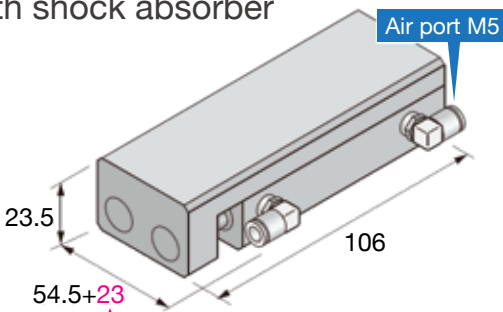
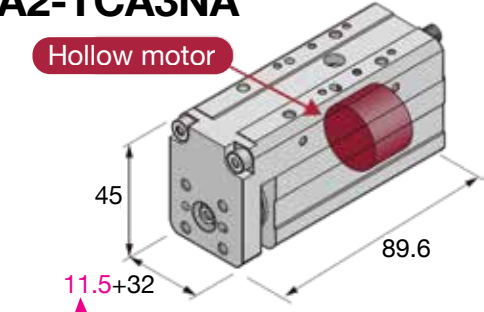
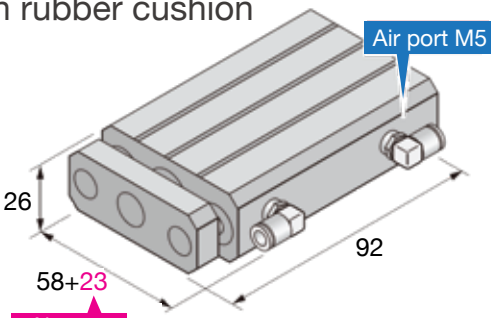
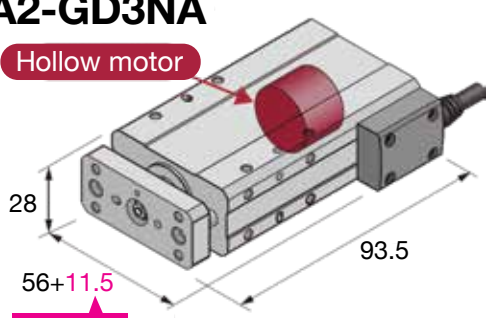
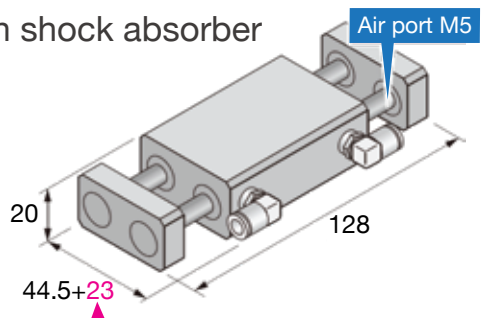
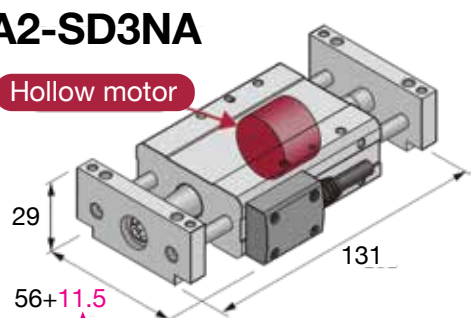


## 1 Switching from Air to Electric

Do you find it **difficult to switch**?

- **Electric cylinders** are available at equivalent sizes to replace air cylinders.
- **Mini ROBO Cylinders** are compact thanks to a hollow motor that makes the overall length short.
- Ideal for replacing air cylinders of equivalent sizes.

