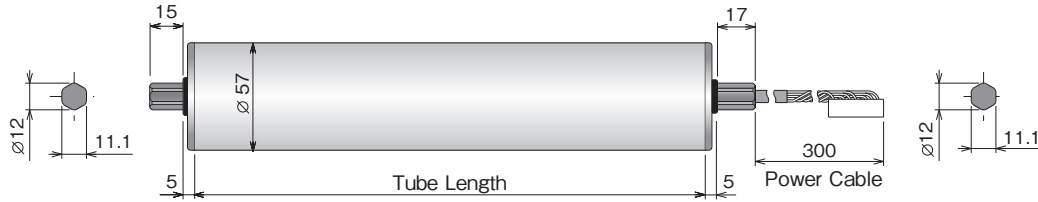


# MDR Brushless DC Motor standard type PM570FE

## Roller diameter $\varnothing 57$

# Roller diameter $\varnothing 57$ PM570FE

- Roller diameter /  $\varnothing 57$
- Thickness / t1.5
- Voltage / 24V DC
- Tube material / STKM12
- Surface treatment / Trivalent chromate processing



### Tube Length : PM570FE

	300mm	$\geq 300$ mm						
Tube Length (mm)	300	400	500	600	700	800	900	1000
Weight (kg)	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2
Spring loaded shaft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 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.

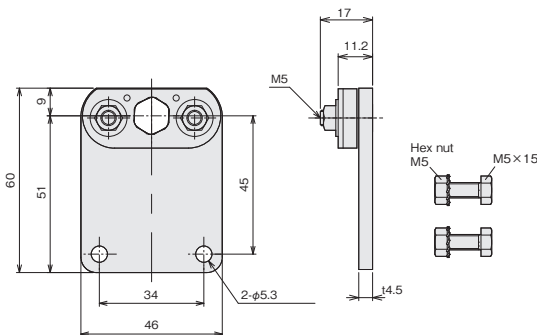
### Product Designation :

**PM570FE - 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 : PM570FE

- Rubber Laggings - NR, UR, NB, CR**  
Natural rubber, Urethane, NBR, Neoprene
- BR Built-In Brake - BR** \*1  
 370mm     $\geq 370$ mm
- DR Drip Proof** \*2  
 310mm     $\geq 310$ mm
- WA Water Proof** \*2  
 310mm     $\geq 310$ mm
- VG Poly V-Belt Pulley**  
 300mm     $\geq 300$ mm
- VP V-Belt Pulley**  
 300mm     $\geq 300$ mm
- P2 Double Grooved Tube** \*3  
 360mm     $\geq 360$ mm

JD

### Both-end D-shaped shaft

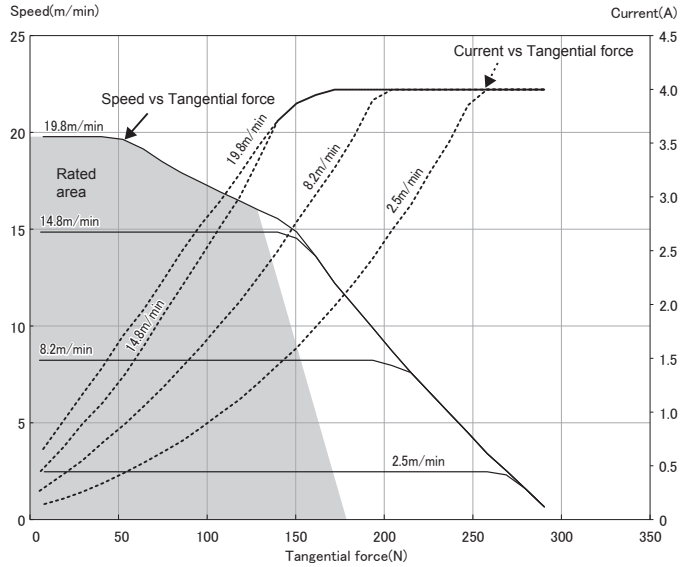
- \*1 When holding type built-in brake is required, specify along with a driver card compatible with such brake specification.  
[Electric brake (without holding function) is equipped as a standard specification.]  
Nominal speed 90m/min rollers are not applicable.
- \*2 Manufacturability and tube length 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

