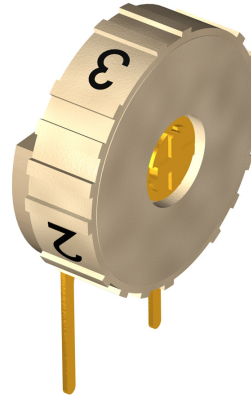


Features

- ☉ Durable tampon-printed numbering, various types
- ☉ Different knobs available
- ☉ Different axles available
- ☉ Different bases available
- ☉ Different plastic colors available
- ☉ Accurate tapers. Linear logarithmic, double logarithmic, and custom-made
- ☉ Customized electrical resistance values and tolerances



Contents

	Page
History Revision	2
Mechanical Specifications	3
Electrical Specifications	3
Material Specifications	3
Environmental Conditions	4
Recommended Process Parameters	4
Mechanical Dimensions	5
Knob Styles	5
Plastic Colors	6
Knob Prints	6
Base Styles	7
Axle Styles	9
Color Coding	9
Product Specification Form	10

Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible.

History Revision

Revision Number/Date	Change from last revision
05 / May. 03	History Revision added. New front picture showing the improved plating has been added
06 / Mar. 08	Storage humidity added. Operational temperature and humidity removed. New lay-out. New data sheet design
MT1040.A (07/08)	Minimum resistance value on linear tapers increased to 200 Ω .
007/JUL-09-2009	No technical updates
008/FEB-09-2010	Knob Styles Nos. 00 and 05 removed

Mechanical Specifications

Rotational angle, mechanical.....	250° ±3°
Resistance curve angle.....	230°
End stop torque.....	Min. 300 cNcm
Rotational torque.....	Max. 10 cNcm, typical 3-7 cNcm
Lifetime.....	Min. 25,000 cycles
Bending of terminals.....	Min. 1 bending cycle 90°, min. 0.5 mm [0.02"] from housing
Terminal retention force.....	Min. 10 N

Electrical Specifications

Resistance value:	
-Linear.....	200 Ω to 1 MΩ
-Logarithmic.....	500 Ω to 600 kΩ
-Double logarithmic.....	2 kΩ to 500 kΩ
Resistance value tolerance.....	±20% (-20% to +30% for values ≤ 1 kΩ)
Resistance taper.....	See 'Tapers Data Sheet'
Wiper contact resistance.....	Typ. better than 20 dB rel. R
Potentiometer max. load.....	10 mW

Material Specifications

All materials comply with RoHS directive (2002/95/EC)



Terminals.....	CuNiZn, gold flash plated
Other metal parts.....	CuNiZn
Knob.....	PA 6.6
Base.....	PES
Carbon track base.....	Glass epoxy composite
Resistance material.....	Carbon/Silver composite

Lubricant, glue/seal, and paint specifications are proprietary information.

Environmental Conditions

Storage temperature -40 to + 60°C
Storage humidity 10 to 95% RH

Recommended Process Parameters

Mounting:

Fixation nut mounting torque Max. 200 cNcm

Soldering:

Soldering temperature and time 300°C [572°F] for 3 s or 350°C [662°F] for 1 s

Soldering distance Min. 0.5 mm [0.02"] from housing
To prevent damage to the carbon taper as a result of the soldering process, the knob must be turned either fully CW or CCW.

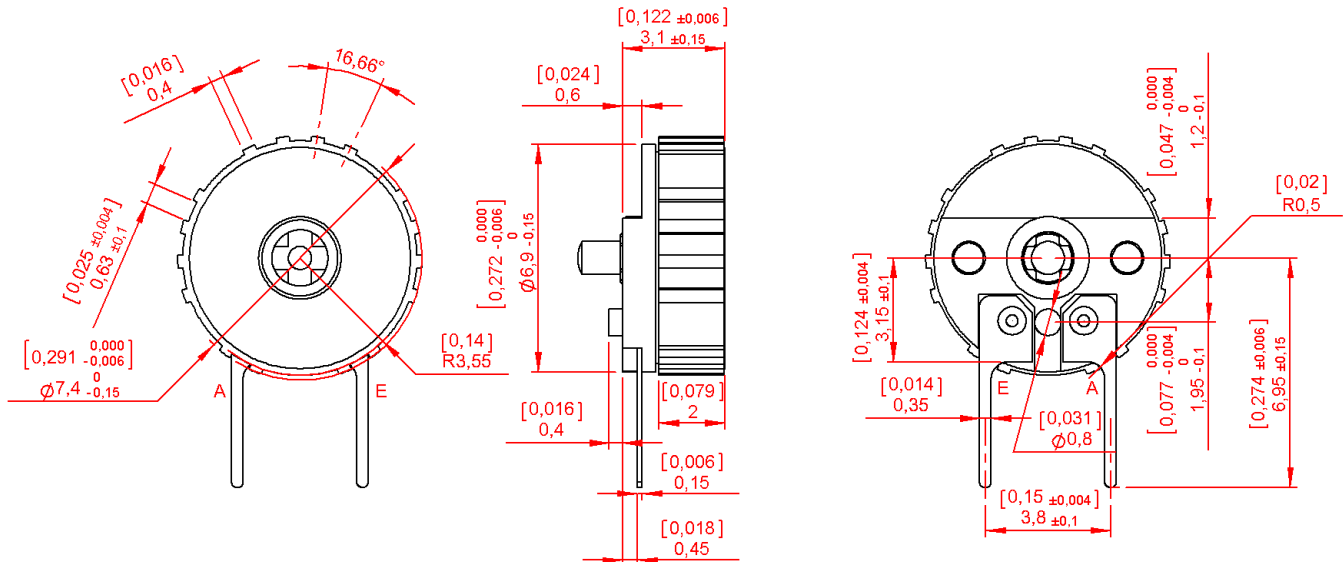
Mechanical stress on soldering terminals must be avoided during soldering.

