MDR Brushless DC Motor Integral motor driver type PM570XE/PM570XP Roller diameter ∅57

Roller diameter ∅57

PM570XE
(Standard type)

PM570XP
(High power type)

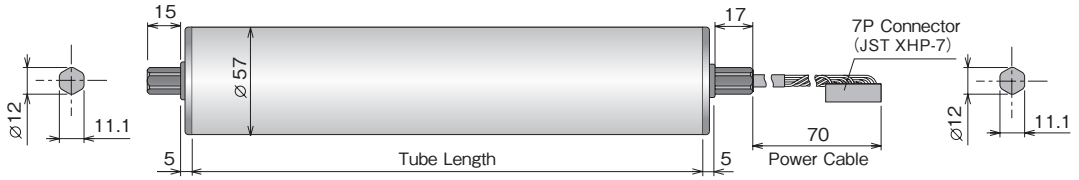
- **Roller diameter** / ∅57
- **Thickness** / t1.5
- **Voltage** / 24V DC
- **Tube material** / STKM12
- **Surface treatment** / Trivalent chromate processing

Product Designation :

PM570XE - 17 - 400 - D - 024 - C007 - NN - VG

Power Moller model / Nominal Speed / Tube Length / Voltage / Cable / Input/Output Signal / Options

Motor type : 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 : Type and length of the power cable
Options : Each of the following optional specification may be selected.



Tube Length : PM570XE/PM570XP

←Min→ 350mm ≥350mm

Tube Length (mm)	400	500	600	700	800	900	1000
Weight (kg)	3.4	3.6	3.8	4.0	4.2	4.4	4.6
Spring loaded shaft	○	○	○	○	○	○	○

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

Options : PM570XE/PM570XP

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

DR Drip Proof
←Min→ 350mm ≥350mm

VG Poly V-Belt Pulley
←Min→ 350mm ≥350mm

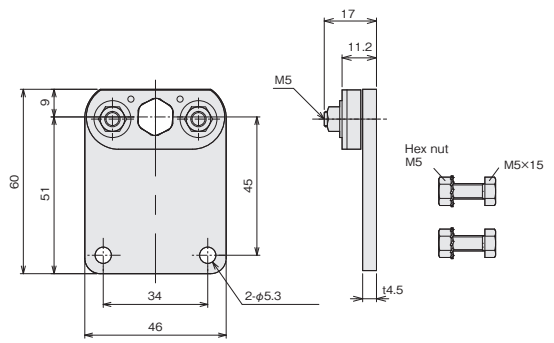
VP V-Belt Pulley
←Min→ 350mm ≥350mm

P2 Double Grooved Tube ※1
←Min→ 400mm ≥400mm

JD Both-end D-shaped shaft

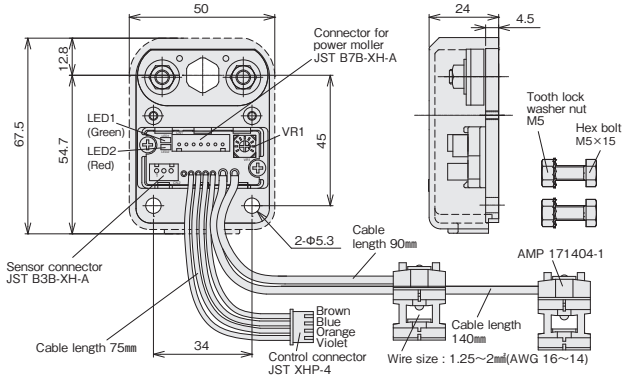
※1 Up to 800mm can be produced.

Mounting Bracket : No.MBB-081

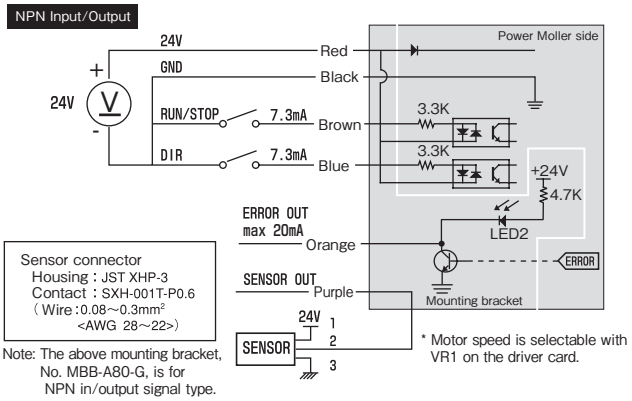


*Attach to the power cable side.
・Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.

