

Minimum
tube lengthSpring
loaded shaft

MDR Brushless DC Motor Integral motor driver type PM486XE/PM486XP

Roller diameter $\varnothing 48.6$ Roller diameter $\varnothing 48.6$ **PM486XE**

(Standard type)

PM486XP

(High power type)

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

Product Designation :

PM486XE - 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)

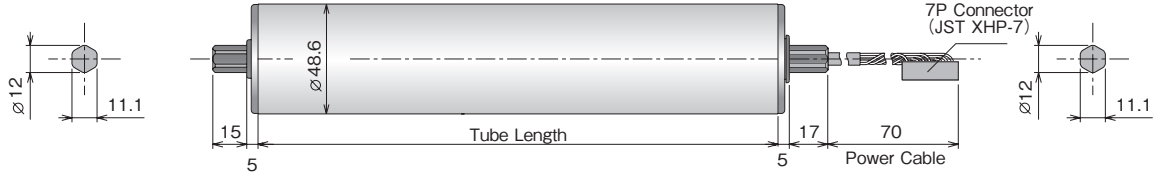
Input / Output Signal : NN-NPN input-output / NP-NPN input, PNP output

*Drip proof and 5P metal connector specification does not require designation. Leave this position blank.

Type and length of the power cable

Each of the following optional specification may be selected.

Cable Options



Tube Length : PM486XE/PM486XP

 350mm	 ≥350mm						
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 : PM486XE/PM486XP

**Rubber Laggings - NR, UR, NB, CR**

Natural rubber, Urethane, NBR, Neoprene

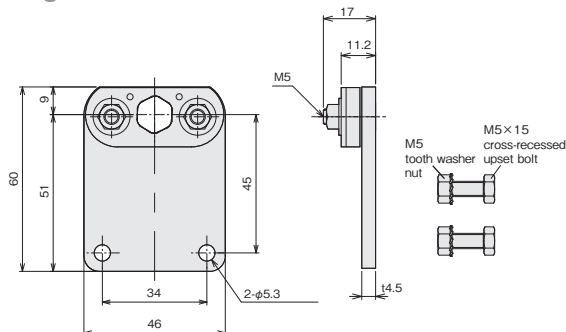
**DR Drip Proof** 350mm ≥ 350 mm**WH IP66**

350mm

**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**

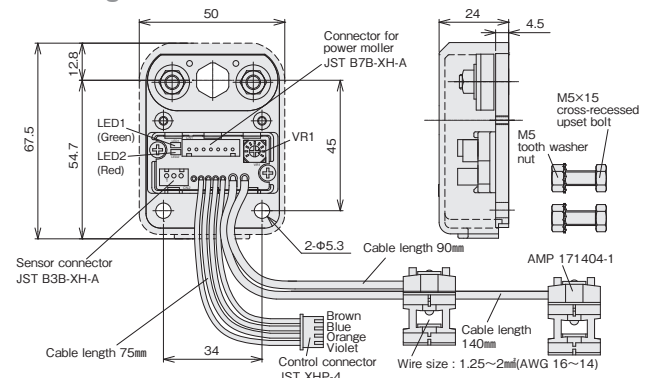
※1 Up to 800mm can be produced.

Mounting Bracket : No.MBB-081

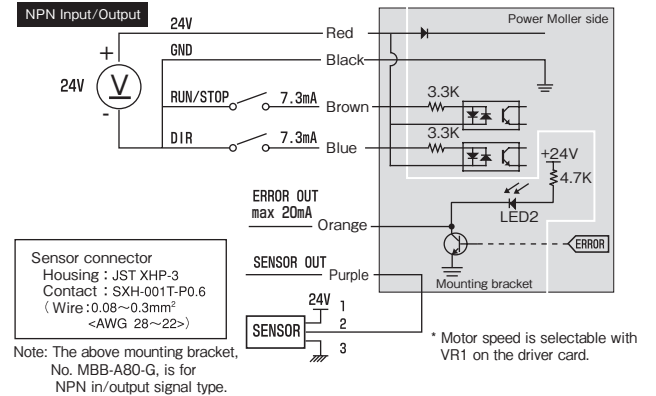


- *Attach to the power cable side.
- *Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.1Nm* for securing the bracket.
- *If case of using a Phillips screwdriver, the required torque is 3.5Nm.

