

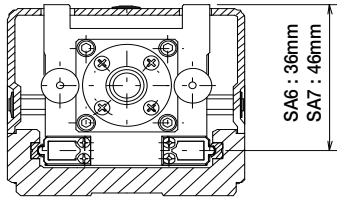
Selection Guide (Push Force and Electric Current Limitation Correlation Graph)

ERC2 Series **Slider type**

When using slider type for pressing operation, limit pressing current to prevent anti-moment generated by push force from exceeding 80% of the catalog spec rating for moment (Ma, Mb).

To calculate moment, use the guide moment action position shown in the figure below, and consider the amount of offset at the push force action position.

Be aware that, if excess force above the rated moment is applied, the guide can be damaged and its use life can be shortened. Therefore, carefully set the current with safety in mind.

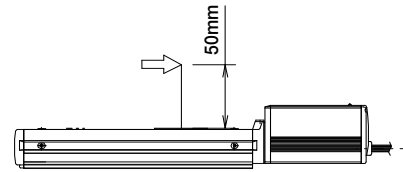


Moment operation position

Caution:
Note: The movement speed during pressing is fixed at 20mm/s.

Example of calculation:

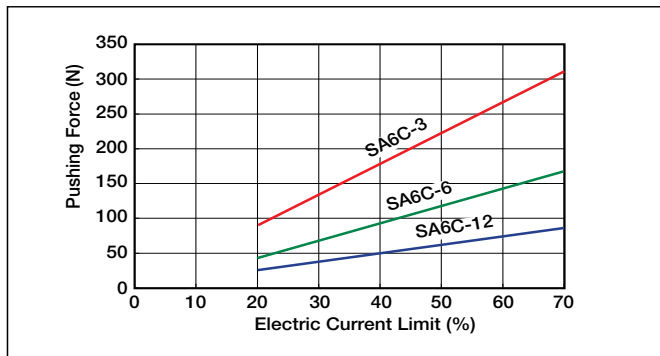
With this type, at the position shown in the figure at the right, when there is 100N of pressing the moment received by the guide is $Ma = (46 + 50) \times 100 = 9600 \text{ (N}\cdot\text{m)} = 9.6 \text{ (N}\cdot\text{m)}$.



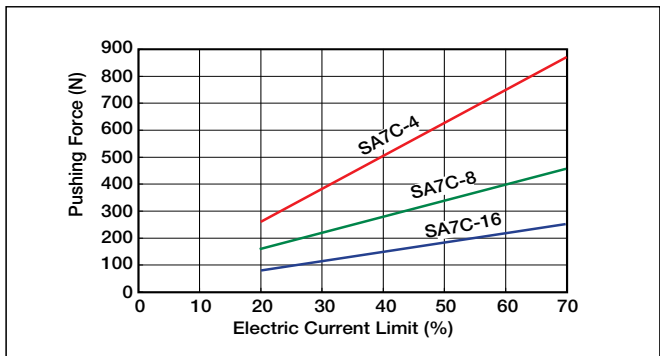
The SA7 rated moment is $Ma = 13.8 \text{ (N}\cdot\text{m)}$ and $13.8 \times 0.8 = 11.04 > 9.6$, which means it is OK. Also, when pressing generates moment Mb, use the overhang calculation to similarly confirm that the moment is within 80% of the rated moment.

Push force and current limit correlation graph * In the table below, standard figures are shown. Actual figures will differ slightly.

