



■ Selection :

For the correct selection and the efficient use of **A series** gearmotor / reducer, please review the following.

Selection procedure

<p>1. Determination of ratio</p>	<p>Calculate the reduction ratio from required output speed. Please refer the characteristics table on Page 4-5 to determine ratio for gearmotor. (Slip of the motor is not considered.)</p>																
<p>2. Calculation of torque</p>	<p>Calculate the torque required by a driven machine. Calculate the maximum torque in case there is fluctuation.</p>																
<p>3. Selection of frame</p>	<p>For gearmotor : Referring to the column of required ratio in the characteristics table on Page 4-5, select a frame which meets the requirement of torque in the two formulas below.</p> <p>For reducer : Referring to the column of required ratio in the characteristics table on Page 6-7, select a frame which meets the following formula.</p> <p>formula (1) $T_E \leq T_A$ formula (1) $T_E \times sf \leq T_G$</p> <p>(2) $T_E \times sf \leq T_A \times sfG$</p> <div style="border: 1px dashed black; padding: 5px; margin: 10px 0;"> <p>T_E = actual torque of load (torque required by driven machine) T_A = output torque (max. driven torque of gearmotor) sf = service factor (load factor for operating condition, table 1) sfG = service factor of gearing for torque T_A T_G = permissible output torque of reducer</p> </div> <p>NOTE : Though gearmotors selected are compatible with the above formulas, it is more cost efficient in order of L,S (There is no classification for reducers.)</p> <p>Table 1. Service factor</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>load\operating hour</th> <th>less than 3 hrs./day</th> <th>3-10 hrs./day</th> <th>more than 10 hrs./day</th> </tr> </thead> <tbody> <tr> <td>uniform load</td> <td>1.00</td> <td>1.00</td> <td>1.25</td> </tr> <tr> <td>medium shock load</td> <td>1.00</td> <td>1.25</td> <td>1.50</td> </tr> <tr> <td>heavy shock load</td> <td>1.50</td> <td>1.75</td> <td>2.00</td> </tr> </tbody> </table>	load\operating hour	less than 3 hrs./day	3-10 hrs./day	more than 10 hrs./day	uniform load	1.00	1.00	1.25	medium shock load	1.00	1.25	1.50	heavy shock load	1.50	1.75	2.00
load\operating hour	less than 3 hrs./day	3-10 hrs./day	more than 10 hrs./day														
uniform load	1.00	1.00	1.25														
medium shock load	1.00	1.25	1.50														
heavy shock load	1.50	1.75	2.00														
<p>4. Calculation of overhung load (O.H.L)</p>	<p>In case radial load is applied to the input/output shaft (high speed/low speed), please make sure that is within the limit of allowable overhung load. (Please refer to the characteristics tables on Page 4 - 7.)</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> $O.H.L = \frac{2000 \times T_E \times sf}{D} \times \frac{C_f}{L_f}$ </div> <p>T_E = actual torque of load sf = service factor (load factor for operating condition, table 1) D = pitch circle diameter of chain sprocket wheel, pulley, etc. (mm) C_f = load connection factor (Refer to Table 2) L_f = load connection factor (Refer to Table 3)</p> <p>Table 2 : C_f : Load connection factor</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>simplex chain</th> <th>duplex chain</th> <th>gear</th> <th>V-belt</th> </tr> </thead> <tbody> <tr> <td>1.00</td> <td>1.25</td> <td>1.25</td> <td>1.00</td> </tr> </tbody> </table> <p>Table 3 : L_f : Load location factor</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>0.3Lo</th> <th>0.5Lo</th> <th>0.7Lo</th> <th>0.9Lo</th> </tr> </thead> <tbody> <tr> <td>1.10</td> <td>1.00</td> <td>0.83</td> <td>0.70</td> </tr> </tbody> </table> <p>NOTE : In case chain sprocket wheel or gear is mounted on the shaft, the point of load application shall be as close as the side of the shaft shoulder.</p>	simplex chain	duplex chain	gear	V-belt	1.00	1.25	1.25	1.00	0.3Lo	0.5Lo	0.7Lo	0.9Lo	1.10	1.00	0.83	0.70
simplex chain	duplex chain	gear	V-belt														
1.00	1.25	1.25	1.00														
0.3Lo	0.5Lo	0.7Lo	0.9Lo														
1.10	1.00	0.83	0.70														
<p>5. NOTE</p>	<p>For large GD value or application involving frequent start-stop please refer to PBEG for the selection of gearmotor/reducer.</p>																