Mounting Bracket : No.MBB-A80-G



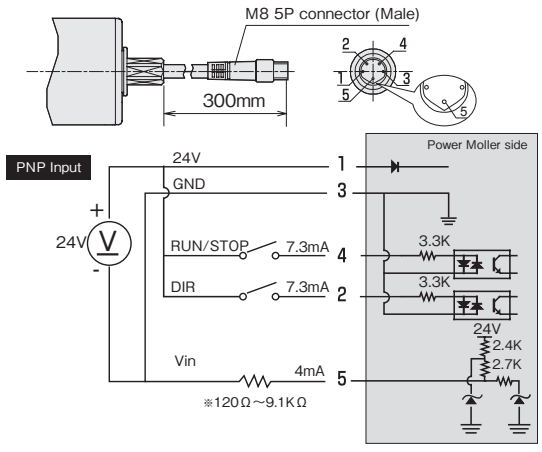
・Attach to the power cable side.
・Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.



Note: The above mounting bracket, No. MBB-A80-G, is for NPN in/output signal type.

* Motor speed is selectable with VR1 on the driver card.

Dripproof option/M8 5P connector cable



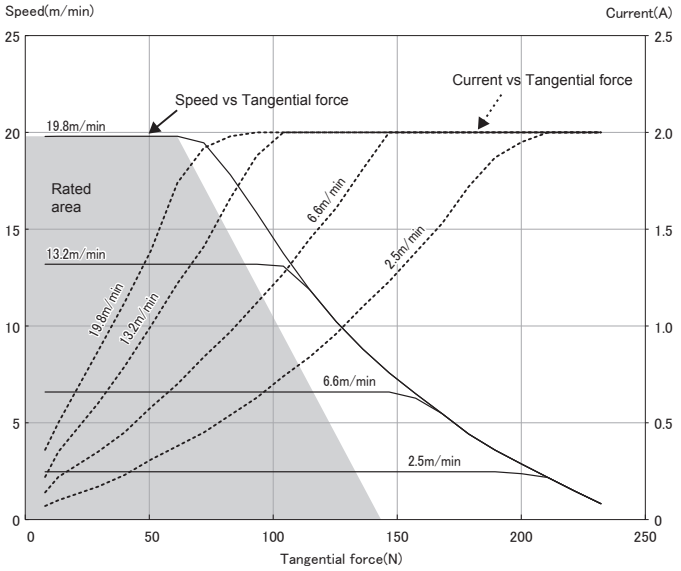
* Speed setting is available by inputting external voltage instead of an external register.
* Connect each plugs carefully when wiring.
Incorrect wiring could result in malfunction and/or damage on other devices.
* Optional mounting bracket for IP66 is No. MBD-081-D.

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

Operating characteristics : **PM570XE**

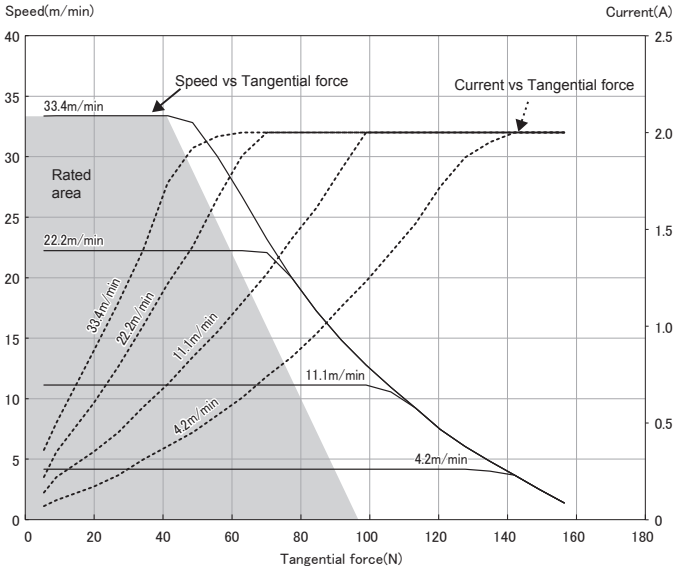
PM507XE-17

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	Starting				
19.8	61	232	0.5	2.0	31	42	9.1K or over or open	9.3~10
18.1	67		0.5		30	42	6.2K	8.5±0.2
14.8	80		0.4		30	42	4.3K	7.5±0.2
13.2	85		0.4		28	41	3.3K	6.5±0.2
11.5	93		0.3		27	40	2.2K	5.5±0.2
9.9	99		0.3		23	36	1.8K	4.5±0.2
6.6	115		0.3		17	30	1.2K	3.5±0.2
4.9	123		0.2		14	29	750	2.5±0.2
3.3	128		0.2		10	26	430	1.5±0.2
2.5	133		0.2		8	23	120 or less of short	0~0.9



