

Waterous Split Shaft Pump/Engine/Ratio Combinations



This guide should be used to determine pump/engine/ratio combinations. Deductions have been made to compensate for engine variations, estimated parasitic losses, truck transmission and operation at an altitude of 2,000 feet. Five percent has been added to the required horsepower listed on Waterous performance sheets for each pump test, to allow for pump variations. HP draw for air conditioning, generator, transmission retarder, etc. is not included. Because of the many variables that affect these combinations, OEM review and approval is required.

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Detroit Diesel					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD8 350 Curve #: D936.917_350-1050 Curve Date: 9/30/20 1050 lb-ft @ 1400 RPM	350/2600	CSUC22-1500	2.27	1806	67
			2.46	1667	44
		CXC22-1250	2.27	1901	104
			2.46	1754	92
			2.68	1610	73

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD8 375 Curve #: D.936.917_375-1000 Curve Date: 6/30/2017 1050 lb-ft @ 1400 RPM	375/2200	CSC22-1250	1.79	2194	127
		CSUC22-1250	2.27	1797	75
		CSUC22-1500	1.88	2181	87
			1.97	2081	84
CXSC22-1500	2.27	1916	72		
	2.46	1768	63		
	2.68	1623	46		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 410 Curve #: D.471.940_410-1450 Curve Date: 12/30/2015 1450 lb-ft @ 975 RPM	410/1900	CSC22 - 750	2.46	1587	185
		CSC22 - 1000	2.46	1592	166
		CSC22-1250	2.46	1596	142
		CSUC22-1250	2.46	1659	145
			2.68	1522	138
		CSUC22-1500	2.46	1667	123
			2.68	1530	116
		CSUC22-1750	2.46	1667	87
			2.68	1530	80
		CSUC22-2000	2.46	1667	57
			2.68	1530	50
		CMC22 - 750	2.46	1622	199
		CMC22 - 1000	2.46	1632	182
		CMC22-1250	2.46	1650	151
CMUC22-1250	2.27	1643	144		
	2.46	1516	137		
CMUC22-1500	2.27	1665	119		
	2.46	1537	112		
CMUC22-1750	2.27	1687	84		
	2.46	1557	81		
CMUC22-2000	2.46	1585	42		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 410 Curve #: D.471.940_410-1450 Curve Date: 12/30/2015 1450 lb-ft @ 1250 RPM	410/1900	CGC22-500	2.68	1716	234
		CGC22-750	2.68	1733	224
		CXC22-750	2.68	1597	175
		CXC22-1000	2.68	1601	167
		CXC22-1250	2.68	1610	151
		CXC22-1500	2.68	1623	120
		S100C22-1250	2.68	1493	107
		S100C22-1500	2.68	1493	79
		S100C22-1750	2.68	1503	59
		S100C22-2000	2.68	1516	48

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 450 Curve #: D.471.940_450-1550 Curve Date: 12/30/2015 1550 lb-ft @ 975 RPM	450/1900	CSC22 - 750	2.46	1587	249
		CSC22 - 1000	2.46	1592	225
		CSC22-1250	2.46	1596	192
		CSUC22-1250	2.46	1659	190
			2.68	1522	173
		CSUC22-1500	2.46	1667	172
			2.68	1530	155
		CSUC22-1750	2.46	1667	127
			2.68	1530	106
		CSUC22-2000	2.46	1667	99
			2.68	1530	93
		CSUC22-2250	2.46	1602	37
			2.68	1506	27
		CMC22 - 750	2.46	1622	231
			2.68	1489	248
CMC22 - 1000	2.46	1628	214		
	2.68	1498	231		
CMC22 - 1250	2.46	1650	185		
CMUC22 - 1250	2.46	1516	160		
CMUC22-1500	2.46	1537	140		
CMUC22-1750	2.46	1557	113		
CMUC22-2000	2.46	1585	74		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 450 Curve #: D.471.940_450-1550 Curve Date: 12/30/2015 1550 lb-ft @ 975 RPM	450/1900	CGC22 - 500	2.68	1716	238
		CGC22 - 750	2.68	1733	222
		CXC22-750	2.68	1597	209
		CXC22-1000	2.68	1601	201
		CXC22-1250	2.68	1610	184
		CXC22-1500	2.68	1623	150
		S100C22-1250	2.68	1493	127
		S100C22-1500	2.68	1493	122
		S100C22-1750	2.68	1504	98
		S100C22-2000	2.68	1516	84

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 470 Curve #: D.471.940_450-1650 Curve Date: 12/30/2015 1650 lb-ft @ 1075 RPM	470/1900	CSC22 - 1250	2.46	1596	184
		CSUC22-1250	2.46	1659	170
		CSUC22-1500	2.46	1667	164
			2.68	1530	138
		CSUC22-1750	2.46	1667	134
			2.68	1530	112
		CSUC22-2000	2.46	1667	111
		CMUC22-1500	2.27	1665	176
2.46	1537		163		
CMUC22-2000	2.46	1585	110		
CXC22-1500	2.46	1768	129		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 500 Curve #: E4-471X-35-16 Curve Date: 2/24/10 1650 lb-ft @ 1800 RPM	500/2000	CSC22-750	2.27	1720	256
			2.46	1587	228
		CSC22-1000	2.27	1725	236
			2.46	1592	209
		CSC22-1250	2.27	1730	212
			2.46	1596	188
		CSUC22-1250	2.27	1797	217
			2.46	1659	195
		CSUC22-1500	2.27	1806*	197
			2.46	1667	174
		CSUC22-1750	2.27	1718	160
			2.46	1585	137
		CSUC22-2000	2.27	1727	128
			2.46	1593	107
		CSUC22-2250	2.27	1778	72
			2.46	1640	55
CMC22-750	2.27	1758	278		
	2.46	1622	258		
CMC22-1000	2.27	1769	261		
	2.46	1632	243		
CMC22-1250	2.27	1789	229		
	2.46	1650	219		
CMUC22-1250	2.27	1643	206		
	2.46	1516	181		
CMUC22-1500	2.27	1665	186		
	2.46	1537	162		
CMUC22-1750	2.27	1687	156		
	2.46	1557	135		
CMUC22-2000	2.27	1718	121		
	2.46	1585	104		
CMUC22-2250	2.27	1819*	41		
	2.46	1679	47		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 500 Curve #: E4-471X-35-16 Curve Date: 2/24/10 1650 lb-ft @ 1800 RPM	500/2000	CGC22 - 500	2.46	1870*	281
		CGC22 - 750	2.46	1888*	269
		CXC22-750	2.27	1885*	212
			2.46	1740	250
		CXC22-1000	2.27	1890*	208
			2.46	1744	239
		CXC22 - 1250	2.46	1754	223
		CXC22 - 1500	2.46	1768	196
		S100C22-1250	2.27	1762	167
			2.46	1626	143
S100C22-1500	2.27	1762	174		
S100C22-1750	2.27	1773	159		
S100C22-2000	2.27	1790	131		
	2.46	1652	112		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 505 Curve #: D471.940_505-1750 Curve Date: 12/30/15 1750 lb-ft @ 1075 RPM	505/1900	CSC22-1000	2.46	1592	226
		CSC22-1250	2.46	1596	207
		CSUC22-1250	2.46	1659	200
		CSUC22-1500	2.46	1667	196
			2.68	1530	162
		CSUC22-1750	2.27	1634	137
			2.46	1667	159
		CSUC22-2000	2.46	1667	135
		CMUC22-1500	2.27	1665	211
			2.46	1537	184
2.68	1410		151		
CMUC22-1750	2.46	1557	189		
	2.68	1463	117		
CMUC22-2000	2.46	1585	124		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 505 Curve #: D471.940_505-1750 Curve Date: 12/30/15 1750 lb-ft @ 1075 RPM	505/1900	CXC22 - 750	2.68	1597	260
		CXC22 - 1000	2.68	1601	249
		CXC22 - 1250	2.68	1610	234
		CXC22 - 1500	2.68	1623	218
		S100C22-1750	2.27	1775	178
		S100C22-2000	2.27	1790	153

