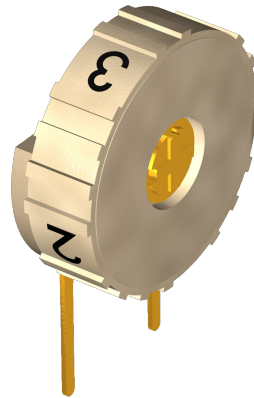


Volume Controls Model PJ 74



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

1. History Revision.....	3
2. Mechanical Specifications.....	4
3. Electrical Specifications.....	4
4. Material Specifications.....	4
5. Environmental Conditions.....	5
6. Recommended Process Parameters.....	5
7. Mechanical Dimensions.....	6
8. Knob Styles.....	6
9. Plastic Colors.....	7
10. Knob Prints.....	7
11. Base Styles.....	9
12. Axle Styles.....	10
13. Color Coding.....	10
14. Product Specification Form.....	11

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

1. 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
009/2014-01-17	Updated design and new RoHS logo directive (2011/65/EU)
010/2019-09-03	Change of storage temperature and humidity (CR3860)

2. 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

3. 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

4. Material Specifications

All materials comply with RoHS directive (2011/65/EU)

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.

5. Environmental Conditions

Storage temperature	25°C
Storage humidity	60% RH
Purpose is to protect from high humidity and keep at driest condition as possible	

6. Recommended Process Parameters

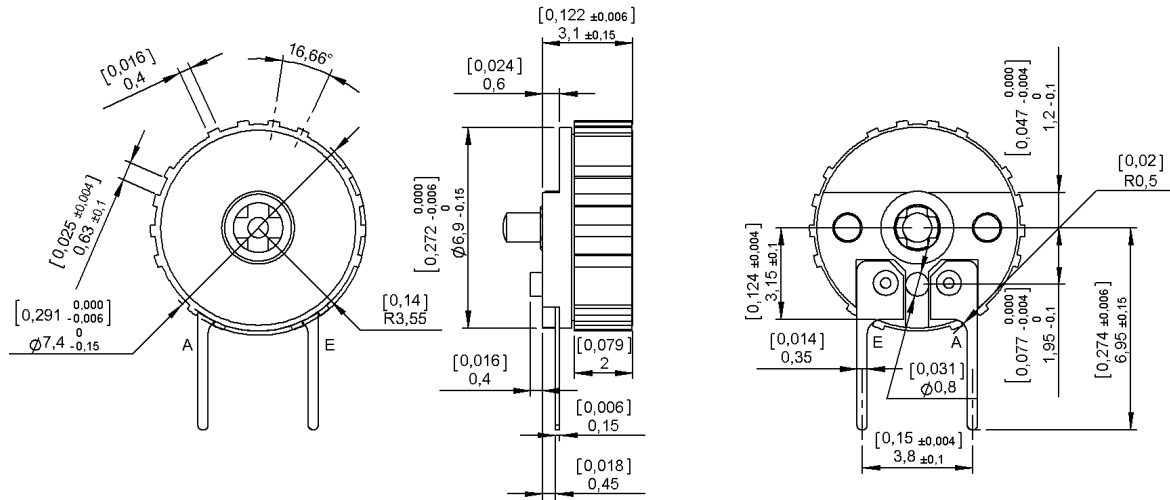
Mounting	
Fixation nut mounting torque	Max. 200 cNcm

Soldering	
Soldering temperature and time	300°C [572°F] for 3 s or 350°C [662°F] for 1 s
Soldering distance	<p>Min. 0.5 mm [0.02"] from housing</p> <p>To prevent damage to the carbon taper as a result of the soldering process, the knob must be turned either fully CW or CCW.</p> <p>Mechanical stress on soldering terminals must be avoided during soldering</p>

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

7. Mechanical Dimensions

The knob is turned CCW to stop (terminal A)



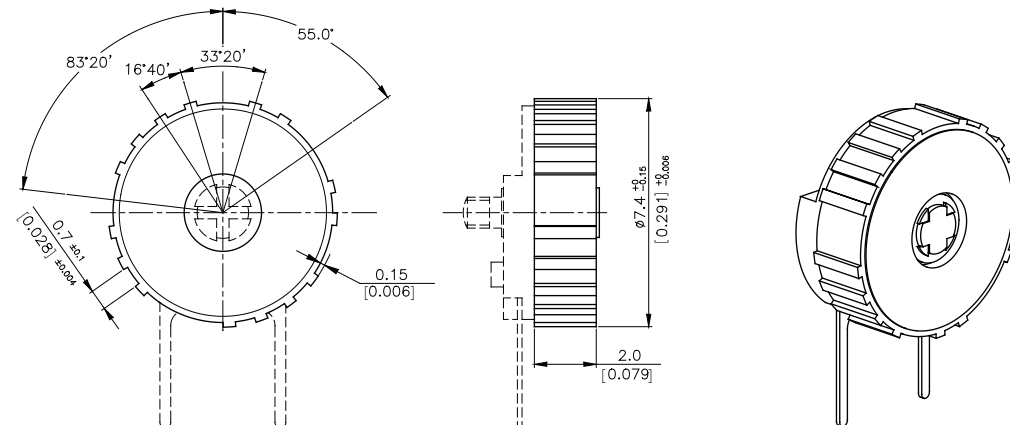
Note:

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.

