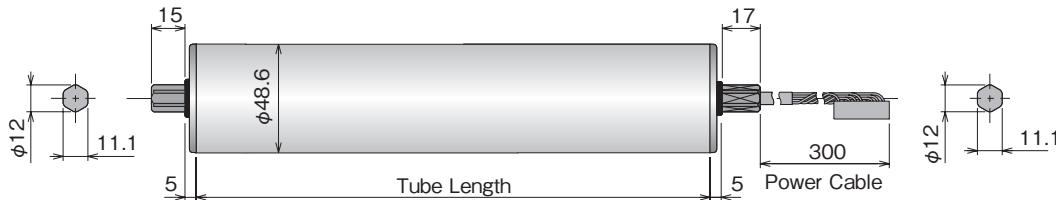


MDR Brushless DC Motor standard type PM486FE

Roller diameter $\varnothing 48.6$

Roller diameter $\varnothing 48.6$ PM486FE

- **Roller diameter** / $\varnothing 48.6$
- **Thickness** / t1.4
- **Voltage** / 24V DC
- **Tube material** / STKM12
- **Surface treatment** / Trivalent chromate processing



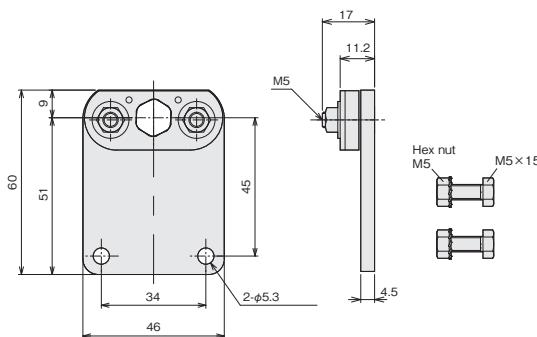
Tube Length : PM486FE

 290mm  290mm≤

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	<input checked="" type="radio"/>							

- 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.

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.

Product Designation :

PM486FE - 17 - 400 - D - 024 - 

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.

Options : PM486FE

 **Rubber Laggings - NR, UR, NB, CR**
Natural rubber, Urethane, NBR, Neoprene

 **Built-In Brake - BR** ^{※1}
 360mm  360mm≤

 **Drip Proof** ^{※2}
 300mm  300mm≤

 **Water Proof** ^{※2}
 310mm  310mm≤

 **Poly V-Belt Pulley**
 290mm  290mm≤

 **V-Belt Pulley**
 300mm  300mm≤

 **Double Grooved Tube** ^{※3}
 340mm  340mm≤

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 Brushless DC Motor standard type PM486FE