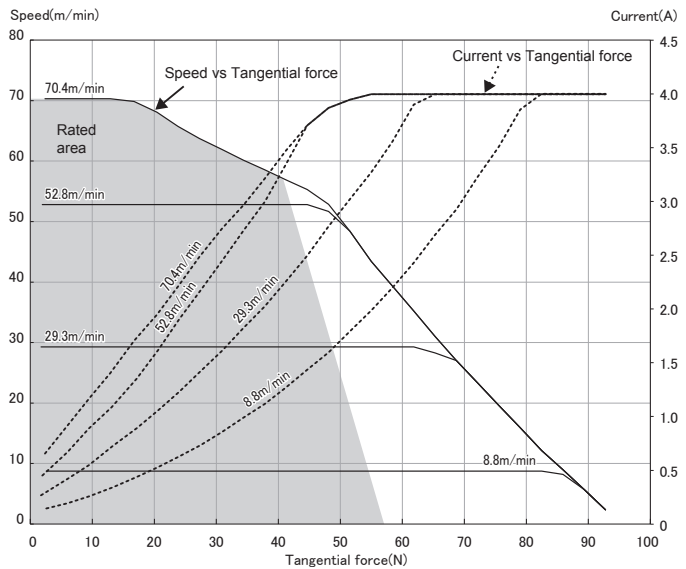
### PM570FE-17

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	Rated	No-load	Starting			SW1#5	SW5	
19.8	128		0.8		50	83	9	9.6~9.9	293
18.1	128		0.7		50	83	8	9.1~9.4	
17.3	128		0.7		50	83	7	8.6~8.9	
16.5	128		0.6		50	83	6	8.1~8.4	
15.7	128		0.6		50	83	5	7.6~7.9	
14.8	131		0.6		47	82	4	7.1~7.4	
13.2	136		0.5		45	79	3	6.6~6.9	
12.4	139		0.5		42	76	2	6.1~6.4	
11.5	141		0.5		39	73	1	5.6~5.9	
10.7	144		0.5		37	71	0	5.1~5.4	
9.9	147		0.4		36	71	9	4.6~4.9	
9.1	149		0.4		33	70	8	4.1~4.4	
8.2	152		0.4		30	66	7	3.6~3.9	
7.4	155		0.4		28	61	6	3.1~3.4	
6.6	157		0.3		24	61	5	2.6~2.9	
5.8	160		0.3		23	60	4	2.1~2.4	
4.9	163		0.3		20	54	3	1.6~1.9	
4.1	165		0.2		16	53	2	1.1~1.4	
3.3	168		0.2		13	50	1	0.6~0.9	
2.5	171		0.2		11	47	0	0.1~0.4	