SA6C type



SA7C type

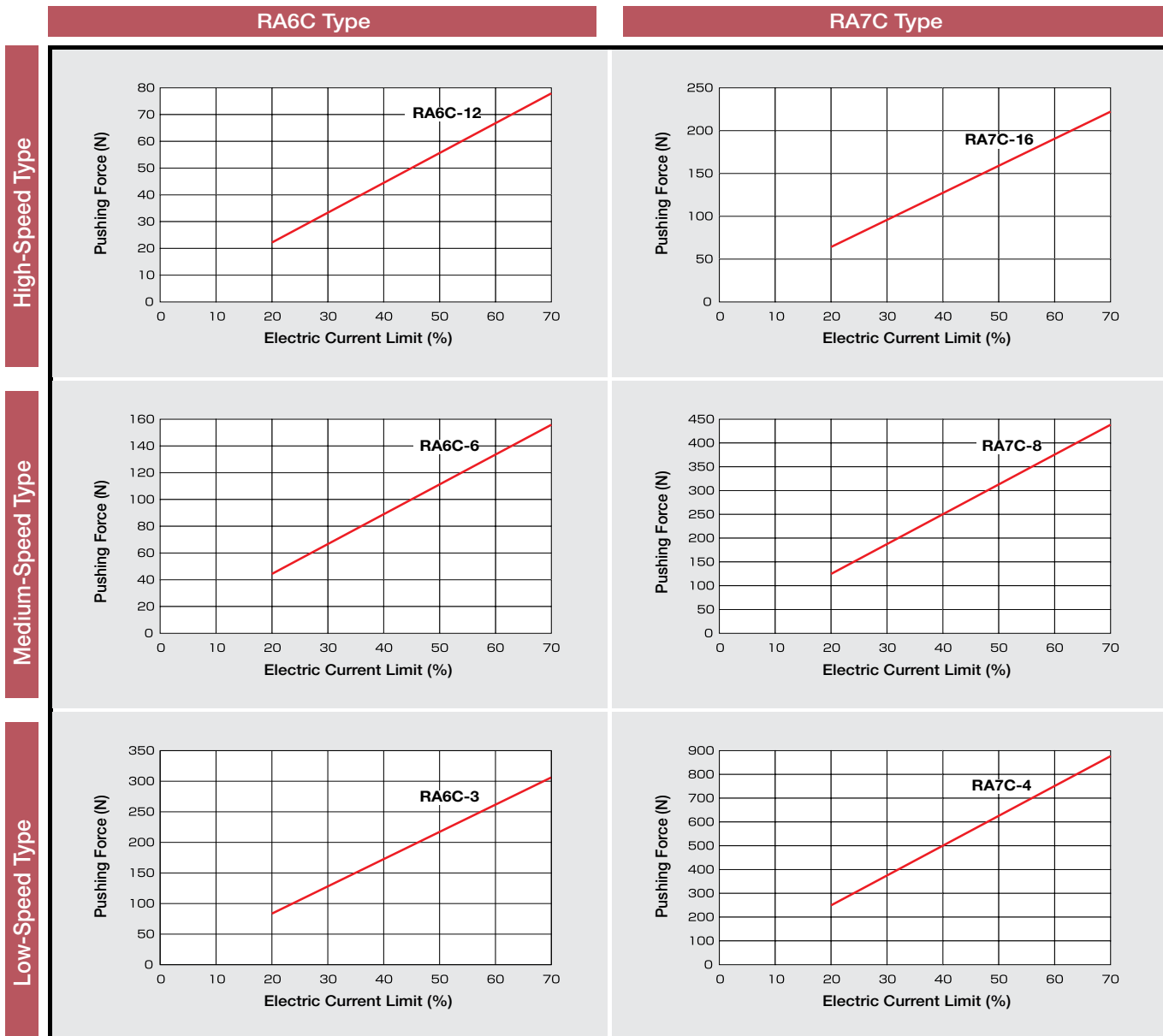


ERC2 Series **Rod Type**

The push force during pressing operation can be freely changed by changing the controller current limit value. The maximum push force changes according to the type of device, so please select the push force you need from the table below.

⚠ Caution for Use

- The push force and current limit correlation figures are given as standard. Actual figures will slightly differ.
- When the current limit is less than 20%, the push force may vary. Therefore use a current limitation that is 20% or higher.
- Movement speed during pressing operation is fixed at 20mm/s.



Note: In the graph above, the number after the type is the lead number.

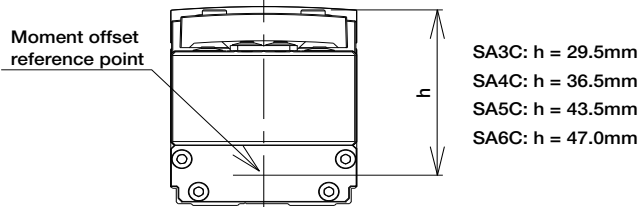
Selection Guide (Push Force and Electric Current Limitation Correlation Graph)

RCP3 Series Slider Type

When using the slider type for the pressing operation, limit the pressing current to prevent anti-moment generated by push force from exceeding **80%** of catalog spec rating for moment (Ma, Mb).

