



Minimum tube length



Spring loaded shaft

MDR Brushless DC Motor Integral motor driver type PM500XE/PM500XP

Roller diameter $\varnothing 50$

Roller diameter $\varnothing 50$ **PM500XE** (Standard type) **PM500XP** (High power type)

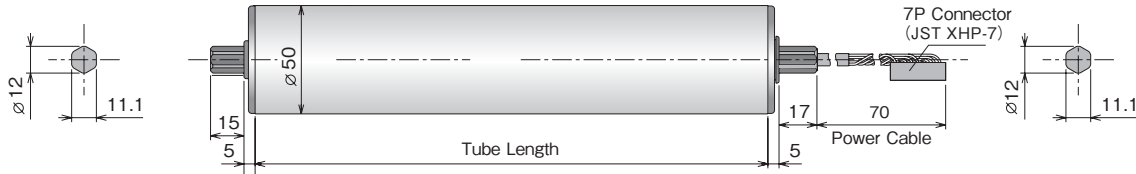
- Roller diameter / $\varnothing 50$
- Thickness / t1.4
- Voltage / 24V DC
- Tube material / STKM12
- Surface treatment / Trivalent chromate processing

Product Designation :

PM500XE - 17 - 400 - D - 024 - C007 - NN - VG

Power Moller model : XE/XP
 Nominal Speed : 17,30,60,100
 Tube Length : Specify in mm.
 Voltage : D-024 (24VDC)

Input / Output Signal : NN-NPN input-output / NP-NPN input, PNP output
 *Drip proof and 5P metal connector specification does not require designation. Leave this position blank.
 Cable Options : Type and length of the power cable
 : Each of the following optional specification may be selected.



Tube Length : PM500XE/PM500XP

Tube Length (mm)	400	500	600	700	800	900	1000
Weight (kg)	2.9	3.1	3.2	3.4	3.5	3.7	3.8
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.

Options : PM500XE/PM500XP

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

DR Drip Proof
 350mm ≥ 350 mm

VG Poly V-Belt Pulley
 350mm ≥ 350 mm

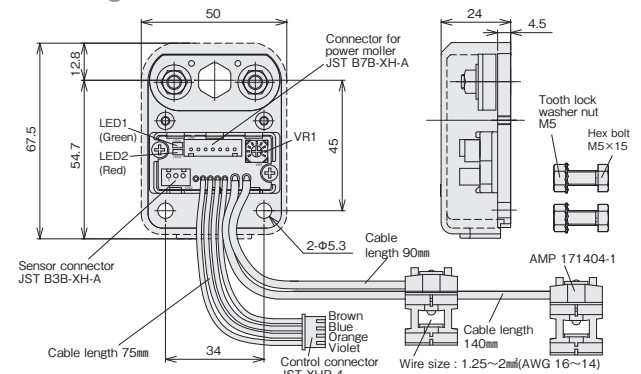
VP V-Belt Pulley
 350mm ≥ 350 mm

P2 Double Grooved Tube ^{*1}
 400mm ≥ 400 mm

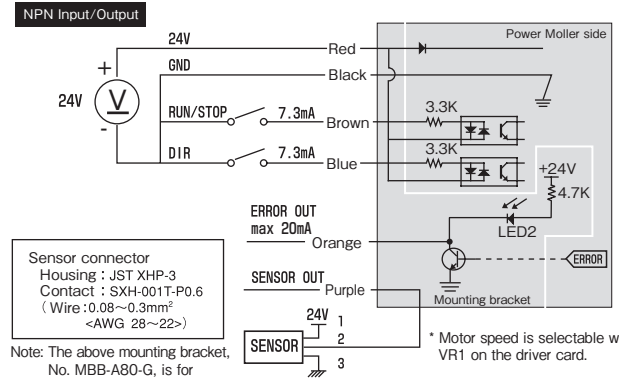
JD Both-end D-shaped shaft

*1 Up to 800mm can be produced.