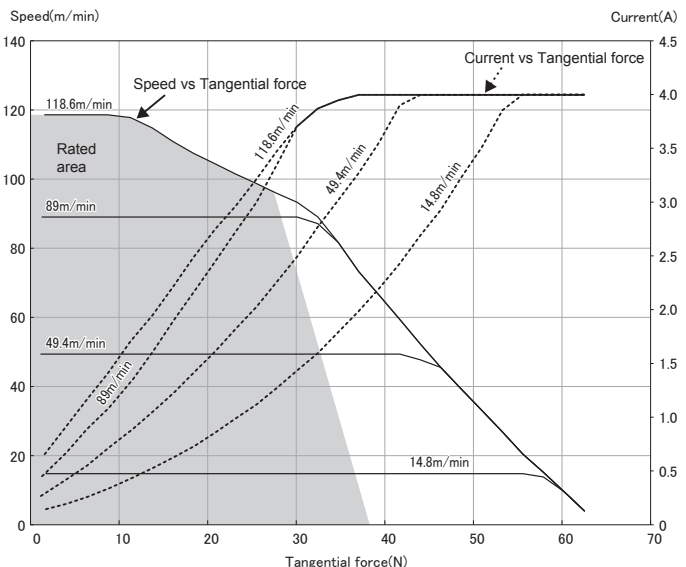
### PM570FE-60

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	Rated	No-load	Starting			SW1#5	SW5	
70.4	41		0.8		50	83	9	9.6~9.9	94
64.5	41		0.7		50	83	8	9.1~9.4	
61.6	41		0.7		50	83	7	8.6~8.9	
58.6	41		0.6		50	83	6	8.1~8.4	
55.7	41		0.6		50	83	5	7.6~7.9	
52.8	42		0.6		47	82	4	7.1~7.4	
46.9	43		0.5		45	79	3	6.6~6.9	
44.0	44		0.5		42	76	2	6.1~6.4	
41.1	45		0.5		39	73	1	5.6~5.9	
38.1	46		0.5		37	71	0	5.1~5.4	
35.2	47		0.4		36	71	9	4.6~4.9	
32.2	48		0.4		33	70	8	4.1~4.4	
29.3	49		0.4		30	66	7	3.6~3.9	
26.4	49		0.4		28	61	6	3.1~3.4	
23.5	50		0.3		24	61	5	2.6~2.9	
20.5	51		0.3		23	60	4	2.1~2.4	
17.6	52		0.3		20	54	3	1.6~1.9	
14.7	53		0.2		16	53	2	1.1~1.4	
11.7	54		0.2		13	50	1	0.6~0.9	
8.8	55		0.2		11	47	0	0.1~0.4	




### PM570FE-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	Rated	No-load	Starting			SW1#5	SW5	
118.6	28		0.8		50	83	9	9.6~9.9	63
108.8	28		0.7		50	83	8	9.1~9.4	
103.8	28		0.7		50	83	7	8.6~8.9	
98.9	28		0.6		50	83	6	8.1~8.4	
93.9	28		0.6		50	83	5	7.6~7.9	
89.0	28		0.6		47	82	4	7.1~7.4	
79.1	29		0.5		45	79	3	6.6~6.9	
74.2	30		0.5		42	76	2	6.1~6.4	
69.2	30		0.5		39	73	1	5.6~5.9	
64.3	31		0.5		37	71	0	5.1~5.4	
59.3	32		0.4		36	71	9	4.6~4.9	
54.4	32		0.4		33	70	8	4.1~4.4	
49.4	33		0.4		30	66	7	3.6~3.9	
44.5	33		0.4		28	61	6	3.1~3.4	
39.5	34		0.3		24	61	5	2.6~2.9	
34.6	34		0.3		23	60	4	2.1~2.4	
29.7	35		0.3		20	54	3	1.6~1.9	
24.7	36		0.2		16	53	2	1.1~1.4	
19.8	36		0.2		13	50	1	0.6~0.9	
14.8	37		0.2		11	47	0	0.1~0.4	



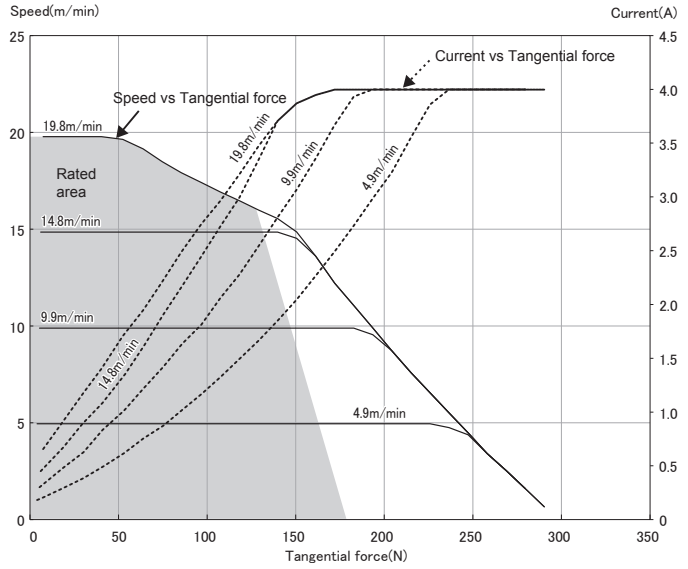
\* The values in the characteristics list are when an ambient temperature is 25 degree C, and only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller (no linked operation) without including other specifications, and the values may change when including other specifications or with linked operation.

