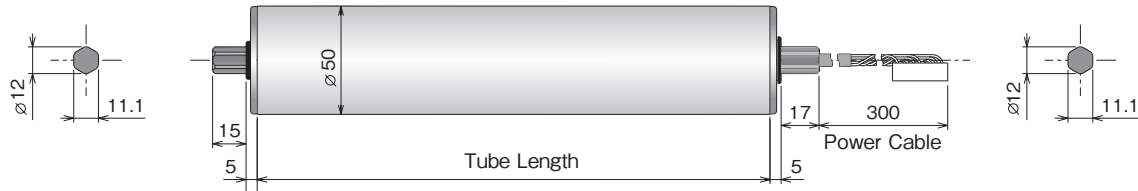


Minimum
tube lengthSpring
loaded shaft**MDR Brushless DC Motor standard type PM500FE****Roller diameter $\varnothing 50$** **Roller diameter $\varnothing 50$** **PM500FE**

- **Roller diameter** / $\varnothing 50$
- **Thickness** / $t1.4$
- **Voltage** / 24V DC
- **Tube material** / STKM12
- **Surface treatment** / Trivalent chromate processing

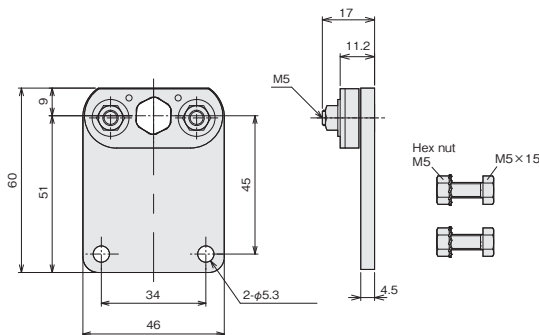
**Tube Length : PM500FE**

	290mm	290mm $\leq$							
Tube Length (mm)	300	400	500	600	700	800	900	1000	
Weight (kg)	2.4	2.5	2.7	2.8	3.0	3.1	3.3	3.4	
Spring loaded shaft	☐	☐	☐	☐	☐	☐	☐	☐	☐

- Conveyor frame inside dimension and frame hole shape vary by the manufacturer.
- A gap of 2~5mm is required between the frame inside dimension and Power Moller.

Product Designation :**PM500FE - 17 - 400 - D - 024 - BR**

Power Moller model	Nominal Speed	Tube Length	Voltage	Options
-----------------------	------------------	----------------	---------	---------

Motor type : FE**Nominal Speed** : 17,60,90**Tube Length** : Specify in mm.**Voltage** : D-024 (24VDC)**Options** : Each of the following optional specification may be selected.**Mounting Bracket : No.MBB-081**

*Attach to the power cable side.

- Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.

Options : PM500FE**Rubber Laggings - NR, UR, NB, CR**

Natural rubber, Urethane, NBR, Neoprene

 **Built-In Brake - BR ^{※1}** 360mm 360mm $\leq$  **Drip Proof ^{※2}** 300mm 300mm $\leq$  **Water Proof ^{※2}** 310mm 310mm $\leq$  **Poly V-Belt Pulley** 290mm 290mm $\leq$  **V-Belt Pulley** 290mm 290mm $\leq$  **Double Grooved Tube ^{※3}** 340mm 340mm $\leq$ **Both-end D-shaped shaft**

※1 When holding type built-in brake is required, specify along with a driver card compatible with such brake specification.

[Electric brake (without holding function) is equipped as a standard specification.]

Nominal speed 90m/min rollers are not applicable.

※2 Manufacturability and tube length are different depending on the specification combination, contact our sales support.

(A standard mounting bracket is No. MBD-081-D.)