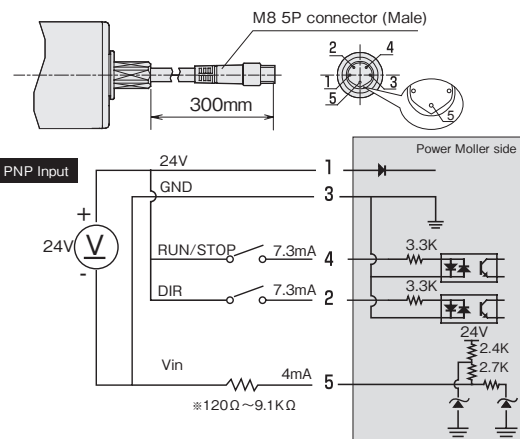
Mounting Bracket : No.MBB-A80-G



- Attach to the power cable side.
- Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.

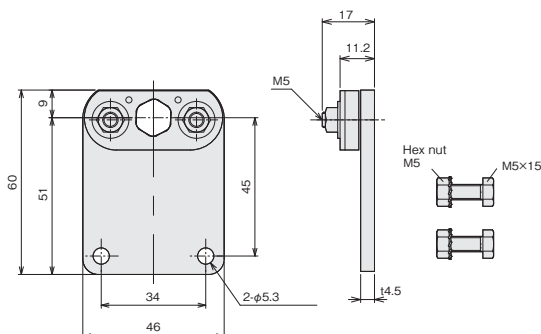


Driproof option/M8 5P connector cable




- Speed setting is available by inputting external voltage instead of an external register.
- Connect each plugs carefully when wiring.
- Incorrect wiring could result in malfunction and/or damage on other devices.
- Optional mounting bracket for IP66 is No. MBD-081-D.

Mounting Bracket : No.MBB-081



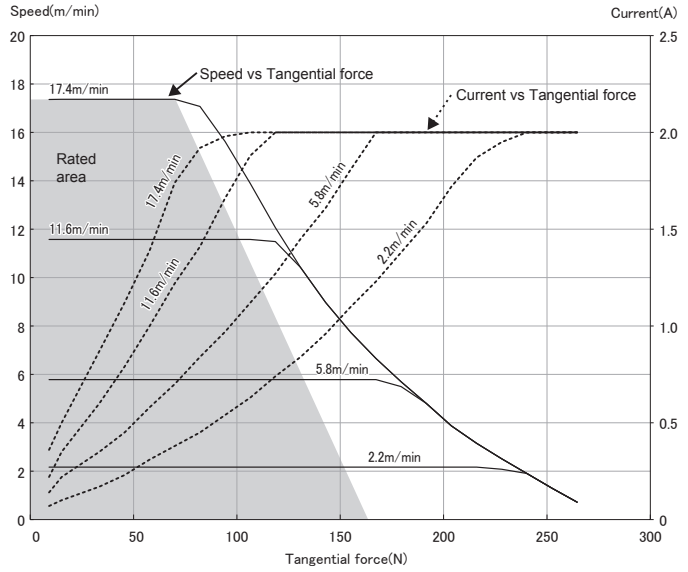
- Attach to the power cable side.
- Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.