To calculate moment, use the guide moment action position shown in the figure below, and consider the amount of offset at the push force action position.

Be aware that, if excess force above the rated moment is applied, the guide can be damaged and its use life can be shortened. Therefore, carefully set the current with safety in mind.

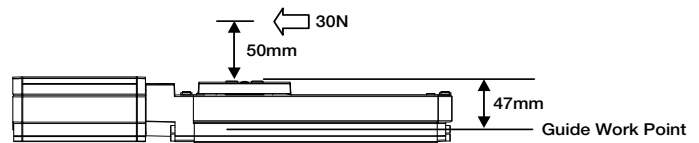


When using slider type for the pressing operation, use setting to ensure that anti-moment generated by push force does not exceed **80% of catalog spec moment tolerance**.

Example of calculations:

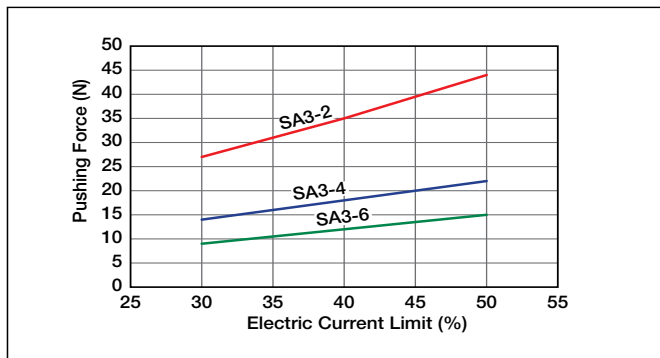
When executing 30N pressing with RCP-3SA6C (Lead 12) type, and performing pressing at 30N, the moment received by the guide is $Ma = (47 + 50) \times 30 = 2910 \text{ (N}\cdot\text{mm)} = 2.91 \text{ (N}\cdot\text{m)}$.

The SA6C allowable load moment (Ma) is 4.31(N·m), 80% of which is 3.448, which is greater than the actual moment load received by the guide (2.91). Therefore, it can be decided that this moment load can be used.

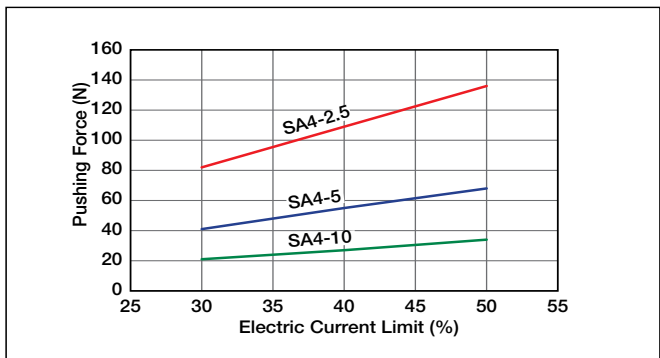


Push force and current limit correlation graph * In the table below, standard figures are shown. Actual figures will differ slightly.

