



Minimum tube length



Spring 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)

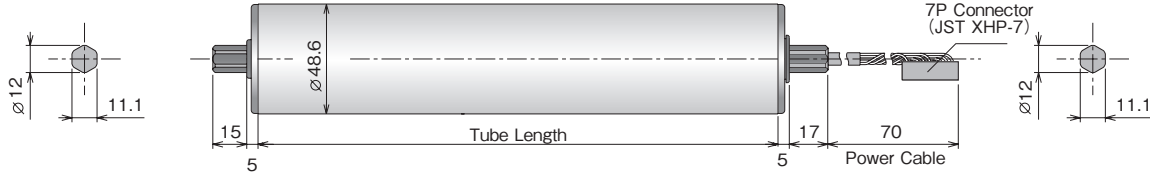
- Roller diameter /  $\varnothing 48.6$
- Thickness / t1.4
- Voltage / 24V DC
- Tube material / STKM12
- Surface treatment / Trivalent chromate processing

### Product Designation :

**PM486XE - 17 - 400 - D - 024 - C007 - NN - VG**

Power Moller model : 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.



### Tube Length : PM486XE/PM486XP

350mm  $\geq 350$ mm

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  $\geq 350$ mm

**WH IP66**  
 350mm

**VG Poly V-Belt Pulley**  
 350mm  $\geq 350$ mm

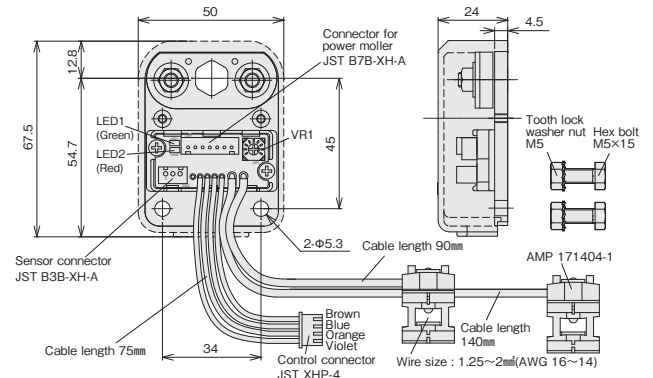
**VP V-Belt Pulley**  
 350mm  $\geq 350$ mm

**P2 Double Grooved Tube <sup>\*1</sup>**  
 400mm  $\geq 400$ mm

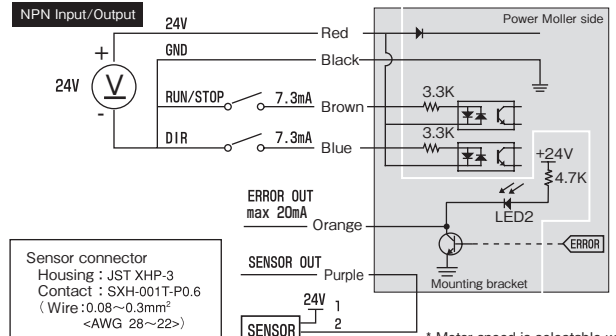
**JD Both-end D-shaped shaft**

\*1 Up to 800mm can be produced.

### Mounting Bracket : No.MBB-A80-G

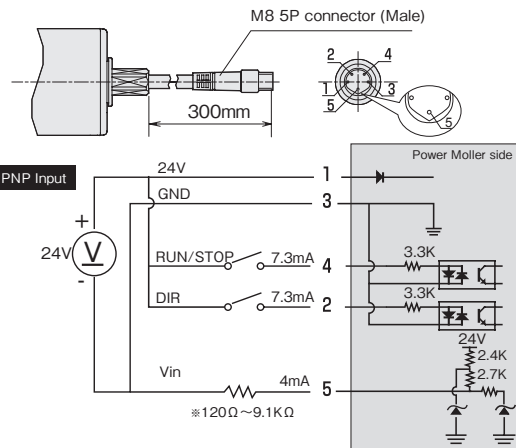


- Attach to the power cable side.
- Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.