"SUPER A" SERIES SELECTION SYSTEM



Characteristics Table of Gearmotor

Nominal Ratio	Output RPM 50Hz	No. of Reduction Stage	Motor Capacity 4 Pole	Class	Frame	Actual Ratio (1/R)	Output Torque (TA)			Allowable O.H.L. on Output Shaft	
							50Hz			50Hz	
							Nm	kgfm	slg	N	kgf
1.6	300	2	0.4 kW	L A6L	4.983	12.1	1.23	1.55	1180	120	
				S B6S	4.900	11.9	1.21	1.55	1320	135	
			0.75 kW	L B5L	5.113	23.2	2.37	1.61	1320	135	
				S C5S	5.048	22.9	2.34	1.52	1860	190	
			1.5 kW	L C5L	4.859	44.1	4.50	1.35	1860	190	
				S D6S	4.894	45.4	4.63	1.40	3190	325	
			2.2 kW	L D6L	5.141	68.5	6.99	1.32	3190	325	
				S E5S	4.848	64.6	6.59	1.32	3480	355	
			3.7 kW	L E5L	4.949	111.0	11.30	1.32	3480	355	
				S F5S	5.023	113.0	11.50	1.32	3480	355	
5.5 kW	L F5L	5.065	169.0	17.20	1.32	2650	270				
	S G5S	5.054	229.0	23.40	1.32	3820	390				
11 kW	S H6S	4.952	330.0	33.70	1.31	2840	290				
1/10	150	2	0.4 kW	L A10L	9.893	24.0	2.45	1.33	1520	155	
				S B10S	10.316	25.0	2.55	1.34	1860	190	
			0.75 kW	L B10L	9.881	44.9	4.58	1.41	1520	155	
				S C10S	9.800	44.5	4.54	1.52	2600	265	
			1.5 kW	L C10L	9.802	89.1	9.09	1.40	3140	320	
				S D10S	9.719	88.4	9.01	1.40	3730	380	
			2.2 kW	L D10L	9.781	130.0	13.30	1.32	3730	380	
				S E10S	10.287	137.0	14.00	1.32	5540	565	
			3.7 kW	L E10L	10.107	227.0	23.10	1.32	6820	695	
				S F10S	9.852	221.0	22.50	1.32	6820	695	
5.5 kW	L F10L	9.692	323.0	32.90	1.32	8080	820				
	S G10S	9.988	454.0	46.30	1.32	8780	895				
11 kW	S H10S	9.905	660.0	67.30	1.32	7350	750				
1/15	100	2	0.4 kW	L A15L	15.417	37.4	3.81	1.16	1570	160	
				S B15S	15.273	37.1	3.78	1.24	2060	210	
			0.75 kW	L B15L	15.595	70.9	7.23	1.17	1620	165	
				S C15S	14.552	66.1	6.74	1.52	2790	285	
			1.5 kW	L C15L	15.384	139.0	14.20	1.33	3430	350	
				S D15S	15.034	136.0	13.90	1.40	4070	415	
			2.2 kW	L D15L	15.944	213.0	21.70	1.28	4070	415	
				S E15S	14.773	197.0	20.10	1.32	5980	610	
			3.7 kW	L E15L	14.727	330.0	33.70	1.29	7350	750	
				S F15S	14.682	330.0	33.60	1.32	7350	750	
5.5 kW	L F15L	15.077	502.0	51.20	1.09	8980	710				