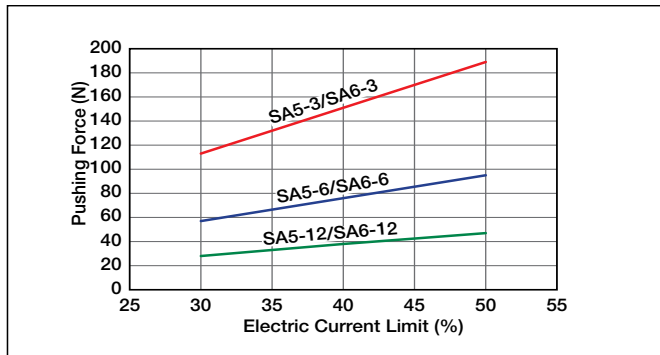
SA3C type



SA4C type



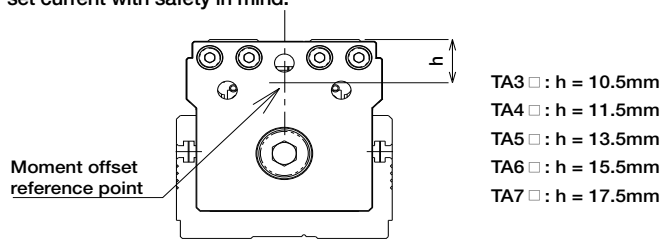
SA5C/SA6C type



RCP3 Series Table Type

When using a table type for the pressing operation, limit the pressing current to prevent anti-moment generated by the push force from exceeding **80%** of the catalog spec rating for moment (Ma, Mb).

To calculate moment, use the guide moment action position shown in the figure below, and consider the amount of offset at the push force action position. Be aware that, if excess force above the rated moment is applied, the guide can be damaged and its use life can be shortened. Therefore, carefully set current with safety in mind.

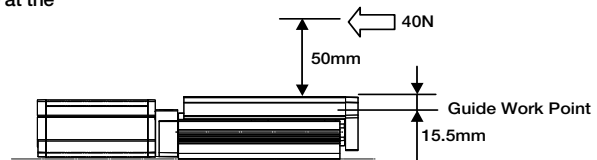


When using a table type for the pressing operation, use setting to ensure that anti-moment generated by the push force does not exceed **80% of catalog spec moment tolerance.**

Example of calculations:

With the RCP3-TA6C (Lead 12) type, using the position shown in the figure at the right, and pressing at 40N,

$$\begin{aligned} \text{the moment received by the guide is } Ma &= (15.5 + 50) \times 40 \\ &= 2620 \text{ (N}\cdot\text{mm)} \\ &= 2.62 \text{ (N}\cdot\text{m)}. \end{aligned}$$

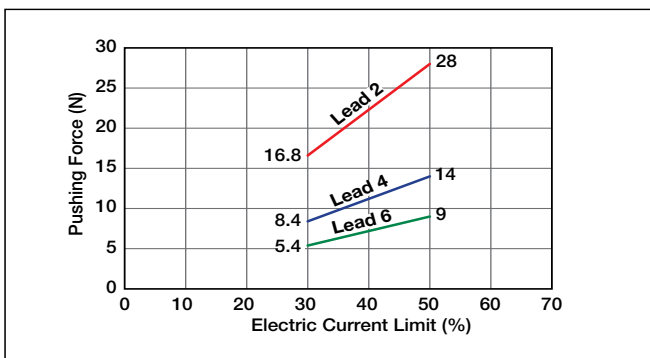


The TA6C allowable load moment (Ma) is 7.26(N•m), 80% of which is 5.968, which is greater than the actual moment load received by the guide (2.62). Therefore, it can be decided that this moment load can be used.

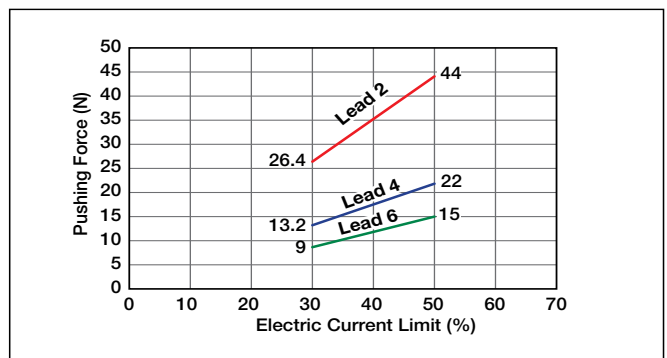
Push force and current limit correlation graph

* In the table below, standard figures are shown. Actual figures will differ slightly.