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

Operating characteristics : PM500XE

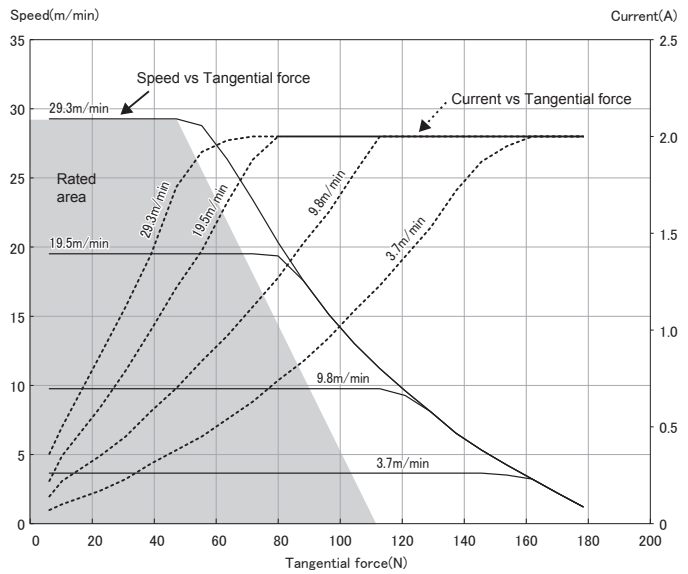
PM500XE-17

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	Starting	No-load				
17.4	70		0.5		31	42	9.1K or over or open	9.3~10
15.9	76		0.5		30	42	6.2K	8.5 \pm 0.2
13.0	91		0.4		30	42	4.3K	7.5 \pm 0.2
11.6	97		0.4		28	41	3.3K	6.5 \pm 0.2
10.1	106		0.3		27	40	2.2K	5.5 \pm 0.2
8.7	113	265	0.3	2.0	23	36	1.8K	4.5 \pm 0.2
5.8	131		0.3		17	30	1.2K	3.5 \pm 0.2
4.3	140		0.2		14	29	750	2.5 \pm 0.2
2.9	146		0.2		10	26	430	1.5 \pm 0.2
2.2	152		0.2		8	23	120 or less of short	0~0.9



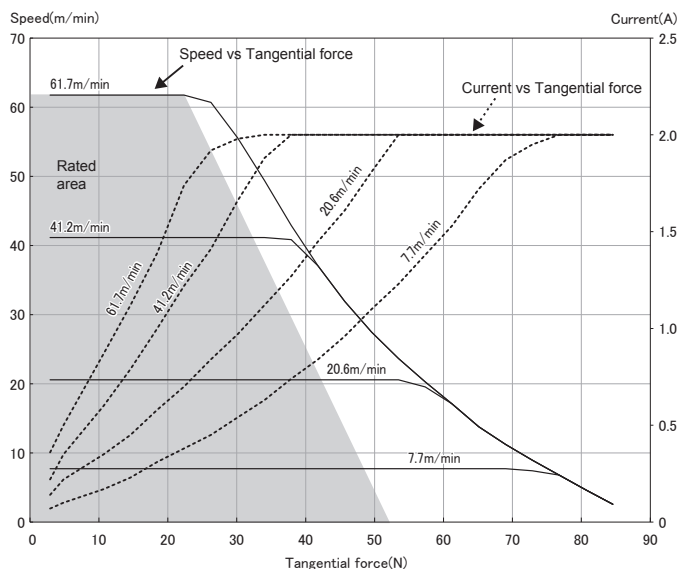
PM500XE-30

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	Starting	No-load				
29.3	47		0.5		31	42	9.1K or over or open	9.3~10
26.8	51		0.5		30	42	6.2K	8.5 \pm 0.2
22.0	62		0.4		30	42	4.3K	7.5 \pm 0.2
19.5	66		0.4		28	41	3.3K	6.5 \pm 0.2
17.1	72	178	0.3	2.0	27	40	2.2K	5.5 \pm 0.2
14.6	76		0.3		23	36	1.8K	4.5 \pm 0.2
9.8	88		0.3		17	30	1.2K	3.5 \pm 0.2
7.3	94		0.2		14	29	750	2.5 \pm 0.2
4.9	98		0.2		10	26	430	1.5 \pm 0.2
3.7	103		0.2		8	23	120 or less of short	0~0.9