	S G15S	14.796	673.0	68.60	1.28	9810	1000				
11 kW	S H15S	15.352	1020.0	104.00	1.09	12000	1220				
1/20	75	2	0.4 kW	L A20L	18.638	45.7	4.68	1.15	1570	160	
				S B20S	20.653	50.1	5.11	1.28	2160	220	
			0.75 kW	L B20L	19.808	90.0	9.18	1.13	1870	170	
				S C20S	19.303	87.8	8.95	1.52	2890	295	
			1.5 kW	L C20L	19.145	174.0	17.70	1.11	3530	360	
				S D20S	19.531	176.0	18.10	1.40	4220	430	
			2.2 kW	L D20L	19.504	260.0	26.50	1.19	4220	430	
				S E20S	21.212	282.0	28.80	1.32	6330	645	
			3.7 kW	L E20L	19.785	443.0	45.20	1.03	7350	750	
				S F20S	20.201	453.0	46.20	1.32	7350	770	
5.5 kW	L G20S	19.856	662.0	67.50	1.32	11100	1130				
	S H20S	20.250	921.0	93.90	1.25	13500	1380				
11 kW	S I20S	20.286	1350.0	138.00	1.24	14200	1450				
1/25	60	2	0.4 kW	L B25L	26.232	63.5	6.48	1.39	2160	220	
				S C25S	25.212	61.1	6.23	1.55	3630	370	
			0.75 kW	L C25L	24.055	109.0	11.10	1.52	3970	405	
				S D25S	24.315	111.0	11.30	1.52	4900	500	
			1.5 kW	L D25L	23.893	217.0	22.10	1.23	4900	500	
				S E25S	25.455	231.0	23.60	1.40	7210	735	
			2.2 kW	L E25L	23.584	314.0	32.00	1.32	7350	750	
				S F25S	23.788	317.0	32.30	1.32	7850	800	
			3.7 kW	L F25L	24.241	546.0	55.70	1.20	7850	800	
				S G25S	25.057	562.0	57.30	1.32	11400	1160	
5.5 kW	L H25S	23.192	773.0	78.80	1.30	15000	1530				
	S K25S	24.456	1110.0	113.00	1.32	16100	1640				
1/30	50	2	0.4 kW	L B30L	29.400	71.3	7.27	1.07	2160	220	
				S C30S	31.418	76.2	7.77	1.55	3780	385	
			0.75 kW	L C30L	28.955	131.0	13.40	1.03	3970	405	
				S D30S	29.744	135.0	13.80	1.52	5050	515	
			1.5 kW	L D30L	27.942	254.0	25.90	1.23	5050	515	
				S E30S	28.264	257.0	26.20	1.40	7350	750	
			2.2 kW	L E30L	27.688	369.0	37.80	1.29	7350	750	
				S F30S	28.636	381.0	38.90	1.32	8040	820	
			3.7 kW	L F30L	28.205	633.0	64.50	1.04	8040	820	
				S G30S	29.455	661.0	67.40	1.32	11800	1200	
5.5 kW	L H30S	29.082	959.0	98.80	1.24	16000	1630				
	S I30S	29.013	1310.0	134.00	1.25	17100	1740				
1/45	33	3	L B45L	44.898	107.0	10.90	1.05	2160	220		
			S C45S	46.383	110.0	11.20	1.46	3970	405		



