

Minimum
tube lengthSpring
loaded shaft

MDR Brushless DC Motor Integral motor driver type PM500XE/PM500XP

Roller diameter $\varnothing 50$ Roller diameter $\varnothing 50$ **PM500XE**
PM500XP

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

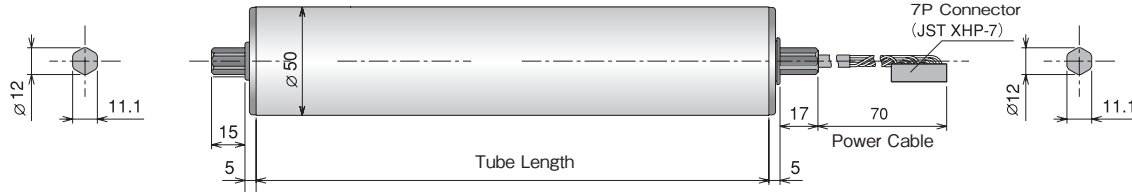
Product Designation :

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

- | Power Moller model | 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 | Options : Drip proof and 5P metal connector specification does not require designation. Leave this position blank. |
| Each of the following optional specification may be selected. | | | | | | |

Cable Options

7P Connector (JST XHP-7)



Tube Length : PM500XE/PM500XP

	350mm	350mm	350mm	350mm	350mm	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 : PM500XE/PM500XP

**RUBBER LAGGINGS - NR, UR, NB, CR**

Natural rubber, Urethane, NBR, Neoprene

P.66

**DRIP PROOF**

350mm 350mm

P.68

**Poly V-Belt Pulley**

350mm 350mm

P.70

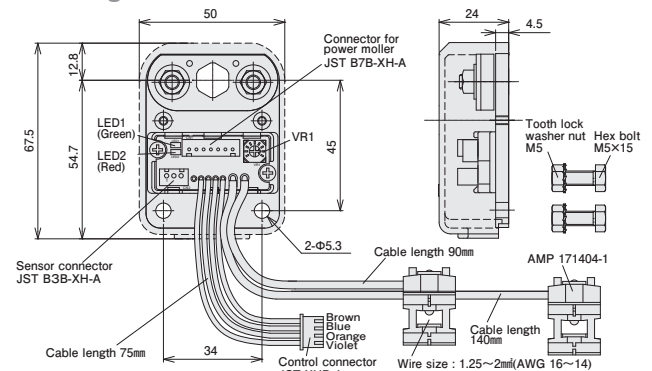
**Double Grooved Tube^{*1}**

400mm 400mm

P.72

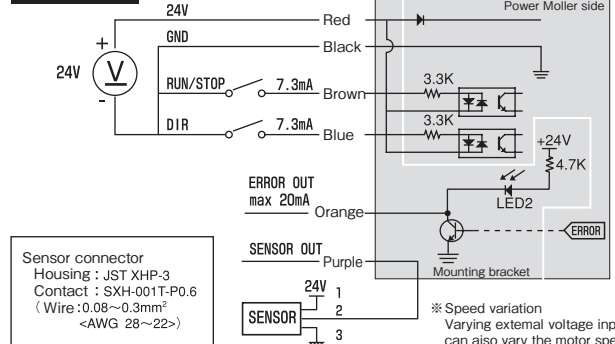
JD**Both-end D-shaped shaft**^{*1} Up to 800mm can be produced.

For other specification, refer to P.73.

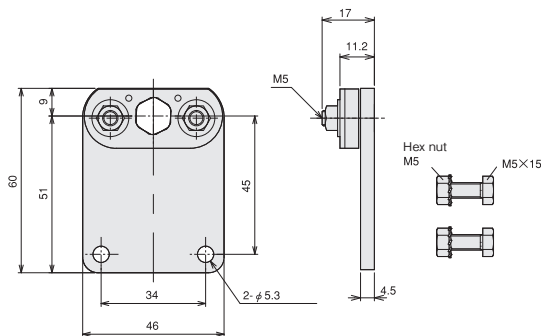
Mounting Bracket : No.MBB-A80-G^{**}

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

NPN Input/Output

^{**} Speed variation Varying external voltage input can also vary the motor speed instead of external resistor.

