



Minimum tube length

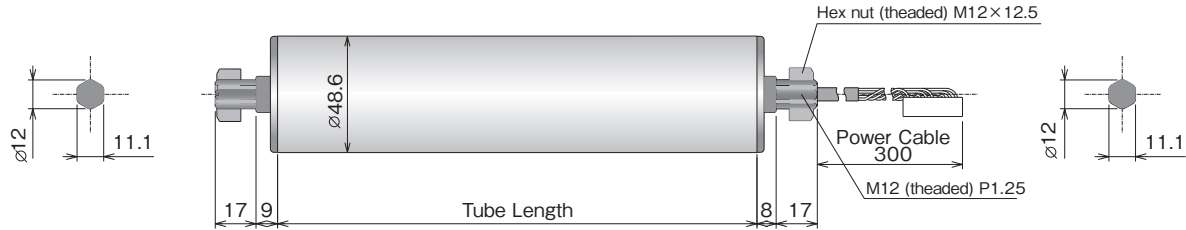


Spring loaded shaft

# MDR Brushless DC Motor High torque type PM486FP Roller diameter $\varnothing 48.6$

## Roller diameter $\varnothing 48.6$ PM486FP

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



### Tube Length : PM486FP

	370mm	$\geq 370$ mm
Tube Length (mm)	400	500
Weight (kg)	2.3	2.5
Spring loaded shaft	<input type="radio"/>	<input type="radio"/>

■ Conveyor frame inside dimension and frame hole shape vary by the manufacturer.

### Product Designation :

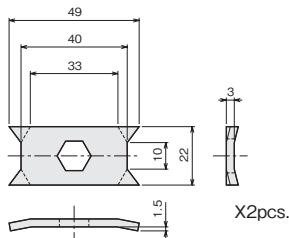
PM486FP - 15 - 400 - D - 024 - **BR**

Power Moller model    Nominal Speed    Tube Length    Voltage    Options

- Motor type : FP
- Nominal Speed : 15,55,255
- Tube Length : Specify in mm.
- Voltage : D-024 (24VDC)
- Options : Each of the following optional specification may be selected.

### Mounting Bracket :

No.P-0B1



X2pcs.

### Options : PM486FP

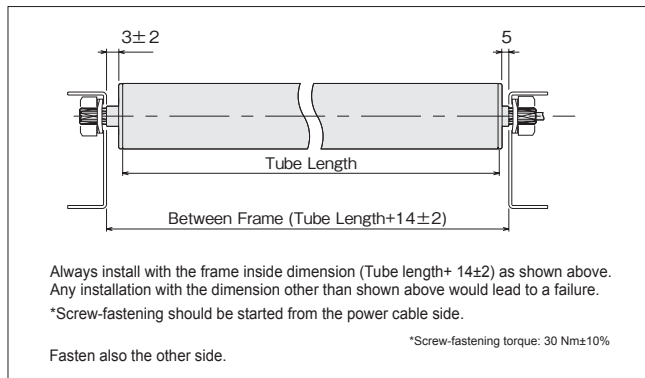
**Rubber Laggings - NR, UR, NB, CR**  
Natural rubber, Urethane, NBR, Neoprene

**BR Built-In Brake - BR** \*1  
 440mm     $\geq 440$ mm

**VP V-Belt Pulley**  
 370mm     $\geq 370$ mm

**P2 Double Grooved Tube** \*2  
 370mm     $\geq 370$ mm

\*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.]  
\*2 Up to 800mm can be produced.




Always install with the frame inside dimension (Tube length+ 14±2) as shown above. Any installation with the dimension other than shown above would lead to a failure.

\*Screw-fastening should be started from the power cable side.

\*Screw-fastening torque: 30 Nm±10%

Fasten also the other side.