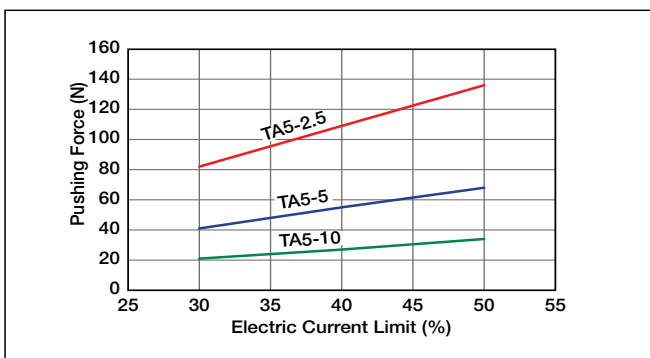
TA3C type



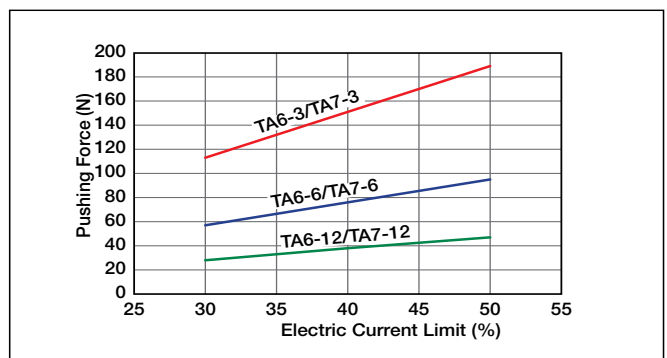
TA4C type



TA5C type



TA6C/TA7C type



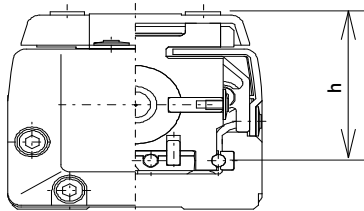
Selection Guide (Push Force and Electric Current Limitation Correlation Graph)

RCP2 Series **Slider Type**

When using the slider type for the pressing operation, limit the pressing current to prevent anti-moment generated by the push force from exceeding 80% of the catalog spec rating for moment (Ma, Mb).

To calculate moment, use the guide moment action position shown in the figure below, and consider the amount of offset at the push force action position.

Be aware that, if excess force above the rated moment is applied, the guide can be damaged and its use life can be shortened. Therefore, carefully set the current with safety in mind.



- SA5C: h = 39mm
- SA6C: h = 40mm
- SA7C: h = 43mm
- SS7C: h = 36mm
- SS8C: h = 48mm

Caution:

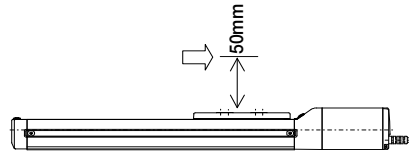
- Pressing operations cannot be performed for Belt type (BA6/BA7).
- Note: The movement speed during pressing is fixed at 20mm/s.

Example of calculations:
With the RCP2-SS7C type, and using the position in the figure at right for 100N pressing,

$$\begin{aligned} \text{the moment received by the guide is } Ma &= (36 + 50) \times 100 \\ &= 8600 \text{ (N}\cdot\text{mm)} \\ &= 8.6 \text{ (N}\cdot\text{m)}. \end{aligned}$$

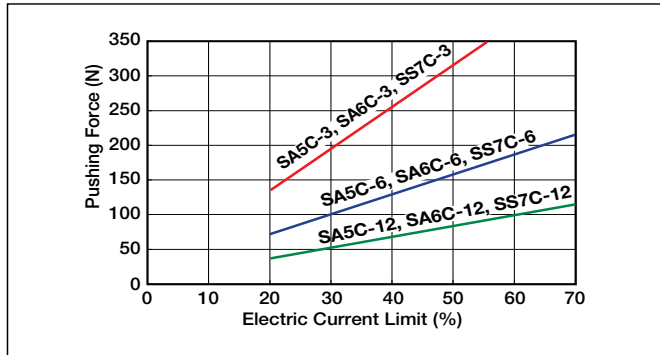
The SS rated moment is $Ma = 14.7 \text{ (N}\cdot\text{m)}$
and $14.7 \times 0.8 = 11.76 > 8.6$, which means it is OK.

Also, when pressing generates moment Mb, use the overhang calculation to similarly confirm that the moment is within 80% of the rated moment.