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 525 Curve #: D471.940_525-1850 Curve Date: 12/30/15 1850 lb-ft @ 1075 RPM	525/1900	CSC22-1000	2.46	1329	249
		CSC22-1250	2.46	1652	153
		CSUC22-1250	2.46	1659	237
		CSUC22-1500	2.46	1667	209
			2.68	1530	184
		CSUC22-1750	2.46	1585	179
		CSUC22-2000	2.46	1667	158
			2.68	1530	143
		CMUC22-1500	2.46	1537	202
2.68	1530		179		
CMUC22-1750	2.46	1557	182		
CMUC22-2000	2.46	1585	143		

Detroit Diesel

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
DD13 525 Curve #: D471.940_525-1850 Curve Date: 12/30/15 1850 lb-ft @ 1075 RPM	525/1900	CXC22 - 1000	2.46	1744	213
		S100C22-1250	2.46	1626	207
		S100C22-1500	2.46	1626	197
		S100C22-1750	2.46	1638	177
		S100C22-2000	2.46	1652	144
2.68	1516		132		

Cummins ISB Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 340 Curve #: FR93353EV Curve Date: 6/14/13 700 lb-ft @ 1600 RPM	340/2600	CSC22-750	1.69	2310	108
			1.79	2181	94
		CSC22-1000	1.69	2317	84
			1.79	2188	74
		CSC22-1250	1.69	2324	62
			1.79	2194	47
		CSUC22-1250	1.79	2279	55
			1.88	2170	44
		CSUC22-1500	1.79	2291	29
			1.88	2181	19
CMC22-750	1.69	2361	117		
	1.79	2229	109		
CMC22-1000	1.69	2376	112		
	1.79	2243	97		
CMC22-1250	1.79	2268	69		
	1.88	2160	57		
CMUC22-1250	1.58	2361	69		
	1.69	2207	55		
CMUC22-1500	1.58	2392	47		
	1.69	2237	31		

Cummins ISB Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 340 Curve #: FR93353EV Curve Date: 6/14/13 700 lb-ft @ 1600 RPM	340/2600	CGC22-500	1.97	2335	146
			2.03	2266	141
		CGC22-750	1.97	2358	136
			2.03	2288	128
		CGC22-1000	2.27	2181	83
			2.46	2012	65
		CXC22-750	1.79	2391	112
			1.88	2277	100
			1.97	2173	87
		CXC22-1000	1.79	2397	94
1.88	2282		90		
1.97	2178		74		
CXC22-1250	1.88	2295	64		
	1.97	2190	53		
CXC22-1500	1.88	2314	75		
	1.97	2208	63		
	2.03	2143	55		
S100C22-1250	1.69	2367	43		
	1.79	2235	28		
S100C22-1500	1.69	2367	29		
	1.79	2235	16		
S100C22-1750	1.69	2385	16		

Cummins ISB Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 360 Curve #: FR93353EV Curve Date: 5/14/13 800 lb-ft @ 1800 RPM	360/2600	CSC22-750	1.69	2310	80
			1.79	2181	124
		CSC22-1000	1.69	2317	116
			1.79	2188	106
		CSC22-1250	1.69	2324	92
			1.79	2194	82
			2.03	1934	41
		CSUC22-1250	1.79	2279	87
			1.88	2170	73
		CSUC22-1500	1.79	2291	62
			1.88	2181	50
			2.03	2020	31
		CSUC22-1750	1.69	2308	38
1.79	2179		23		
CMC22-750	1.69	2361	159		
	1.79	2229	144		
CMC22-1000	1.79	2367	148		
	1.88	2243	132		
CMC22-1250	1.79	2268	106		
	1.88	2160	92		
CMUC22-1250	1.79	2361	106		
	1.88	2207	89		
CMUC22-1500	1.58	2392	85		
	1.69	2237	67		
CMUC22-1750	1.69	2266	41		
	1.79	2140	25		

Cummins ISB Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISB 360 Curve #: FR93353EV Curve Date: 5/14/13 800 lb-ft @ 1800 RPM	360/2600	CGC22-500	1.97	2335	177
			2.03	2266	172
		CGC22-750	1.97	2358	171
			2.03	2288	163
		CGC22-1000	2.27	2181	120
			2.46	2012	95
		CXC22-750	1.79	2391	146
			1.88	2277	132
			1.97	2173	120
		CXC22-1000	1.79	2397	129
			1.88	2282	117
1.97	2178		107		
CXC22-1250	1.79	2411*	110		
	1.88	2295	97		
	1.97	2190	85		
CXC22-1500	1.79	2314	112		
	1.88	2208	99		
	2.03	2143	91		
S100C22-1250	1.69	2367	79		
	1.79	2235	66		
S100C22-1500	1.69	2367	65		
	1.79	2235	56		
S100C22-1750	1.69	2385	41		
	1.79	2251	25		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 300 Curve #: FR93445EV Curve Date: 6/26/13 860 lb-ft @ 1300 RPM	300/2200	CSC22-750	2.27	1720	90
			2.46	1587	74
		CSC22-1000	2.03	1929	92
			2.27	1725	64
		CSC22-1250	2.46	1592	48
			2.03	1934	66
		CSUC22-1250	2.27	1730	44
			2.46	1596	27
		CSUC22-1500	2.27	1797	49
			2.46	1659	32
CMC22-750	2.03	2020*	44		
	2.27	1806	23		
CMC22-1000	2.27	1758	104		
	2.46	1622	87		
CMC22-1250	2.27	1768	77		
	2.46	1632	63		
CMUC22-1250	2.27	1789	60		
	2.46	1650	45		
CMUC22-1500	2.27	1643	35		
	2.46	1516	19		
	1.97	1919	37		
	2.03	1862	32		