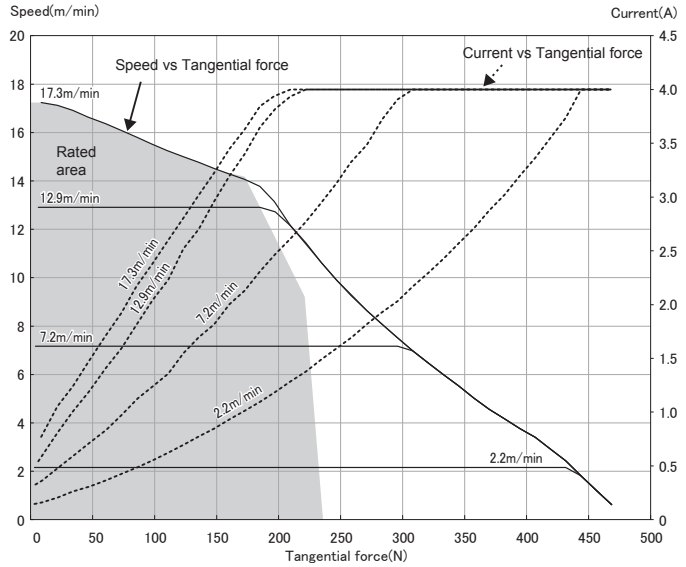
# MDR Brushless DC Motor High torque type PM486FP Roller diameter $\varnothing 48.6$

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

## Operating characteristics with CB-016 driver card

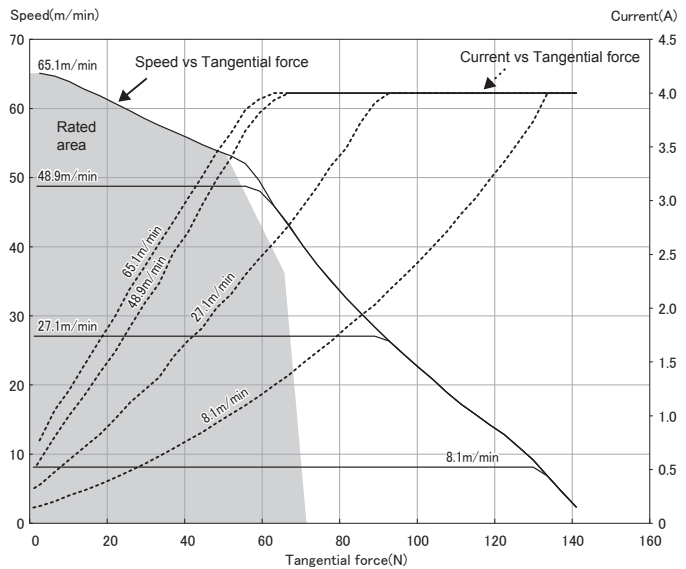
### PM486FP-15

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	
17.3	173		0.9		59	88	9	9.6~9.9	465
15.8	173		0.8		59	87	8	9.1~9.4	
15.1	173		0.8		59	87	7	8.6~8.9	
14.4	173		0.8		59	87	6	8.1~8.4	
13.7	176		0.7		58	85	5	7.6~7.9	
12.9	186		0.7		58	85	4	7.1~7.4	
11.5	199		0.6		55	84	3	6.6~6.9	
10.8	206		0.6		55	83	2	6.1~6.4	
10.1	213		0.6		52	81	1	5.6~5.9	
9.3	219		0.5		51	81	0	5.1~5.4	
8.6	223		0.5		47	77	9	4.6~4.9	
7.9	223		0.5		43	72	8	4.1~4.4	
7.2	223		0.5		39	67	7	3.6~3.9	
6.5	226		0.4		35	62	6	3.1~3.4	
5.8	226		0.4		31	57	5	2.6~2.9	
5.0	226		0.4		27	52	4	2.1~2.4	
4.3	226		0.3		23	48	3	1.6~1.9	
3.6	229		0.3		20	42	2	1.1~1.4	
2.9	229		0.3		16	38	1	0.6~0.9	
2.2	229		0.2		12	33	0	0.1~0.4	