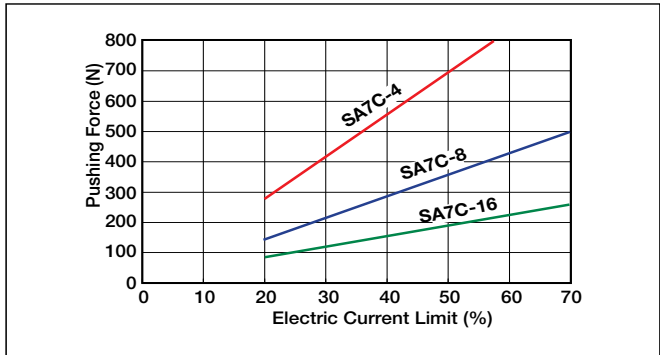


Push force and current limit correlation graph * In the table below, standard figures are shown. Actual figures will differ slightly.

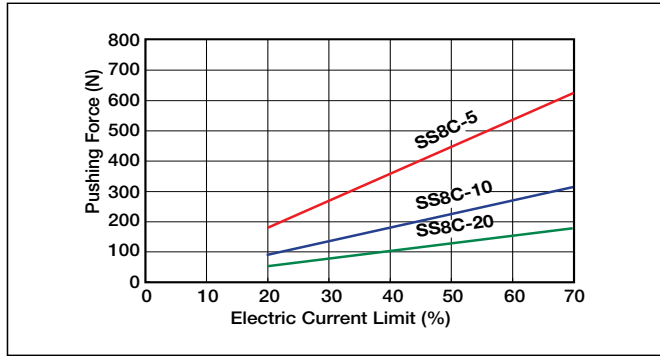
SA5C/SA6C/SS7C type



SA7C type



SS8C type



RCP3 Series

Mini rod type

*The specification value is shown within an area indicated by a red line.

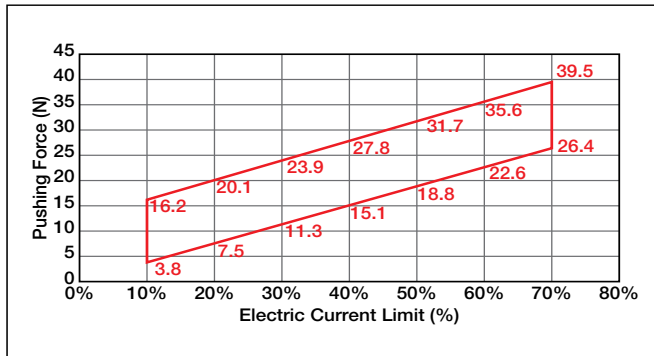
When performing a pressing operation, select a model which has desired push force within an area indicated by the red line in the graph below.

(The graph makes allowance for efficiency reduction due to change due to wear.)

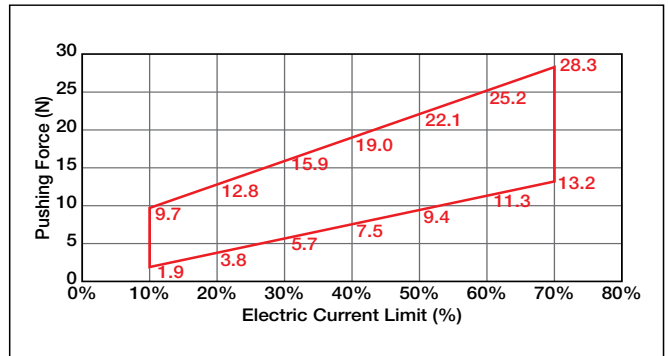
Caution:

Movement speed during pressing operation is fixed at 5mm/s.