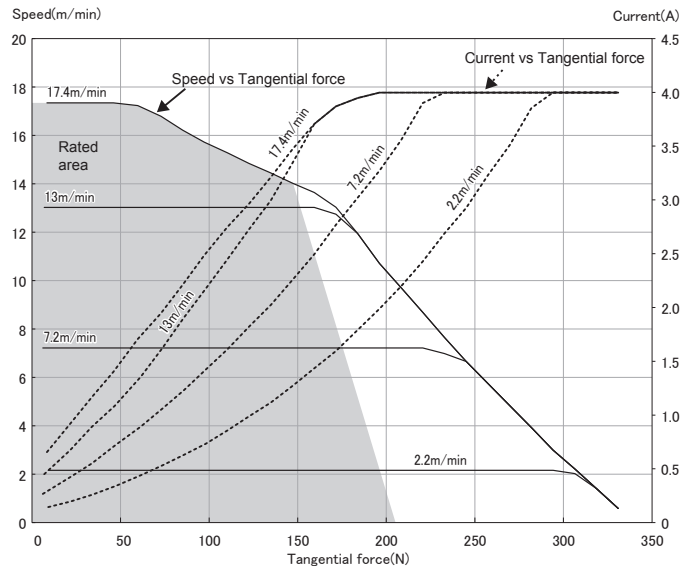
※3 Up to 800mm can be produced.

 [MDR Selection Tool] is available on our web page.

Operating characteristics with CB-016 driver card

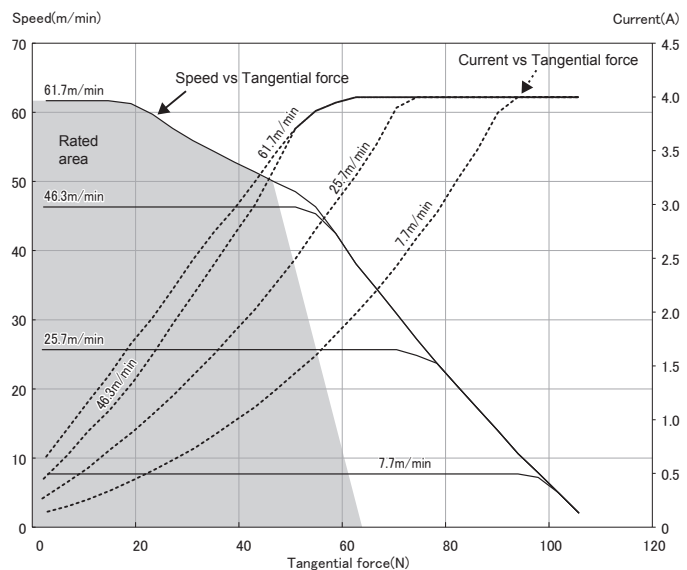
PM500FE-17

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Internal Rotary Switch No.		External input voltage (V)
		No-load	Starting			SW1#5	SW5	
17.4	146	0.8		50	83	ON	9	9.6~9.9
15.9	146	0.7		50	83		8	9.1~9.4
15.2	146	0.7		50	83		7	8.6~8.9
14.5	146	0.6		50	83		6	8.1~8.4
13.7	146	0.6		50	83		5	7.6~7.9
13.0	149	0.6		47	82		4	7.1~7.4
11.6	155	0.5		45	79		3	6.6~6.9
10.9	158	0.5		42	76		2	6.1~6.4
10.1	161	0.5		39	73		1	5.6~5.9
9.4	164	0.5		37	71		0	5.1~5.4
8.7	167	0.4		36	71	OFF	9	4.6~4.9
8.0	170	0.4		33	70		8	4.1~4.4
7.2	173	0.4		30	66		7	3.6~3.9
6.5	176	0.4		28	61		6	3.1~3.4
5.8	179	0.3		24	61		5	2.6~2.9
5.1	182	0.3		23	60		4	2.1~2.4
4.3	186	0.3		20	54		3	1.6~1.9
3.6	189	0.2		16	53		2	1.1~1.4
2.9	192	0.2		13	50		1	0.6~0.9
2.2	195	0.2		11	47		0	0.1~0.4