PM500XE-60

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	Starting	No-load				
61.7	22		0.5		31	42	9.1K or over or open	9.3~10
56.6	24		0.5		30	42	6.2K	8.5 \pm 0.2
46.3	29		0.4		30	42	4.3K	7.5 \pm 0.2
41.2	31		0.4		28	41	3.3K	6.5 \pm 0.2
36.0	34	85	0.3	2.0	27	40	2.2K	5.5 \pm 0.2
30.9	36		0.3		23	36	1.8K	4.5 \pm 0.2
20.6	42		0.3		17	30	1.2K	3.5 \pm 0.2
15.4	45		0.2		14	29	750	2.5 \pm 0.2
10.3	47		0.2		10	26	430	1.5 \pm 0.2
7.7	49		0.2		8	23	120 or less of short	0~0.9



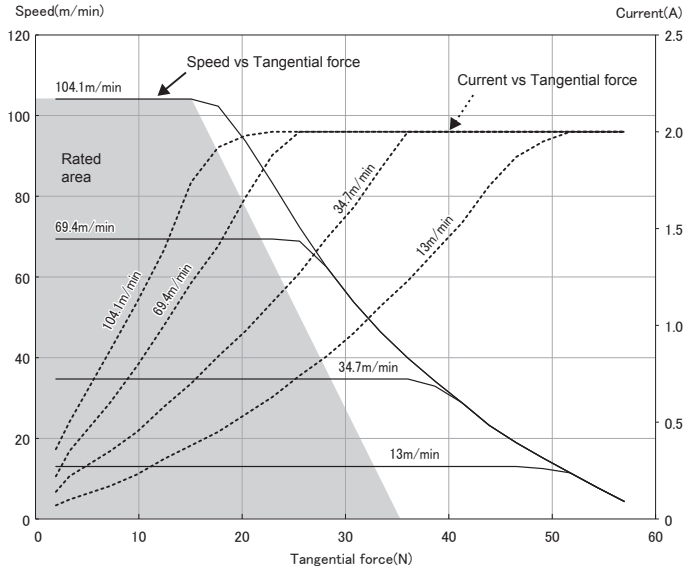
* The values in the characteristics list are when an ambient temperature is 25 degree C, and only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller (no linked operation) without including other specifications, and the values may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

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

Operating characteristics : PM500XE

PM500XE-100

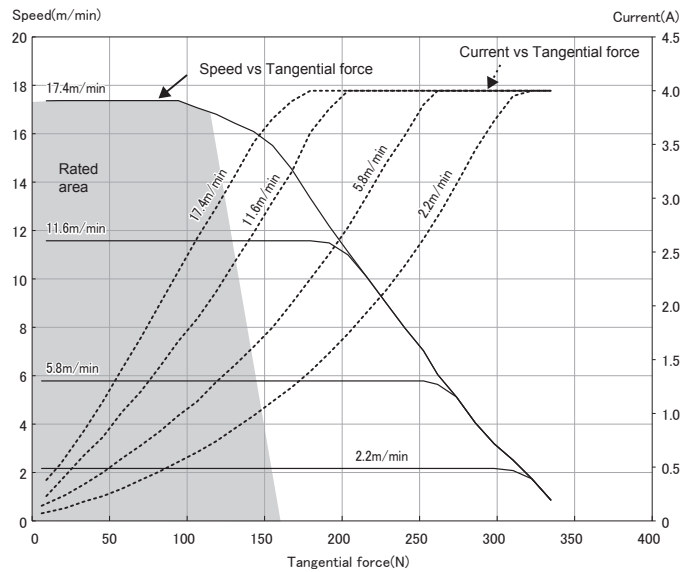
Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	No-load	Starting				
104.1	15		0.5		31	42	9.1K or over or open	9.3~10
95.4	16		0.5		30	42	6.2K	8.5 \pm 0.2
78.1	20		0.4		30	42	4.3K	7.5 \pm 0.2
69.4	21		0.4		28	41	3.3K	6.5 \pm 0.2
60.7	23	57	0.3	2.0	27	40	2.2K	5.5 \pm 0.2
52.0	24		0.3		23	36	1.8K	4.5 \pm 0.2
34.7	28		0.3		17	30	1.2K	3.5 \pm 0.2
26.0	30		0.2		14	29	750	2.5 \pm 0.2
17.3	31		0.2		10	26	430	1.5 \pm 0.2
13.0	33		0.2		8	23	120 or less of short	0~0.9