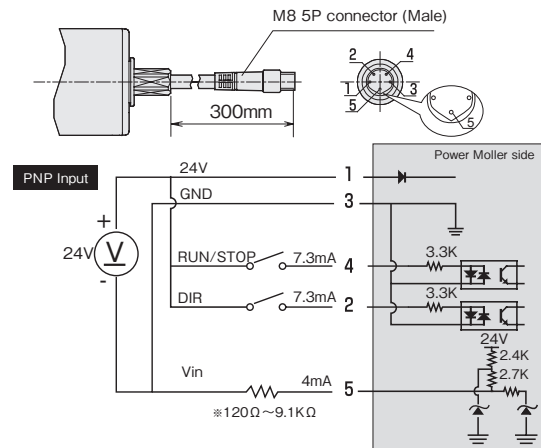
Mounting Bracket : No.MBB-A80-G



- * Attach to the power cable side.
- * Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.1Nm* for securing the bracket.
- * If case of using a Phillips screwdriver, the required torque is 3.5Nm.



Dripproof option/M8 5P connector cable

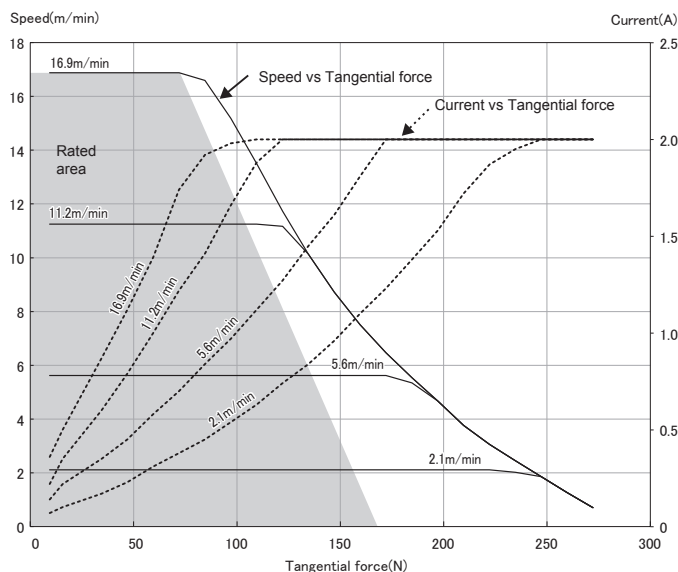


 [MDR Selection Tool] is available on our web page.

Operating characteristics : PM486XE

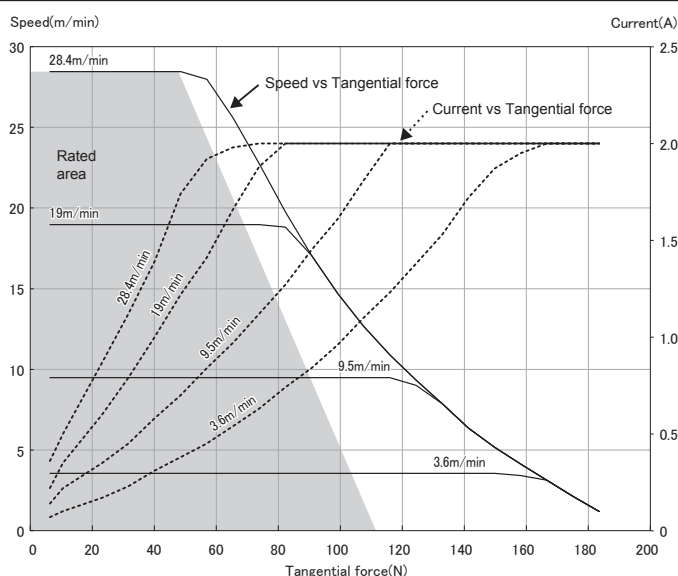
PM486XE-17

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		
16.9	72	0.5	31	42	9.1K or over or open	9.3~10
15.5	78	0.5	30	42	6.2K	8.5 $\pm$ 0.2
12.7	94	0.4	30	42	4.3K	7.5 $\pm$ 0.2
11.2	100	0.4	28	41	3.3K	6.5 $\pm$ 0.2
9.8	110	0.3	27	40	2.2K	5.5 $\pm$ 0.2
8.4	116	0.3	23	36	1.8K	4.5 $\pm$ 0.2
5.6	135	0.3	17	30	1.2K	3.5 $\pm$ 0.2
4.2	144	0.2	14	29	750	2.5 $\pm$ 0.2
2.8	150	0.2	10	26	430	1.5 $\pm$ 0.2
2.1	156	0.2	8	23	120 or less of short	0~0.9