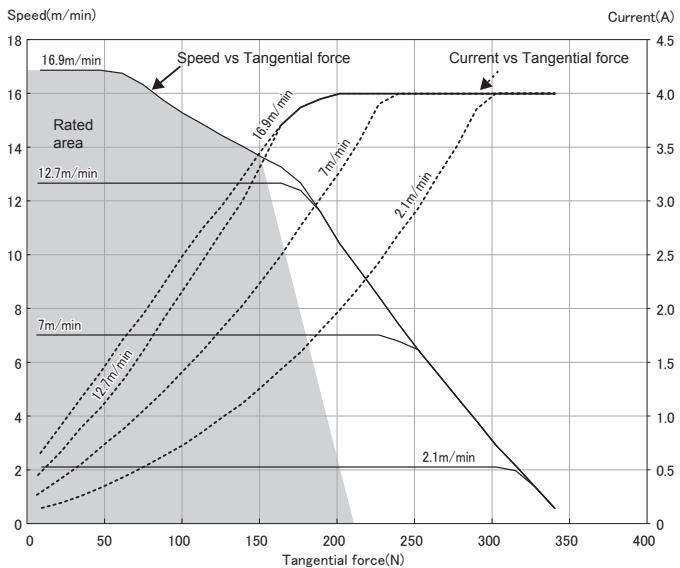
Roller diameter Ø48.6

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

Operating characteristics with CB-016 driver card

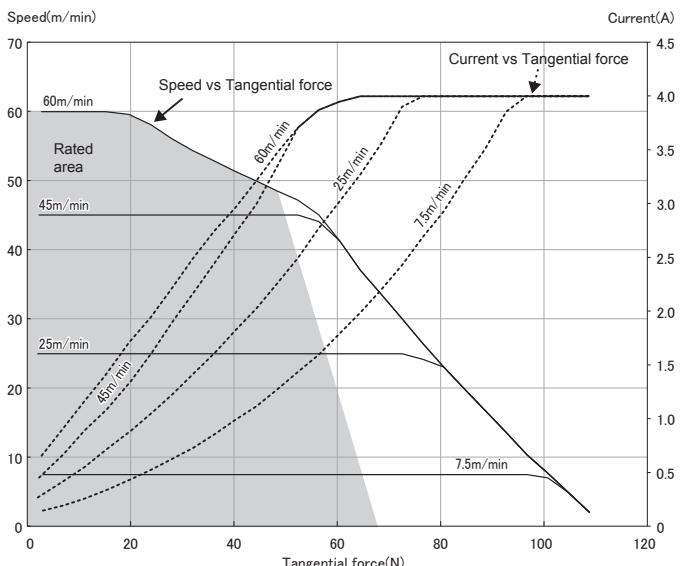
PM486FE-17

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Internal Rotary Switch No. SW1#5	External input voltage (V)
		No-load	Starting				
16.9	150	344	0.8	50	83	ON	9 9.6~9.9
15.5	150		0.7	50	83		8 9.1~9.4
14.8	150		0.7	50	83		7 8.6~8.9
14.1	150		0.6	50	83		6 8.1~8.4
13.4	150		0.6	50	83		5 7.6~7.9
12.7	153		0.6	47	82		4 7.1~7.4
11.2	160		0.5	45	79		3 6.6~6.9
10.5	163		0.5	42	76		2 6.1~6.4
9.8	166		0.5	39	73		1 5.6~5.9
9.1	169		0.5	37	71		0 5.1~5.4
8.4	172		0.4	36	71	OFF	9 4.6~4.9
7.7	175		0.4	33	70		8 4.1~4.4
7.0	178		0.4	30	66		7 3.6~3.9
6.3	181		0.4	28	61		6 3.1~3.4
5.6	185		0.3	24	61		5 2.6~2.9
4.9	188		0.3	23	60		4 2.1~2.4
4.2	191		0.3	20	54		3 1.6~1.9
3.5	194		0.2	16	53		2 1.1~1.4
2.8	197		0.2	13	50		1 0.6~0.9
2.1	200		0.2	11	47		0 0.1~0.4