Cleaning:

Cleaning solvents Aqua wash (Alpha 2110), Benzine
Ultrasonic cleaning must be avoided as it may remove the lubricant inside the component.

Mechanical Dimensions

The knob is turned CCW to stop (terminal A)



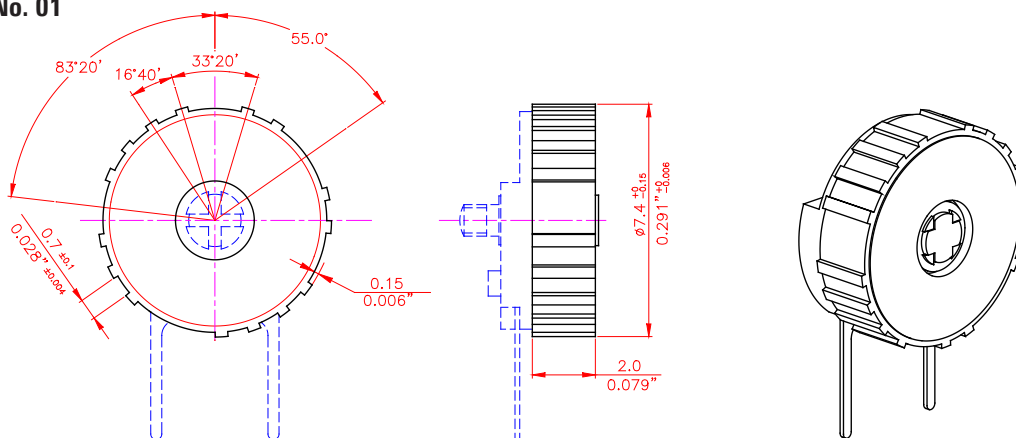
Note:

The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

Knob Styles

All knobs are shown turned CCW to stop (terminal A)

No. 01



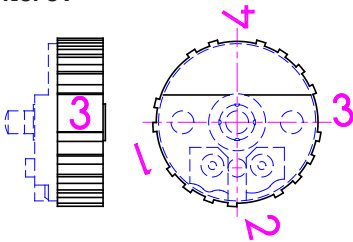
Plastic Colors

Please refer to the series 200 included in the Sonion 'Plastic Color Assortment' binder.

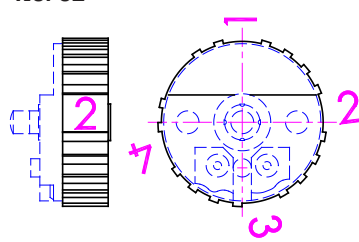
Knob Prints

The knob is shown turned CCW to stop at terminal A on all drawings. Available knob print colors: White, black and brown.