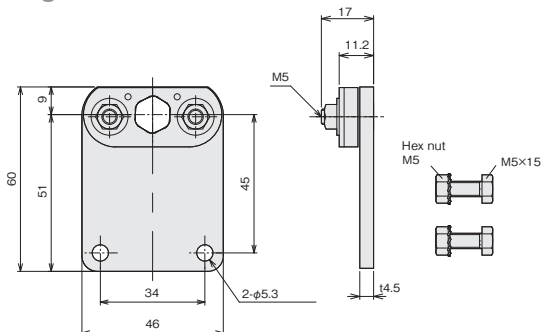
Note: The above mounting bracket, No. MBB-A80-G, is for NPN in/output signal type.  
 \* Motor speed is selectable with VR1 on the driver card.

### 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.

### Mounting Bracket : No.MBB-081



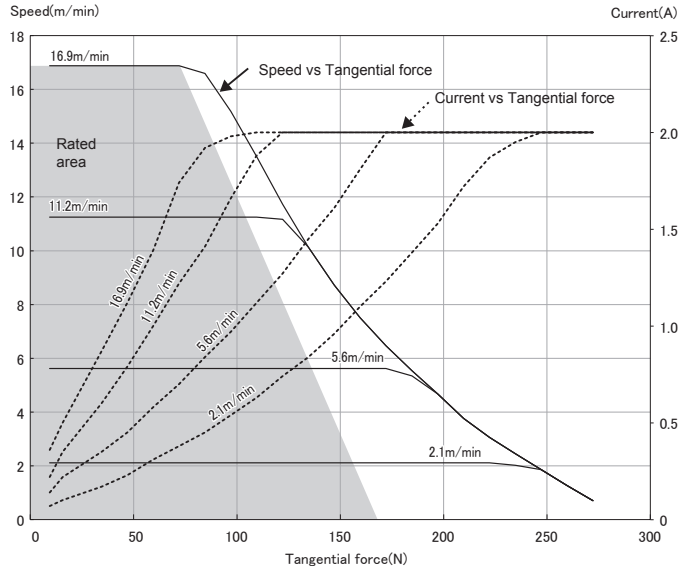
- \* Attach to the power cable side.
- \* Apply 6~10Nm torque for securing the Power Moller mounting shaft, and 3.5Nm for securing the bracket.

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

Operating characteristics : PM486XE

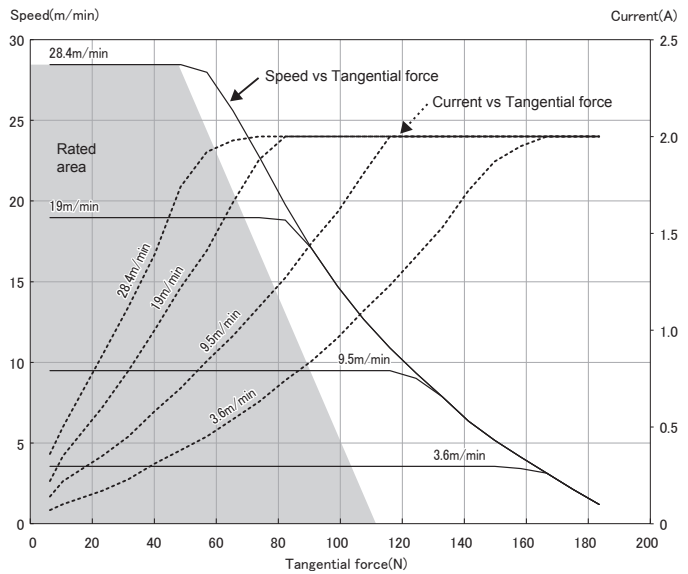
PM486XE-17

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor ( $\Omega$ )	External input voltage (V)
	No-load	Rated	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	272	0.3	2.0	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