Cummins ISB Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 300 Curve #: FR93445EV Curve Date: 6/26/13 860 lb-ft @ 1300 RPM	300/2200	CGC22-500	2.27	2026*	160
			2.46	1870	144
		CGC22-750	2.27	2046*	142
			2.46	1888	130
		CGC22-1000	2.46	1847	75
		CXC22-750	2.27	1885	92
			2.46	1740	81
		CXC22-1000	2.27	1890	84
			2.46	1744	64
CXC22-1250	2.27	1901	66		
	2.46	1754	50		
CXC22-1500	2.27	1916	65		
	2.46	1768	54		
S100C22-1250	2.03	1970	30		
	2.27	1762	17		
S100C22-1500	2.03	1970	19		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 330 Curve #: FR93444EV Curve Date: 6/26/13 1000 lb-ft @ 1400 RPM	330/2200	CSC22-750	2.27	1720	120
			2.46	1587	89
		CSC22-1000	2.27	1725	101
			2.46	1592	73
		CSC22-1250	2.03	1934	91
			2.27	1730	75
			2.46	1596	55
		CSUC22-1250	2.27	1797	73
			2.46	1659	62
		CSUC22-1500	2.03	2020*	66
			2.27	1806	47
			2.46	1667	38
		CSUC22-1750	1.97	1980	31
2.03	1921		26		
CMC22-750	2.27	1758	129		
	2.46	1622	117		
CMC22-1000	2.27	1769	116		
	2.46	1632	103		
CMC22-1250	2.27	1789	82		
	2.46	1650	70		
CMUC22-1250	2.27	1643	63		
	2.46	1516	52		
CMUC22-1500	2.03	1862	54		
	2.27	1665	37		
CMUC22-1750	1.97	1944	28		
	2.03	1887	23		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 330 Curve #: FR93444EV Curve Date: 6/26/13 1000 lb-ft @ 1400 RPM	330/2200	CGC22-500	2.27	2026*	184
			2.46	1870	170
		CGC22-750	2.27	2046*	165
			2.46	1888	154
		CGC22-1000	2.46	2012*	119
		CXC22-750	2.27	1885	116
			2.46	1740	104
		CXC22-1000	2.27	1890	108
			2.46	1744	96
CXC22-1250	2.27	1901	90		
	2.46	1754	78		
CXC22-1500	2.27	1916	89		
	2.46	1768	76		
S100C22-1250	2.27	1762	39		
	2.46	1626	28		
S100C22-1500	2.27	1762	29		
	2.46	1626	18		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 350 Curve #: FR93443EV Curve Date: 6/26/13 1000 lb-ft @ 1400 RPM	350/2200	CSC22-750	2.27	1720	124
			2.46	1587	89
		CSC22-1000	2.27	1725	117
			2.46	1592	73
		CSC22-1250	2.03	1934	98
			2.27	1730	94
			2.46	1596	55
		CSUC22-1250	2.03	2020*	71
			2.27	1806	80
			2.46	1659	66
		CSUC22-1500	2.03	2020*	72
			2.27	1806	53
			2.46	1667	40
		CMUC22-1750	1.97	1980	43
2.03	1921		36		
CSUC22-2000	2.03	2020*	17		
CMC22-750	2.27	1758	135		
	2.46	1622	119		
CMC22-1000	2.27	1769	121		
	2.46	1632	107		
CMUC22-1250	2.03	1837	90		
	2.27	1643	66		
	2.46	1516	52		
CMUC22-1500	2.03	1862	64		
	2.27	1665	42		
	2.46	1537	27		
CMUC22-1750	1.97	1944	43		
	2.03	1887	36		
	2.27	1687	13		
CSUC22-2000	1.97	1980	9*		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 350 Curve #: FR93443EV Curve Date: 6/26/13 1000 lb-ft @1400 RPM	350/2200	CGC22-500	2.27	2026*	191
			2.46	1870	174
		CGC22-750	2.27	2046*	169
			2.46	1888	162
		CGC22-1000	2.46	2012*	136
		CXC22-750	2.27	1885	130
			2.46	1740	113
		CXC22-1000	2.27	1890	120
			2.46	1744	105
		CXC22-1250	2.27	1901	98
2.46	1754		81		
CXC22-1500	2.27	1916	104		
	2.46	1768	87		
S100C22-1250	2.27	1762	49		
	2.46	1626	41		
S100C22-1500	2.27	1762	40		
	2.46	1626	22		
S100C22-1750	2.27	1775	14		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 360 Curve #: FR96235EV Curve Date: 11/19/19 1150 lb-ft @1200 RPM	360/2200	CSC22-1000	2.27	1440	134
		CSC22-1250	2.27	1730	99
		CSUC22-1250	2.27	1797	109
		CSUC22-1500	2.27	1586	92
			2.46	1667	71
		CMUC22-1500	2.27	1586	80
CXC22-1500	2.27	1806	92		
	2.46	1667	94		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 370 Curve #: FR93437EV Curve Date: 6/26/13 1250 lb-ft @ 1400 RPM	370/2100	CSC22-750	2.27	1720	178
			2.46	1587	148
		CSC22-1000	2.27	1725	168
			2.46	1592	132
		CSC22-1250	2.27	1730	141
			2.46	1596	104
		CSUC22-1250	2.27	1797	126
			2.46	1659	125
		CSUC22-1500	2.27	1806	112
			2.46	1667	98
		CSUC22-1750	2.03	1921*	82
			2.27	1718	76
			2.46	1585	62
		CSUC22-2000	2.27	1806	46
			2.46	1667	40
		CMC22-750	2.27	1758	187
2.46	1622		185		
CMC22-1000	2.27	1769	170		
	2.46	1632	167		
CMC22-1250	2.27	1789	140		
	2.46	1650	136		
CMUC22-1250	2.27	1643	130		
	2.46	1516	112		
CMUC22-1500	2.27	1665	104		
	2.46	1537	84		
CMUC22-1750	2.03	1887	72		
	2.27	1687	70		
CMUC22-2000	2.03	1921*	31		
	2.27	1718	32		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 370 Curve #: FR93437EV Curve Date: 6/26/13 1250 lb-ft @ 1400 RPM	370/2100	CGC22-500	2.46	1870	225
		CGC22-750	2.46	1888	213
		CXC22-750	2.27	1888	160
			2.46	1740	161
		CXC22-1000	2.27	1890	152
			2.46	1744	153
		CXC22-1250	2.27	1901*	141
			2.46	1754	141
		CXC22-1500	2.27	1916*	131
			2.46	1768	131
		S100C22-1250	2.27	1762	94
			2.46	1626	92
S100C22-1500	2.27	1762	84		
	2.46	1626	82		
S100C22-1750	2.27	1775	68		
	2.46	1638	66		
S100C22-2000	2.27	1790	42		
	2.46	1652	36		
ESUC22-1500	1.79	2053	15		
	1.88	1955	18		
	1.97	1865	19		
	2.03	1810	19		
	2.27	1619	21		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 380 Curve #: FR934427EV Curve Date: 6/26/13 1150 lb-ft @ 1400 RPM	380/2200	CSC22-750	2.03	1923	171
			2.27	1720	151
			2.46	1587	126
		CSC22-1000	2.27	1725	132
			2.46	1592	105
		CSC22-1250	2.03	1934	123
			2.27	1730	104
			2.46	1596	80
		CSUC22-1500	2.27	1806	86
			2.46	1667	76
		CSUC22-1750	2.03	1921	68
			2.27	1806	40
		CSUC22-2000	1.97	2081*	53
			2.03	1732	20*
			2.27	1806	28
			2.46	1667	13
		CMC22-750	2.27	1758	168
2.46	1622		153		
CMC22-1000	2.27	1769	170		
	2.46	1632	167		
CMC22-1000	2.27	1769	154		
	2.46	1632	141		
CMC22-1250	2.27	1789	124		
	2.46	1650	109		
CMUC22-1250	2.03	1837	112		
	2.27	1643	100		
	2.46	1516	87		
CMUC22-1500	2.27	1665	76		
	2.46	1537	62		
CMUC22-1750	2.03	1887	65		
	2.27	1687	46		
CMUC22-2000	2.03	1921	31		
	2.27	1718	12*		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 380 Curve #: FR934427EV Curve Date: 6/26/13 1150 lb-ft @1400 RPM	380/2200	CGC22-500	2.27	2026*	224
			2.46	1870	209
		CGC22-750	2.27	2046*	208
			2.46	1888	194
		CGC22-1000	2.46	2012*	162
		CXC22-750	2.27	1888	159
			2.46	1740	145
		CXC22-1000	2.27	1890	152
			2.46	1744	138
		CXC22-1250	2.27	1901	130
			2.46	1754	116
		CXC22-1500	2.27	1916	132
			2.46	1768	118
S100C22-1250	2.27	1762	80		
	2.46	1626	62		
S100C22-1500	2.27	1762	71		
	2.46	1626	61		
S100C22-1750	2.27	1775	48		
	2.46	1638	34		
S100C22-2000	2.27	1790	21		
ESUC22-1500	1.88	1955	25		
	1.97	1865	16		
ESUC22-1750	1.88	1957	12		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 400 Curve #: FR9435EV Curve Date: 6/26/13 1250 lb-ft @ 1400 RPM	400/2200	CSC22-750	2.27	1720	183
			2.46	1587	148
		CSC22-1000	2.27	1725	164
			2.46	1592	125
		CSC22-1250	2.03	1934	158
			2.27	1730	141
			2.46	1596	113
		CSUC22-1250	2.03	2010*	147
			2.27	1797	138
			2.46	1659	125
		CSUC22-1500	2.03	2020*	111
			2.27	1806	116
			2.46	1667	101
		CSUC22-1750	2.03	1921	92
			2.27	1718	77
			2.46	1585	59
		CSUC22-2000	2.03	2020*	65
			2.27	1806	54
2.46	1667		41		
CMC22-750	2.27	1758	197		
	2.46	1622	185		
CMC22-1000	2.27	1769	181		
	2.46	1632	170		
CMC22-1250	2.27	1789	149		
	2.46	1650	138		
CMUC22-1250	1.97	1893	150		
	2.03	1837	147		
	2.27	1643	131		
	2.46	1516	112		
CMUC22-1500	2.03	1862	120		
	2.27	1665	104		
	2.46	1537	81		
CMUC22-1750	1.97	1944	90		
	2.03	1887	87		
	2.27	1687	74		
CMUC22-2000	1.97	1980	52		
	2.03	1921	50		
	2.27	1718	39		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 400 Curve #: FR93435EV Curve Date: 6/26/13 1250 lb-ft @1400 RPM	400/2200	CGC22-500	2.27	2026*	248
			2.46	1870	238
		CGC22-750	2.27	2046*	239
			2.46	1888	221
		CGC22-1000	2.46	2012*	178
		CXC22-750	2.27	1888	178
			2.46	1740	170
		CXC22-1000	2.27	1890	170
			2.46	1744	162
		CXC22-1250	2.27	1901	158
			2.46	1754	145
		CXC22-1500	2.27	1916	150
			2.46	1768	142
		S100C22-1250	2.27	1762	105
			2.46	1626	95
		S100C22-1500	2.27	1762	95
			2.46	1626	85
		S100C22-1750	2.27	1775	77
2.46	1638		66		
S100C22-2000	2.27	1790	48		
	2.46	1652	36		
ESUC22-1500	1.69	2175	38		
	1.79	2053	43		
	1.88	1955	41		
	1.97	1865	36		
	2.03	1810	34		
ESUC22-1750	2.27	1619	21		
	1.79	2056*	31		
	1.88	1957	28		
	1.97	1868	23		
	2.03	1813	21		
ESUC22-2000	1.79	2053*	17		
	1.88	1957	14		