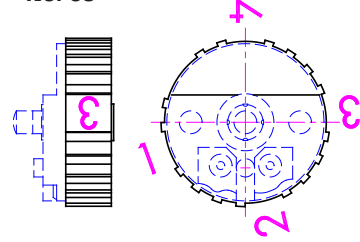
No. 01



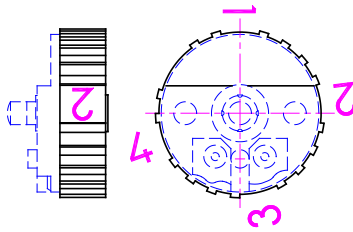
No. 02



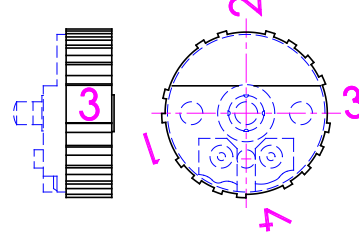
No. 03



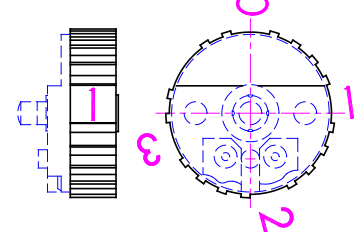
No. 04



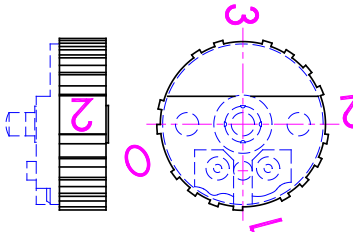
No. 05



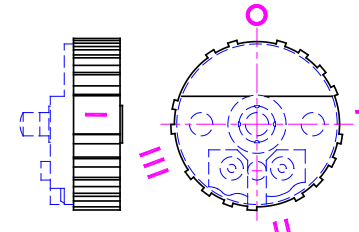
No. 06



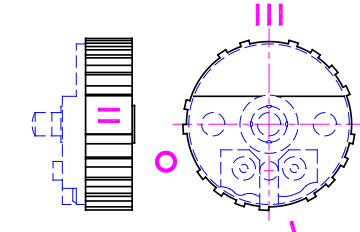
No. 07



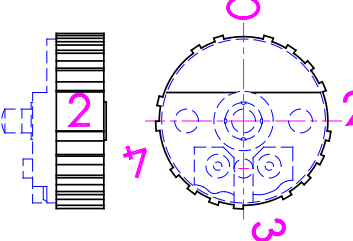
No. 10



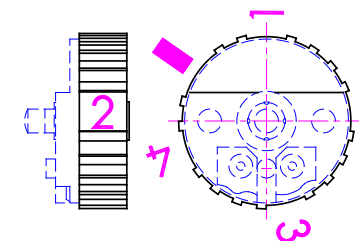
No. 11



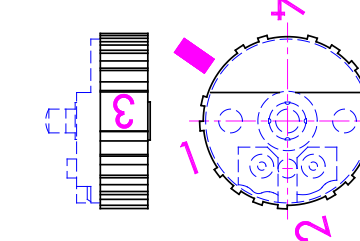
No. 22



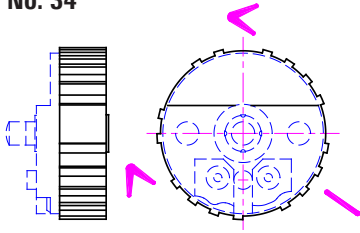
No. 32



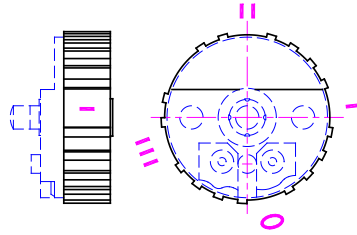
No. 33



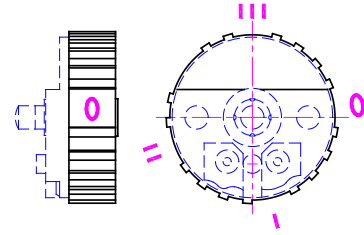
No. 34



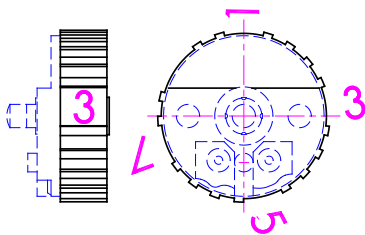
No. 42



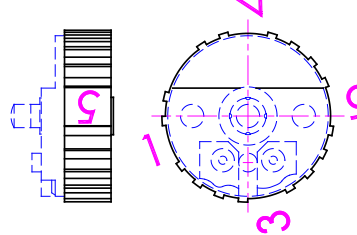
No. 43



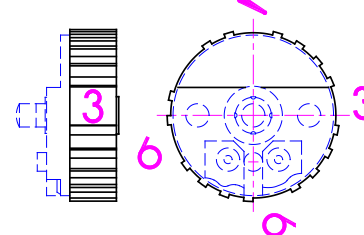
No. 44



No. 45

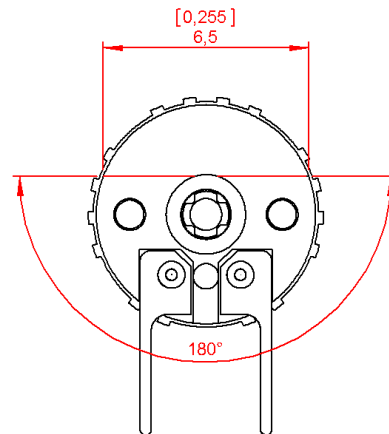
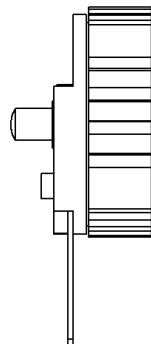
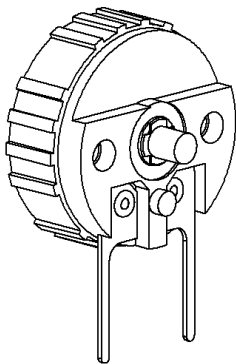