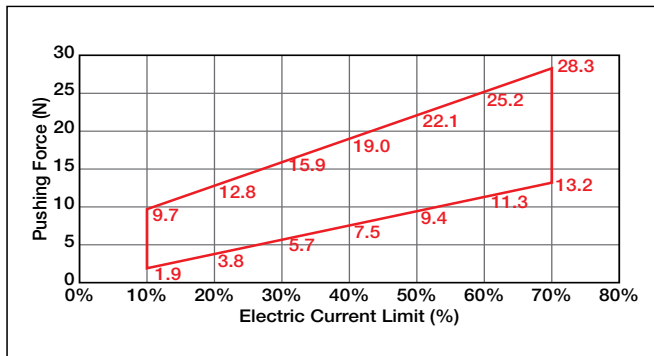
RA2AC/RA2AR Lead 1



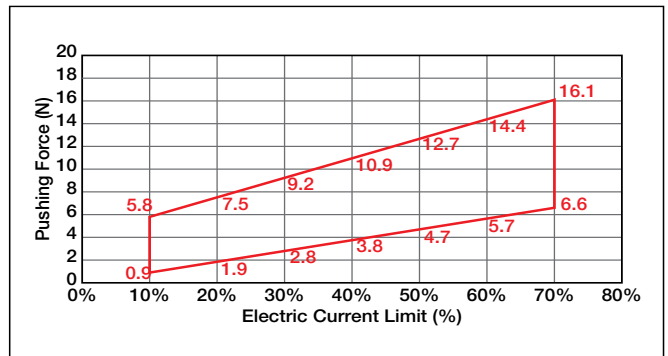
RA2BC/RA2BR Lead 2



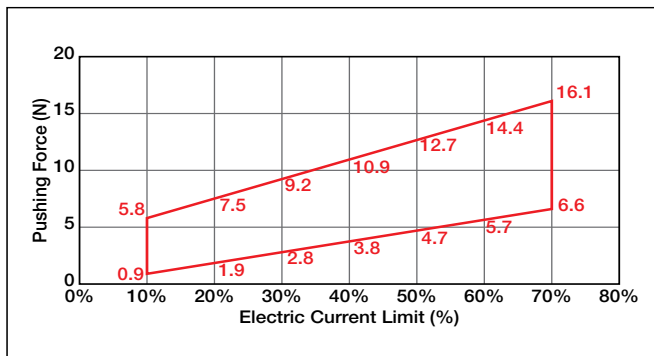
RA2AC/RA2AR Lead 2



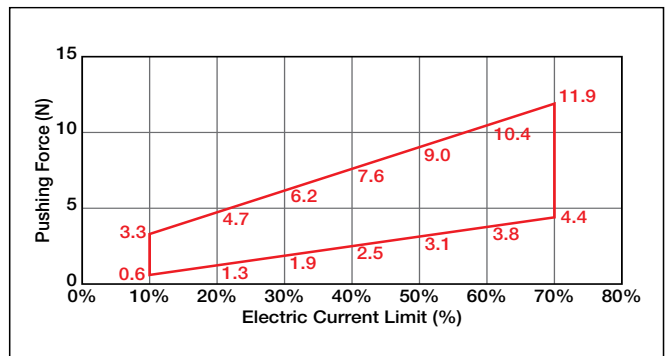
RA2BC/RA2BR Lead 4



RA2AC/RA2AR Lead 4



RA2BC/RA2BR Lead 6

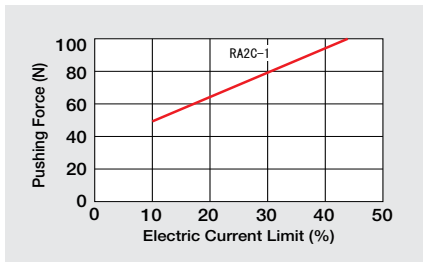


Selection Guide (Push Force and Electric Current Limitation Correlation Graph)

RCP2 Series **Rod Type**

The push force during the pressing operation can be freely changed by changing the controller current limit value. The maximum push force changes according to the type of device, so please select the push force you need from the table below.

RA2C Type



*With the RA2C type, the maximum push force limit is set according to the stroke.