"SUPER A" SERIES SELECTION SYSTEM



Characteristics Table of Gearmotor

Nominal Ratio	Output RPM	No. of Reduction Stage	Motor Capacity 4 Pole	Class	Frame	Actual Ratio (I/R)	Output Torque (TA)			Allowable O.H.L. on Output Shaft				
							50Hz			50Hz				
							Nm	kgfm	stg	N	kgf			
146	33	3	0.75 kW	L	D46L	46.460	207	21.1	*	3870	405			
			S	D46S	44.163	198	20.0	1.23	5100	520				
			1.5 kW	L	D46L	45.665	408	41.4	*	5100	520			
			S	E46L	47.292	421	42.9	1.08	7350	750				
			2.2 kW	L	E46L	45.818	597	60.9	*	7350	750			
			S	F46S	43.182	583	57.4	1.08	9760	995				
			S	G46S	44.807	981	100.0	*	8040	820				
160	30	3	3.7 kW	L	F46L	46.364	1020	104.0	1.09	13700	1400			
			S	G46S	46.364	1020	104.0	1.09	13700	1400				
			5.5 kW	L	H46L	42.878	1970	143.0	1.04	17000	1730			
			S	K46S	44.389	229.0	201.0	*	18600	1820				
			7.5 kW	L	K46L	44.389	229.0	201.0	*	18600	1820			
			S	L46S	44.389	229.0	201.0	*	18600	1820				
			0.4 kW	L	B60L	51.140	121	12.4	*	2160	220			
			S	C60S	50.445	120	12.2	1.40	3970	405				
			0.75 kW	L	C60L	50.529	225	22.9	*	3970	405			
			S	D60S	48.109	214	21.8	1.17	5100	520				
			1.5 kW	L	D60L	49.745	423	43.1	*	5100	520			
			S	E60S	51.705	480	48.9	*	7350	750				
			2.2 kW	L	E60L	50.093	632	64.4	*	7350	750			
			S	F60S	53.342	895	70.9	*	10000	1020				
160	25	3	3.7 kW	L	F60L	52.394	1060	108.0	*	8040	820			
			S	G60S	50.356	1110	113.0	1.01	13700	1400				
			5.5 kW	L	H60L	50.242	1640	167.0	*	17800	1820			
			S	K60S	51.352	2240	228.0	*	18700	2010				
			7.5 kW	L	K60L	58.698	130	13.2	*	2160	220			
			S	C60S	60.445	143	14.6	1.25	3870	405				
			0.4 kW	L	C60L	60.545	242	24.7	*	3970	405			
			S	D60S	57.823	257	26.2	1.06	5100	520				
			0.75 kW	L	D60L	59.790	431	44.0	*	5100	520			
			S	E60S	62.735	508	51.8	*	7350	750				
			1.5 kW	L	E60L	60.779	534	54.7	*	7350	750			
			S	F60S	62.374	614	63.0	*	10100	1030				
			2.2 kW	L	F60L	57.000	1080	110.0	*	8280	845			
			S	G60S	56.924	1250	127.0	*	13700	1400				
5.5 kW	L	H60L	59.873	1670	170.0	*	18100	1850						
S	K60S	64.341	2480	253.0	*	21600	2200							
175	20	3	0.4 kW	L	B75L	73.576	131	13.4	*	2160	220			
			S	C75S	80.182	190	19.4	1.00	3870	405				
			0.75 kW	L	C75L	74.204	245	25.0	*	3970	405			