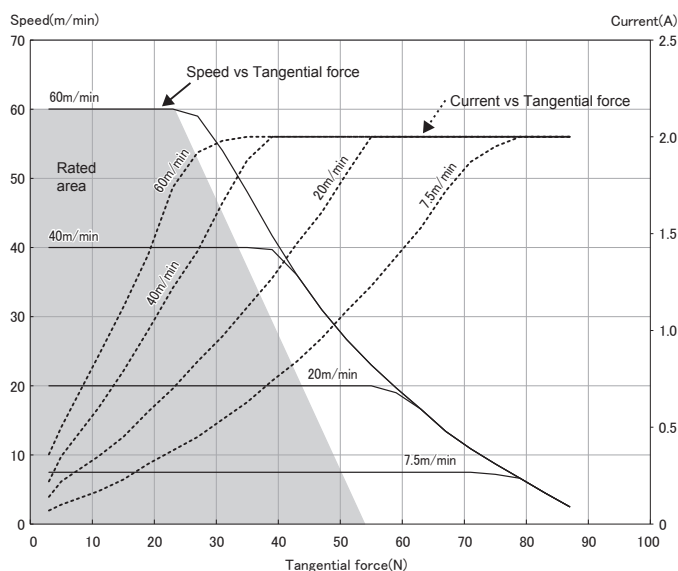
PM486XE-30

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		
28.4	49	0.5	31	42	9.1K or over or open	9.3~10
26.1	53	0.5	30	42	6.2K	8.5 $\pm$ 0.2
21.3	63	0.4	30	42	4.3K	7.5 $\pm$ 0.2
19.0	67	0.4	28	41	3.3K	6.5 $\pm$ 0.2
16.6	74	0.3	27	40	2.2K	5.5 $\pm$ 0.2
14.2	78	0.3	23	36	1.8K	4.5 $\pm$ 0.2
9.5	91	0.3	17	30	1.2K	3.5 $\pm$ 0.2
7.1	97	0.2	14	29	750	2.5 $\pm$ 0.2
4.7	101	0.2	10	26	430	1.5 $\pm$ 0.2
3.6	105	0.2	8	23	120 or less of short	0~0.9



PM486XE-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		
60.0	23	0.5	31	42	9.1K or over or open	9.3~10
55.0	25	0.5	30	42	6.2K	8.5 $\pm$ 0.2
45.0	30	0.4	30	42	4.3K	7.5 $\pm$ 0.2
40.0	32	0.4	28	41	3.3K	6.5 $\pm$ 0.2
35.0	35	0.3	27	40	2.2K	5.5 $\pm$ 0.2
30.0	37	0.3	23	36	1.8K	4.5 $\pm$ 0.2
20.0	43	0.3	17	30	1.2K	3.5 $\pm$ 0.2
15.0	46	0.2	14	29	750	2.5 $\pm$ 0.2
10.0	48	0.2	10	26	430	1.5 $\pm$ 0.2
7.5	50	0.2	8	23	120 or less of short	0~0.9



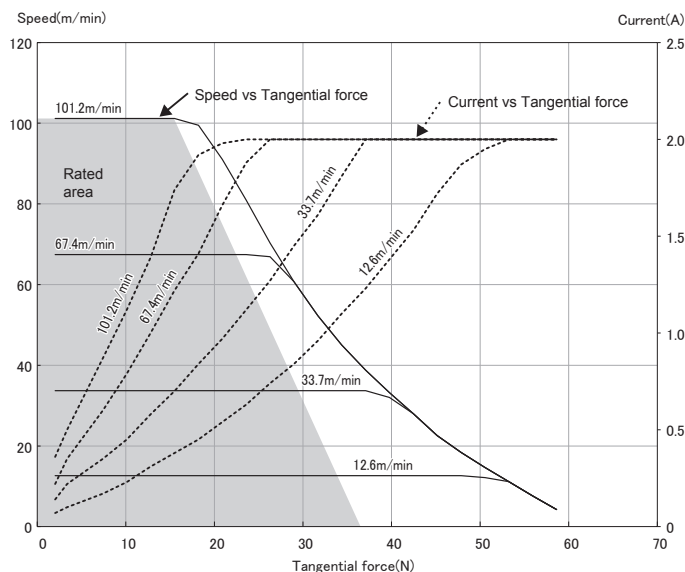
MDR Brushless DC Motor Integral motor driver type PM486XE/PM486XP Roller diameter $\varnothing 48.6$