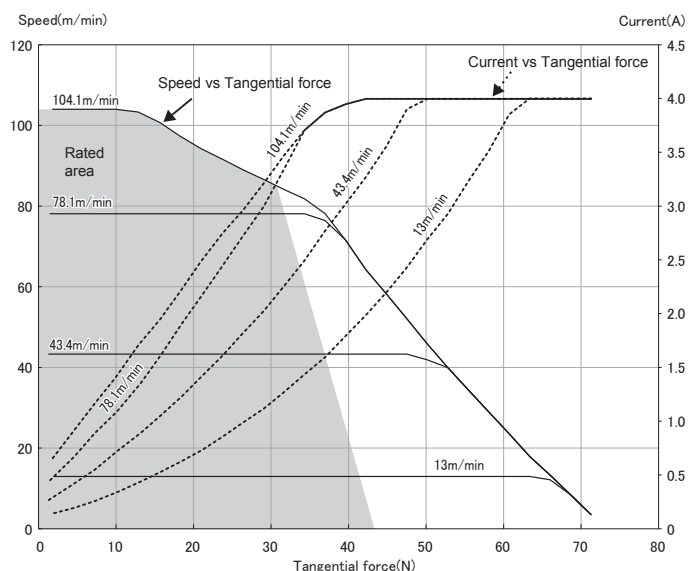
PM500FE-60

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Internal Rotary Switch No.		External input voltage (V)
		No-load	Starting			SW1#5	SW5	
61.7	47	0.8		50	83	ON	9	9.6~9.9
56.6	47	0.7		50	83		8	9.1~9.4
54.0	47	0.7		50	83		7	8.6~8.9
51.4	47	0.6		50	83		6	8.1~8.4
48.9	47	0.6		50	83		5	7.6~7.9
46.3	48	0.6		47	82		4	7.1~7.4
41.2	50	0.5		45	79		3	6.6~6.9
38.6	51	0.5		42	76		2	6.1~6.4
36.0	52	0.5		39	73		1	5.6~5.9
33.4	52	0.5		37	71		0	5.1~5.4
30.9	53	0.4		36	71	OFF	9	4.6~4.9
28.3	54	0.4		33	70		8	4.1~4.4
25.7	55	0.4		30	66		7	3.6~3.9
23.1	56	0.4		28	61		6	3.1~3.4
20.6	57	0.3		24	61		5	2.6~2.9
18.0	58	0.3		23	60		4	2.1~2.4
15.4	59	0.3		20	54		3	1.6~1.9
12.9	60	0.2		16	53		2	1.1~1.4
10.3	61	0.2		13	50		1	0.6~0.9
7.7	62	0.2		11	47		0	0.1~0.4



PM500FE-90

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Internal Rotary Switch No.		External input voltage (V)
		No-load	Starting			SW1#5	SW5	
104.1	31	0.8		50	83	ON	9	9.6~9.9
95.4	31	0.7		50	83		8	9.1~9.4
91.1	31	0.7		50	83		7	8.6~8.9
86.7	31	0.6		50	83		6	8.1~8.4
82.4	31	0.6		50	83		5	7.6~7.9
78.1	32	0.6		47	82		4	7.1~7.4
69.4	33	0.5		45	79		3	6.6~6.9
65.1	34	0.5		42	76		2	6.1~6.4
60.7	35	0.5		39	73		1	5.6~5.9
56.4	35	0.5		37	71		0	5.1~5.4
52.0	36	0.4		36	71	OFF	9	4.6~4.9
47.7	37	0.4		33	70		8	4.1~4.4
43.4	37	0.4		30	66		7	3.6~3.9
39.0	38	0.4		28	61		6	3.1~3.4
34.7	39	0.3		24	61		5	2.6~2.9
30.3	39	0.3		23	60		4	2.1~2.4
26.0	40	0.3		20	54		3	1.6~1.9
21.7	41	0.2		16	53		2	1.1~1.4
17.3	41	0.2		13	50		1	0.6~0.9
13.0	42	0.2		11	47		0	0.1~0.4