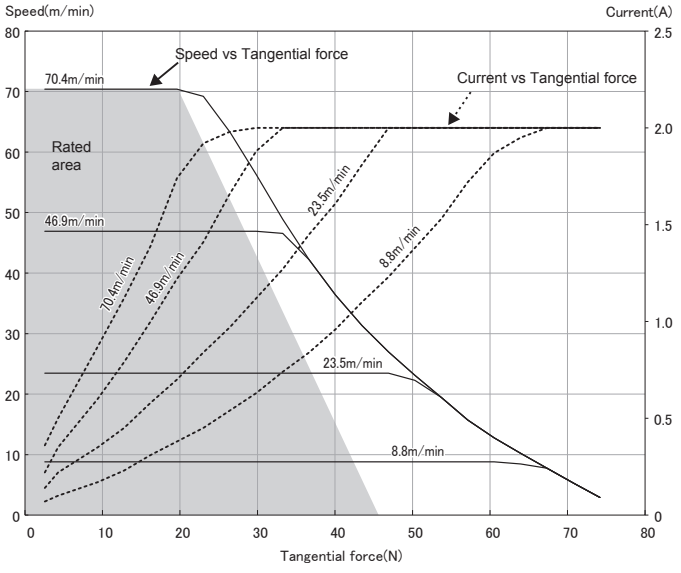
PM570XE-30

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	Starting				
33.4	41	156	0.5	2.0	31	42	9.1K or over or open	9.3~10
30.6	45		0.5		30	42	6.2K	8.5±0.2
25.0	54		0.4		30	42	4.3K	7.5±0.2
22.2	58		0.4		28	41	3.3K	6.5±0.2
19.5	63		0.3		27	40	2.2K	5.5±0.2
16.7	67		0.3		23	36	1.8K	4.5±0.2
11.1	77		0.3		17	30	1.2K	3.5±0.2
8.3	83		0.2		14	29	750	2.5±0.2
5.6	86		0.2		10	26	430	1.5±0.2
4.2	90		0.2		8	23	120 or less of short	0~0.9



PM570XE-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	Starting				
70.4	20	74	0.5	2.0	31	42	9.1K or over or open	9.3~10
64.5	21		0.5		30	42	6.2K	8.5±0.2
52.8	26		0.4		30	42	4.3K	7.5±0.2
46.9	27		0.4		28	41	3.3K	6.5±0.2
41.1	30		0.3		27	40	2.2K	5.5±0.2
35.2	32		0.3		23	36	1.8K	4.5±0.2
23.5	37		0.3		17	30	1.2K	3.5±0.2
17.6	39		0.2		14	29	750	2.5±0.2
11.7	41		0.2		10	26	430	1.5±0.2
8.8	43		0.2		8	23	120 or less of short	0~0.9



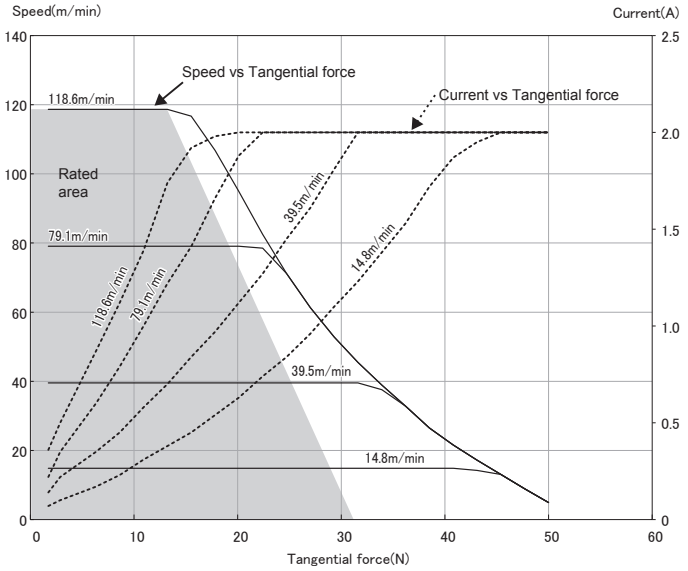
* The values in the characteristics list are when an ambient temperature is 25 degree C, and only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller(no linked operation) without including other specifications, and the values may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