Operating characteristics : PM500XP

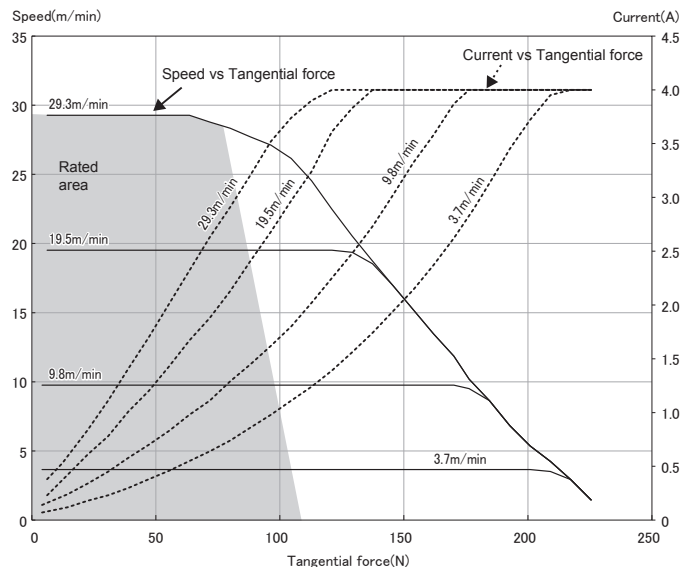
PM500XP-17

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	No-load	Starting				
17.4	116		0.5		46	63	9.1K or over or open	9.3~10
15.9	119		0.5		43	59	6.2K	8.5 \pm 0.2
13.0	125		0.4		39	56	4.3K	7.5 \pm 0.2
11.6	128		0.4		35	51	3.3K	6.5 \pm 0.2
10.1	134	341	0.3	4.0	30	46	2.2K	5.5 \pm 0.2
8.7	137		0.3		29	42	1.8K	4.5 \pm 0.2
5.8	146		0.3		19	35	1.2K	3.5 \pm 0.2
4.3	149		0.2		14	29	750	2.5 \pm 0.2
2.9	152		0.2		10	26	430	1.5 \pm 0.2
2.2	155		0.2		8	23	120 or less of short	0~0.9




PM500XP-30

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	No-load	Starting				
29.3	78		0.5		46	63	9.1K or over or open	9.3~10
26.8	80		0.5		43	59	6.2K	8.5 \pm 0.2
22.0	84		0.4		39	56	4.3K	7.5 \pm 0.2
19.5	86		0.4		35	51	3.3K	6.5 \pm 0.2
17.1	90	230	0.3	4.0	30	46	2.2K	5.5 \pm 0.2
14.6	92		0.3		29	42	1.8K	4.5 \pm 0.2
9.8	98		0.3		19	35	1.2K	3.5 \pm 0.2
7.3	100		0.2		14	29	750	2.5 \pm 0.2
4.9	103		0.2		10	26	430	1.5 \pm 0.2
3.7	105		0.2		8	23	120 or less of short	0~0.9