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 450 Curve #: FR93434EV Curve Date: 6/26/13 1250 lb-ft @1400 RPM	450/2200	CSC22-750	2.27	1720	183
			2.46	1587	148
		CSC22-1000	2.27	1725	164
			2.46	1592	125
		CSC22-1250	1.97	1993	175
			2.03	1934	167
			2.27	1730	141
		CSUC22-1250	2.46	1596	113
			2.03	2010*	168
			2.27	1797	146
		CSUC22-1500	2.46	1659	125
			1.97	2081*	111
			2.03	2020*	149
		CSUC22-1750	2.27	1806	121
			2.46	1667	101
			2.03	1921	107
		CSUC22-2000	2.27	1718	82
			2.46	1585	62
			1.97	2081*	88
		CSUC22-2250	2.03	2020*	92
2.27	1806		67		
2.46	1667		46		
CMC22-750	2.03	1988	27		
	2.27	1758	204		
CMC22-1000	2.46	1622	185		
	2.27	1769	190		
CMC22-1250	2.46	1632	171		
	2.27	1789	162		
CMUC22-1250	2.46	1650	143		
	2.27	1643	133		
CMUC22-1500	2.46	1516	112		
	1.97	1919	143		
	2.03	1862	137		
CMUC22-1750	2.27	1665	109		
	2.46	1537	84		
	2.03	1887	109		
CMUC22-2000	2.27	1687	82		
	1.97	1980	83		
	2.03	1921	76		
	2.27	1718	50		
		2.46	1569	30	

Cummins ISL/L Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISL/L9 450 Curve #: FR93434EV Curve Date: 6/26/13 1250 lb-ft @1400 RPM	450/2200	CGC22-500	2.27	2026*	262
			2.46	1870	242
		CGC22-750	2.27	2046*	251
			2.46	1888	232
		CGC22-1000	2.46	2012*	214
		CXC22-750	2.27	1888	204
			2.46	1740	180
		CXC22-1000	2.27	1890	188
			2.46	1744	170
		CXC22-1250	2.27	1901	168
			2.46	1754	149
		CXC22-1500	2.27	1916	178
			2.46	1768	159
			2.68	1623	95
		S100C22-1250	2.27	1762	120
			2.46	1626	101
		S100C22-1500	2.27	1762	109
			2.46	1626	86
		S100C22-1750	2.27	1775	84
			2.46	1638	66
S100C22-2000	2.03	2001*	84		
	2.27	1790	55		
	2.46	1652	39		
ESUC22-1500	1.69	2175	75		
	1.79	2053	87		
	1.88	1955	79		
	1.97	1865	79		
	2.03	1810	67		
	2.27	1619	25		
ESUC22-1750	1.79	2056*	74		
	1.88	1957	70		
	1.97	1868	68		
	2.03	1813	63		
	2.27	1621	23		
ESUC22-2000	1.79	2056*	61		
	1.88	1957	53		
	1.97	1868	40		
	2.03	1813	32		

Cummins ISX Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 370 Curve #: FR20411EV Curve Date: 6/25/13 1450 lb-ft @1100 RPM	370/2100	CSC22-750	2.27	1720	182
			2.46	1587	184
		CSC22-1000	2.27	1725	172
			2.46	1592	174
		CSC22-1250	2.27	1730	159
			2.46	1596	152
		CSUC22-1250	2.27	1797	131
			2.46	1659	132
		CSUC22-1500	2.27	1806	116
			2.46	1667	118
		CSUC22-1750	2.27	1718	89
			2.46	1585	87
		CSUC22-2000	2.27	1806	50
			2.46	1667	52
CMC22-750	2.27	1758	192		
	2.46	1622	193		
CMC22-1000	2.27	1769	175		
	2.46	1632	176		
CMC22-1250	2.27	1786	144		
	2.46	1650	146		
CMUC22-1250	2.27	1643	140		
	2.46	1516	141		
CMUC22-1500	2.27	1665	115		
	2.46	1537	116		
CMUC22-1750	2.27	1687	78		
	2.46	1557	79		
CMUC22-2000	2.27	1718	37		
	2.46	1585	38		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 370 Curve #: FR20411EV Curve Date: 6/25/13 1450 lb-ft @1100 RPM	370/2100	CGC22-500	2.46	1870	227
		CGC22-750	2.46	1888	215
		CXC22-750	2.27	1885	162
			2.46	1740	165
		CXC22-1000	2.27	1890	153
			2.46	1744	157
		CXC22-1250	2.27	1901*	141
			2.46	1754	146
		CXC22-1500	2.27	1916*	129
			2.46	1768	136
S100C22-1250	2.27	1762	99		
	2.46	1626	100		
S100C22-1500	2.27	1762	89		
	2.46	1626	90		
S100C22-1750	2.27	1775	73		
	2.46	1638	74		
S100C22-2000	2.27	1790	48		
	2.46	1652	49		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 400 Curve #: FR20407EV Curve Date: 6/25/13 1450 lb-ft @1100 RPM	400/2100	CSC22-750	2.27	1720	195
			2.46	1587	192
		CSC22-1000	2.27	1725	185
			2.46	1592	176
		CSC22-1250	2.27	1730	164
			2.46	1596	151
		CSUC22-1250	2.27	1797	144
			2.46	1659	143
		CSUC22-1500	2.27	1806	128
			2.46	1667	128
		CSUC22-1750	2.27	1718	97
			2.46	1585	88
		CSUC22-2000	2.27	1806	63
			2.46	1667	60
CMC22-750	2.27	1758	205		
	2.46	1622	203		
CMC22-1000	2.27	1769	188		
	2.46	1632	186		
CMC22-1250	2.27	1789	157		
	2.46	1650	155		
CMUC22-1250	2.27	1643	150		
	2.46	1516	143		
CMUC22-1500	2.27	1665	123		
	2.46	1537	115		
CMUC22-1750	2.27	1687	89		
	2.46	1557	82		
CMUC22-2000	2.27	1718	50		
	2.46	1585	45		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 400 Curve #: FR20407EV Curve Date: 6/25/13 1450 lb-ft @1100 RPM	400/2100	CGC22-500	2.46	1870	238
		CGC22-750	2.46	1888	225
		CXC22-750	2.27	1885	173
			2.46	1740	178
		CXC22-1000	2.27	1890	165
			2.46	1744	170
		CXC22-1250	2.27	1901*	151
			2.46	1754	159
		CXC22-1500	2.27	1916*	139
			2.46	1768	149
S100C22-1250	2.27	1762	112		
	2.46	1626	110		
S100C22-1500	2.27	1762	102		
	2.46	1626	100		
S100C22-1750	2.27	1775	86		
	2.46	1638	84		
S100C22-2000	2.27	1790	60		
	2.46	1652	55		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 400 Curve #: FR20406EV Curve Date: 6/25/13 1550 lb-ft @1100 RPM	400/2100	CSC22-750	2.27	1720	199
			2.46	1587	205
		CSC22-1000	2.27	1725	189
			2.46	1592	196
		CSC22-1250	2.27	1730	176
			2.46	1596	174
		CSUC22-1250	2.27	1797	144
			2.46	1659	152
		CSUC22-1500	2.27	1806	127
			2.46	1667	137
		CSUC22-1750	2.27	1718	112
			2.46	1585	111
		CSUC22-2000	2.27	1806	67
			2.46	1667	75
CMC22-750	2.27	1758	208		
	2.46	1622	214		
CMC22-1000	2.27	1769	190		
	2.46	1632	196		
CMC22-1250	2.27	1789	161		
	2.46	1650	168		
CMUC22-1250	2.27	1643	160		
	2.46	1516	165		
CMUC22-1500	2.27	1665	138		
	2.46	1537	138		
CMUC22-1750	2.27	1687	98		
	2.46	1557	103		
CMUC22-2000	2.27	1718	55		
	2.46	1585	62		

