



## **DESCRIPTION & CHART**

The SD110 power steering gear is a compact version of the M110 power steering gear. The SD110, working with a 185 bar pump is capable of steering vocational and heavy haul vehicles with front axle ratings of 16,000 to 18,000 lbs. in single gear applications.

	MD83	HD94	M100	M110	SD110	XD120	
	6-10k lbs	10-14.6k lbs	10-14.6k lbs	14.6-18k lbs	14.6-18k lbs	18-23k lbs	
Front Axle Range	(2700-4500 kg)	(4500-6600 kg)	(4500-6600 kg)	(6600-8200 kg)	(6600-8200 kg)	(8200-10400 kg)	
Output Torque	35,058 in-lbf	45,436 in-lbf	46,345 in-lbf	59,300 in-lbf	59,760 in-lbf	78,825 in-lbf	
@ Rated Pressure & 90% Effciency	(3961 Nm)	(5134 Nm)	(5236 Nm)	(6700 Nm)	(6752 Nm)	(8906 Nm)	
	2,683 psi	2,683 psi	2,350 psi	2,175 psi	2,756 psi	2,175 psi	
Rated Pressure	(185 bar)	(185 bar)	(162 bar)	(150 bar)	(190 bar)	(150 bar)	
Minimum Pump Flow	2.4 GPM	3.0 GPM	3.0 GPM	3.5 GPM	3.9 GPM	4.8 GPM	
@1.5 HWT/s	(9.1 LPM)	(11.4 LPM)	(11.4 LPM)	(13.2 LPM)	(14.8 LPM)	(18.2 LPM)	
Pump Flow Range	2.4-3.4 GPM	3.0-4.0 GPM	3.0-4.0 GPM	3.5-4.5 GPM	3.9-4.9 GPM	4.8-5.8 GPM	
Single Steering Gear	(9.1-12.9 LPM)	(11.4-15.1 LPM)	(11.4-15.1 LPM)	(13.2-17.0 LPM)	(14.8-18.5 LPM)	(18.2-22.0 LPM)	
Ratio	16.9:1	16.9:1	18.9:1	23.0:1	16.9:1	23.0:1	
Gear Travel	95°	95°	95°	100°	95°	96°	
Normal System	-40 to 220 °F						
Operating Temperature	(-40 to 104 °C)						
	250 °F						
Not-To-Exceed Temperature	(121 °C)						
·	2.00 in	2.00 in	2.00 in	2.25 in	2.25 in	2.50 in	
Output Shaft Diameter	(50.8 mm)	(50.8 mm)	(50.8 mm)	(57.2 mm)	(57.2 mm)	(63.5 mm)	
	60 lbs	70 lbs	75 lbs	110 lbs	85 lbs	150 lbs	
Approximate Dry Weight	(27.2 kg)	(31.8 kg)	(34.0 kg)	(49.9 kg)	(38.6 kg)	(68.0 kg)	
Pump Flow Range	( ) )	, 0,	, 0,	, 0,	, ,,,	1	
Dual Steering Gears @1.0 HWT/s & 90%							
Efficiency							
	4.0-5.5 GPM	4.5-6.0 GPM	4.6-6.1 GPM	5.0-6.5 GPM	5.3-6.8 GPM	6.0-7.5 GPM	
w/ MD83 Slave	(15.1-20.8 LPM)	(17.0-22.7 LPM)	(17.4-23.1 LPM)	(18.9-24.6 LPM)	(20.1-25.7 LPM)	(22.7-28.4 LPM)	
		5.0-6.5 GPM	5.1-6.6 GPM	5.5-7.0 GPM	5.5-7.0 GPM	6.5-8.0 GPM	
w/ HD94 Slave	N/A	(18.9-24.6 LPM)	(19.3-25.0 LPM)	(20.8-26.5 LPM)	(20.8-26.5 LPM)	(24.6-30.3 LPM)	
			5.3-6.8 GPM	5.6-7.1 GPM	200	6.6-8.1 GPM	
w/ M100 Slave	N/A	N/A	(20.1-25.7 LPM)	(21.2-26.9 LPM)	N/A	(25.0-30.7 LPM)	
	9800 HAVO		27-27-25-2	6.0-7.5 GPM	nacionis.	7.0-8.5 GPM	
w/ M110 Slave	N/A	N/A	N/A	(22.7-28.4 LPM)	N/A	(26.5-32.2 LPM)	
	, 100 m	200. <b>.</b>	000.00	6.5-8.0 GPM	6.5-8.0 GPM	7.3-8.8 GPM	
w/ SD110 Slave	N/A	N/A	N/A	(24.6-30.3 LPM)	(24.6-30.3 LPM)	(27.6-33.3 LPM)	
						8.0-9.5 GPM	
w/ XD120 Slave	N/A	N/A	N/A	N/A	N/A	(30.3-36.0 LPM)	
Output Torque Range @ Rated Pressure of Master Gear & 90% Efficiency							
	70,116 in-lbf	80,497 in-lbf	77,052 in-lbf	87,720 in-lbf	95,772 in-lbf	107,245 in-lbf	
w/ MD83 Slave	(7922 Nm)	(9095 Nm)	(8706 Nm)	(9911 Nm)	(10821 Nm)	(12117 Nm)	
		90,878 in-lbf	86,144 in-lbf	96,133 in-lbf	106,435 in-lbf	115,661 in-lbf	
w/ HD94 Slave	N/A	(10268 Nm)	(9733 Nm)	(10862 Nm)	(12026 Nm)	(13068 Nm)	
	350 • 100		92,690 in-lbf	102,194 in-lbf	,	121,719 in-lbf	
w/ M100 Slave	N/A	N/A	(10473 Nm)	(11546 Nm)	N/A	(13752 Nm)	
			,	118,600 in-lbf		138,125 in-lbf	
w/ M110 Slave	N/A	N/A	N/A	(13400 Nm)	N/A	(15606 Nm)	
				106,462 in-lbf	119,520 in-lbf	125,987 in-lbf	
w/ SD110 Slave	N/A	N/A	N/A	(12029 Nm)	(13504 Nm)	(14235 Nm)	
						157,650 in-lbf	
w/ XD120 Slave	N/A	N/A	N/A	N/A	N/A	(17812 Nm)	

Gear Options			Steer Aute Weight Rating							
	6-8k	10k	12k	13.2k	14.6k	16k	18k	20k	23k	> 23k
MDE3	×	×								
M100		×	×	×	×					
HD94 M110 5D110 KD120 Dual*		×	×	×	×					
M110					×	×	×			
SD110		2			×	×	X		1	
KD120							X	×	×	
Dual*						×	x	×	X	X
* Contact RHS Engir	neering for options									