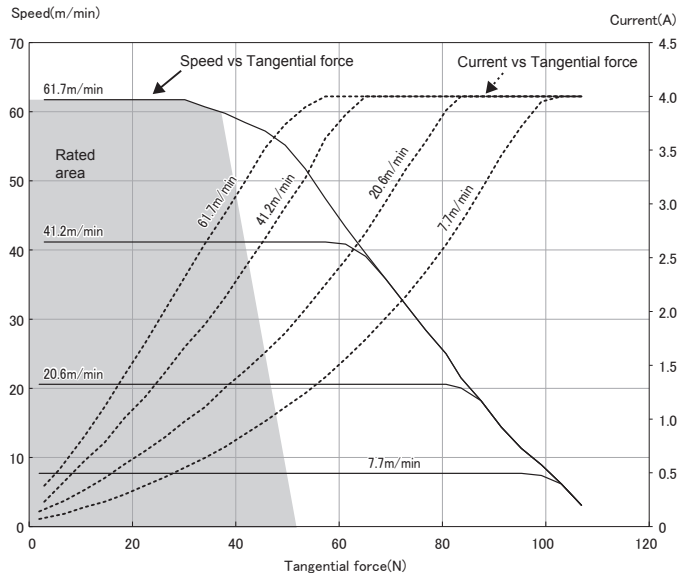
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Operating characteristics : PM500XP

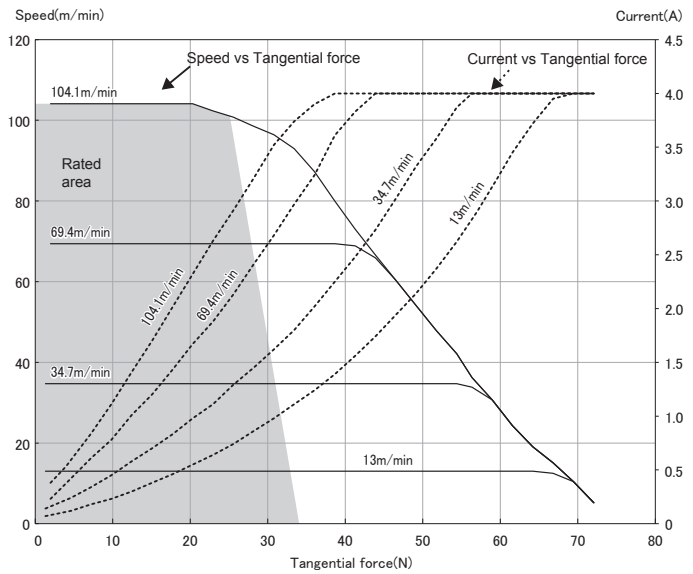
PM500XP-60

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	No-load	Starting				
61.7	37		0.5		46	63	9.1K or over or open	9.3~10
56.6	38		0.5		43	59	6.2K	8.5 \pm 0.2
46.3	40		0.4		39	56	4.3K	7.5 \pm 0.2
41.2	41		0.4		35	51	3.3K	6.5 \pm 0.2
36.0	43		0.3		30	46	2.2K	5.5 \pm 0.2
30.9	44	109	0.3	4.0	29	42	1.8K	4.5 \pm 0.2
20.6	47		0.3		19	35	1.2K	3.5 \pm 0.2
15.4	48		0.2		14	29	750	2.5 \pm 0.2
10.3	49		0.2		10	26	430	1.5 \pm 0.2
7.7	50		0.2		8	23	120 or less of short	0~0.9



PM500XP-100

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
	No-load	Rated	No-load	Starting				
104.1	25		0.5		46	63	9.1K or over or open	9.3~10
95.4	26		0.5		43	59	6.2K	8.5 \pm 0.2
78.1	27		0.4		39	56	4.3K	7.5 \pm 0.2
69.4	28		0.4		35	51	3.3K	6.5 \pm 0.2
60.7	29	73	0.3	4.0	30	46	2.2K	5.5 \pm 0.2
52.0	29		0.3		29	42	1.8K	4.5 \pm 0.2
34.7	31		0.3		19	35	1.2K	3.5 \pm 0.2
26.0	32		0.2		14	29	750	2.5 \pm 0.2
17.3	33		0.2		10	26	430	1.5 \pm 0.2
13.0	33		0.2		8	23	120 or less of short	0~0.9



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