- 25•50 stroke : 100N
- 75 stroke : 70N
- 100 stroke : 55N



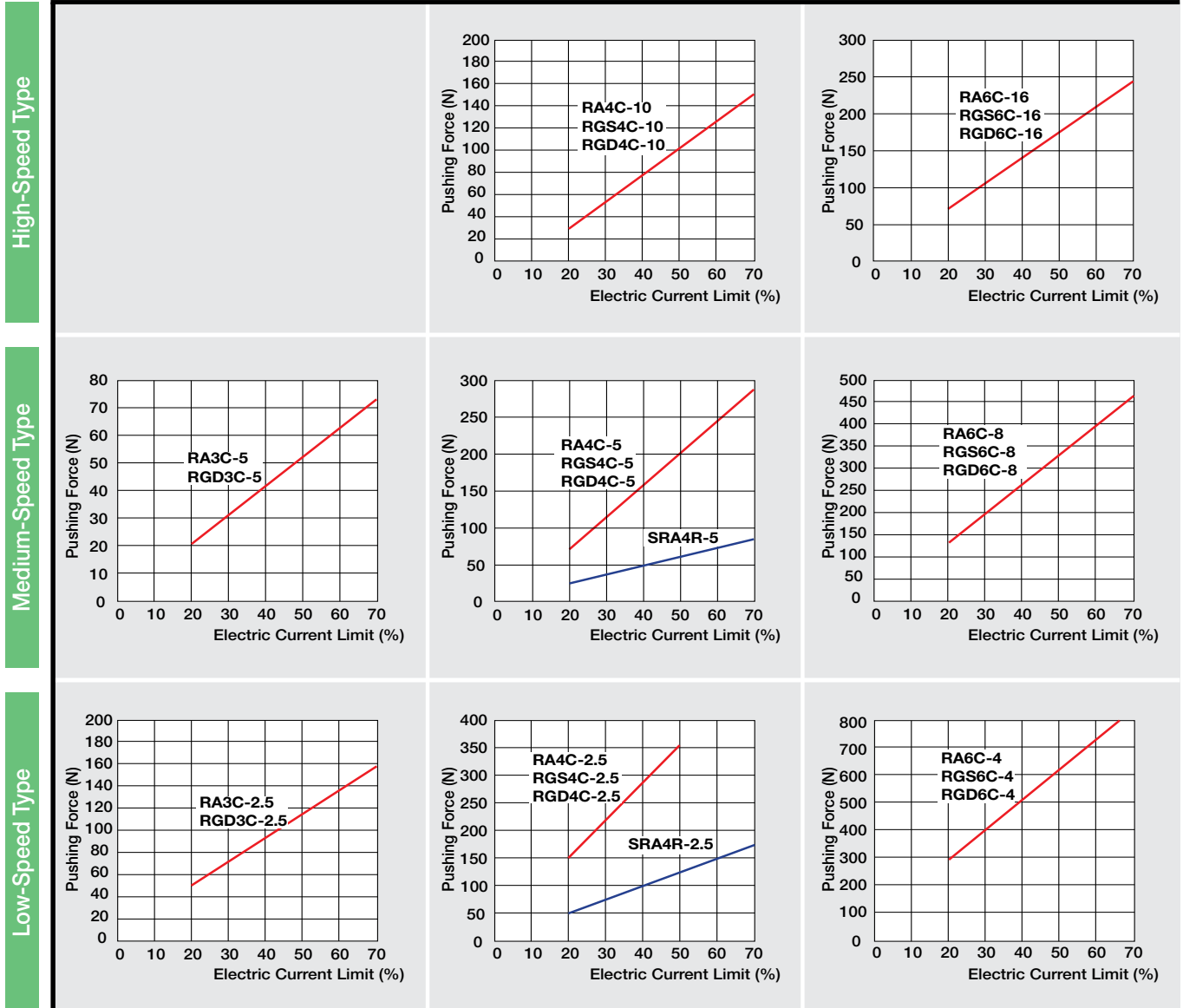
Caution for Use

- The push force and current limit correlation figures are given as standard. Actual figures will slightly differ.
- When the current limit is less than 20%, the push force may vary. Therefore use a current limitation that is 20% or higher.
- Movement speed during the pressing operation is fixed at 20mm/s. (3mm/s for RA2C only)

RA3C/RGD3C

RA4C/RGS4C/RGD4C/SRA4R

RA6C/RGS6C/RGD6C



Note: In the graph above, the number after the type is the lead number.