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

Operating characteristics : PM486XE

PM486XE-100

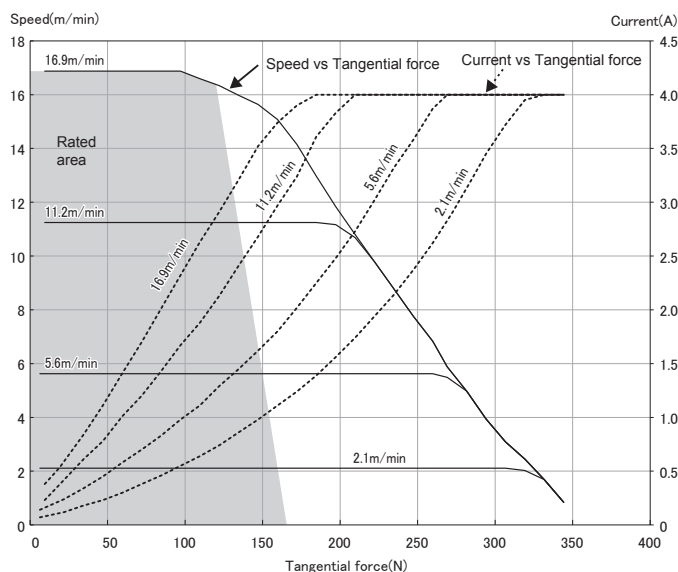
Speed (m/min)	Tangential Force(N)	Input Current (A)	Power Input (W)	Power Output (W)	External resistor (Ω)	External input voltage (V)
No-load	Rated	Starting	No-load	Starting		
101.2	16	0.5	31	42	9.1K or over or open	9.3~10
92.7	17	0.5	30	42	6.2K	8.5 $\pm$ 0.2
75.9	20	0.4	30	42	4.3K	7.5 $\pm$ 0.2
67.4	22	0.4	28	41	3.3K	6.5 $\pm$ 0.2
59.0	24	0.3	27	40	2.2K	5.5 $\pm$ 0.2
50.6	25	0.3	23	36	1.8K	4.5 $\pm$ 0.2
33.7	29	0.3	17	30	1.2K	3.5 $\pm$ 0.2
25.3	31	0.2	14	29	750	2.5 $\pm$ 0.2
16.9	32	0.2	10	26	430	1.5 $\pm$ 0.2
12.6	34	0.2	8	23	120 or less of short	0~0.9



Operating characteristics : PM486XP

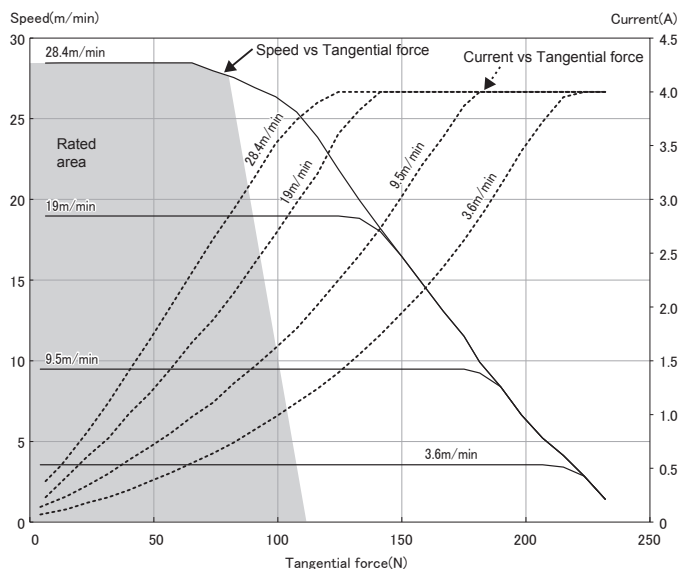
PM486XP-17

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		
16.9	119	0.5	46	63	9.1K or over or open	9.3~10
15.5	122	0.5	43	59	6.2K	8.5 $\pm$ 0.2
12.7	128	0.4	39	56	4.3K	7.5 $\pm$ 0.2
11.2	131	0.4	35	51	3.3K	6.5 $\pm$ 0.2
9.8	138	0.3	30	46	2.2K	5.5 $\pm$ 0.2
8.4	141	0.3	29	42	1.8K	4.5 $\pm$ 0.2
5.6	150	0.3	19	35	1.2K	3.5 $\pm$ 0.2
4.2	153	0.2	14	29	750	2.5 $\pm$ 0.2
2.8	156	0.2	10	26	430	1.5 $\pm$ 0.2
2.1	160	0.2	8	23	120 or less of short	0~0.9