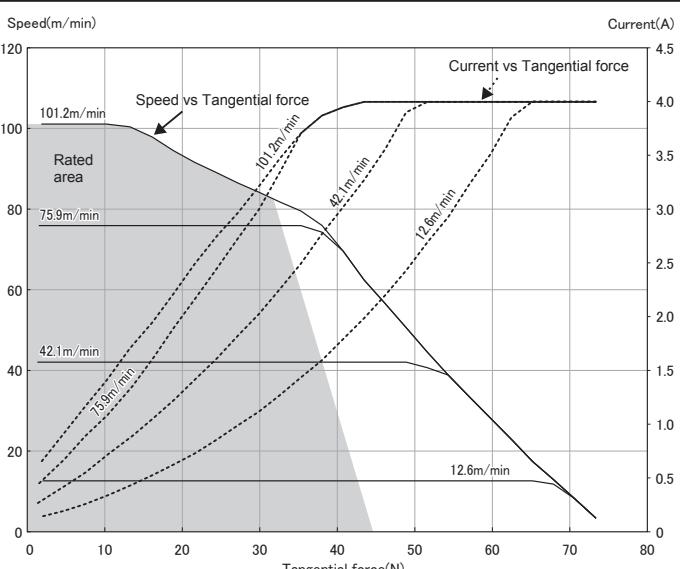
PM486FE-60

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Internal Rotary Switch No. SW1#5	External input voltage (V)
		No-load	Starting				
60.0	48	110	0.8	50	83	ON	9 9.6~9.9
55.0	48		0.7	50	83		8 9.1~9.4
52.5	48		0.7	50	83		7 8.6~8.9
50.0	48		0.6	50	83		6 8.1~8.4
47.5	48		0.6	50	83		5 7.6~7.9
45.0	49		0.6	47	82		4 7.1~7.4
40.0	51		0.5	45	79		3 6.6~6.9
37.5	52		0.5	42	76		2 6.1~6.4
35.0	53		0.5	39	73		1 5.6~5.9
32.5	54		0.5	37	71		0 5.1~5.4
30.0	55		0.4	36	71	OFF	9 4.6~4.9
27.5	56		0.4	33	70		8 4.1~4.4
25.0	57		0.4	30	66		7 3.6~3.9
22.5	58		0.4	28	61		6 3.1~3.4
20.0	59		0.3	24	61		5 2.6~2.9
17.5	60		0.3	23	60		4 2.1~2.4
15.0	61		0.3	20	54		3 1.6~1.9
12.5	62		0.2	16	53		2 1.1~1.4
10.0	63		0.2	13	50		1 0.6~0.9
7.5	64		0.2	11	47		0 0.1~0.4



PM486FE-90

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Internal Rotary Switch No. SW1#5	External input voltage (V)
		No-load	Starting				
101.2	32	74	0.8	50	83	ON	9 9.6~9.9
92.7	32		0.7	50	83		8 9.1~9.4
88.5	32		0.7	50	83		7 8.6~8.9
84.3	32		0.6	50	83		6 8.1~8.4
80.1	32		0.6	50	83		5 7.6~7.9
75.9	33		0.6	47	82		4 7.1~7.4
67.4	34		0.5	45	79		3 6.6~6.9
63.2	35		0.5	42	76		2 6.1~6.4
59.0	36		0.5	39	73		1 5.6~5.9
54.8	36		0.5	37	71		0 5.1~5.4
50.6	37		0.4	36	71	OFF	9 4.6~4.9
46.4	38		0.4	33	70		8 4.1~4.4
42.1	38		0.4	30	66		7 3.6~3.9
37.9	39		0.4	28	61		6 3.1~3.4
33.7	40		0.3	24	61		5 2.6~2.9
29.5	40		0.3	23	60		4 2.1~2.4
25.3	41		0.3	20	54		3 1.6~1.9
21.1	42		0.2	16	53		2 1.1~1.4
16.9	42		0.2	13	50		1 0.6~0.9
12.6	43		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 Brushless DC Motor standard type PM486FE