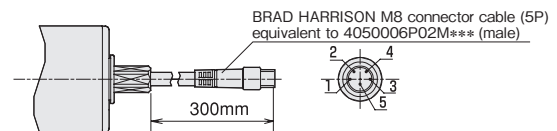
Mounting Bracket : No.MBB-081



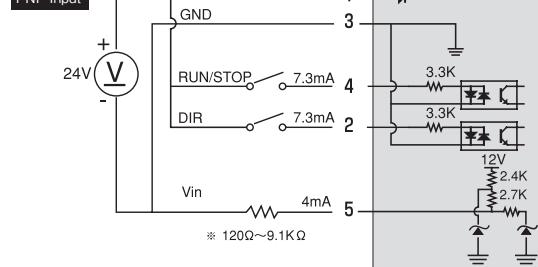
*Attach to the power cable side.

- Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.

Dripproof option/M8 5P connector cable



PNP Input

^{**} Speed variation Varying external voltage input can also vary the motor speed instead of external resistor.

MDR Brushless DC Motor Integral motor driver type PM500XE Roller diameter $\varnothing 50$

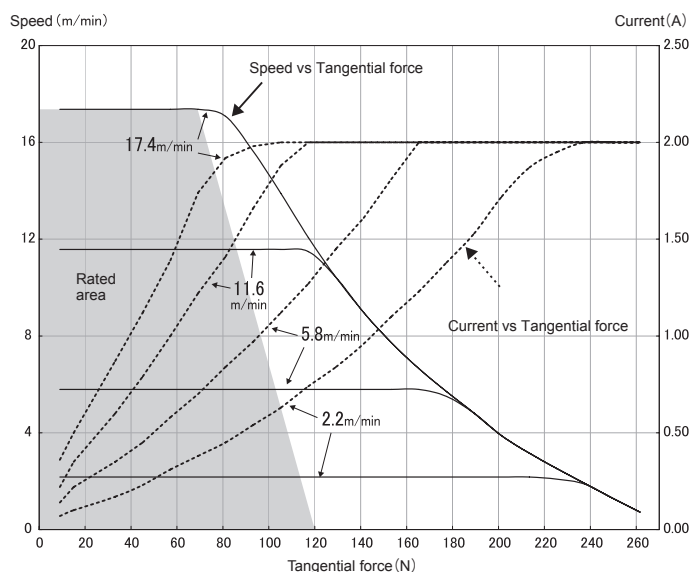
 [MDR Selection Tool] is available on our web page.

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	Rated	Starting	No-load	Starting				
17.4	17.4	70		0.5		30	41	9.1K or over or open	9.3~10 *
15.9	15.9	76		0.5		30	41	6.2K	8.5 $\pm$ 0.2
13.0	13.0	82		0.4		27	38	4.3K	7.5 $\pm$ 0.2
11.6	11.6	85		0.4		24	36	3.3K	6.5 $\pm$ 0.2
10.1	10.1	89		0.3		23	34	2.2K	5.5 $\pm$ 0.2
8.7	8.7	95		0.3		21	31	1.8K	4.5 $\pm$ 0.2
5.8	5.8	101		0.3		14	24	1.2K	3.5 $\pm$ 0.2
4.3	4.3	106		0.2		12	22	750	2.5 $\pm$ 0.2
2.9	2.9	112		0.2		8	19	430	1.5 $\pm$ 0.2
2.2	2.2	112		0.2		6	17	120 or less of short	0~0.9

