

## M10, M16 series

### Feature

- ▶ **Bearing bush type level compensator (low friction)**
- ▶ **Light weight and durability design (long life-time)**
- ▶ **Extend compatibility with multiple connectors**

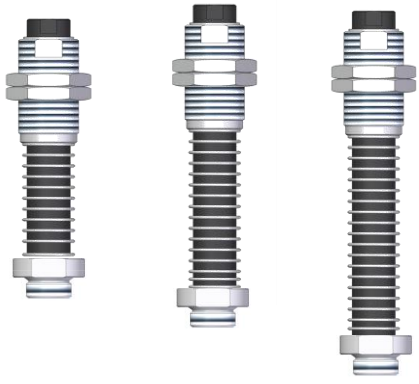
### Specification

Model	Stroke (mm)	Weight (g)	Material
M1030	30	90	AL, SS, BS, SUM
M1030-18M	30	86.54	AL, SS, BS, SUM
M1050	50	99.3	AL, SS, BS, SUM
M1050-18M	50	95.84	AL, SS, BS, SUM
M1070	70	108.58	AL, SS, BS, SUM
M1070-18M	70	105.12	AL, SS, BS, SUM
M1630	30	200.62	AL, SS, BS, SUM
M1630-18M	30	191.15	AL, SS, BS, SUM
M1630-14M	30	193.52	AL, SS, BS, SUM
M1630-38M10F	30	198.06	AL, SS, BS, SUM
M1650	50	213.66	AL, SS, BS, SUM
M1650-18M	50	204.19	AL, SS, BS, SUM
M1650-14M	50	206.56	AL, SS, BS, SUM
M1650-38M10F	50	211.1	AL, SS, BS, SUM
M1670	70	225.86	AL, SS, BS, SUM
M1670-18M	70	216.39	AL, SS, BS, SUM
M1670-14M	70	218.76	AL, SS, BS, SUM
M1670-38M10F	70	223.3	AL, SS, BS, SUM

## Structure - M10 & M16 series

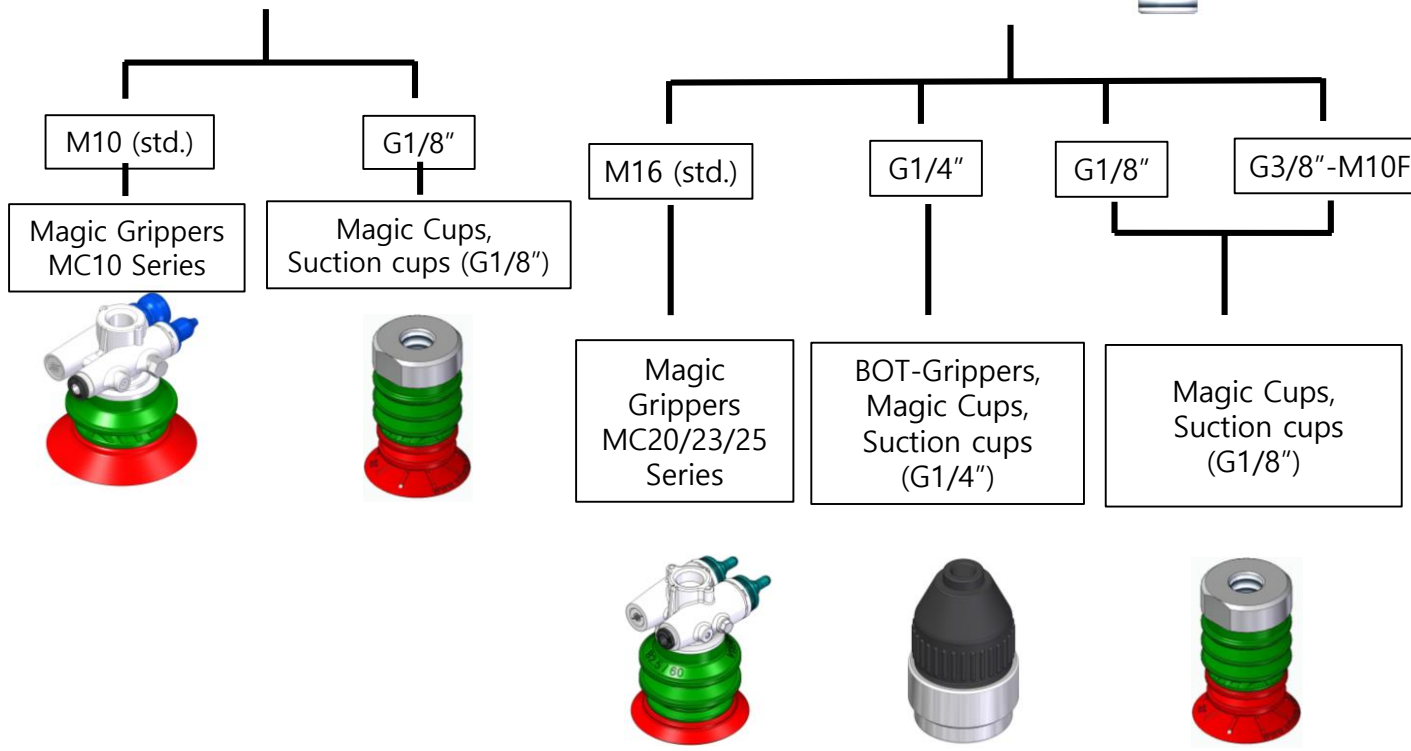
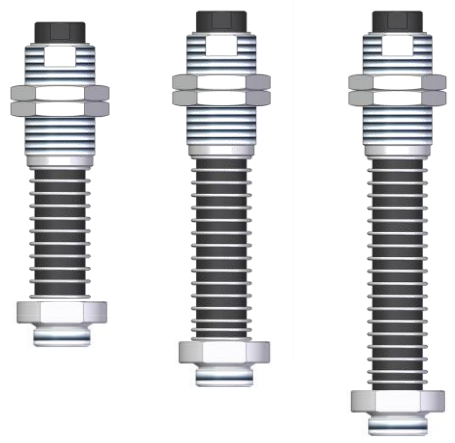
### M10 Series