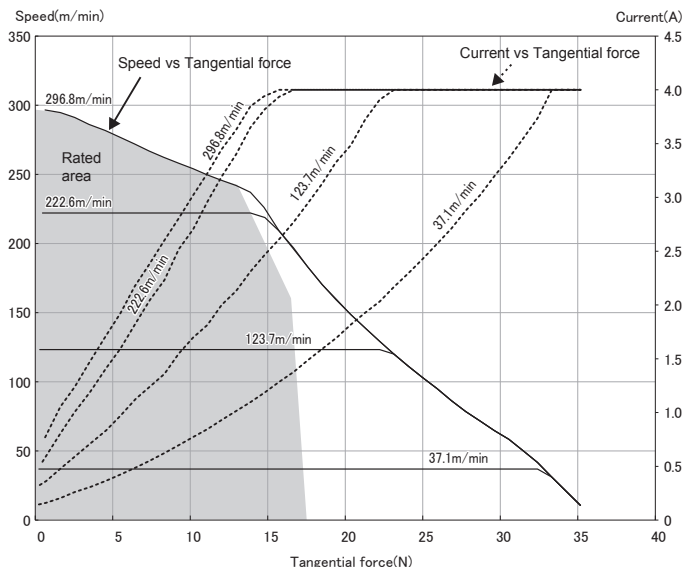
### PM486FP-55

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	
65.1	52		0.9		59	88	9	9.6~9.9	140
59.7	52		0.8		59	87	8	9.1~9.4	
57.0	52		0.8		59	87	7	8.6~8.9	
54.3	52		0.8		59	87	6	8.1~8.4	
51.6	53		0.7		58	85	5	7.6~7.9	
48.9	56		0.7		58	85	4	7.1~7.4	
43.4	60		0.6		55	84	3	6.6~6.9	
40.7	62		0.6		55	83	2	6.1~6.4	
38.0	64		0.6		52	81	1	5.6~5.9	
35.3	66		0.5		51	81	0	5.1~5.4	
32.6	67		0.5		47	77	9	4.6~4.9	
29.9	67		0.5		43	72	8	4.1~4.4	
27.1	67		0.5		39	67	7	3.6~3.9	
24.4	68		0.4		35	62	6	3.1~3.4	
21.7	68		0.4		31	57	5	2.6~2.9	
19.0	68		0.4		27	52	4	2.1~2.4	
16.3	68		0.3		23	48	3	1.6~1.9	
13.6	69		0.3		20	42	2	1.1~1.4	
10.9	69		0.3		16	38	1	0.6~0.9	
8.1	69		0.2		12	33	0	0.1~0.4	




### PM486FP-255

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	
296.8	13		0.9		59	88	9	9.6~9.9	35
272.1	13		0.8		59	87	8	9.1~9.4	
259.7	13		0.8		59	87	7	8.6~8.9	
247.4	13		0.8		59	87	6	8.1~8.4	
235.0	13		0.7		58	85	5	7.6~7.9	
222.6	14		0.7		58	84	4	7.1~7.4	
197.9	15		0.6		55	84	3	6.6~6.9	
185.5	15		0.6		55	83	2	6.1~6.4	
173.2	16		0.6		52	81	1	5.6~5.9	
160.8	16		0.5		51	81	0	5.1~5.4	
148.4	17		0.5		47	77	9	4.6~4.9	
136.0	17		0.5		43	72	8	4.1~4.4	
123.7	17		0.5		39	67	7	3.6~3.9	
111.3	17		0.4		35	62	6	3.1~3.4	
98.9	17		0.4		31	57	5	2.6~2.9	
86.6	17		0.4		27	52	4	2.1~2.4	
74.2	17		0.3		23	48	3	1.6~1.9	
61.8	17		0.3		20	42	2	1.1~1.4	
49.5	17		0.3		16	38	1	0.6~0.9	
37.1	17		0.2		12	33	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.

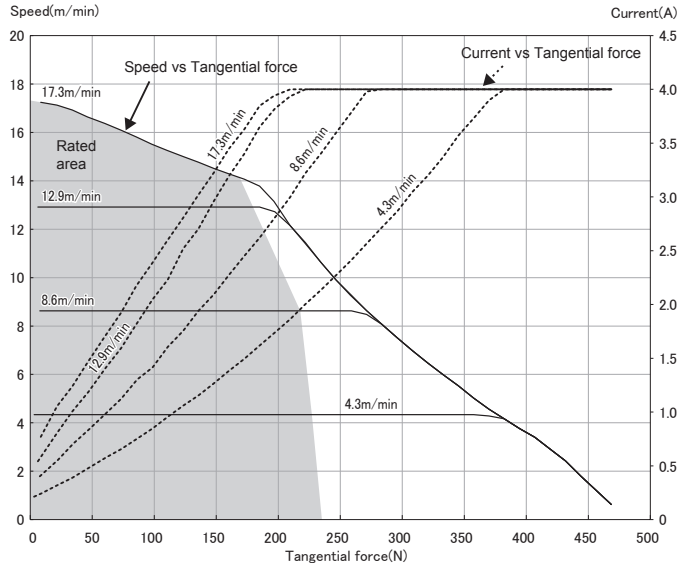
# MDR Brushless DC Motor High torque type PM486FP Roller diameter $\varnothing 48.6$