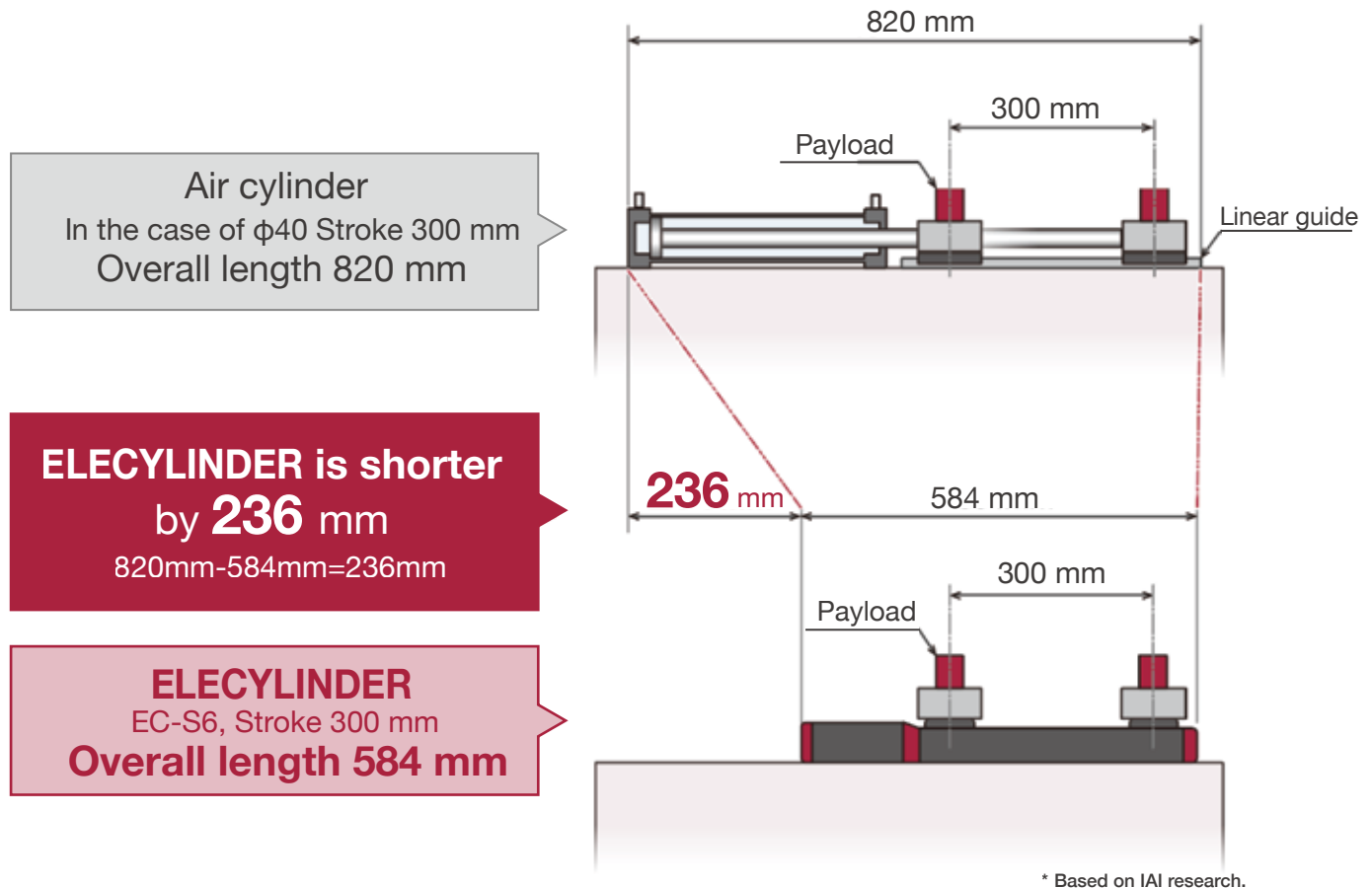
<Comparison of size and performance between air cylinders and Mini ROBO Cylinders>

Type	Air cylinder	Mini ROBO Cylinder
Table type	<p>with shock absorber</p>  <p>Air port M5</p> <p>23.5</p> <p>54.5+23</p> <p>106</p> <p>Air port</p> <p>Stroke: 30 mm with shock absorber <math>\phi</math>8mm, horizontal payload 0.7 kg</p>	<p><b>RCA2-TCA3NA</b></p>  <p>Hollow motor</p> <p>45</p> <p>11.5+32</p> <p>89.6</p> <p>Cable exit</p> <p>Stroke: 30 mm Maximum speed: 200 mm/s Horizontal payload: 0.75 kg Ball screw lead: 4 mm</p>
with double guide	<p>with rubber cushion</p>  <p>Air port M5</p> <p>26</p> <p>58+23</p> <p>92</p> <p>Air port</p> <p>Stroke: 20 mm with rubber cushion <math>\phi</math>12 mm, horizontal payload 1.1 kg</p>	<p><b>RCA2-GD3NA</b></p>  <p>Hollow motor</p> <p>28</p> <p>56+11.5</p> <p>93.5</p> <p>Cable exit</p> <p>Stroke: 50 mm Maximum speed: 100 mm/s Horizontal payload: 1.5 kg Ball screw lead: 2 mm</p>
Slide unit	<p>with shock absorber</p>  <p>Air port M5</p> <p>20</p> <p>44.5+23</p> <p>128</p> <p>Air port</p> <p>Stroke: 20 mm with shock absorber <math>\phi</math>10 mm, <math>\phi</math>10 mm, horizontal payload 1.05 kg</p>	<p><b>RCA2-SD3NA</b></p>  <p>Hollow motor</p> <p>29</p> <p>56+11.5</p> <p>131</p> <p>Cable exit</p> <p>Stroke: 25 mm Maximum speed: 100 mm/s Horizontal payload: 1.5 kg Ball screw lead: 2 mm</p>

## 2 Dimensions of **ELECYLINDER** and Air cylinder

### Do you think that **ELECYLINDERS** are larger than Air cylinders?

- For transfer applications, **ELECYLINDERS** are smaller than air cylinders.  
The overall length of the slider type (with built-in guide) **ELECYLINDER** is **236mm** shorter than that of a rod type air cylinder!



### Reason why the above comparison is not with the rod-less air cylinder

For transfer applications, a rod type air cylinder is more likely to be used with a guide.  
The reasons are as follows:

- Rod-less air cylinders are more expensive than rod type air cylinders.
- Rod-less air cylinders have a shorter operational life than rod type air cylinders.

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The information contained in this product brochure may change without prior notice due to product improvements.

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