Torque transmission capacity table

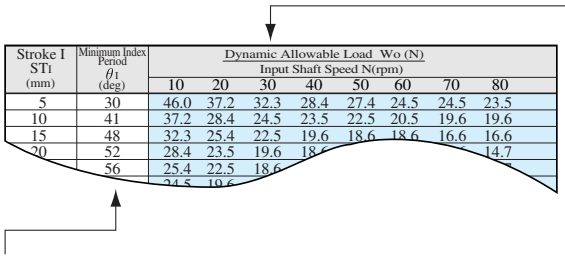
SANDEX

Reading carrying capacity tables for parts handlers

The carrying capacity table gives dynamic allowable load Wo by stroke and rotating speeds.

This table was calculated based on a parts handler that has been mounted and lubricated according to specifications and is being operated under normal condition. Adverse operating conditions and poor maintenance can effect the transmission capacities and life of the parts handler.

Note, when selecting models it is important that the torque transmission capacity table be read correctly in order to make the proper selection. Always make sure to read and understand the following explanations.



Index periods

Two or more index periods are given for each stroke range. The smallest index period is the minimum index period for that amount of stroke. Cams cannot be manufactured for index periods below this minimum value.

When designing the timing, try to make the index period as large as possible.

Dynamic allowable load and rotating speeds

The dynamic allowable load given in the carrying capacity table will vary according to the stroke. Index period, and rotating speed. The dynamic allowable load may also vary by the mounting position due to the internal load of the parts handler. The allowable rotating speed varies according to the direction of the stroke. Therefore, always check the values according to actual operating conditions.

Cam curves

The output displacement of the parts handler is produced by a modified sine curve(MS curve). If your application requires synchronized operation at equivalent speeds or special displacement specifications, please consult Sankyo.

6GY

Carrying capacity table of stroke I

Table 6GY-1

Stroke I STI (mm)	Minimum Index Period θI (deg)	Dynamic Allowable Load Wo (N) Input Shaft Speed N(rpm) 10	20	30	40	50	60	70	80	Camshaft Frictional Torque Tx (N·m)
10	28	107.8	83.3	70.5	62.7	52.9	46.0	38.2	36.2	(4.9)
20	37	83.3	62.7	53.9	48.0	40.1	34.3	28.4	26.4	
30	42	70.5	53.9	45.0	40.1	33.3	28.4	23.5	22.5	
40	50	62.7	48.0	40.1	35.2	29.4	25.4	20.5	19.6	
50	60	57.8	44.1	36.2	32.3	26.4	21.5	18.6	17.6	

Carrying capacity table of stroke II

Table 6GY-2

Stroke II STII (mm)	Minimum Index Period θII (deg)	Static Allowable Load Ws (N)	Dynamic Allowable Load Wo (N) Input Shaft Speed N(rpm) 10	20	30	40	50	60	70	80	Camshaft Frictional Torque Tx (N·m)
10	18	116.6	92.1	83.3	70.5	62.7	57.8	46.0	28.4	15.6	(4.9)
20	25	112.7	83.3	69.5	61.7	50.9	49.0	39.2	22.5	11.7	
30	30	109.7	70.5	60.7	50.9	45.0	42.1	32.3	18.6	9.8	
40	34	105.8	62.7	53.9	48.0	41.1	38.2	30.3	16.6	7.8	
50	36	103.8	57.8	49.0	42.1	37.2	35.2	25.4	12.7	6.8	
60	39	100.9	53.9	45.0	38.2	35.2	32.3	20.5	10.7	4.9	
70	42	98.9	49.9	41.1	36.2	32.3	31.3	17.6	9.8	4.9	
80	48	96.0	48.0	38.2	33.3	29.4	28.4	21.5	9.8	4.9	
90	54	95.0	45.0	36.2	31.3	28.4	27.4	20.5	9.8	4.9	
100	60	92.1	44.1	33.3	29.4	27.4	24.5	19.6	10.7	7.8	
110	66	89.1	41.1	32.3	28.4	25.4	23.5	18.6	11.7	9.8	
120	73	88.2	40.1	31.3	25.4	24.5	22.5	17.6	11.7	9.8	
130	80	86.2	38.2	29.4	25.4	23.5	20.5	16.6	10.7	9.8	
140	93	84.2	37.2	27.4	24.5	22.5	19.6	16.6	10.7	9.8	
150	103	82.3	36.2	25.4	23.5	20.5	19.6	15.6	10.7	8.8	