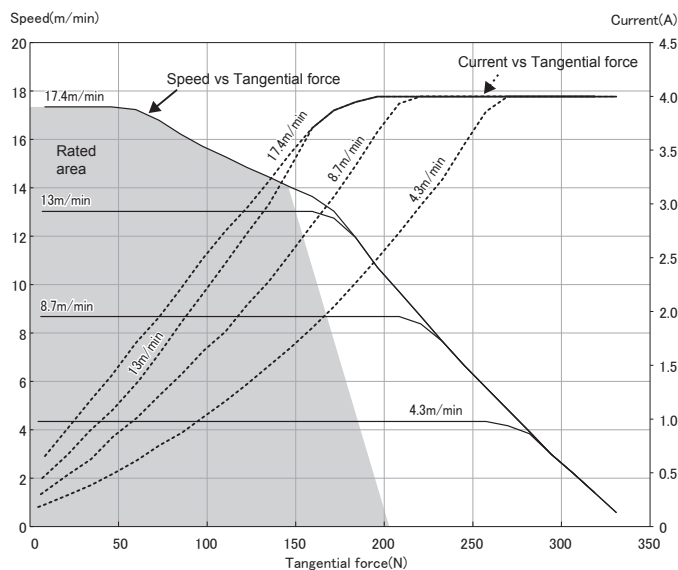


 [MDR Selection Tool] is available on our web page.

Operating characteristics with HB-510 driver card

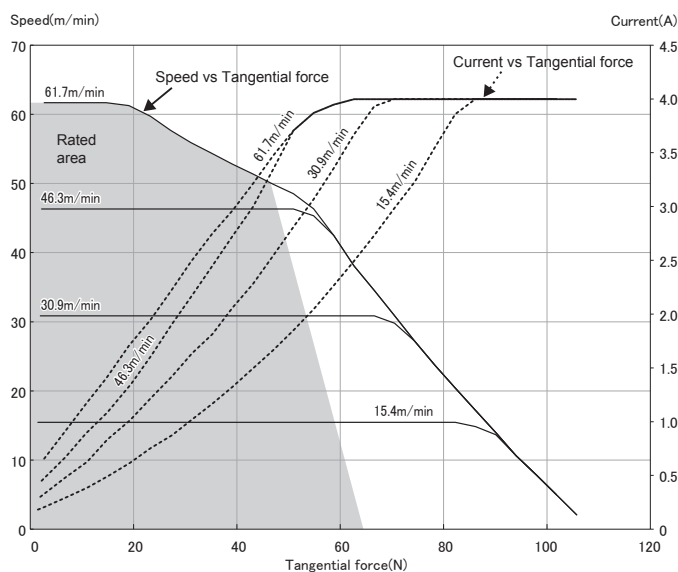
PM500FE-17

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No	External input voltage (V)
	No-load	Rated	No-load	Starting				
17.4	146		0.8		50	83	9	9.3~9.7
15.9	146		0.7		50	83	8	8.3~8.7
14.5	146		0.6		50	83	7	7.3~7.7
13.0	149		0.6		47	82	6	6.3~6.7
11.6	155		0.5		45	79	5	5.3~5.7
10.1	161		0.5		39	73	4	4.3~4.7
8.7	167		0.4		36	71	3	3.3~3.7
7.2	173		0.4		30	66	2	2.3~2.7
5.8	179		0.3		24	61	1	1.3~1.7
4.3	186		0.3		20	54	0	0.3~0.7