			S	D75S	75.121	334	34.1	*	5100	520				
			1.5 kW	L	D75L	75.336	439	44.8	*	5100	520			
			S	E75S	74.455	647	66.0	*	7350	750				
			2.2 kW	L	E75L	73.396	830	84.6	*	10500	1070			
			S	F75S	72.808	949	96.8	1.05	13700	1400				
			3.7 kW	L	F75L	74.103	1270	129.0	*	13700	1400			
			S	G75S	72.409	1590	162.0	1.06	18100	1850				
			5.5 kW	L	H75L	74.555	2430	248.0	*	21600	2200			
			S	K75S	86.270	233	23.8	*	3970	405				
			0.4 kW	L	D100L	98.117	232	23.7	1.31	5100	520			
			S	E100S	94.653	421	42.9	*	5100	520				
0.75 kW	L	E100L	92.688	412	42.0	1.10	7350	750						
S	F100S	99.967	662	67.5	*	7350	750							
175	15	3	1.5 kW	L	F100L	102.967	844	86.1	*	11600	1180			
			S	G100S	102.196	1070	109.0	*	11600	1180				
			2.2 kW	L	G100L	100.962	1230	125.0	*	13700	1400			
			S	H100S	94.659	1620	165.0	*	13700	1400				
			3.7 kW	L	H100L	101.108	1890	193.0	*	18100	1850			
			S	K100S	95.135	2790	285.0	*	21600	2200				
			0.4 kW	L	D130L	127.726	226	23.0	*	3970	405			
			S	D130S	120.025	284	29.0	1.03	5100	520				
			0.75 kW	L	D130L	127.427	429	43.7	*	5100	520			
			S	E130S	124.449	553	56.4	*	7350	750				
			1.5 kW	L	F130L	122.637	1040	106.0	*	11600	1180			
			S	G130S	121.154	1080	110.0	1.04	13700	1400				
			2.2 kW	L	G130L	123.657	1470	150.0	*	13700	1400			
			S	H130S	125.169	1470	150.0	*	18100	1850				
3.7 kW	L	H130L	120.055	2040	209.0	*	21600	2200						
175	11.5	3	0.4 kW	L	C150L	140.318	226	23.0	*	3970	405			
			S	D150S	151.232	330	33.7	*	5100	520				
			0.75 kW	L	D150L	141.183	428	43.4	*	5100	520			
			S	E150S	150.567	483	49.3	*	7350	750				
			1.5 kW	L	F150L	149.610	1020	104.0	*	11600	1180			
			S	G150S	148.388	1270	129.0	*	13700	1400				
			2.2 kW	L	G150L	145.360	1470	150.0	*	13700	1400			
			S	H150S	149.161	1470	150.0	*	18100	1850				
			3.7 kW	L	H150L	144.582	2790	284.0	*	21600	2200			
			1200	7.5	3	0.4 kW	L	D200L	184.403	437	44.8	*	5100	520
						S	E200S	194.997	462	47.2	*	7350	750	
						0.75 kW	L	E200L	196.520	592	60.4	*	7350	750
						S	F200S	196.987	878	89.3	1.07	11600	1180	
						1.5 kW	L	G200L	174.432	1500	153.0	*	13700	1400
S	H200S	196.987				1500	153.0	*	18100	1850				
2.2 kW	L	H200L				198.751	2590	264.0	*	21600	2200			