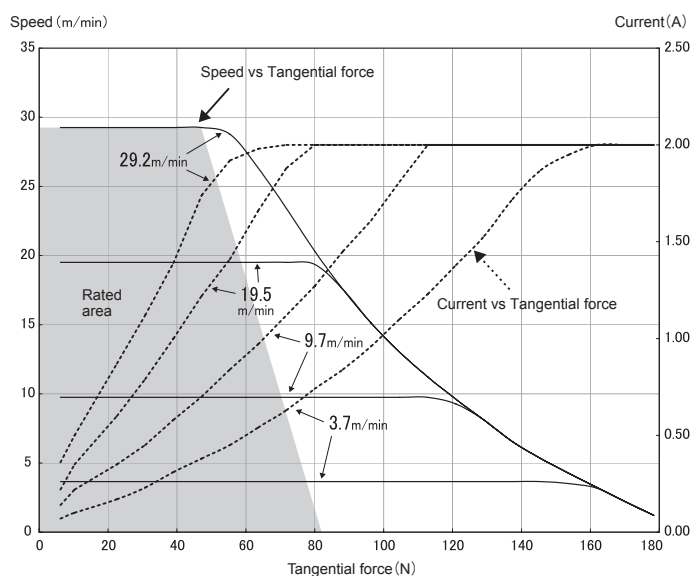
*9.3~10 or No input Voltage



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	Rated	Starting	No-load	Starting				
29.2	29.2	48		0.5		31	41	9.1K or over or open	9.3~10 *
26.8	26.8	52		0.5		30	41	6.2K	8.5 $\pm$ 0.2
21.9	21.9	56		0.4		27	38	4.3K	7.5 $\pm$ 0.2
19.5	19.5	58		0.4		24	36	3.3K	6.5 $\pm$ 0.2
17.0	17.0	61		0.3		23	34	2.2K	5.5 $\pm$ 0.2
14.6	14.6	65		0.3		21	31	1.8K	4.5 $\pm$ 0.2
9.7	9.7	69		0.3		14	24	1.2K	3.5 $\pm$ 0.2
7.3	7.3	73		0.2		12	22	750	2.5 $\pm$ 0.2
4.9	4.9	77		0.2		8	19	430	1.5 $\pm$ 0.2
3.7	3.7	77		0.2		6	17	120 or less of short	0~0.9

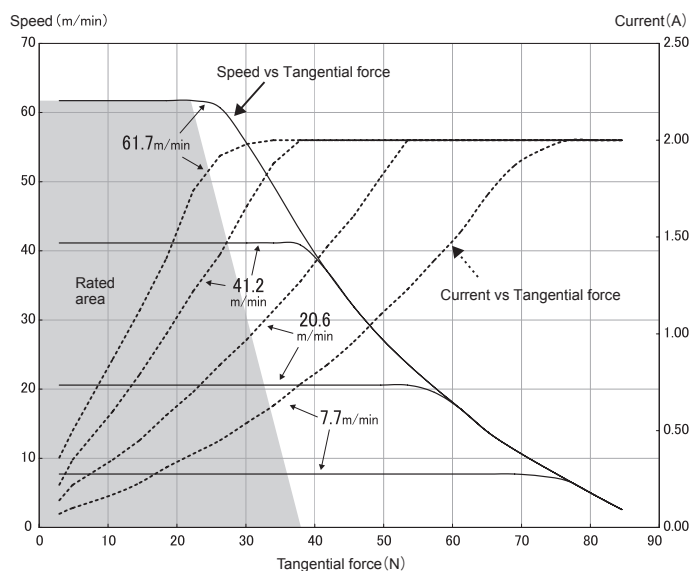
*9.3~10 or No input Voltage



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	Rated	Starting	No-load	Starting				
61.7	61.7	23		0.5		31	41	9.1K or over or open	9.3~10 *
56.6	56.6	24		0.5		30	41	6.2K	8.5 $\pm$ 0.2
46.3	46.3	26		0.4		27	38	4.3K	7.5 $\pm$ 0.2
41.2	41.2	28		0.4		24	36	3.3K	6.5 $\pm$ 0.2
36.0	36.0	29		0.3		23	34	2.2K	5.5 $\pm$ 0.2
30.9	30.9	31		0.3		21	31	1.8K	4.5 $\pm$ 0.2
20.6	20.6	33		0.3		14	24	1.2K	3.5 $\pm$ 0.2
15.4	15.4	34		0.2		12	22	750	2.5 $\pm$ 0.2
10.3	10.3	36		0.2		8	19	430	1.5 $\pm$ 0.2
7.7	7.7	36		0.2		6	17	120 or less of short	0~0.9

*9.3~10 or No input Voltage



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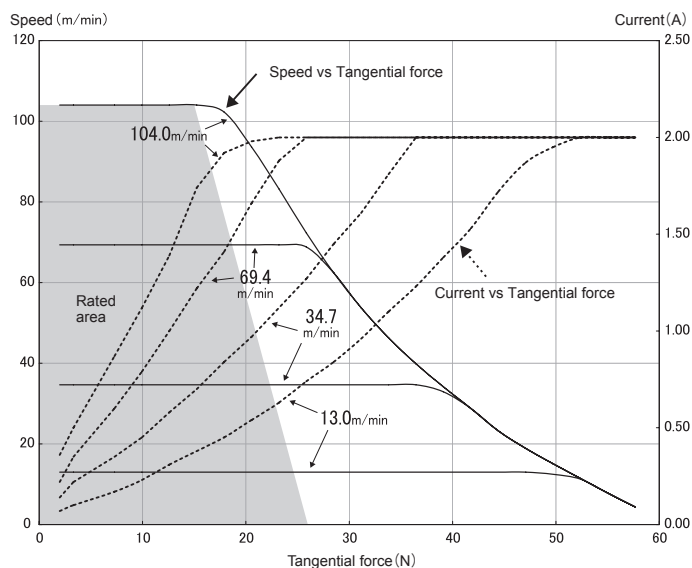
 [MDR Selection Tool] is available on our web page.