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

Operating characteristics with HB-510 driver card

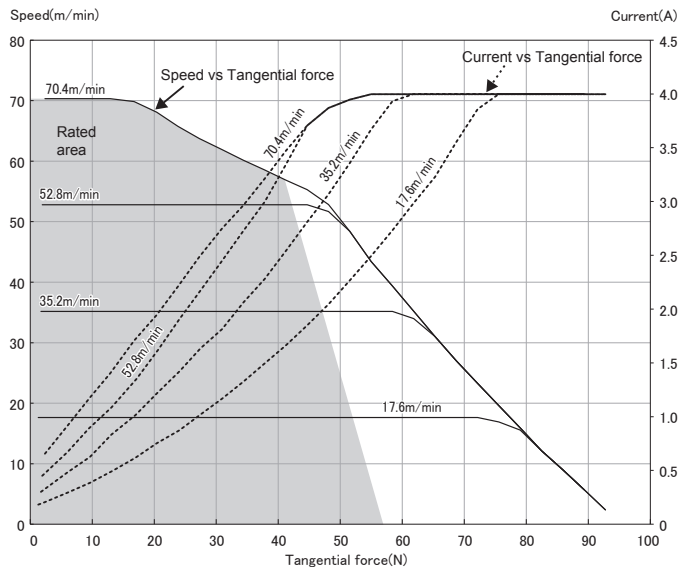
PM570FE-17

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				
19.8	128		0.8		50	83	9	9.3~9.7
18.1	128		0.7		50	83	8	8.3~8.7
16.5	128		0.6		50	83	7	7.3~7.7
14.8	131		0.6		47	82	6	6.3~6.7
13.2	136		0.5		45	79	5	5.3~5.7
11.5	141		0.5		39	73	4	4.3~4.7
9.9	147		0.4		36	71	3	3.3~3.7
8.2	152		0.4		30	66	2	2.3~2.7
6.6	157		0.3		24	61	1	1.3~1.7
4.9	163		0.3		20	54	0	0.3~0.7



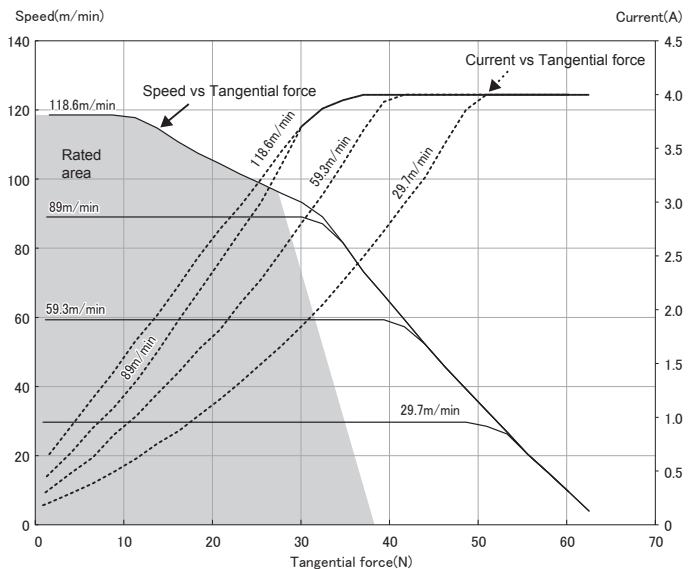
PM570FE-60

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				
70.4	41		0.8		50	83	9	9.3~9.7
64.5	41		0.7		50	83	8	8.3~8.7
58.6	41		0.6		50	83	7	7.3~7.7
52.8	42		0.6		47	82	6	6.3~6.7
46.9	43		0.5		45	79	5	5.3~5.7
41.1	45		0.5		39	73	4	4.3~4.7
35.2	47		0.4		36	71	3	3.3~3.7
29.3	49		0.4		30	66	2	2.3~2.7
23.5	50		0.3		24	61	1	1.3~1.7
17.6	52		0.3		20	54	0	0.3~0.7