Cummins ISX12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 400 Curve #: FR20406EV Curve Date: 6/25/13 1550 lb-ft @1100 RPM	400/2100	CGC22-500	2.46	1870	238
		CGC22-750	2.46	1888	225
		CXC22-750	2.27	1885	173
			2.46	1740	182
		CXC22-1000	2.27	1890	163
			2.46	1744	173
		CXC22-1250	2.27	1901*	151
			2.46	1754	162
		CXC22-1500	2.27	1916*	139
			2.46	1768	151
S100C22-1250	2.27	1762	114		
	2.46	1626	121		
S100C22-1500	2.27	1762	104		
	2.46	1626	111		
S100C22-1750	2.27	1775	87		
	2.46	1638	95		
S100C22-2000	2.27	1790	67		
	2.46	1652	72		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 425 Curve #: FR20396EV Curve Date: 6/25/13 1550 lb-ft @1100 RPM	425/2100	CSC22-750	2.27	1720	221
			2.46	1587	218
		CSC22-1000	2.27	1725	211
			2.46	1592	200
		CSC22-1250	2.27	1730	197
			2.46	1596	179
		CSUC22-1250	2.27	1797	168
			2.46	1659	171
		CSUC22-1500	2.27	1806	150
			2.46	1667	157
		CSUC22-1750	2.27	1718	128
			2.46	1585	120
		CSUC22-2000	2.27	1806	89
			2.46	1667	90
		CSUC22-2250	2.27	1778	28
			2.46	1640	26
CMC22-750	2.27	1758	230		
	2.46	1622	232		
CMC22-1000	2.27	1769	212		
	2.46	1632	215		
CMC22-1250	2.27	1789	183		
	2.46	1650	185		
CMUC22-1250	2.27	1643	179		
	2.46	1516	173		
CMUC22-1500	2.27	1665	154		
	2.46	1537	147		
CMUC22-1750	2.27	1687	117		
	2.46	1557	115		
CMUC22-2000	2.27	1718	77		
	2.46	1585	76		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 425 Curve #: FR20396EV Curve Date: 6/25/13 1550 lb-ft @1100 RPM	425/2100	CGC22-500	2.46	1870	260
		CGC22-750	2.46	1888	248
		CXC22-750	2.27	1885	195
			2.46	1740	204
		CXC22-1000	2.27	1890	189
			2.46	1744	195
		CXC22-1250	2.27	1901*	175
			2.46	1754	184
		CXC22-1500	2.27	1916*	164
			2.46	1768	173
S100C22-1250	2.27	1762	132		
	2.46	1626	139		
S100C22-1500	2.27	1762	126		
	2.46	1626	130		
S100C22-1750	2.27	1775	112		
	2.46	1638	113		
S100C22-2000	2.27	1790	88		
	2.46	1652	87		

Cummins ISX Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 450 Curve #: FR20395EV Curve Date: 6/25/13 1550 lb-ft @1100 RPM	450/2100	CSC22-750	2.27	1720	236
			2.46	1587	218
		CSC22-1000	2.27	1725	225
			2.46	1592	200
		CSC22-1250	2.27	1730	202
			2.46	1596	179
		CSUC22-1250	2.27	1797	188
			2.46	1659	185
		CSUC22-1500	2.27	1806	172
			2.46	1667	163
		CSUC22-1750	2.27	1718	136
			2.46	1585	123
		CSUC22-2000	2.27	1806	104
			2.46	1667	99
		CSUC22-2250	2.27	1778	41
			2.46	1640	35
CMC22-750	2.27	1758	247		
	2.46	1622	243		
CMC22-1000	2.27	1769	230		
	2.46	1632	226		
CMC22-1250	2.27	1789	199		
	2.46	1650	195		
CMUC22-1250	2.27	1643	191		
	2.46	1516	175		
CMUC22-1500	2.27	1665	162		
	2.46	1537	151		
CMUC22-1750	2.27	1687	130		
	2.46	1557	122		
CMUC22-2000	2.27	1718	91		
	2.46	1585	84		
CMUC22-2250	2.27	1819	19		
	2.46	1679	18		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 450 Curve #: FR20395EV Curve Date: 6/25/13 1550 lb-ft @1100 RPM	450/2100	CGC22-500	2.46	1870	282
		CGC22-750	2.46	1888	269
		CXC22-750	2.27	1885	217
			2.46	1740	220
		CXC22-1000	2.27	1890	207
			2.46	1744	212
		CXC22-1250	2.27	1901*	195
			2.46	1754	201
		CXC22-1500	2.27	1916*	182
			2.46	1768	191
S100C22-1250	2.27	1762	155		
	2.46	1626	151		
S100C22-1500	2.27	1762	145		
	2.46	1626	141		
S100C22-1750	2.27	1775	129		
	2.46	1638	125		
S100C22-2000	2.27	1790	101		
	2.46	1652	95		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 455 Curve #: FR21227 Curve Date: 5/5/20 1700 lb-ft @1000 RPM	455/2000	CSC22-1250	2.27	1730	219
			2.46	1366	212
			2.68	1254	213
		ESUC22-1750	2.03	1813	80
			2.27	1621	82
			2.46	1496	84
	2.68		1373	70	

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 500 Curve #: FR20389EV Curve Date: 6/25/13 1645 lb-ft @1100 RPM	500/2100	CSC22-750	2.27	1720	261
			2.46	1587	238
		CSC22-1000	2.27	1725	241
			2.46	1592	219
		CSC22-1250	2.27	1730	217
			2.46	1596	196
		CSUC22-1250	2.27	1797	222
			2.46	1659	206
		CSUC22-1500	2.27	1806	198
			2.46	1667	179
		CSUC22-1750	2.27	1718	157
			2.46	1585	139
		CSUC22-2000	2.27	1806	143
			2.46	1667	123
		CSUC22-2250	2.27	1778	78
			2.46	1640	57
		CMC22-750	2.27	1758	280
			2.46	1622	261
CMC22-1000	2.27	1769	266		
	2.46	1632	248		
CMC22-1250	2.27	1789	238		
	2.46	1650	220		
CMUC22-1250	2.27	1643	209		
	2.46	1516	191		
CMUC22-1500	2.27	1665	186		
	2.46	1537	167		
CMUC22-1750	2.27	1687	159		
	2.46	1557	139		
CMUC22-2000	2.27	1718*	138		
	2.46	1569	125		
	2.68	1440	105		
CMUC22-2250	2.27	1819	62		
	2.46	1679	52		

Cummins ISX 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 12 500 Curve #: FR20389EV Curve Date: 6/25/13 1645 lb-ft @1100 RPM	500/2100	CGC22-500	2.46	1870	319
		CGC22-750	2.46	1888	308
		CXC22-750	2.27	1885	256
			2.46	1740	260
		CXC22-1000	2.27	1890	247
			2.46	1744	245
		CXC22-1250	2.27	1901*	234
			2.46	1754	224
		CXC22-1500	2.27	1916*	223
			2.46	1768	233
		S100C22-1250	2.27	1762	196
			2.46	1626	182
S100C22-1500	2.27	1762	185		
	2.46	1626	165		
S100C22-1750	2.27	1775	160		
	2.46	1638	142		
S100C22-2000	2.27	1790	136		
	2.46	1652	115		
ESUC22-1750	2.03	1813	122		
	2.27	1621	113		
	2.46	1496	98		
	2.68	1373	63		