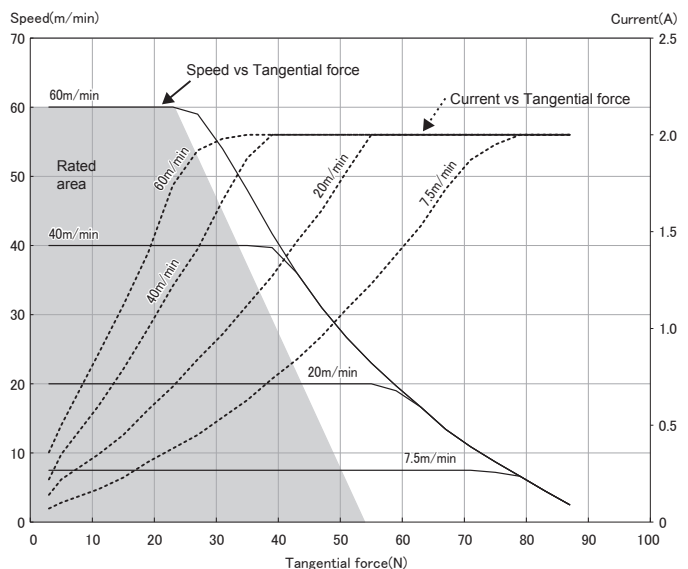
PM486XE-30

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor ( $\Omega$ )	External input voltage (V)
	No-load	Rated	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	183	0.3	2.0	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 ( $\Omega$ )	External input voltage (V)
	No-load	Rated	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	87	0.3	2.0	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



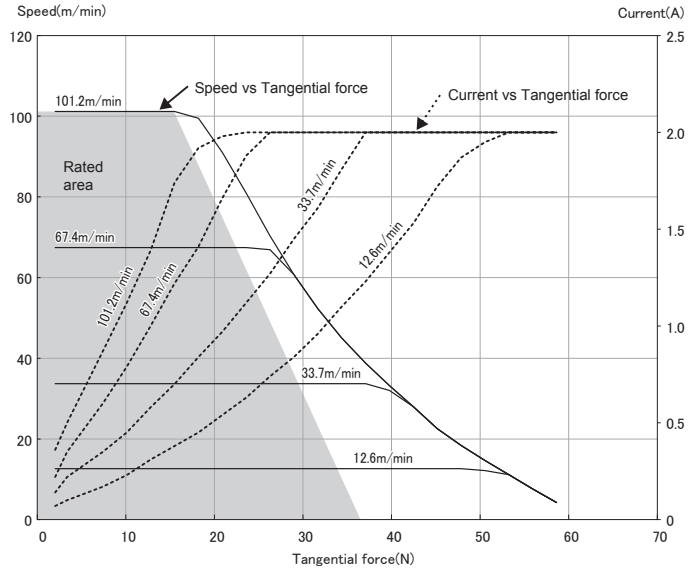
\* The values in the characteristics list are when an ambient temperature is 25 degree C, and only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller(no linked operation) without including other specifications, and the values may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

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

Operating characteristics : PM486XE

PM486XE-100

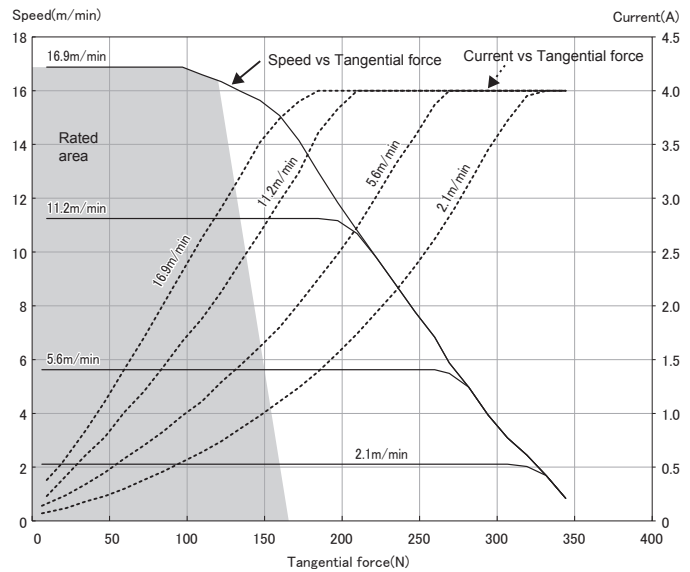
Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor ( $\Omega$ )	External input voltage (V)
	No-load	Rated	No-load	Starting				
101.2	16		0.5		31	42	9.1K or over or open	9.3~10
92.7	17		0.5		30	42	6.2K	8.5 $\pm$ 0.2
75.9	20		0.4		30	42	4.3K	7.5 $\pm$ 0.2
67.4	22		0.4		28	41	3.3K	6.5 $\pm$ 0.2
59.0	24	59	0.3	2.0	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