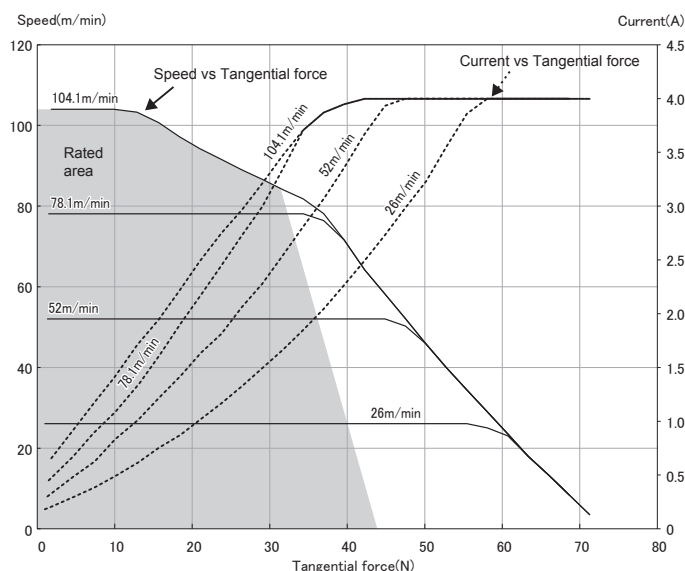
PM500FE-60

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No	External input voltage (V)
	No-load	Rated	No-load	Starting				
61.7	47		0.8		50	83	9	9.3~9.7
56.6	47		0.7		50	83	8	8.3~8.7
51.4	47		0.6		50	83	7	7.3~7.7
46.3	48		0.6		47	82	6	6.3~6.7
41.2	50		0.5		45	79	5	5.3~5.7
36.0	52		0.5		39	73	4	4.3~4.7
30.9	53		0.4		36	71	3	3.3~3.7
25.7	55		0.4		30	66	2	2.3~2.7
20.6	57		0.3		24	61	1	1.3~1.7
15.4	59		0.3		20	54	0	0.3~0.7



PM500FE-90

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No	External input voltage (V)
	No-load	Rated	No-load	Starting				
104.1	31		0.8		50	83	9	9.3~9.7
95.4	31		0.7		50	83	8	8.3~8.7
86.7	31		0.6		50	83	7	7.3~7.7
78.1	32		0.6		47	82	6	6.3~6.7
69.4	33		0.5		45	79	5	5.3~5.7
60.7	35		0.5		39	73	4	4.3~4.7
52.0	36		0.4		36	71	3	3.3~3.7
43.4	37		0.4		30	66	2	2.3~2.7
34.7	39		0.3		24	61	1	1.3~1.7
26.0	40		0.3		20	54	0	0.3~0.7



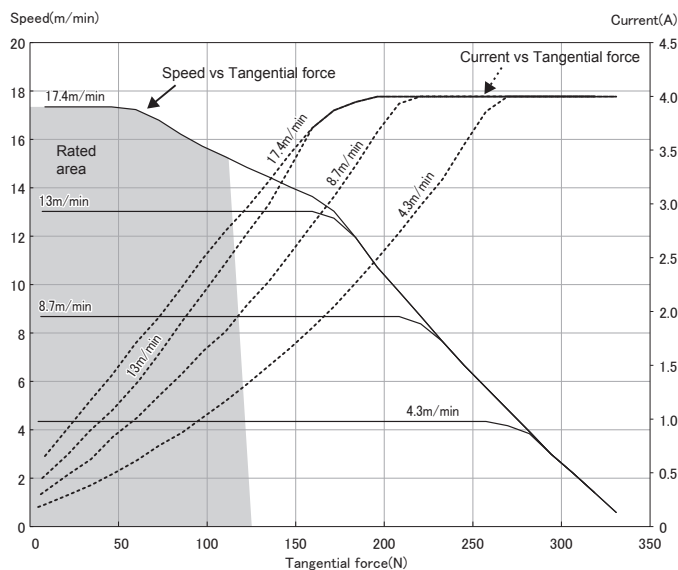
 [MDR Selection Tool] is available on our web page.

Operating characteristics with HBM-604/IB-C02 driver card

PM500FE-17

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No
		No-load	Starting			
17.4	113	0.6	4.0	41	66	9
15.9	113			41	65	8
14.5	113			39	64	7
13.0	116			35	58	6
11.6	116			31	53	5
10.1	116			27	49	4
8.7	119			23	43	3
7.2	119			20	38	2
5.8	119			17	37	1
4.3	122	0.2		13	32	0