- M1030 (ST 30)
- M1050 (ST 50)
- M1070 (ST 70)

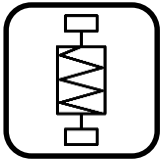


### M16 Series

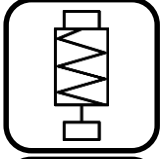
- M1630 (ST 30)
- M1650 (ST 50)
- M1670 (ST 70)



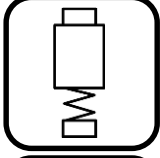
## Dimensions – Basic Pump



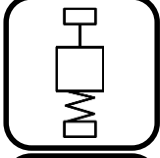
Vacuum port – Non fixed type  
Spring – Inner type



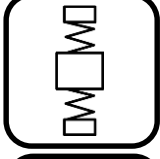
Vacuum port – Fixed type  
Spring – Inner type



Vacuum port – Fixed type  
Spring – Outer type



Vacuum port – Non fixed type  
Spring – Outer type



Vacuum port – Non fixed type  
Spring – Outer type



Rotating level compensator



Non-Rotating level compensator



180° Rotating level compensator



Energization specification



Possible secondary cell & semiconductor

## Dimensions – M10 Series

<p><b>Dimension</b></p>			
<p><b>Model</b></p>	<p><b>M1030</b></p>	<p><b>M1030-18M</b></p>	<p><b>M1050</b></p>
<p><b>Description</b></p>			
<p><b>Stroke</b></p>	<p><b>30mm</b></p>	<p><b>30mm</b></p>	<p><b>50mm</b></p>
<p><b>Material</b></p>	<p><b>BS, SUM, SUS, AL</b></p>	<p><b>BS, SUM, SUS, AL</b></p>	<p><b>BS, SUM, SUS, AL</b></p>

## Dimensions – M10 Series

<p><b>Dimension</b></p>			
<p><b>Model</b></p>	<p><b>M1050-18M</b></p>	<p><b>M1070</b></p>	<p><b>M1070-18M</b></p>
<p><b>Description</b></p>			
<p><b>Stroke</b></p>	<p><b>50mm</b></p>	<p><b>70mm</b></p>	<p><b>70mm</b></p>
<p><b>Material</b></p>	<p><b>BS, SUM, SUS, AL</b></p>	<p><b>BS, SUM, SUS, AL</b></p>	<p><b>BS, SUM, SUS, AL</b></p>

## Dimensions – M16 Series

Dimension			
Model	M1630	M1630-18M	M1630-14M
Description			
Stroke	30mm	30mm	30mm
Material	BS, SUM, SUS, AL	BS, SUM, SUS, AL	BS, SUM, SUS, AL

## Dimensions – M16 Series

Dimension			
Model	M1630-38M10F	M1650	M1650-18M
Description			
Stroke	30mm	50mm	50mm
Material	BS, SUM, SUS, AL	BS, SUM, SUS, AL	BS, SUM, SUS, AL

## Dimensions – M16 Series

Dimension			
Model	<b>M1650-14M</b>	<b>M1650-38M10F</b>	<b>M1670</b>
Description			
Stroke	<b>50mm</b>	<b>50mm</b>	<b>70mm</b>
Material	<b>BS, SUM, SUS, AL</b>	<b>BS, SUM, SUS, AL</b>	<b>BS, SUM, SUS, AL</b>



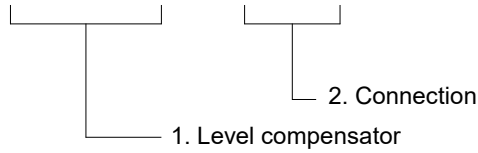
## Dimensions – M16 Series

Dimension			
Model	M1670-18M	M1670-14M	M1670-38M10F
Description			
Stroke	70mm	70mm	70mm
Material	BS, SUM, SUS, AL	BS, SUM, SUS, AL	BS, SUM, SUS, AL

## Build an Ordering No.



**M1050 - 18M**

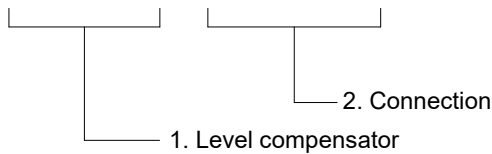


1. Level compensator	Description	Symbol
	Level compensator M10 series, 30mm stroke	M1030
	Level compensator M10 series, 50mm stroke	M1050
	Level compensator M10 series, 70mm stroke	M1070

2. Connection	Description	Symbol
	Connection – Fitting for Magic gripper MC10 series	Blank
	Connection – Fitting G1/8" male	18M



**M1650 - 38M10F**



1. Level compensator	Description	Symbol
	Level compensator M16 series, 30mm stroke	M1630
	Level compensator M16 series, 50mm stroke	M1650
	Level compensator M16 series, 70mm stroke	M1670

2. Connection	Description	Symbol
	Connection – Fitting for magic gripper MC20, 23, 25 series	Blank
	Connection – Fitting G1/8" male	18M
	Connection – Fitting G1/4" male	14M
	Connection – Fitting G3/8" male, M10 female	38M10F