PM486XP-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		
28.4	80	0.5	46	63	9.1K or over or open	9.3~10
26.1	82	0.5	43	59	6.2K	8.5 $\pm$ 0.2
21.3	86	0.4	39	56	4.3K	7.5 $\pm$ 0.2
19.0	89	0.4	35	51	3.3K	6.5 $\pm$ 0.2
16.6	93	0.3	30	46	2.2K	5.5 $\pm$ 0.2
14.2	95	0.3	29	42	1.8K	4.5 $\pm$ 0.2
9.5	101	0.3	19	35	1.2K	3.5 $\pm$ 0.2
7.1	103	0.2	14	29	750	2.5 $\pm$ 0.2
4.7	105	0.2	10	26	430	1.5 $\pm$ 0.2
3.6	108	0.2	8	23	120 or less of short	0~0.9

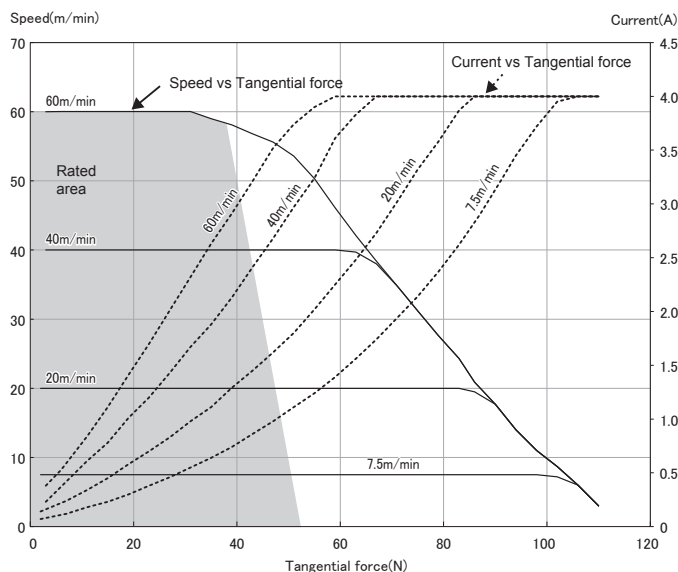


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Operating characteristics : PM486XP

PM486XP-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		
60.0	38	0.5	46	63	9.1K or over or open	9.3~10
55.0	39	0.5	43	59	6.2K	8.5 $\pm$ 0.2
45.0	41	0.4	39	56	4.3K	7.5 $\pm$ 0.2
40.0	42	0.4	35	51	3.3K	6.5 $\pm$ 0.2
35.0	44	0.3	30	46	2.2K	5.5 $\pm$ 0.2
30.0	45	0.3	29	42	1.8K	4.5 $\pm$ 0.2
20.0	48	0.3	19	35	1.2K	3.5 $\pm$ 0.2
15.0	49	0.2	14	29	750	2.5 $\pm$ 0.2
10.0	50	0.2	10	26	430	1.5 $\pm$ 0.2
7.5	51	0.2	8	23	120 or less of short	0~0.9



PM486XP-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		
101.2	26	0.5	46	63	9.1K or over or open	9.3~10
92.7	26	0.5	43	59	6.2K	8.5 $\pm$ 0.2
75.9	28	0.4	39	56	4.3K	7.5 $\pm$ 0.2
67.4	28	0.4	35	51	3.3K	6.5 $\pm$ 0.2
59.0	30	0.3	30	46	2.2K	5.5 $\pm$ 0.2
50.6	30	0.3	29	42	1.8K	4.5 $\pm$ 0.2
33.7	32	0.3	19	35	1.2K	3.5 $\pm$ 0.2
25.3	33	0.2	14	29	750	2.5 $\pm$ 0.2
16.9	34	0.2	10	26	430	1.5 $\pm$ 0.2
12.6	34	0.2	8	23	120 or less of short	0~0.9