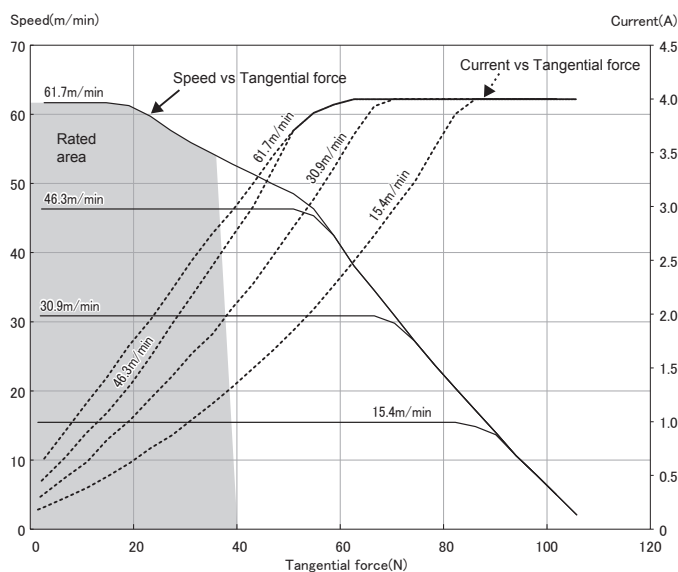
* Internal speed SW3/4 is for HBM-604.



PM500FE-60

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No
		No-load	Starting			
61.7	36	0.6	4.0	41	66	9
56.6	36			41	65	8
51.4	36			39	64	7
46.3	37			35	58	6
41.2	37			31	53	5
36.0	37			27	49	4
30.9	38			23	43	3
25.7	38			20	38	2
20.6	38			17	37	1
15.4	39	0.2		13	32	0

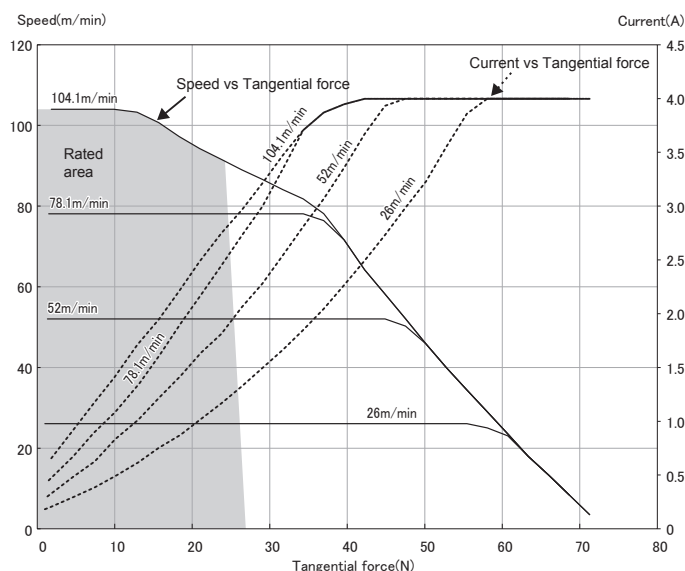
* Internal speed SW3/4 is for HBM-604.



PM500FE-90

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No
		No-load	Starting			
104.1	24	0.6	4.0	41	66	9
95.4	24			41	65	8
86.7	24			39	64	7
78.1	25			35	58	6
69.4	25			31	53	5
60.7	25			27	49	4
52.0	26			23	43	3
43.4	26			20	38	2
34.7	26			17	37	1
26.0	26	0.2		13	32	0

* Internal speed SW3/4 is for HBM-604.