"SUPER A" SERIES SELECTION SYSTEM



Characteristics Table of Reducer

Nominal Ratio	Reducer Frame	Actual Ratio (1/R)	No. of Reduction Stage	Input RPM 1460 rpm						
				Allowable Input Power	Allowable Output Torque (TG)		Allowable Overhung Load On Input Shaft		Allowable Overhung Load On Output Shaft	
					kW	Nm	kgfm	N	kgf	N
1.5	ACA6L	4.983	2	0.50	15.1	1.54	265	27	1180	120
	ACB6L	4.983	2	1.05	32.5	3.32	314	32	1320	135
	ACC6L	4.983	2	1.95	57.4	5.86	431	44	1860	190
	ACD6L	4.983	2	2.82	87.8	8.98	470	48	3190	325
	ACE6L	4.983	2	4.77	143.0	14.6	598	61	3480	365
	ACF6S	4.983	2	7.25	222.0	22.7	804	82	2650	270
	ACG6S	4.983	2	9.87	302.0	30.8	990	101	3820	390
	ACH6S	4.983	2	14.5	435.0	44.4	1210	123	2840	290
1/10	ACA10L	9.893	2	0.50	30.0	3.08	265	27	1520	155
	ACB10L	9.881	2	1.05	62.8	6.41	314	32	1520	155
	ACC10L	9.802	2	1.95	116.0	11.8	431	44	3140	320
	ACD10L	9.761	2	2.82	167.0	17.0	471	48	3730	380
	ACE10L	10.107	2	4.77	292.0	29.8	598	61	6820	695
	ACF10S	9.692	2	7.25	425.0	43.4	804	82	6080	620
	ACG10S	9.968	2	9.87	597.0	60.9	990	101	8780	895
	ACH10S	9.905	2	14.5	870.0	88.8	1210	123	7350	750
1/15	ACA15L	15.417	2	0.50	46.6	4.76	265	27	1570	160
	ACB15L	15.595	2	1.05	90.1	9.19	314	32	1620	165
	ACC15L	15.364	2	1.95	181.0	18.5	431	44	3430	350
	ACD15L	15.944	2	2.82	272.0	27.8	471	48	4070	415
	ACE15L	14.727	2	4.77	425.0	43.4	598	61	7350	750
	ACF15S	15.077	2	8.52	585.0	60.7	804	82	6960	710
	ACG15S	14.798	2	9.87	884.0	90.2	990	101	9810	1000
	ACH15S	15.352	2	13.0	1220.0	124.0	1210	123	12000	1220
1/20	ACA20L	18.836	2	0.50	57.0	5.82	265	27	1570	160
	ACB20L	19.808	2	0.92	111.0	11.3	314	32	1670	170
	ACC20L	19.145	2	1.81	210.0	21.4	431	44	3530	360
	ACD20L	19.504	2	2.82	333.0	34.0	470	48	4220	430
	ACE20L	19.785	2	4.14	496.0	50.6	598	61	7350	750
	ACF20S	20.201	2	4.77	583.0	59.5	598	61	7550	770
	ACG20S	19.856	2	7.25	872.0	89.0	804	82	11100	1130
	ACH20S	20.250	2	9.87	1220.0	124.0	990	101	13500	1380
	ACK20S	20.286	2	14.5	1780.0	182.0	1210	123	14200	1450
1/25	ACB25L	26.232	2	0.58	92.1	9.40	265	27	2160	220
	ACC25L	24.055	2	1.05	153.0	15.8	314	32	3970	405
	ACD25L	23.893	2	1.95	282.0	28.8	431	44	4900	500
	ACE25L	23.554	2	2.82	402.0	41.0	470	48	7350	750
	ACF25L	24.341	2	4.77	704.0	71.8	598	61	7850	800
	ACG25S	25.057	2	4.77	724.0	73.9	598	61	11400	1160
	ACH25S	23.192	2	7.25	1020.0	104.0	804	82	15000	1530
	ACK25S	24.456	2	9.87	1460.0	149.0	990	101	16100	1640
1/30	ACB30L	29.400	2	0.47	82.8	8.45	265	27	2160	220
	ACC30L	28.955	2	0.84	147.0	15.0	314	32	3970	405
	ACD30L	27.942	2	1.95	330.0	33.7	431	44	5050	515
	ACE30L	27.686	2	2.82	472.0	48.2	470	48	7350	750
	ACF30L	28.205	2	4.18	714.0	72.9	598	61	8040	820
	ACG30S	29.455	2	4.77	851.0	86.8	598	61	11800	1200
	ACH30S	29.082	2	7.25	1270.0	130.0	804	82	16000	1630
	ACK30S	29.013	2	9.87	1730.0	177.0	990	101	17100	1740
1/45	ACB45L	44.898	3	0.47	124.0	12.7	265	27	2160	220
	ACC45L	46.460	3	0.78	216.0	22.0	314	32	3970	405
	ACD45L	45.665	3	1.50	406.0	41.4	431	44	5100	520
	ACE45L	45.818	3	2.22	604.0	61.6	471	48	7350	750
	ACF45L	44.807	3	3.70	980.0	100.0	598	61	8040	820
	ACG45S	46.364	3	4.48	1230.0	126.0	598	61	13700	1400
	ACH45S	42.878	3	8.38	1620.0	165.0	804	82	17000	1730
ACK45S	44.389	3	8.25	2170.0	221.0	990	101	18800	1920	