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	Rated	Starting	No-load	Starting				
104.0	104.0	15		0.5		31	41	9.1K or over or open	9.3~10 *
95.4	95.4	17		0.5		30	41	6.2K	8.5 $\pm$ 0.2
78.0	78.0	18		0.4		27	38	4.3K	7.5 $\pm$ 0.2
69.4	69.4	19		0.4		24	36	3.3K	6.5 $\pm$ 0.2
60.7	60.7	20		0.3		23	34	2.2K	5.5 $\pm$ 0.2
52.0	52.0	21		0.3		21	31	1.8K	4.5 $\pm$ 0.2
34.7	34.7	22		0.3		14	24	1.2K	3.5 $\pm$ 0.2
26.0	26.0	23		0.2		12	22	750	2.5 $\pm$ 0.2
17.3	17.3	25		0.2		8	19	430	1.5 $\pm$ 0.2
13.0	13.0	25		0.2		6	17	120 or less or short	0~0.9

*9.3~10 or No input Voltage

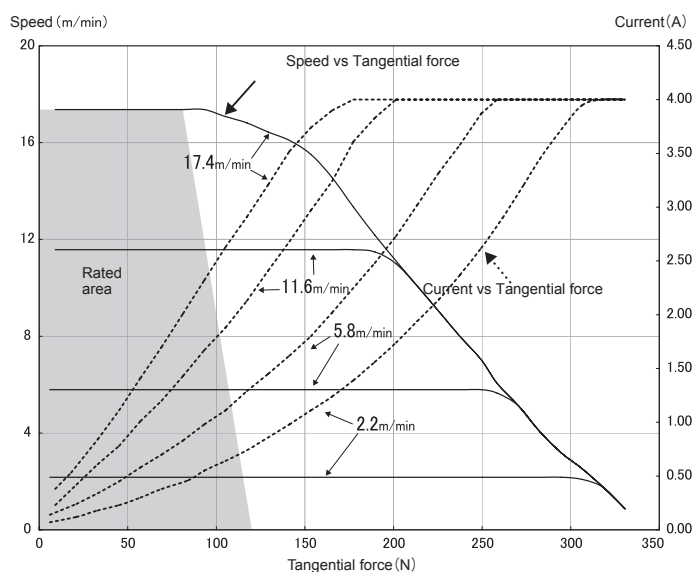


Operating characteristics : PM500XP

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	Rated	Starting	No-load	Starting				
17.4	17.4	82		0.5		36	48	9.1K or over or open	9.3~10 *
15.9	15.9	88		0.5		35	48	6.2K	8.5 $\pm$ 0.2
13.0	13.0	95		0.4		31	43	4.3K	7.5 $\pm$ 0.2
11.6	11.6	97		0.4		28	38	3.3K	6.5 $\pm$ 0.2
10.1	10.1	99		0.3		24	36	2.2K	5.5 $\pm$ 0.2
8.7	8.7	102		0.3		22	34	1.8K	4.5 $\pm$ 0.2
5.8	5.8	106		0.3		16	26	1.2K	3.5 $\pm$ 0.2
4.3	4.3	106		0.2		12	24	750	2.5 $\pm$ 0.2
2.9	2.9	112		0.2		8	19	430	1.5 $\pm$ 0.2
2.2	2.2	112		0.2		6	17	120 or less or short	0~0.9