PM570FE-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				
118.6	28		0.8		50	83	9	9.3~9.7
108.8	28		0.7		50	83	8	8.3~8.7
98.9	28		0.6		50	83	7	7.3~7.7
89.0	28		0.6		47	82	6	6.3~6.7
79.1	29		0.5		45	79	5	5.3~5.7
69.2	30		0.5		39	73	4	4.3~4.7
59.3	32		0.4		36	71	3	3.3~3.7
49.4	33		0.4		30	66	2	2.3~2.7
39.5	34		0.3		24	61	1	1.3~1.7
29.7	35		0.3		20	54	0	0.3~0.7



\* The values in the characteristics list are when an ambient temperature is 25 degree C, and only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller (no linked operation) without including other specifications, and the values may change when including other specifications or with linked operation.

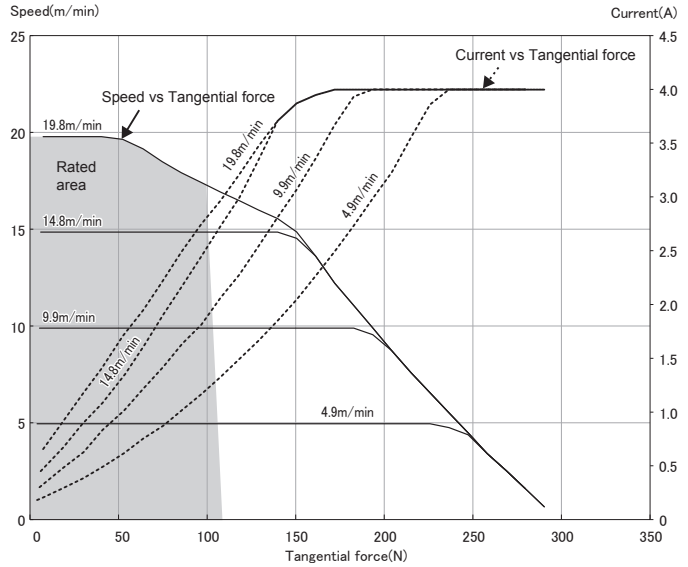
 [MDR Selection Tool] is available on our web page.

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

PM570FE-17

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No
	No-load	Rated	No-load	Starting			
19.8	99		0.6		41	66	9
18.1	99		0.5		41	65	8
16.5	99		0.5		39	64	7
14.8	101		0.4		35	58	6
13.2	101		0.4		31	53	5
11.5	101		0.4		27	49	4
9.9	104		0.3		23	43	3
8.2	104		0.3		20	38	2
6.6	104		0.2		17	37	1
4.9	107		0.2		13	32	0

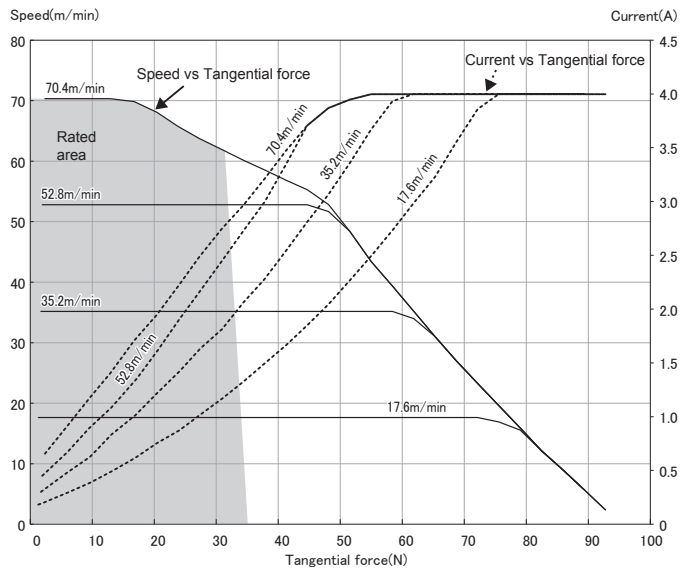
\* Internal speed SW3/4 is for HBM-604.