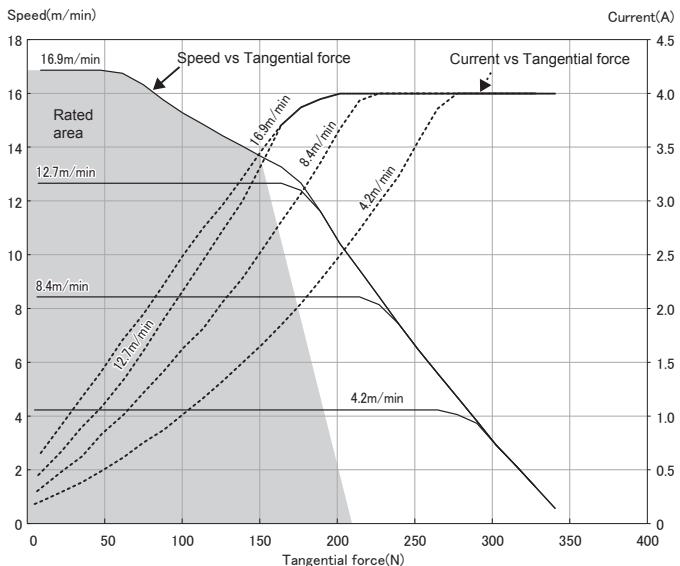
Roller diameter $\varnothing 48.6$

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

Operating characteristics with HB-510 driver card

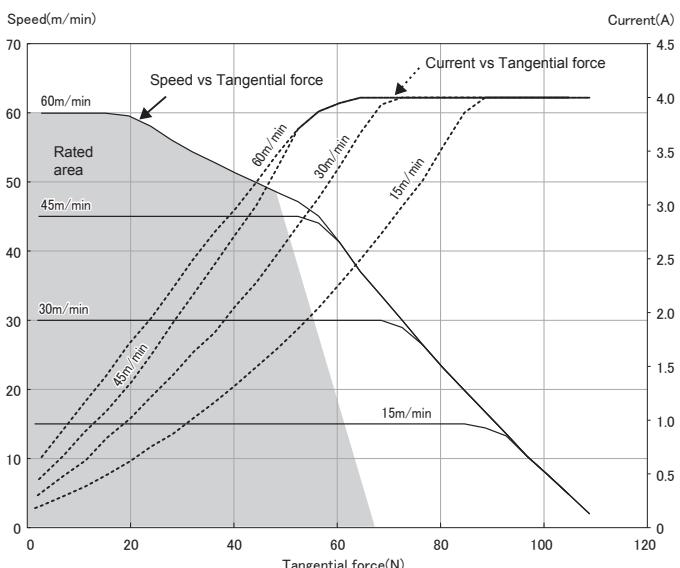
PM486FE-17

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No	External input voltage (V)
		No-load	Starting				
16.9	150	344	0.8	50	83	9	9.3~9.7
15.5	150		0.7	50	83	8	8.3~8.7
14.1	150		0.6	50	83	7	7.3~7.7
12.7	153		0.6	47	82	6	6.3~6.7
11.2	160		0.5	45	79	5	5.3~5.7
9.8	166		0.5	39	73	4	4.3~4.7
8.4	172		0.4	36	71	3	3.3~3.7
7.0	178		0.4	30	66	2	2.3~2.7
5.6	185		0.3	24	61	1	1.3~1.7
4.2	191		0.3	20	54	0	0.3~0.7



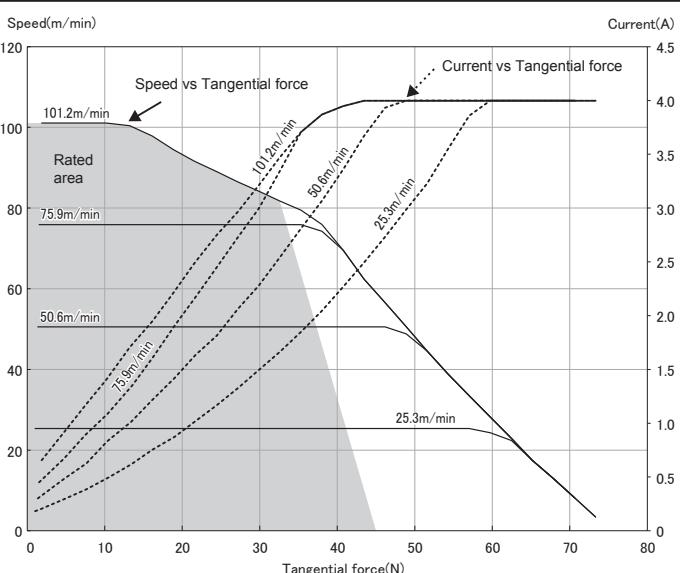
PM486FE-60

Speed (m/min)	Tangential Force (N)	Input Current (A)		Power Input (W)	Power Output (W)	Rotary SW No	External input voltage (V)
		No-load	Starting				
60.0	48	110	0.8	50	83	9	9.3~9.7
55.0	48		0.7	50	83	8	8.3~8.7
50.0	48		0.6	50	83	7	7.3~7.7
45.0	49		0.6	47	82	6	6.3~6.7
40.0	51		0.5	45	79	5	5.3~5.7
35.0	53		0.5	39	73	4	4.3~4.7
30.0	55		0.4	36	71	3	3.3~3.7
25.0	57		0.4	30	66	2	2.3~2.7
20.0	59		0.3	24	61	1	1.3~1.7
15.0	61		0.3	20	54	0	0.3~0.7



PM486FE-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	Starting				
101.2	32	74	0.8	50	83	9	9.3~9.7
92.7	32		0.7	50	83	8	8.3~8.7
84.3	32		0.6	50	83	7	7.3~7.7
75.9	33		0.6	47	82	6	6.3~6.7
67.4	34		0.5	45	79	5	5.3~5.7
59.0	36		0.5	39	73	4	4.3~4.7
50.6	37		0.4	36	71	3	3.3~3.7
42.1	38		0.4	30	66	2	2.3~2.7
33.7	40		0.3	24	61	1	1.3~1.7
25.3	41		0.3	20	54	0	0.3~0.7



