3.11x3.39 (79x86)	3.11x3.39 (79x86)	3.11x3.39 (79x86)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)
Compression Ratio	17.2:1	17.2:1	17.2:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1
Injection System	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected
RPM	4400	4400	4400	3800	3800	3800	3800	3800	3800	3600
Starting System	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt
Amp	50	50	50	80	80	80	80	80	80	70
Alternator	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Standard
Idle Speed (RPM)	4400 rpm @ 27.3 l/hr	4400 rpm @ 27.3 l/hr	4400 rpm @ 27.3 l/hr	3800 rpm @ 40.4 l/hr	3800 rpm @ 40.4 l/hr	3800 rpm @ 40.4 l/hr	3800 rpm @ 49.6 l/hr	3800 rpm @ 49.6 l/hr	3800 rpm @ 49.6 l/hr	3600 rpm @ 40.6 l/hr
Idle Fuel Consumption (g/hr)	4400 rpm @ 7.2 g/hr	4400 rpm @ 7.2 g/hr	4400 rpm @ 7.2 g/hr	3800 rpm @ 10.7 g/hr	3800 rpm @ 10.7 g/hr	3800 rpm @ 10.7 g/hr	3800 rpm @ 13.1 g/hr	3800 rpm @ 13.1 g/hr	3800 rpm @ 13.1 g/hr	3600 rpm @ 10.7 g/hr
Cruise RPM	4000 rpm @ 20.1 l/hr	4000 rpm @ 20.1 l/hr	4000 rpm @ 20.1 l/hr	3400 rpm @ 25.8 l/hr	3400 rpm @ 25.8 l/hr	3400 rpm @ 25.8 l/hr	3400 rpm @ 31.6 l/hr	3400 rpm @ 31.6 l/hr	3400 rpm @ 31.6 l/hr	3200 rpm @ 27.7 l/hr
Cruise Fuel Consumption (g/hr)	4000 rpm @ 5.3 g/hr	4000 rpm @ 5.3 g/hr	4000 rpm @ 5.3 g/hr	3400 rpm @ 6.8 g/hr	3400 rpm @ 6.8 g/hr	3400 rpm @ 6.8 g/hr	3400 rpm @ 8.3 g/hr	3400 rpm @ 8.3 g/hr	3400 rpm @ 8.3 g/hr	3200 rpm @ 7.3 g/hr
Standard	Standard	N/A	Standard	Standard	N/A	Standard	Standard	N/A	Standard	Standard
Optional	Optional	N/A	Optional	Standard	N/A	Optional	Standard	N/A	Optional	Standard
Optional	Optional	N/A	Optional	Standard	N/A	Standard	Standard	N/A	Standard	Standard
Optional	Optional	N/A	N/A	Standard	N/A	N/A	Standard	N/A	N/A	Standard
Optional	Optional	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Optional
Optional	Optional	Optional	Optional	Standard	Standard	Standard	Standard	Standard	Standard	Standard
N/A	N/A	N/A	N/A	Optional	Optional	Optional	Optional	Optional	Optional	N/A
in. (mm)	29.4 (748)	26.0 (660)	42.6 (1082)	40.8 (1035)	36.6 (931)	47.8 (1214)	33.9 (862)	27.9 (708)	47.8 (1214)	49.4 (1254)
in. (mm)	29.4 (746)	29.1 (738)	29.1 (738)	29.9 (759)	29.9 (759)	29.9 (759)	30.2 (767)	29.9 (759)	29.9 (759)	29.3 (743)
in. (mm)	28.1 (715)	28.1 (715)	28.1 (715)	31.1 (790)	31.1 (790)	31.1 (790)	31.1 (790)	31.1 (790)	31.1 (790)	31.0 (788)
Bravo I/Alpha/Boat Tail	653 lbs. (296 kg)	550 lbs. (250 kg)	N/A	1075 lbs. (488 kg)	869 lbs. (395 kg)	N/A	1075 lbs. (488 kg)	869 lbs. (395 kg)	N/A	1275 lbs. (578 kg)