Cummins ISX 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 455 Curve #: FR11086EV Curve Date: 5/22/13 1750 lb-ft @1200 RPM	455/2100	CSC22-750	2.27	1720	247
			2.46	1587	251
		CSC22-1000	2.27	1725	237
			2.46	1592	240
		CSC22-1250	2.27	1730	224
			2.46	1596	214
		CSUC22-1250	2.27	1797	192
			2.46	1659	199
		CSUC22-1500	2.27	1806	177
			2.46	1667	181
		CSUC22-1750	2.27	1718	156
			2.46	1585	151
		CSUC22-2000	2.27	1806	115
			2.46	1667	119
		CSUC22-2250	2.27	1778	55
			2.46	1640	56
CMC22-750	2.27	1758	255		
	2.46	1622	260		
CMC22-1000	2.27	1769	238		
	2.46	1632	243		
CMC22-1250	2.27	1789	209		
	2.46	1650	213		
CMUC22-1250	2.27	1643	207		
	2.46	1516	205		
CMUC22-1500	2.27	1665	182		
	2.46	1537	177		
CMUC22-1750	2.27	1687	145		
	2.46	1557	145		
CMUC22-2000	2.27	1718	104		
	2.46	1585	104		
CMUC22-2250	2.27	1819	23		
	2.46	1679	32		

Cummins ISX 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 455 Curve #: FR11086EV Curve Date: 5/22/13 1750 lb-ft @1200 RPM	455/2100	CGC22-500	2.46	1870	314
		CGC22-750	2.46	1888	267
		CXC22-750	2.27	1885	215
			2.46	1740	230
		CXC22-1000	2.27	1890	206
			2.46	1744	221
		CXC22-1250	2.27	1901*	192
			2.46	1754	210
		CXC22-1500	2.27	1916*	180
			2.46	1768	199
S100C22-1250	2.27	1762	162		
	2.46	1626	167		
S100C22-1500	2.27	1762	152		
	2.46	1626	157		
S100C22-1750	2.27	1775	136		
	2.46	1638	141		
S100C22-2000	2.27	1790	115		
	2.46	1652	116		

Cummins ISX Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 500 Curve #: FR11094EV Curve Date: 5/22/13 1850 lb-ft @1200 RPM	500/2100	CSC22-750	2.27	1720	279
			2.46	1587	283
		CSC22-1000	2.27	1725	268
			2.46	1592	264
		CSC22-1250	2.27	1730	255
			2.46	1596	231
		CSUC22-1250	2.27	1797	221
			2.46	1659	231
		CSUC22-1500	2.27	1806	206
			2.46	1667	217
		CSUC22-1750	2.27	1718	189
			2.46	1585	181
		CSUC22-2000	2.27	1806	147
			2.46	1667	151
		CSUC22-2250	2.27	1778	86
			2.46	1640	88
CMC22-750	2.27	1758	286		
	2.46	1622	293		
CMC22-1000	2.27	1769	267		
	2.46	1632	276		
CMC22-1250	2.27	1789	240		
	2.46	1650	247		
CMUC22-1250	2.27	1643	240		
	2.46	1516	234		
CMUC22-1500	2.27	1665	215		
	2.46	1537	208		
CMUC22-1750	2.27	1687	178		
	2.46	1557	176		
CMUC22-2000	2.27	1718	135		
	2.46	1585	137		
CMUC22-2250	2.27	1819	51		
	2.46	1679	64		

Cummins ISX 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 500 Curve #: FR11094EV Curve Date: 5/22/13 1850 lb-ft @1200 RPM	500/2100	CGC22-500	2.46	1870	312
		CGC22-750	2.46	1888	298
		CXC22-750	2.27	1885	246
			2.46	1740	260
		CXC22-1000	2.27	1890	237
			2.46	1744	250
		CXC22-1250	2.27	1901*	223
			2.46	1754	240
		CXC22-1500	2.27	1916*	210
			2.46	1768	229
S100C22-1250	2.27	1762	194		
	2.46	1626	200		
S100C22-1500	2.27	1762	182		
	2.46	1626	190		
S100C22-1750	2.27	1775	164		
	2.46	1638	174		
S100C22-2000	2.27	1790	146		
	2.46	1652	148		

Cummins ISX 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 550 Curve #: FR11099EV Curve Date: 5/22/13 1850 lb-ft @1200 RPM	550/2100	CSC22-750	2.27	1720	317
			2.46	1587	283
		CSC22-1000	2.27	1725	299
			2.46	1592	267
		CSC22-1250	2.27	1730	278
			2.46	1596	237
		CSUC22-1250	2.27	1797	276
			2.46	1659	259
		CSUC22-1500	2.27	1806	258
			2.46	1667	239
		CSUC22-1750	2.27	1718	219
			2.46	1585	197
		CSUC22-2000	2.27	1806	195
			2.46	1667	151
		CSUC22-2250	2.27	1778	132
			2.46	1640	118
CMC22-750	2.27	1758	339		
	2.46	1622	323		
CMC22-1000	2.27	1769	320		
	2.46	1632	309		
CMC22-1250	2.27	1789	289		
	2.46	1650	280		
CMUC22-1250	2.27	1643	272		
	2.46	1516	247		
CMUC22-1500	2.27	1665	247		
	2.46	1537	227		
CMUC22-1750	2.27	1687	217		
	2.46	1557	201		
CMUC22-2000	2.27	1718	182		
	2.46	1585	168		
CMUC22-2250	2.27	1819	106		
	2.46	1679	107		

Cummins ISX Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 550 Curve #: FR11099EV Curve Date: 5/22/13 1850 lb-ft @1200 RPM	550/2100	CGC22-500	2.46	1870	368
		CGC22-750	2.46	1888	354
		CXC22-750	2.27	1885	302
			2.46	1740	310
		CXC22-1000	2.27	1890	293
			2.46	1744	302
		CXC22-1250	2.27	1901*	280
			2.46	1754	285
		CXC22-1500	2.27	1916*	268
			2.46	1768	281
S100C22-1250	2.27	1762	244		
	2.46	1626	226		
S100C22-1500	2.27	1762	234		
	2.46	1626	223		
S100C22-1750	2.27	1775	218		
	2.46	1638	204		
S100C22-2000	2.27	1790	191		
	2.46	1652	176		

Cummins ISX 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 600 Curve #: FR11103EV Curve Date: 5/22/13 1850 lb-ft @1200 RPM	600/2100	CSC22-750	2.27	1720	318
			2.46	1587	283
		CSC22-1000	2.27	1725	301
			2.46	1592	267
		CSC22-1250	2.27	1730	282
			2.46	1596	246
		CSUC22-1250	2.27	1797	295
			2.46	1659	260
		CSUC22-1500	2.27	1806	279
			2.46	1667	242
		CSUC22-1750	2.27	1718	237
			2.46	1585	200
		CSUC22-2000	2.27	1806	238
			2.46	1667	204
		CSUC22-2250	2.27	1778	176
			2.46	1640	135
CMC22-750	2.27	1758	367		
	2.46	1622	329		
CMC22-1000	2.27	1769	349		
	2.46	1632	313		
CMC22-1250	2.27	1789	332		
	2.46	1650	303		
CMUC22-1250	2.27	1643	284		
	2.46	1516	248		
CMUC22-1500	2.27	1665	267		
	2.46	1537	230		
CMUC22-1750	2.27	1687	249		
	2.46	1557	209		
CMUC22-2000	2.27	1718	225		
	2.46	1585	185		
CMUC22-2250	2.27	1819	150		
	2.46	1679	146		

Cummins ISX 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
ISX 15 600 Curve #: FR11103EV Curve Date: 5/22/13 1850 lb-ft @1200 RPM	600/2100	CGC22-500	2.46	1870	400
		CGC22-750	2.46	1888	398
		CXC22-750	2.27	1885	346
			2.46	1740	320
		CXC22-1000	2.27	1890	337
			2.46	1744	311
		CXC22-1250	2.27	1901*	324
			2.46	1754	301
		CXC22-1500	2.27	1916*	312
			2.46	1768	325
S100C22-1250	2.27	1762	268		
	2.46	1626	235		
S100C22-1500	2.27	1762	262		
	2.46	1626	225		
S100C22-1750	2.27	1775	246		
	2.46	1638	210		
S100C22-2000	2.27	1790	232		
	2.46	1652	190		