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MDR Brushless DC Motor standard type PM486FE

Roller diameter Ø48.6

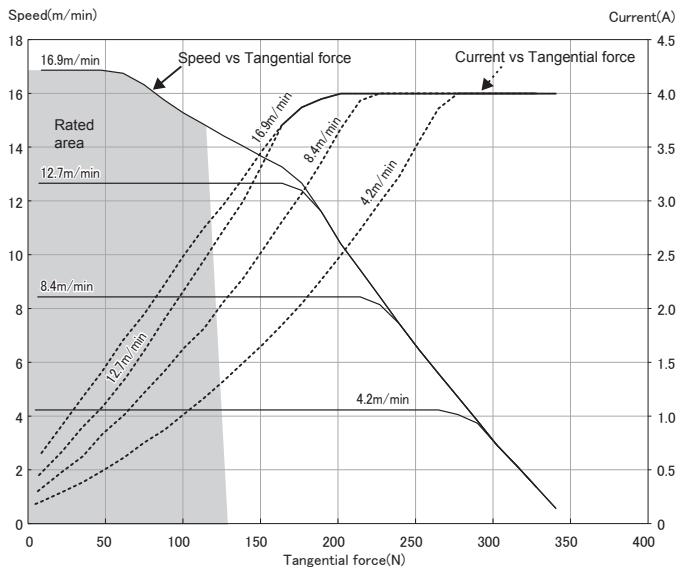
[MDR Selection Tool] is available on our web page.

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

PM486FE-17

Speed (m/min)	Tangential Force (N)	Input Current (A)	Power Input (W)	Power Output (W)	Rotary SW No
No-load	Rated	Starting	No-load	Starting	
16.9	116	0.6	41	66	9
15.5	116	0.5	41	65	8
14.1	116	0.5	39	64	7
12.7	119	0.4	35	58	6
11.2	119	0.4	31	53	5
9.8	119	0.4	27	49	4
8.4	122	0.3	23	43	3
7.0	122	0.3	20	38	2
5.6	122	0.2	17	37	1
4.2	125	0.2	13	32	0

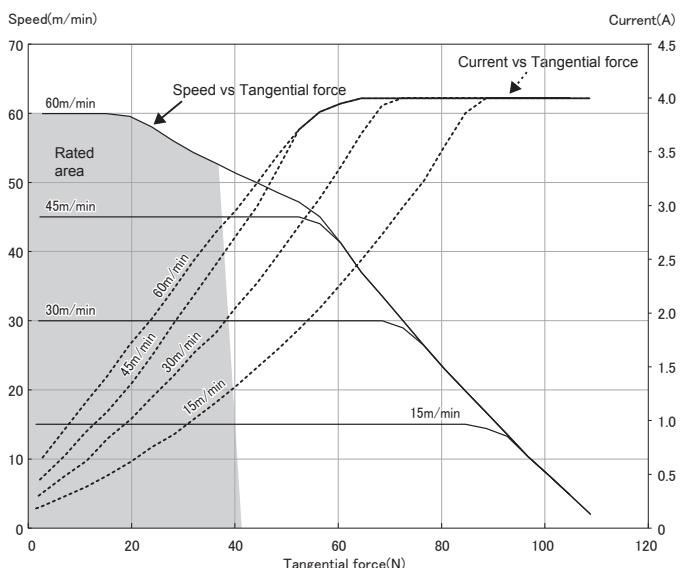
* Internal speed SW3/4 is for HBM-604.