Bravo II/Down Angle	N/A	607 lbs. (276 kg)	N/A	1087 lbs. (493 kg)	973 lbs. (442 kg)	N/A	1087 lbs. (493 kg)	973 lbs. (442 kg)	N/A	1287 lbs. (584 kg)
Bravo III/V-Drive	N/A	N/A	N/A	1096 lbs. (497 kg)	1017 lbs. (462 kg)	N/A	1096 lbs. (497 kg)	1017 lbs. (462 kg)	N/A	1296 lbs. (588 kg)
Jet lbs. (kg)	N/A	N/A	750 lbs. (341 kg)	N/A	N/A	1080 lbs. (491 kg)	N/A	N/A	1080 lbs. (491 kg)	N/A
Alpha	2.0°	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bravo On	N/A	N/A	N/A	1.5 • 1.65°	N/A	N/A	1.5 • 1.65°	N/A	N/A	1.5° • 1.65
Bravo OneXR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bravo Two	N/A	N/A	N/A	2.2° • 2.0	N/A	N/A	2.0 • 1.81 • 2.2°	N/A	N/A	2.0° • 1.81 • 2.2
Bravo Three	N/A	N/A	N/A	2.2 • 2.0° • 2.43	N/A	N/A	2.2 • 2.0°	N/A	N/A	1.65 • 1.81° • 2.0 • 2.2
Jet	N/A	N/A	1.86:1	N/A	N/A	1.52:1	N/A	N/A	1.42:1	N/A
ZF 25A	N/A	1.6 • 1.9 • 2.3 • 2.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ZF 45A	N/A	N/A	N/A	N/A	1.5 • 2.0 • 2.43	N/A	N/A	1.5 • 2.0 • 2.43	N/A	N/A
ZF 45A (Trolling V/V)	N/A	N/A	N/A	N/A	2.0	N/A	N/A	2.0	N/A	N/A
ZF 63A	N/A	N/A	N/A	N/A	1.5 • 2.0 • 2.5	N/A	N/A	1.5 • 2.0 • 2.5	N/A	N/A
ZF 63IV	N/A	N/A	N/A	N/A	1.5 • 2.0 • 2.5	N/A	N/A	1.5 • 2.0 • 2.5	N/A	N/A



4.2 MI 200	4.2 MS 230	4.2 MI 230	4.2 ES 250	4.2 EI 250	4.2 EJ 250	4.2 ES 270	4.2 EI 270	4.2 ES 320	4.2 EI 320
200 (147)	230 (169)	230 (169)	250 (184)	250 (184)	250 (184)	270 (198)	270 (198)	320 (236)	320 (236)
194 (142)	220 (162)	222 (164)	239 (176)	241 (178)	239 (176)	259 (191)	261 (192)	306 (225)	310 (229)
LC	PC	PC	PC	PC	PC	PC	PC	PC	PC
254/4.2	254/4.2	254/4.2	254/4.2	254/4.2	254/4.2	254/4.2	254/4.2	254/4.2	254/4.2
Inline-6	Inline-6	Inline-6	Inline-6	Inline-6	Inline-6	Inline-6	Inline-6	Inline-6	Inline-6
3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)	3.70x3.94 (94x100)
16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1
Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected	Direct-Injected
3600	3800	3800	3800	3800	3800	3800	3800	3900	3900
12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt	12 Volt
70	65	65	65	65	65	65	65	65	65
Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
3600 rpm @ 40.6 l/hr	3800 rpm @ 46.6 l/hr	3800 rpm @ 46.6 l/hr	3800 rpm @ 51.7 l/hr	3800 rpm @ 51.7 l/hr	3800 rpm @ 51.7 l/hr	3800 rpm @ 58.2 l/hr	3800 rpm @ 58.2 l/hr	3900 rpm @ 71.0 l/hr	3900 rpm @ 71.0 l/hr
3600 rpm @ 10.7 g/hr	3800 rpm @ 12.3 g/hr	3800 rpm @ 12.3 g/hr	3800 rpm @ 13.7 g/hr	3800 rpm @ 13.7 g/hr	3800 rpm @ 13.7 g/hr	3800 rpm @ 15.4 g/hr	3800 rpm @ 15.4 g/hr	3900 rpm @ 18.8 g/hr	3900 rpm @ 18.8 g/hr