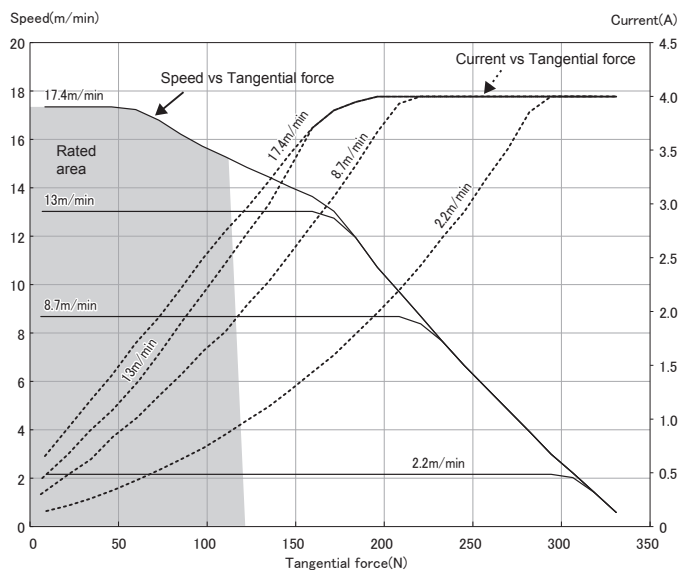


 [MDR Selection Tool] is available on our web page.

Operating characteristics with IB-E03 driver card

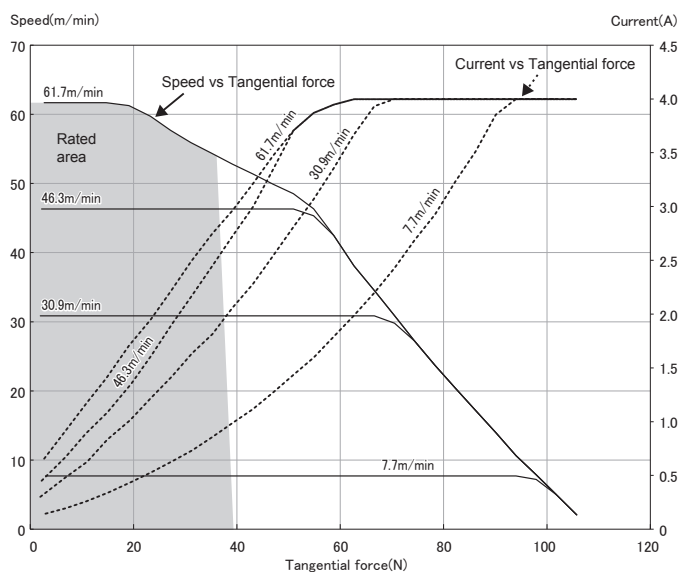
PM500FE-17

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)
	No-load	Rated	No-load	Starting		
17.4	113		0.6		41	66
15.9	113		0.5		41	66
15.2	113		0.5		41	66
14.5	113		0.5		40	65
13.7	116		0.5		39	64
13.0	116		0.4		37	62
11.6	116		0.4		34	60
10.9	116		0.4		32	57
10.1	119		0.4		30	54
9.4	119		0.4		28	51
8.7	119		0.3		26	49
7.2	119		0.3		20	38
5.8	122		0.2		17	37
4.3	122		0.2		13	32
2.9	122		0.2		9	27
2.2	122		0.2		7	24



PM500FE-60

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)
	No-load	Rated	No-load	Starting		
61.7	36		0.6		41	66
56.6	36		0.5		41	66
54.0	36		0.5		41	66
51.4	36		0.5		40	65
48.9	37		0.5		39	64
46.3	37		0.4		37	62
41.2	37		0.4		34	60
38.6	37		0.4		32	57
36.0	38		0.4		30	54
33.4	38		0.4		28	51
30.9	38		0.3		26	49
25.7	38		0.3		20	38
20.6	39		0.2		17	37
15.4	39		0.2		13	32
10.3	39		0.2		9	27
7.7	39		0.2		7	24



PM500FE-90

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)
	No-load	Rated	No-load	Starting		
104.1	24		0.6		41	66
95.4	24		0.5		41	66
91.1	24		0.5		41	66
86.7	24		0.5		40	65
82.4	25		0.5		39	64
78.1	25		0.4		37	62
69.4	25		0.4		34	60
65.1	25		0.4		32	57
60.7	26		0.4		30	54
56.4	26		0.4		28	51
52.0	26		0.3		26	49
43.4	26		0.3		20	38
34.7	26		0.2		17	37
26.0	26		0.2		13	32
17.3	26		0.2		9	27
13.0	26		0.2		7	24

