



## Cylinder / Selection table



**U2WB-SC39Q**



**U2WA-C**



**AR-10B-300S**

### Order Key

TYPE			OPTION		
U2	W	A	-	SC39	Q C
Model	Load direction	Indicate Position		Rubber Cushion	QPQ Shaft
				QPQ Shaft	Chrome Shaft

U2W : Both Load Cylinder.

U2S : Extending Load Only.

U2C : Compressing Load Only.

### General Advantage

WATA U2 SERIES provide excellent exercise feeling and durability with an accurate load resistance control system (pressure control cylinder) compared to fluid flow control cylinder. U2 series cylinder is manufactured from anti-corrosion material like a aluminum and stainless steel with parts accurately made by 5-Axis CNC machine.

### U2 Series

You can select the resistance direction of the cylinder according to the equipment specification. The standard model is the U2W which provides resistance on both direction. There is also the U2S which is made only with extending load. On the other hand, the U2C cylinder is only with made compressing load.

### AR Series

AR cylinder offers an automatically retract rod shaft by an inside return spring. This series is unique to apply on a leg press machine and leg extension machine which needs to retract the foot plate.

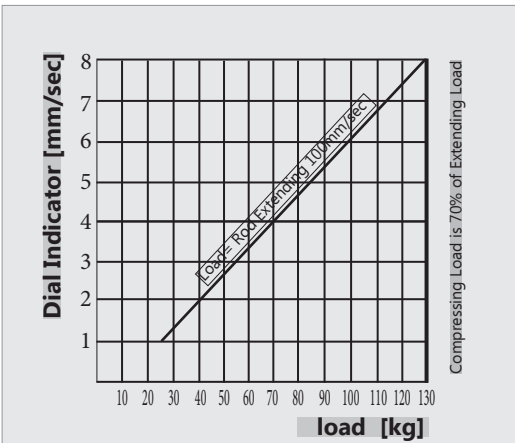
### V2EX Series

This model is connected to the cylinder and valve by hydraulic hose so that V2EX controller can be easily installed anywhere you desire for facile control. This is a unique product of WATA Engineering with a special conveniently placed resistance control valve.



Instead of having orifices controlling the passage of hydraulic flows, U2 Series cylinder controls the internal pressure through a hydraulic control valve. Therefore there is no functioning noise caused by the movement of hydraulic pressure, and the cylinder shows the most similar movement characteristics as those of the existing machines based on weight, enabling smooth and safe weight training. When implemented on a weight machine, U2 Series cylinders make it possible to adjust the minimum training weight by grams (g), being optimized for the weight training of anyone, the young and the old. WATA high quality cylinder will enhance the value and quality of your equipment.

### U2W & U2S Load Characteristic Curve

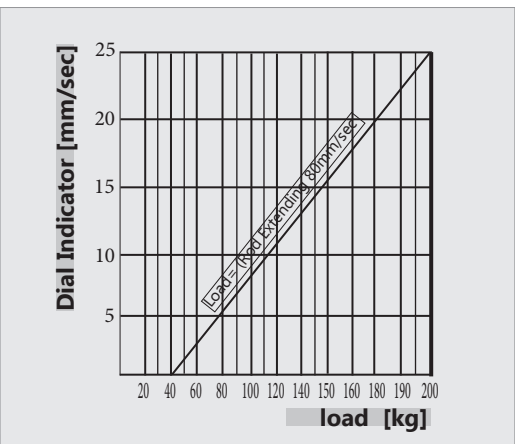


### Model Features

<b>U2W</b>	S45C Chromated Rod Shaft & SUS Rod end Bearing
<b>U2S</b>	Same material SPEC as U2W, Extending load Only.
<b>U2C</b>	Same material SPEC as U2W, Compressing Load Only.

- 1) Load tolerance is  $\pm 10\%$  of maximum load.
- 2) The graph on the left is showing the cylinder load curve, the final exercise weight of the machine is according to your machine design.
- 3) When you install the cylinder in your machine, the rod shaft side must be tilted up to 5 degrees (avoid horizontal installation).
- 4) We can supply custom made cylinder to your specifications.

### AR-10B-S300 Load Characteristic Curve



### Model Features

<b>AR-10B-S300</b>	80mm stroke (standard model), Extending load Only.
<b>AR-10B-S400</b>	150mm stroke (option), Extending load Only.

- 1) Load tolerance is  $\pm 10\%$  of maximum load.
- 2) The graph on the left is showing the cylinder load curve, the final exercise weight of the machine is according to your machine design.
- 3) When you install the cylinder in your machine, the rod shaft side must be tilted up to 5 degrees (avoid horizontal installation).
- 4) We can supply custom made cylinder to your specifications.

### Technical Data

MODEL	U2 SERIES	AR SERIES
<b>Material</b>	Aluminum & Stainless	
<b>Stroke</b>	220mm	80 mm
<b>Compressed length</b>	404mm	300mm
<b>Extended length</b>	628mm	380mm
<b>Temperature range</b>	-30°C to 80°C (-86°F to +176°F)	
<b>Seal material</b>	NBR, Uretan, Teflon	
<b>Operating fluid</b>	Mineral oil based hydraulic fluid (others upon request)	
<b>Application Type (push &amp; pull)</b>	Compressed load is 70% of the extending load (U2 Series only)	
<b>lifetime</b>	Million times (1,000,000 times)	