PM486FE-60

Speed (m/min)	Tangential Force (N)	Input Current (A)	Power Input (W)	Power Output (W)	Rotary SW No
No-load	Rated	Starting	No-load	Starting	
60.0	37	0.6	41	66	9
55.0	37	0.5	41	65	8
50.0	37	0.5	39	64	7
45.0	38	0.4	35	58	6
40.0	38	0.4	31	53	5
35.0	38	0.4	27	49	4
30.0	39	0.3	23	43	3
25.0	39	0.3	20	38	2
20.0	39	0.2	17	37	1
15.0	40	0.2	13	32	0

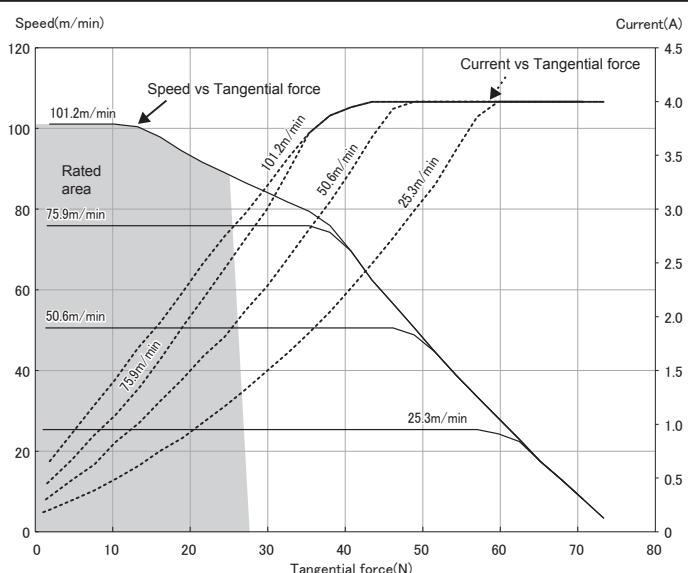
* Internal speed SW3/4 is for HBM-604.



PM486FE-90

Speed (m/min)	Tangential Force (N)	Input Current (A)	Power Input (W)	Power Output (W)	Rotary SW No
No-load	Rated	Starting	No-load	Starting	
101.2	25	0.6	41	66	9
92.7	25	0.5	41	65	8
84.3	25	0.5	39	64	7
75.9	26	0.4	35	58	6
67.4	26	0.4	31	53	5
59.0	26	0.4	27	49	4
50.6	26	0.3	23	43	3
42.1	26	0.3	20	38	2
33.7	26	0.2	17	37	1
25.3	27	0.2	13	32	0