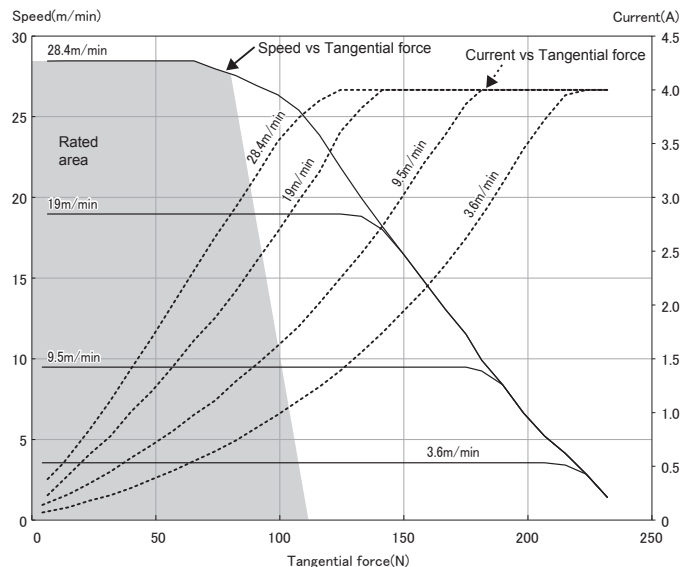
PM486XP-17

Speed (m/min)	Tangential Force(N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor ( $\Omega$ )	External input voltage (V)
	No-load	Rated	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	350	0.4	4.0	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 ( $\Omega$ )	External input voltage (V)
	No-load	Rated	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	236	0.4	4.0	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



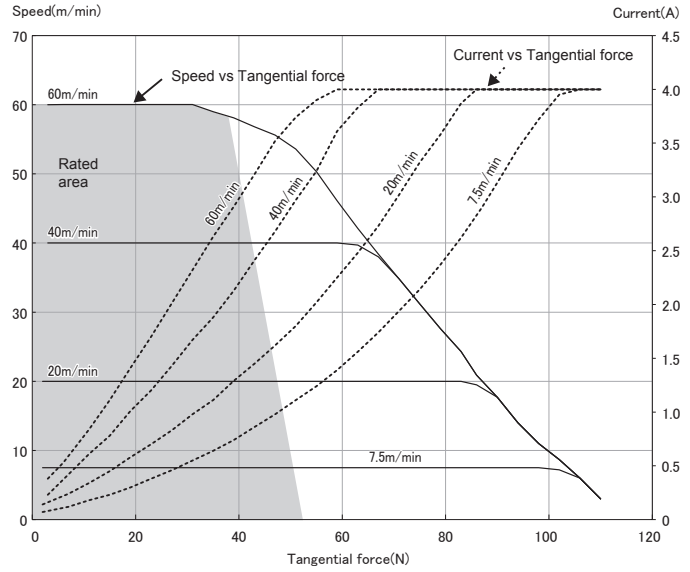
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Operating characteristics : PM486XP

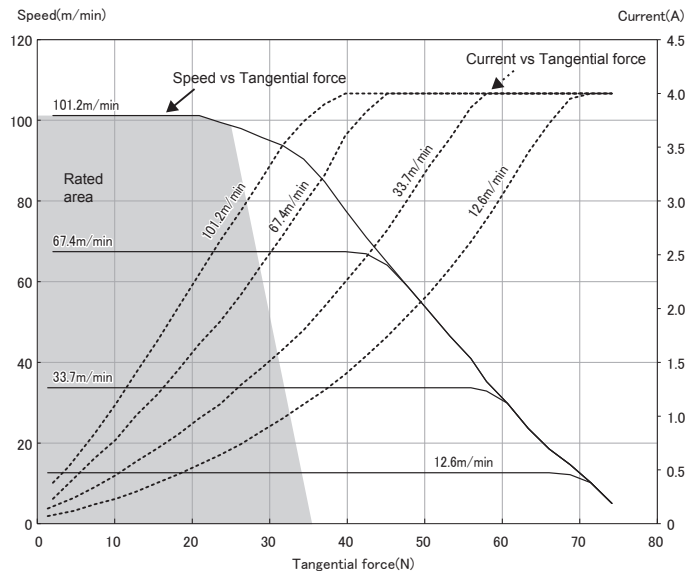
PM486XP-60

Speed (m/min)	Tangential Force (N)		Input Current (A)		Power Input (W)	Power Output (W)	External resistor ( $\Omega$ )	External input voltage (V)
	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	112	0.3	4.0	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 ( $\Omega$ )	External input voltage (V)
	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	75	0.3	4.0	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



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