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

Operating characteristics : **PM570XE**

PM570XE-100

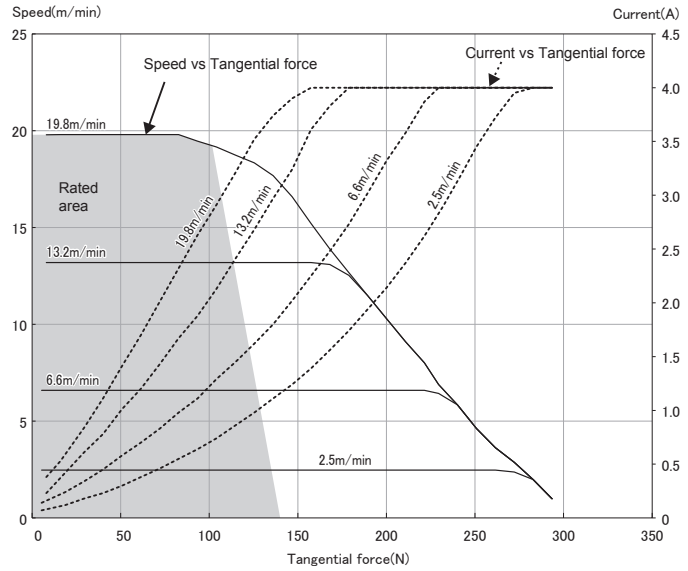
Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
No-load	Rated	Starting	No-load	Starting				
118.6	13	50	0.5	2.0	31	42	9.1K or over or open	9.3~10
108.8	14		0.5		30	42	6.2K	8.5±0.2
89.0	17		0.4		30	42	4.3K	7.5±0.2
79.1	18		0.4		28	41	3.3K	6.5±0.2
69.2	20		0.3		27	40	2.2K	5.5±0.2
59.3	21		0.3		23	36	1.8K	4.5±0.2
39.5	25		0.3		17	30	1.2K	3.5±0.2
29.7	26		0.2		14	29	750	2.5±0.2
19.8	28		0.2		10	26	430	1.5±0.2
14.8	29		0.2		8	23	120 or less of short	0~0.9



Operating characteristics : **PM570XP**

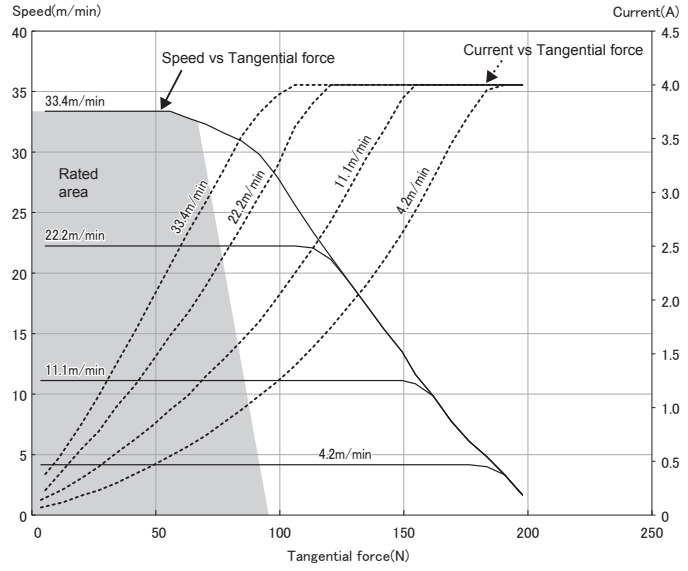
PM570XP-17

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	Starting				
19.8	101	299	0.5	4.0	46	63	9.1K or over or open	9.3~10
18.1	104		0.5		43	59	6.2K	8.5±0.2
14.8	109		0.4		39	56	4.3K	7.5±0.2
13.2	112		0.4		35	51	3.3K	6.5±0.2
11.5	117		0.3		30	46	2.2K	5.5±0.2
9.9	120		0.3		29	42	1.8K	4.5±0.2
6.6	128		0.3		19	35	1.2K	3.5±0.2
4.9	131		0.2		14	29	750	2.5±0.2
3.3	133		0.2		10	26	430	1.5±0.2
2.5	136		0.2		8	23	120 or less of short	0~0.9



PM570XP-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	Starting				
33.4	68	201	0.5	4.0	46	63	9.1K or over or open	9.3~10
30.6	70		0.5		43	59	6.2K	8.5±0.2
25.0	74		0.4		39	56	4.3K	7.5±0.2
22.2	76		0.4		35	51	3.3K	6.5±0.2
19.5	79		0.3		30	46	2.2K	5.5±0.2
16.7	81		0.3		29	42	1.8K	4.5±0.2
11.1	86		0.3		19	35	1.2K	3.5±0.2
8.3	88		0.2		14	29	750	2.5±0.2
5.6	90		0.2		10	26	430	1.5±0.2
4.2	92		0.2		8	23	120 or less of short	0~0.9