Cummins X 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X 12 455 Curve #: FR21227EV Curve Date: 10/5/22 1700 lb-ft @1000 RPM	455/2000	CSC22-1000	2.46	1592	231
		CSC22-1250	2.27	1730	219
			2.46	1596	212
			2.68	1465	213
		CSUC22-1500	2.27	1806	181
			2.46	1667	179
		CSUC22-2000	2.46	1667	113
			2.68	1530	114
		CMUC22-1750	2.46	1557	140
			2.68	1429	137

Cummins X 12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X 12 455 Curve #: FR21227EV Curve Date: 10/5/22 1700 lb-ft @1000 RPM	455/2000	CXC22-1500	2.68	1530	178
		ESUC22-1500	1.97	1865	90
			2.03	1810	93
			2.27	1619	95
			2.46	1494	97
		ESUC22-2000	2.68	1371	85
			2.03	1810	67
			2.27	1621	69
			2.46	1496	66
				2.68	1373

Cummins X12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X12 500 Curve #: FR20903EV Curve Date: 5/7/18 1700 lb-ft @1000 RPM	500/2000	CSC22-1000	2.27	1725	268
		CSUC22-1250	2.27	1797	231
			2.46	1659	223
		CSUC22-1500	2.27	1806	212
			2.46	1667	204
			2.68	1530	167
		CSUC22-1750	2.27	1806	180
			2.46	1667	161
		CSUC22-2000	2.27	1806	151
			2.46	1667	141
			2.68	1530	123
		CSUC22-2250	2.27	1778*	89
			2.46	1640	90
2.68	1506		56		
CMC22-1000	2.27	1769	276		
CMC22-1250	2.27	1643	235		
CMUC22-1500	2.27	1665	205		
	2.46	1537	191		
CMUC22-1750	2.27	1687	176		
CMUC22-2000	2.27	1718	138		
	2.46	1585	125		
	2.68	1440	105		
CMUC22-2250	2.46	1650	66		

Cummins X12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X12 500 Curve #: FR20903EV Curve Date: 5/7/18 1700 lb-ft @1000 RPM	500/2000	CXC22-1500	2.46	1667	213
			2.68	1530	200
		S100C22-2000	2.46	1652	139
			2.68	1516	116
		ESUC22-1500	1.97	1865	133
			2.03	1810	133
			2.27	1619	126
			2.46	1494	112
		ESUC22-1750	2.68	1371	88
			2.03	1813	122
			2.27	1621	113
		ESUC22-2000	2.46	1496	98
2.68	1373		63		
2.27	1621		90		
ESUC22-2000	2.46	1496	74		
	2.68	1373	40		

Cummins X12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X12 525 Curve #: FR21519EV Curve Date: 11/19/21 1695 lb-ft @1000 RPM	525/2000	CSUC22-1500	2.27	1806	215
			2.46	1667	185
			2.68	1530	156
		CSUC22-2000	2.27	1806	166
			2.46	1585	150
			2.68	1530	125
		CMUC22-2000	2.27	1718	155
			2.46	1569	132
			2.68	1455	105

Cummins X12 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X12 525 Curve #: FR21519EV Curve Date: 11/19/21 1695 lb-ft @1000 RPM	525/2000	CXC22-1000	2.46	1744	266
		CXC22-1500	2.46	1768	278
			2.68	1623	262
		ESUC22-1500	2.27	1619	131
			2.46	1494	117
			2.68	1371	81
		ESUC22-1750	2.03	1813	142
			2.27	1621	122
			2.46	1496	93
			2.68	1373	68
		ESUC22-2000	2.03	1813	129
			2.27	1621	103
			2.46	1496	74
			2.68	1373	40

Cummins X15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X15 500 Curve #: FR12120 Curve Date: 5/4/13 1850 lb-ft @1400 RPM	500/2000	CSUC22-1500	2.68	1530	200
		CXC22-1500	2.46	1768	271
		ESUC22-1750	2.27	1621	122
2.46	1496		107		
2.68	1373		68		

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X15 505 Curve #: FR11361 Curve Date: 2/20/17 1850 lb-ft @1150 RPM	505/2100	CSUC22-1500	2.27	1806	221
			2.46	1667	224
		CSUC22-2000	2.27	1630	116
			2.46	1667	157
		CMC22-1250	2.46	1650	250
		CMUC22-1500	2.46	1537	216
		ESUC22-1750	2.27	1621	126
			2.46	1496	124
			2.68	1373	103

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP	
X15 565 Curve #: FR11362EV Curve Date: 2/20/17 1850 lb-ft @1150 RPM	565/2100	CSC22-1250	2.27	1730	286	
			2.46	1596	247	
			2.68	1465	213	
		CSC22-1500	2.27	1797	292	
			CSUC22-1250	2.27	1797	288
				2.46	1659	257
		2.68		1522	228	
		CSUC22-1500	2.27	1806	265	
			2.46	1667	234	
			2.68	1530	203	
		CSUC22-1750	2.27	1806	227	
			2.46	1667	194	
			2.68	1530	157	
		CSUC22-2000	2.27	1806	205	
			2.46	1667	194	
			2.68	1530	157	
		CSUC22-2250	2.27	1778	144	
			2.46	1640	126	
2.68	1506		117			
CMC22-750	2.27	1758	349			
	2.46	1622	330			
	2.68	1489	293			
CMC22-1000	2.27	1769	332			
	2.46	1632	310			
	2.68	1498	283			
CMC22-1250	2.27	1789	302			
	2.46	1650	291			
	2.68	1515	257			
CMC22-1500	2.27	1665	260			
	2.46	1537	230			
	2.68	1410	187			
CMCU22-1750	2.27	1687	225			
	2.46	1557	208			
	2.68	1429	169			
CMCU22-2000	2.27	1718	195			
	2.46	1585	176			
	2.68	1455	144			
CMCU22-2250	2.68	1728	95			

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X15 565 Curve #: FR11362EV Curve Date: 2/20/17 1850 lb-ft @1150 RPM	565/2100	CXC22-1250	2.46	1754	294
			2.68	1610	263
		CXC22-1500	2.46	1768	269
			2.68	1623	249
		S100C22-1500	2.27	1762	247
			2.46	1626	223
			2.68	1493	191
		S100C22-1750	2.27	1775	202
			2.46	1638	211
			2.68	1499	170
		S100C22-2000	2.27	1790	229
			2.46	1652	185
2.68	1516		155		
ESUC22-1500	2.03	1810	188		
	2.27	1619	179		
	2.46	1494	149		

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X15 600 Curve #: FR11641EV Curve Date: 2/20/17 1850 lb-ft @1150 RPM	600/2100	CSC22-750	2.27	1720	320
			2.46	1587	286
			2.68	1457	251
		CSC22-1000	2.27	1725	295
			2.46	1592	265
			2.68	1220	235
		CSC22-1250	2.27	1730	282
			2.46	1596	246
			2.68	1465	213
		CSUC22-1500	2.27	1806	296
			2.46	1596	246
			2.68	1530	206
		CSUC22-1750	2.27	1806	259
			2.46	1667	216
			2.68	1530	179
		CSUC22-2000	2.27	1718	215
			2.46	1585	176
			2.68	1455	139
		CMC22-750	2.27	1758	365
			2.46	1622	330
			2.68	1489	297
		CMC22-1000	2.27	1769	348
			2.46	1632	313
			2.68	1498	280
CMC22-1250	2.27	1789	333		
	2.46	1650	304		
	2.68	1515	261		
CMUC22-1500	2.27	1665	269		
	2.46	1537	235		
	2.68	1410	192		
CMUC22-1750	2.27	1687	245		
	2.46	1557	206		
	2.68	1429	173		
CMUC22-2000	2.27	1718	226		
	2.46	1585	187		
	2.68	1455	140		
CMUC22-2250	2.27	1692	148		
	2.46	1561	146		
	2.68	1433	102		