PM570FE-60

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No
	No-load	Rated	No-load	Starting			
70.4	32		0.6		41	66	9
64.5	32		0.5		41	65	8
58.6	32		0.5		39	64	7
52.8	32		0.4		35	58	6
46.9	32		0.4		31	53	5
41.1	32		0.4		27	49	4
35.2	33		0.3		23	43	3
29.3	33		0.3		20	38	2
23.5	33		0.2		17	37	1
17.6	34		0.2		13	32	0

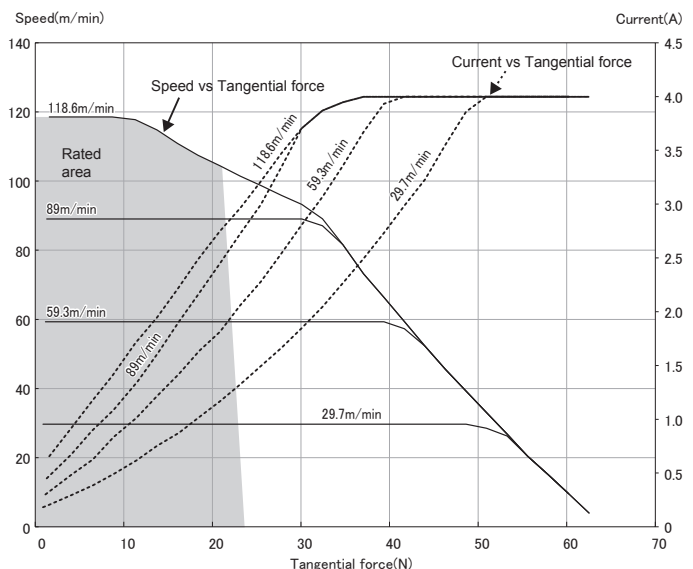
\* Internal speed SW3/4 is for HBM-604.




PM570FE-90

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No
	No-load	Rated	No-load	Starting			
118.6	21		0.6		41	66	9
108.8	21		0.5		41	65	8
98.9	21		0.5		39	64	7
89.0	22		0.4		35	58	6
79.1	22		0.4		31	53	5
69.2	22		0.4		27	49	4
59.3	22		0.3		23	43	3
49.4	22		0.3		20	38	2
39.5	22		0.2		17	37	1
29.7	23		0.2		13	32	0

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

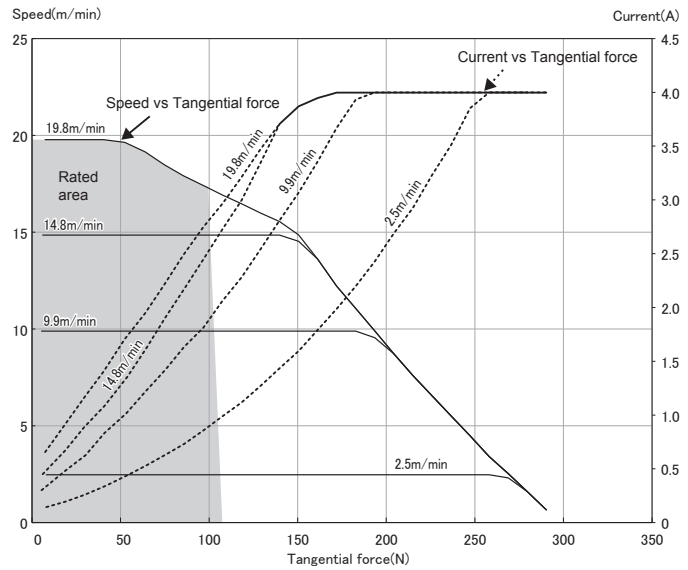


 [MDR Selection Tool] is available on our web page.