3200 rpm @ 27.7 l/hr	3400 rpm @ 29.7 l/hr	3400 rpm @ 29.7 l/hr	3400 rpm @ 32.9 l/hr	3400 rpm @ 32.9 l/hr	3400 rpm @ 32.9 l/hr	3400 rpm @ 37.1 l/hr	3400 rpm @ 37.1 l/hr	3600 rpm @ 52.8 l/hr	3600 rpm @ 52.8 l/hr
3200 rpm @ 7.3 g/hr	3400 rpm @ 7.8 g/hr	3400 rpm @ 7.8 g/hr	3400 rpm @ 8.7 g/hr	3400 rpm @ 8.7 g/hr	3400 rpm @ 8.7 g/hr	3400 rpm @ 9.8 g/hr	3400 rpm @ 9.8 g/hr	3600 rpm @ 14.0 g/hr	3600 rpm @ 14.0 g/hr
N/A	Standard	N/A	Standard	N/A	Standard	Standard	N/A	Standard	N/A
N/A	Standard	N/A	Standard	N/A	Optional	Standard	N/A	Standard	N/A
N/A	Standard	N/A	Standard	N/A	Standard	Standard	N/A	Standard	N/A
N/A	Standard	N/A	Standard	N/A	N/A	Standard	N/A	Standard	N/A
N/A	Optional	N/A	Optional	N/A	N/A	Optional	N/A	Optional	N/A
Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
N/A	N/A	N/A	Optional	Optional	Optional	Optional	Optional	Optional	Optional
45.5 (1155)	49.4 (1254)	45.5 (1155)	49.6 (1259)	45.5 (1155)	64.0 (1624)	49.6 (1259)	45.5 (1155)	49.6 (1259)	45.5 (1155)
26.9 (684)	29.3 (743)	26.9 (684)	29.1 (740)	26.9 (684)	29.1 (740)	29.1 (740)	26.9 (684)	29.1 (740)	26.9 (684)
30.2 (767)	31.3 (794)	30.2 (767)	31.3 (794)	30.7 (779)	31.3 (794)	31.3 (794)	30.7 (779)	31.3 (794)	30.7 (779)
1161 lbs. (528 kg)	1275 lbs. (578 kg)	1161 lbs. (528 kg)	1275 lbs. (578 kg)	1161 lbs. (528 kg)	N/A	1275 lbs. (578 kg)	1161 lbs. (528 kg)	1275 lbs. (578 kg)	1161 lbs. (528 kg)
1265 lbs. (575 kg)	1287 lbs. (584 kg)	1265 lbs. (575 kg)	1287 lbs. (584 kg)	1265 lbs. (575 kg)	N/A	1287 lbs. (584 kg)	1265 lbs. (575 kg)	1287 lbs. (584 kg)	1265 lbs. (575 kg)
1309 lbs. (595 kg)	1296 lbs. (588 kg)	1309 lbs. (595 kg)	1296 lbs. (588 kg)	1309 lbs. (595 kg)	N/A	1296 lbs. (588 kg)	1309 lbs. (595 kg)	1296 lbs. (588 kg)	1309 lbs. (595 kg)
N/A	N/A	N/A	N/A	N/A	1280 lbs. (582 kg)	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	1.5 <sup>P</sup> • 1.65	N/A	1.5 <sup>P</sup> • 1.65	N/A	N/A	1.36 • 1.5 <sup>P</sup>	N/A	1.36 • 1.5 <sup>P</sup>	N/A
N/A	N/A	N/A	1.35 • 1.5 <sup>P</sup>	N/A	N/A	1.35 • 1.5 <sup>P</sup>	N/A	1.35 • 1.5 <sup>P</sup>	N/A
N/A	2.0 <sup>P</sup> • 1.81 • 2.2	N/A	2.0 <sup>P</sup> • 1.81 • 2.2	N/A	N/A	2.0 <sup>P</sup> • 1.81	N/A	2.0 <sup>P</sup> • 1.81	N/A
N/A	1.65 • 1.81 <sup>P</sup> • 2.0 • 2.2	N/A	1.65 • 1.81 <sup>P</sup> • 2.0	N/A	N/A	1.5 • 1.65 • 1.81 <sup>P</sup>	N/A	1.5 • 1.65 • 1.81 <sup>P</sup>	N/A
N/A	N/A	N/A	N/A	N/A	1.33:1	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1.5 • 2.0 • 2.5	N/A	1.5 • 2.0 • 2.5	N/A	1.5 • 2.0 • 2.5	N/A	N/A	1.5 • 2.0 • 2.5	N/A	1.5 • 2.0 • 2.5
1.5 • 2.0 • 2.5	N/A	1.5 • 2.0 • 2.5	N/A	1.5 • 2.0 • 2.5	N/A	N/A	1.5 • 2.0 • 2.5	N/A	1.5 • 2.0 • 2.5