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
<p style="text-align: center;">X15 600 Curve #: FR11641EV Curve Date: 2/20/17 1850 lb-ft @1150 RPM</p>	600/2100	CGC22-500	2.68	1716	407
		CGC22-750	2.68	1733	374
		CGC22-1000	2.68	1672	345
		CRUC23-2500	1.95	1744	118
		CRUC23-3000	1.77	1424	188
			1.95	1564	150
		CRUC23-3500	1.77	1723	157
			1.95	1654	118
		CRUC23-4000	1.77	1751	134
			1.95	1590	86
		S100C22-1250	2.27	1762	274
			2.46	1626	236
		S100C22-1500	2.68	1493	202
			2.27	1762	266
2.46	1626		223		
S100C22-1750	2.68	1493	189		
	2.27	1775	245		
	2.46	1638	207		
S100C22-2000	2.68	1504	154		
	2.27	1790	233		
	2.46	1652	194		
ESUC22-1500	2.68	1516	155		
	2.27	1619	182		
	2.46	1494	148		
		2.68	1371	113	

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X15 605 Curve #: FR11921 Curve Date: 4/8/21 1850 lb-ft @1000 RPM	605/2100	CSC22-750	2.27	1720	320
			2.46	1587	326
			2.68	1457	252
		CSC22-1000	2.27	1725	303
			2.46	1592	265
			2.68	1461	235
		CSC22-1250	2.27	1730	282
			2.46	1596	247
			2.68	1465	213
		CSUC22-1500	2.27	1806	280
			2.46	1667	245
			2.68	1530	204
		CSUC22-1750	2.27	1718	241
			2.46	1585	200
			2.68	1455	159
		CSUC22-2000	2.27	1806	236
			2.46	1667	232
			2.68	1530	168
		CSUC22-2250	2.27	1778	175
			2.46	1640	131
			2.68	1506	97
		CMC22-750	2.27	1758	365
			2.46	1622	326
			2.68	1489	288
		CMC22-1000	2.27	1769	350
			2.46	1632	316
			2.68	1498	280
CMC22-1250	2.27	1789	333		
	2.46	1622	326		
	2.68	1515	263		
CMUC22-1500	2.27	1665	268		
	2.46	1537	233		
	2.68	1410	187		
CMUC22-1750	2.27	1687	232		
	2.46	1557	215		
	2.68	1429	169		
CMUC22-2000	2.27	1718	226		
	2.46	1585	187		
	2.68	1455	149		
CMUC22-2250	2.46	1650	141		
	2.68	1515	110		

Cummins X 15 Series

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
X15 605 Curve #: FR11921 Curve Date: 4/8/21 1850 lb-ft @1000 RPM	605/2100	CGC22-500	2.68	1716	363
		CGC22-750	2.68	1733	365
		CXC22-750	2.46	1740	323
			2.68	1597	286
		CXC22-1000	2.46	1744	308
			2.68	1601	271
		CXC22-1250	2.46	1754	281
			2.68	1610	243
		CXC22-1500	2.46	1768	283
			2.68	1623	247
		S100C22-1250	2.27	1762	269
			2.46	1626	232
2.68	1493		195		
S100C22-1500	2.27	1762	262		
	2.46	1626	223		
	2.68	1493	189		
S100C22-1750	2.27	1775	245		
	2.46	1638	225		
	2.68	1504	168		
S100C22-2000	2.27	1790	228		
	2.46	1652	194		
	2.68	1429	151		
ESUC22-1500	2.27	1619	178		
	2.46	1419	148		
	2.68	1371	118		

Ford					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
Ford Curve #: F2017 P558 Curve Date: 2017 750 lb-ft @ 2200 RPM	330/3350	CXC22-1250	1.79	2411	77
			1.88	2040	69
		CXC22-1500	1.79	2430	44
			1.88	2314	36
			1.97	2208	28

Paccar PX-9

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP	
PX-9 380 Curve #: 2021MX11BSPEC Curve Date: 1/1/21 1250 lb-ft @1200 RPM	380/2100	CSC22-2000	1.88	2089*	151	
			1.97	1993	152	
			2.03	1934	152	
			2.27	1730	154	
		CXC22-1250	2.27	1901	140	
		ESUC22-1500	1.88	1955	26	
			1.97	1895	27	
			2.03	1810	27	
			2.27	1619	29	
			2.46	1494	16	

Paccar PX-9

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
PX-9 450 Curve #: 2021MX11BSPEC Curve Date: 1/1/21 1250 lb-ft @1200 RPM	450/2200	CSC22-2000	1.88	2089*	151
			1.97	1993	152
			2.03	1934	152
			2.27	1730	154
		CXC22-1500	2.27	1916*	160
			2.46	1718	129
			2.68	1623	95
		ESUC22-2000	1.97	1868	44
			2.03	1813	28

Paccar MX-13

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
MX13 455 Curve #: 2021MX13BSPEC Curve Date: 1/1/21 1850 lb-ft @1200 RPM	455/1800	ESUC22-2000	2.27 2.46 2.68	1621 1496 1373	69 58 27

Paccar MX-13

Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
MX13 510 Curve #: 2021MX13BSPEC Curve Date: 1/1/21 1850 lb-ft @1200 RPM	510/1800	CSC22-750	2.27	1720	261
			2.46	1306	285
			2.68	1197	243
		CSC22-1000	2.27	1725	229
			2.46	1329	268
			2.68	1220	230
		CSC22-1250	2.27	1730	216
			2.46	1596	218
			2.68	1254	204
		CSUC22-1500	2.27	1586	109
			2.46	1667	215
			2.68	1343	198
		CSUC22-1750	2.27	1806	92
			2.46	1508	192
			2.68	1384	167
		CSUC22-2000	2.46	1585	150
			2.68	1455	133
		CSUC22-2250	2.27	1778	49
			2.46	1565	90
			2.68	1437	69
		CMC22-750	2.27	1758	249
2.46	1502		260		
2.68	1379		235		
CMC22-1000	2.27	1769	188		
	2.46	1543	275		
	2.68	1416	262		
CMC22-1250	2.27	1789	168		
	2.46	1600	247		
	2.68	1468	230		
CMUC22-1250	2.68	1728	22		
CMUC22-1500	2.27	1665	220		
	2.46	1463	199		
	2.68	1343	191		
CMUC22-1750	2.27	1643	170		
	2.46	1516	171		
	2.68	1392	155		
CMUC22-2000	2.27	1700	125		
	2.46	1569	135		
	2.68	1440	122		
CMUC22-1250	2.68	1728	21		

Paccar MX-13					
Engine	HP/Governed RPM	Pump Model	Ratio	Max Engine RPM	Surplus HP
MX13 510 Curve #: 2021MX13BSPEC Curve Date: 1/1/21 1850 lb-ft @1200 RPM	510/1800	CGC22-500	2.68	1716	313
		CGC22-750	2.68	1733	275
		CXC22-750	2.46	1740	175
			2.68	1597	203
		CXC22-1000	2.46	1744	209
			2.68	1362	243
		CXC22-1250	2.46	1754	168
			2.68	1431	228
		CXC22-1500	2.46	1768	198
			2.68	1530	195
S100C22-2000	2.46	1626	191		
	2.68	1516	268		
ESUC22-1500	2.27	1619	137		
	2.46	1494	119		
	2.68	1371	110		
ESUC22-2000	2.27	1621	113		
	2.46	1496	93		
	2.68	1373	62		

Engine variation and estimated parasitic losses are based on a 12% deduction for Cummins
And a 15% deduction for Detroit and International. All others 25%.

Estimated parasitic losses represent deductions for average alternator, power steering, fan,
and exhaust back-pressure losses.

Computations for engines up to and including 1250 lb-ft are based on using an Allison 3000 EVS
series truck transmission.

Computations for engines above 1250 lb-ft are based on using an Allison 4000 EVS
series truck transmission.

*Note: According to computations, if there is a surplus horsepower of less than 12 and/or the
required engine RPM is within 200 of the engine governed RPM.

These pump/engine/ratio combinations may be marginal; however, they may be suitable
under favorable conditions.