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

## Operating characteristics with HB-510 driver card

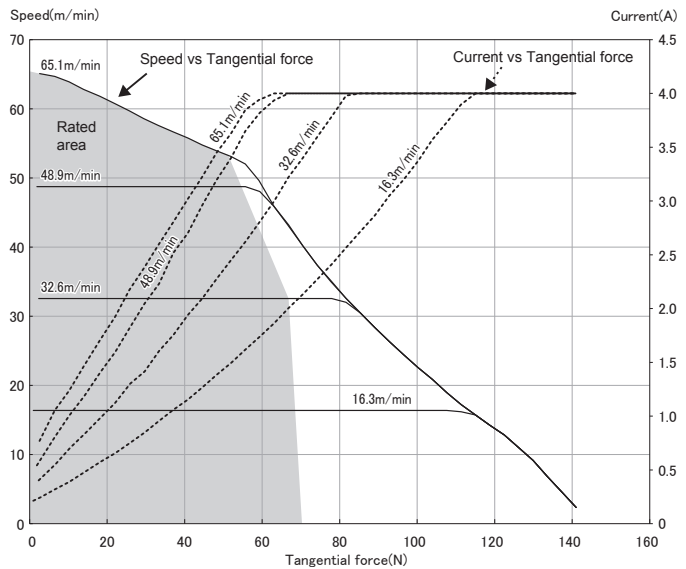
### PM486FP-15

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				
17.3	173		0.9		59	88	9	9.3~9.7
15.8	173		0.8		59	87	8	8.3~8.7
14.4	173		0.8		59	87	7	7.3~7.7
12.9	186		0.7		58	85	6	6.3~6.7
11.5	199		0.6		55	84	5	5.3~5.7
10.1	213		0.6		52	81	4	4.3~4.7
8.6	223		0.5		47	77	3	3.3~3.7
7.2	223		0.5		39	67	2	2.3~2.7
5.8	226		0.4		31	57	1	1.3~1.7
4.3	226		0.3		23	48	0	0.3~0.7



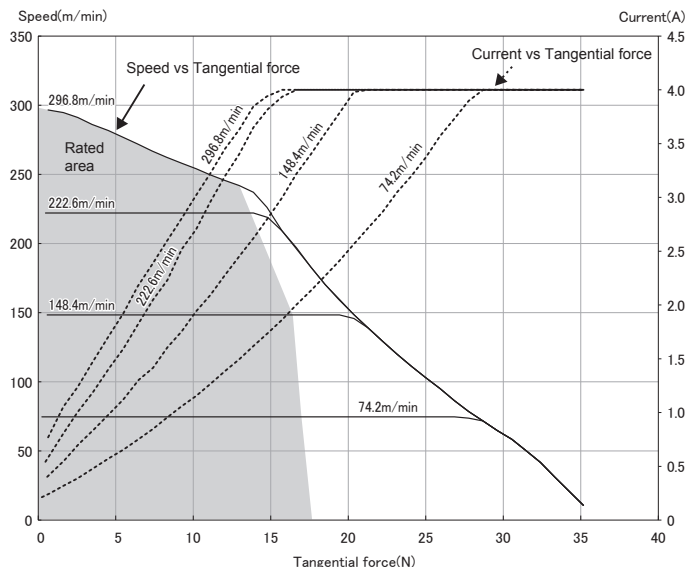
### PM486FP-55

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				
65.1	52		0.9		59	88	9	9.3~9.7
59.7	52		0.8		59	87	8	8.3~8.7
54.3	52		0.8		59	87	7	7.3~7.7
48.9	56		0.7		58	85	6	6.3~6.7
43.4	60		0.6		55	84	5	5.3~5.7
38.0	64		0.6		52	81	4	4.3~4.7
32.6	67		0.5		47	77	3	3.3~3.7
27.1	67		0.5		39	67	2	2.3~2.7
21.7	68		0.4		31	57	1	1.3~1.7
16.3	68		0.3		23	48	0	0.3~0.7



### PM486FP-255

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				
296.8	13		0.9		59	88	9	9.3~9.7
272.1	13		0.8		59	87	8	8.3~8.7
247.4	13		0.8		59	87	7	7.3~7.7
222.6	14		0.7		58	85	6	6.3~6.7
197.9	15		0.6		55	84	5	5.3~5.7
173.2	16		0.6		52	81	4	4.3~4.7
148.4	17		0.5		47	77	3	3.3~3.7
123.7	17		0.5		39	67	2	2.3~2.7
98.9	17		0.4		31	57	1	1.3~1.7
74.2	17		0.3		23	48	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.