No. 66

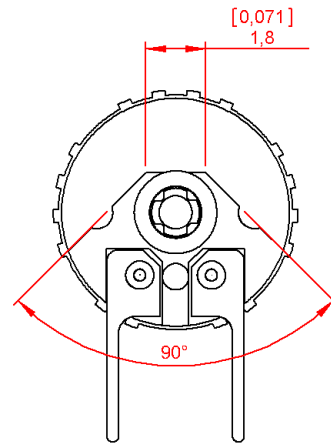
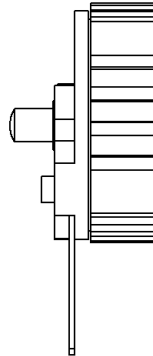
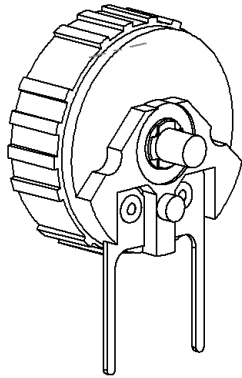


Base Styles

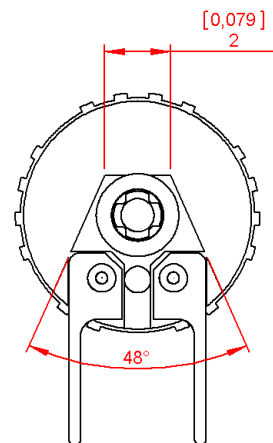
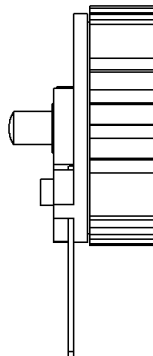
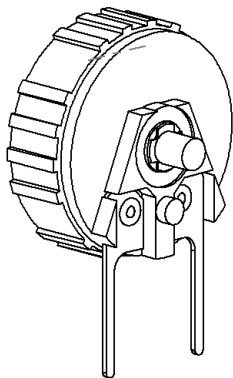
No. 01 - 180°



No. 02 - 90°

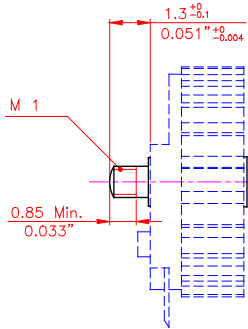


No. 03 - 48°

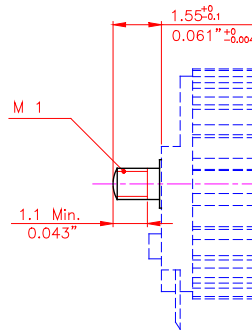


Axle Styles

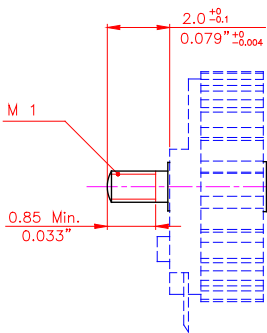
No. 01



No. 02



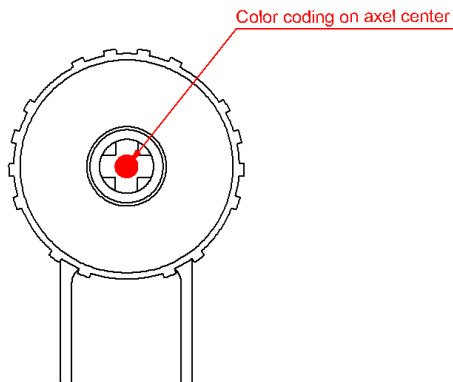
No. 03



Color Coding

Axle

Please refer to colors for coding included in the Sonion 'Plastic Color Assortment' binder.



Product Specification Form

Name: _____

Company: _____

Customer Part No.: _____

Parameters	Look at Page	Enter your choices	Guidelines
Model	1	PJ 74	
Knob Styles	6		
Knob Prints	7-8		Please enter knob print style and knob print color. Color: White, brown or black
Base Styles	8-9		
Axle Styles			
Plastic Colors	7		Please refer to the series 200 included in the Sonion 'Plastic Color Assortment' binder
Color Coding	10		Axle Please refer to colors for coding included in the Sonion 'Plastic Color Assortment' binder
Resistance Value			Please see 'Electrical Specifications' and 'Tapers Data Sheet'
Resistance Taper			Please see 'Electrical Specifications' and 'Tapers Data Sheet'