Characteristics Table of Reducer

Nominal Ratio	Reducer Frame	Actual Ratio (I/R)	No. of Reduction Stage	Input RPM 1450 rpm						
				Allowable Input Power	Allowable Output Torque (TG)		Allowable Overhung Load On Input Shaft		Allowable Overhung Load On Output Shaft	
					KW	Nm	kgfm	N	kgf	N
1/50	ACB50L	51.140	3	0.42	128	13.1	265	27	2160	220
	ACC50L	50.529	3	0.75	224	22.9	314	32	3970	405
	ACD50L	49.745	3	1.43	422	43.1	431	44	5096	520
	ACE50L	50.093	3	2.13	631	64.4	471	48	7350	750
	ACF50L	52.394	3	3.41	1060	108.0	598	61	8040	820
	ACG50S	50.356	3	4.15	1230	126.0	598	61	13700	1400
	ACH50S	50.242	3	5.56	1660	168.0	804	82	17800	1820
	ACK50S	51.352	3	7.33	2230	228.0	990	101	19700	2010
1/60	ACB60L	58.898	3	0.37	129	13.2	265	27	2160	220
	ACC60L	60.545	3	0.68	242	24.7	314	32	3970	405
	ACD60L	59.790	3	1.22	431	44.0	431	44	5100	520
	ACE60L	60.779	3	1.76	634	64.7	471	48	7350	750
	ACF60L	57.000	3	3.21	1080	110.0	598	61	8290	845
	ACG60S	58.924	3	3.70	1240	127.0	598	61	13700	1400
	ACH60S	59.873	3	4.71	1670	170.0	804	82	18100	1850
	ACK60S	64.341	3	6.50	2480	253.0	990	101	21600	2200
1/75	ACB75L	73.576	3	0.30	131	13.4	265	27	2160	220
	ACC75L	74.204	3	0.56	245	25.0	314	32	3970	405
	ACD75L	75.336	3	0.98	439	44.8	431	44	5100	520
	ACE75L	74.455	3	1.47	647	66.0	431	44	7350	750
	ACF75L	73.396	3	1.91	829	84.6	471	48	10500	1070
	ACG75L	74.103	3	2.88	1270	128.0	598	61	13700	1400
	ACH75S	72.409	3	4.36	1870	191.0	598	61	18100	1850
	ACK75S	74.555	3	5.87	2590	264.0	804	82	21600	2200
1/100	ACC100L	98.270	3	0.40	233	23.8	265	27	3970	405
	ACD100L	94.853	3	0.76	426	43.4	314	32	5100	520
	ACE100L	99.967	3	1.12	662	67.5	431	44	7350	750
	ACF100L	102.198	3	1.76	1070	108.0	471	48	11600	1180
	ACG100L	94.859	3	2.88	1620	165.0	598	61	13700	1400
	ACH100S	101.108	3	3.17	1890	193.0	598	61	18100	1850
	ACK100S	95.135	3	4.95	2790	285.0	804	82	21600	2200
	1/130	ACC130L	127.726	3	0.30	226	23.0	265	27	3970
ACD130L		127.427	3	0.57	429	43.7	314	32	5100	520
ACE130S		124.449	3	0.75	553	56.4	314	32	7350	750
ACF130L		122.637	3	1.43	1040	106.0	431	44	11600	1180
ACG130L		123.857	3	2.00	1470	150.0	471	48	13700	1400
ACH130S		125.189	3	1.98	1470	150.0	471	48	18100	1850
ACK130S		120.055	3	3.91	2780	283.0	598	61	21600	2200
1/150		ACC150L	140.318	3	0.27	226	23.0	265	27	3970
	ACD150L	141.183	3	0.51	426	43.4	314	32	5100	520
	ACE150S	150.567	3	0.54	483	49.4	314	32	7350	750
	ACF150L	149.810	3	1.15	1020	104.0	431	44	11600	1180
	ACG150L	145.360	3	1.71	1470	150.0	471	48	13700	1400
	ACH150S	149.161	3	1.66	1470	150.0	471	48	18100	1850
	ACK150S	144.582	3	3.25	2790	284.0	598	61	21600	2200
	1/200	ACD200L	184.403	3	0.40	437	44.6	265	27	5100
ACE200L		196.520	3	0.51	592	60.4	314	32	7350	750
ACF200S		196.987	3	0.89	1040	106.0	314	32	11600	1180
ACG200L		174.432	3	1.45	1500	153.0	431	44	13700	1400
ACH200S		196.987	3	1.28	1500	153.0	431	44	18100	1850
ACK200S		198.751	3	2.35	2770	282.0	471	48	21600	2200