## Operating characteristics with IB-E03 driver card

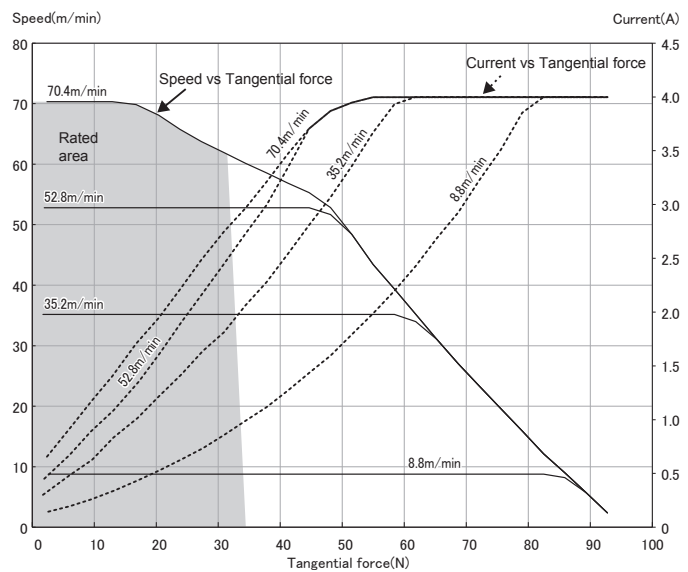
### PM570FE-17

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)
	No-load	Rated	No-load	Starting		
19.8	99		0.6		41	66
18.1	99		0.5		41	66
17.3	99		0.5		41	66
16.5	99		0.5		40	65
15.7	101		0.5		39	64
14.8	101		0.4		37	62
13.2	101		0.4		34	60
12.4	101		0.4		32	57
11.5	104	293	0.4	4.0	30	54
10.7	104		0.4		28	51
9.9	104		0.3		26	49
8.2	104		0.3		20	38
6.6	107		0.2		17	37
4.9	107		0.2		13	32
3.3	107		0.2		9	27
2.5	107		0.2		7	24



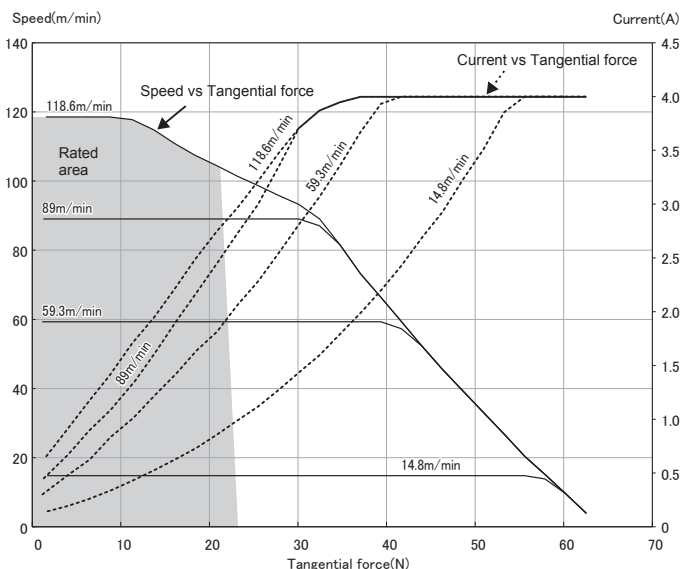
### PM570FE-60

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)
	No-load	Rated	No-load	Starting		
70.4	32		0.6		41	66
64.5	32		0.5		41	66
61.6	32		0.5		41	66
58.6	32		0.5		40	65
55.7	32		0.5		39	64
52.8	32		0.4		37	62
46.9	32		0.4		34	60
44.0	32	94	0.4	4.0	32	57
41.1	33		0.4		30	54
38.1	33		0.4		28	51
35.2	33		0.3		26	49
29.3	33		0.3		20	38
23.5	34		0.2		17	37
17.6	34		0.2		13	32
11.7	34		0.2		9	27
8.8	34		0.2		7	24



### PM570FE-90

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)
	No-load	Rated	No-load	Starting		
118.6	21		0.6		41	66
108.8	21		0.5		41	66
103.8	21		0.5		41	66
98.9	21		0.5		40	65
93.9	22		0.5		39	64
89.0	22		0.4		37	62
79.1	22		0.4		34	60
74.2	22	63	0.4	4.0	32	57
69.2	22		0.4		30	54
64.3	22		0.4		28	51
59.3	22		0.3		26	49
49.4	22		0.3		20	38
39.5	23		0.2		17	37
29.7	23		0.2		13	32
19.8	23		0.2		9	27
14.8	23		0.2		7	24



\* The values in the characteristics list are when an ambient temperature is 25 degree C, and only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller (no linked operation) without including other specifications, and the values may change when including other specifications or with linked operation.