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



MDR Brushless DC Motor standard type PM486FE

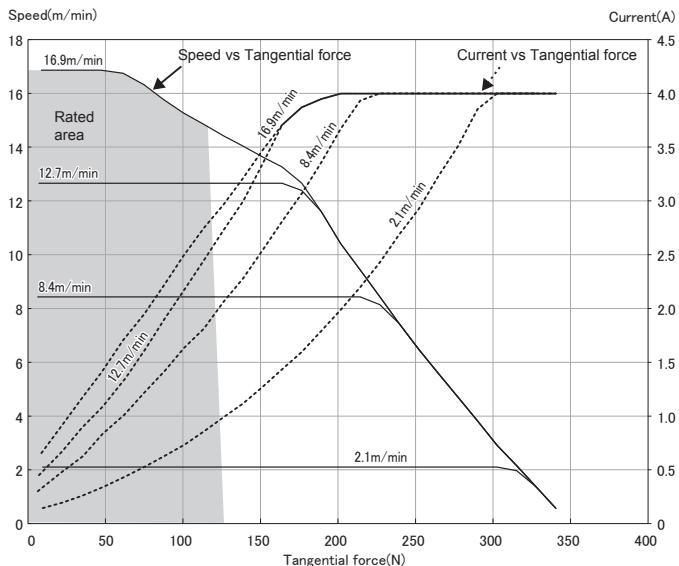
Roller diameter Ø48.6

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

Operating characteristics with IB-E03 driver card

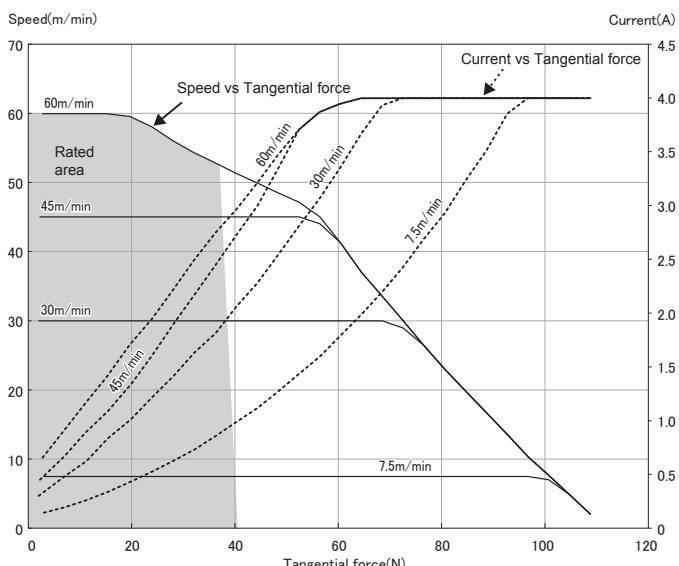
PM486FE-17

Speed (m/min)	Tangential Force (N)	Input Current (A)	Power Input (W)	Power Output (W)
No-load	Rated	Starting	No-load	Starting
16.9	116	0.6	41	66
15.5	116	0.5	41	66
14.8	116	0.5	41	66
14.1	116	0.5	40	65
13.4	119	0.5	39	64
12.7	119	0.4	37	62
11.2	119	0.4	34	60
10.5	119	0.4	32	57
9.8	122	0.4	30	54
9.1	122	0.4	28	51
8.4	122	0.3	26	49
7.0	122	0.3	20	38
5.6	125	0.2	17	37
4.2	125	0.2	13	32
2.8	125	0.2	9	27
2.1	125	0.2	7	24



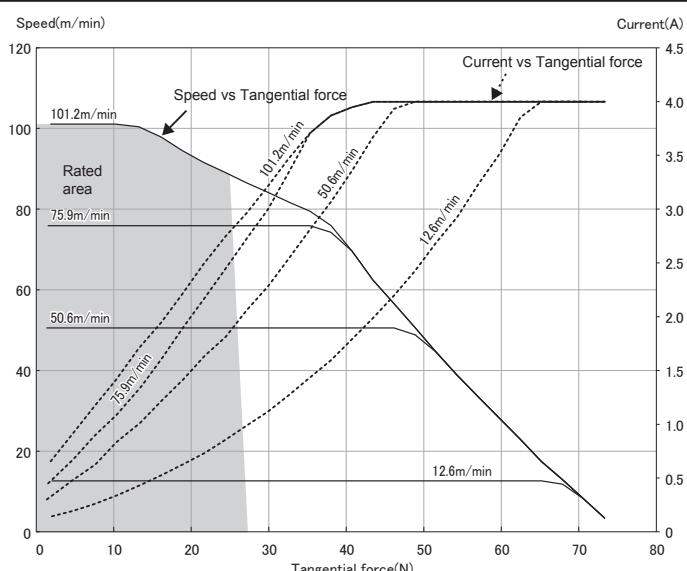
PM486FE-60

Speed (m/min)	Tangential Force (N)	Input Current (A)	Power Input (W)	Power Output (W)
No-load	Rated	Starting	No-load	Starting
60.0	37	0.6	41	66
55.0	37	0.5	41	66
52.5	37	0.5	41	66
50.0	37	0.5	40	65
47.5	38	0.5	39	64
45.0	38	0.4	37	62
40.0	38	0.4	34	60
37.5	38	0.4	32	57
35.0	39	0.4	30	54
32.5	39	0.4	28	51
30.0	39	0.3	26	49
25.0	39	0.3	20	38
20.0	40	0.2	17	37
15.0	40	0.2	13	32
10.0	40	0.2	9	27
7.5	40	0.2	7	24



PM486FE-90

Speed (m/min)	Tangential Force (N)	Input Current (A)	Power Input (W)	Power Output (W)
No-load	Rated	Starting	No-load	Starting
101.2	25	0.6	41	66
92.7	25	0.5	41	66
88.5	25	0.5	41	66
84.3	25	0.5	40	65
80.1	26	0.5	39	64
75.9	26	0.4	37	62
67.4	26	0.4	34	60
63.2	26	0.4	32	57
59.0	26	0.4	30	54
54.8	26	0.4	28	51
50.6	26	0.3	26	49
42.1	26	0.3	20	38
33.7	27	0.2	17	37
25.3	27	0.2	13	32
16.9	27	0.2	9	27
12.6	27	0.2	7	24



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