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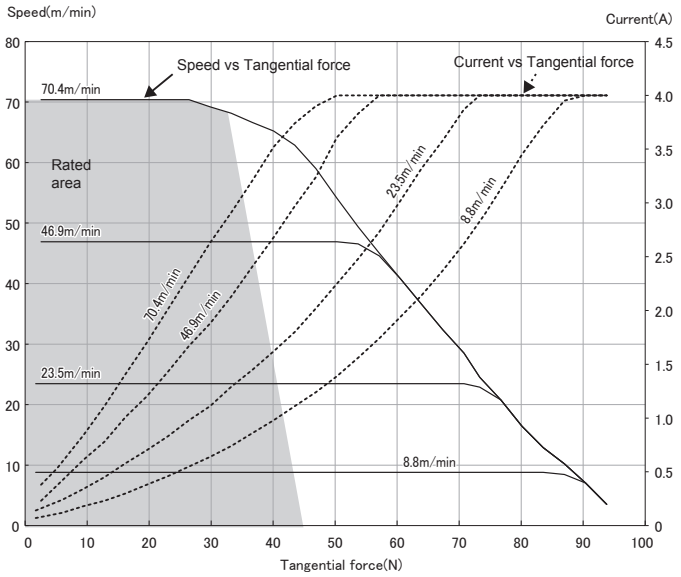
[MDR Selection Tool] is available on our web page.

Operating characteristics : **PM570XP**

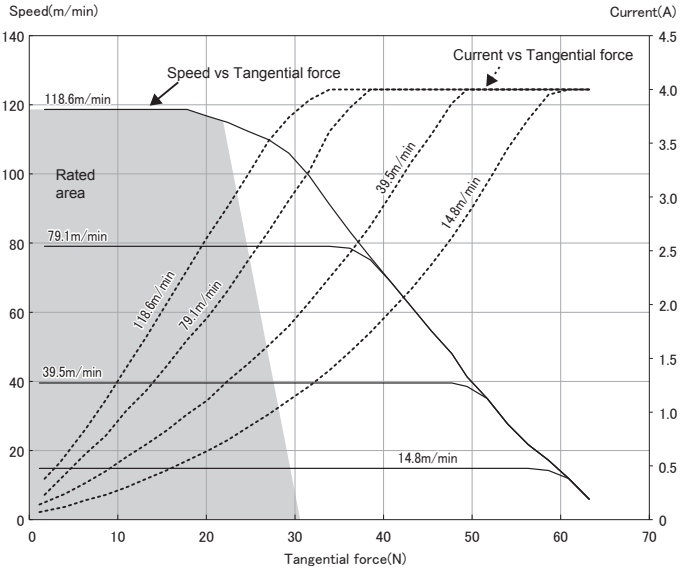
PM570XP-60

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	Starting				
70.4	32	95	0.5	4.0	46	63	9.1K or over or open	9.3～10
64.5	33		0.5		43	59	6.2K	8.5±0.2
52.8	35		0.4		39	56	4.3K	7.5±0.2
46.9	36		0.4		35	51	3.3K	6.5±0.2
41.1	38		0.3		30	46	2.2K	5.5±0.2
35.2	38		0.3		29	42	1.8K	4.5±0.2
23.5	41		0.3		19	35	1.2K	3.5±0.2
17.6	42		0.2		14	29	750	2.5±0.2
11.7	43		0.2		10	26	430	1.5±0.2
8.8	43		0.2		8	23	120 or less of short	0～0.9



PM570XP-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	Starting	No-load	Starting				
118.6	22	64	0.5	4.0	46	63	9.1K or over or open	9.3～10
108.8	22		0.5		43	59	6.2K	8.5±0.2
89.0	24		0.4		39	56	4.3K	7.5±0.2
79.1	24		0.4		35	51	3.3K	6.5±0.2
69.2	25		0.3		30	46	2.2K	5.5±0.2
59.3	26		0.3		29	42	1.8K	4.5±0.2
39.5	28		0.3		19	35	1.2K	3.5±0.2
29.7	28		0.2		14	29	750	2.5±0.2
19.8	29		0.2		10	26	430	1.5±0.2
14.8	29		0.2		8	23	120 or less of short	0～0.9



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