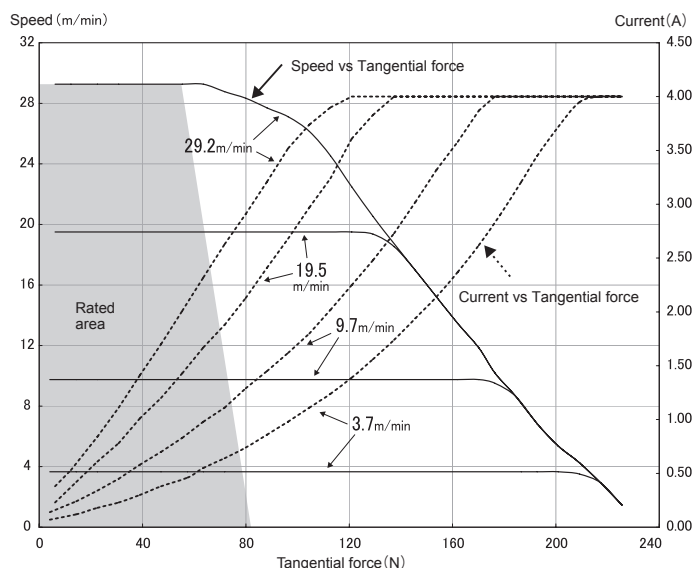
*9.3~10 or No input Voltage



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	Rated	Starting	No-load	Starting				
29.2	29.2	56		0.5		36	48	9.1K or over or open	9.3~10 *
26.8	26.8	60		0.5		35	48	6.2K	8.5 $\pm$ 0.2
21.9	21.9	65		0.4		31	43	4.3K	7.5 $\pm$ 0.2
19.5	19.5	66		0.4		28	38	3.3K	6.5 $\pm$ 0.2
17.0	17.0	68		0.3		24	36	2.2K	5.5 $\pm$ 0.2
14.6	14.6	70		0.3		22	34	1.8K	4.5 $\pm$ 0.2
9.7	9.7	73		0.3		16	26	1.2K	3.5 $\pm$ 0.2
7.3	7.3	73		0.2		12	24	750	2.5 $\pm$ 0.2
4.9	4.9	77		0.2		8	19	430	1.5 $\pm$ 0.2
3.7	3.7	77		0.2		6	17	120 or less or short	0~0.9

*9.3~10 or No input Voltage



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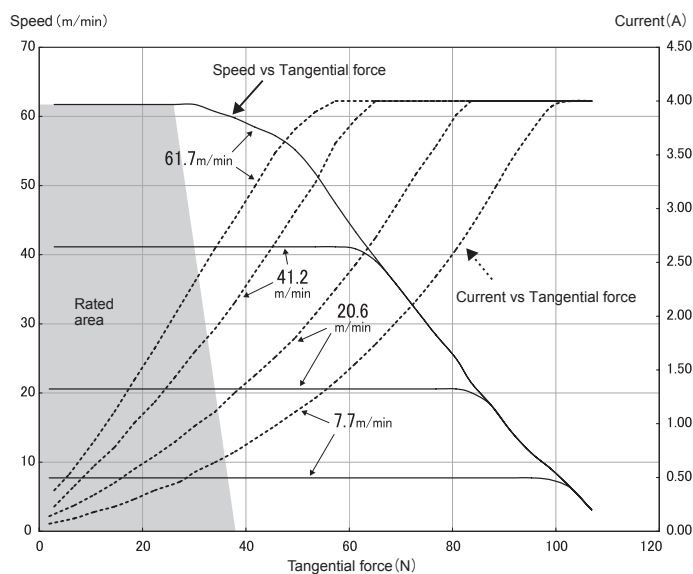
 [MDR Selection Tool] is available on our web page.

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	Rated	Starting	No-load	Starting				
61.7	61.7	26	109	0.5	4.0	36	48	9.1K or over or open	9.3~10 *
56.6	56.6	28		0.5		35	48	6.2K	8.5 $\pm$ 0.2
46.3	46.3	31		0.4		31	43	4.3K	7.5 $\pm$ 0.2
41.2	41.2	31		0.4		28	38	3.3K	6.5 $\pm$ 0.2
36.0	36.0	32		0.3		24	36	2.2K	5.5 $\pm$ 0.2
30.9	30.9	33		0.3		22	34	1.8K	4.5 $\pm$ 0.2
20.6	20.6	34		0.3		16	26	1.2K	3.5 $\pm$ 0.2
15.4	15.4	34		0.2		12	24	750	2.5 $\pm$ 0.2
10.3	10.3	36		0.2		8	19	430	1.5 $\pm$ 0.2
7.7	7.7	36		0.2		6	17	120 or less of short	0~0.9

*9.3~10 or No input Voltage



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	Rated	Starting	No-load	Starting				
104.0	104.0	18	74	0.5	4.0	36	48	9.1K or over or open	9.3~10 *
95.4	95.4	19		0.5		35	48	6.2K	8.5 $\pm$ 0.2
78.0	78.0	21		0.4		31	43	4.3K	7.5 $\pm$ 0.2
69.4	69.4	21		0.4		28	38	3.3K	6.5 $\pm$ 0.2
60.7	60.7	22		0.3		24	36	2.2K	5.5 $\pm$ 0.2
52.0	52.0	22		0.3		22	34	1.8K	4.5 $\pm$ 0.2
34.7	34.7	23		0.3		16	26	1.2K	3.5 $\pm$ 0.2
26.0	26.0	23		0.2		12	24	750	2.5 $\pm$ 0.2
17.3	17.3	25		0.2		8	19	430	1.5 $\pm$ 0.2
13.0	13.0	25		0.2		6	17	120 or less of short	0~0.9

*9.3~10 or No input Voltage