8. Knob Styles

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

No. 01



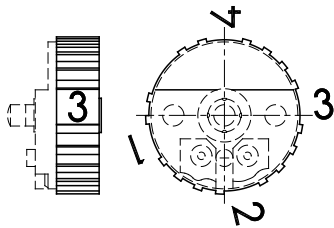
9. Plastic Colors

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

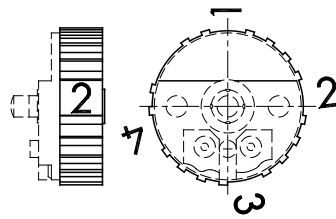
10. Knob Prints

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

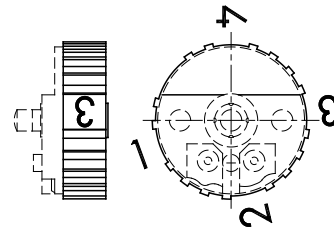
No. 01



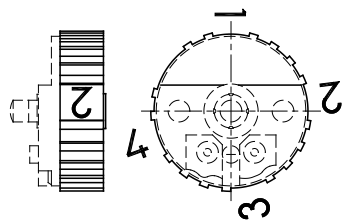
No. 02



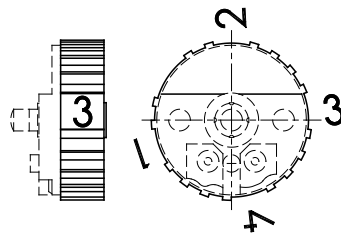
No. 03



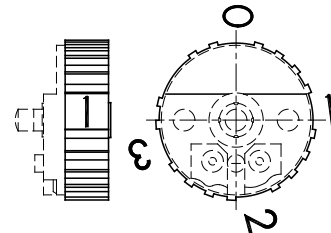
No. 04



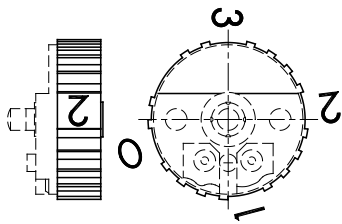
No. 05



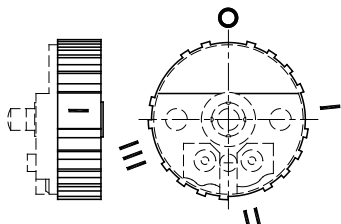
No. 06



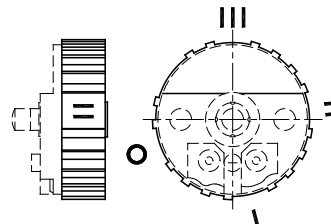
No. 07



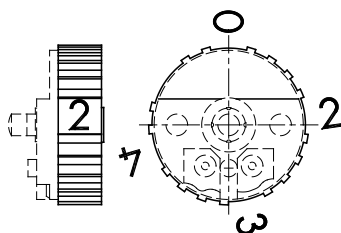
No. 10



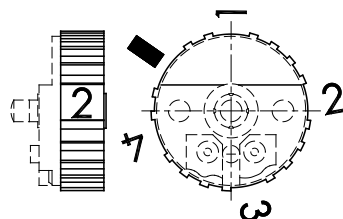
No. 11



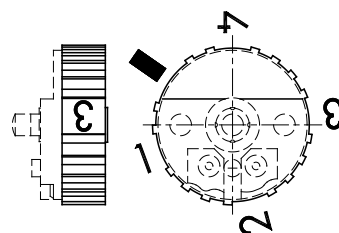
No. 22



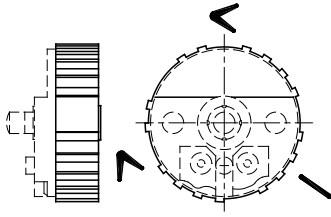
No. 32



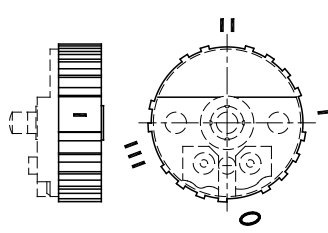
No. 33



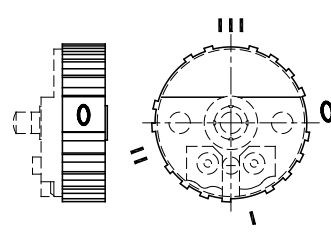
No. 34



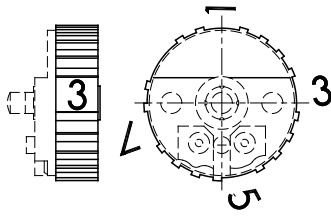
No. 42



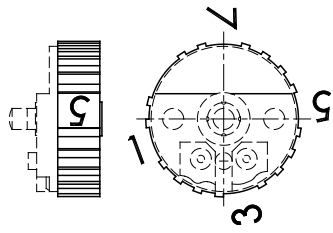
No. 43



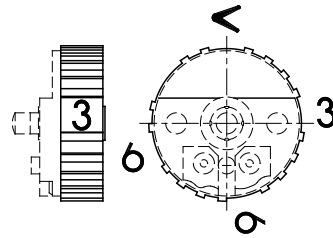
No. 44



No. 45

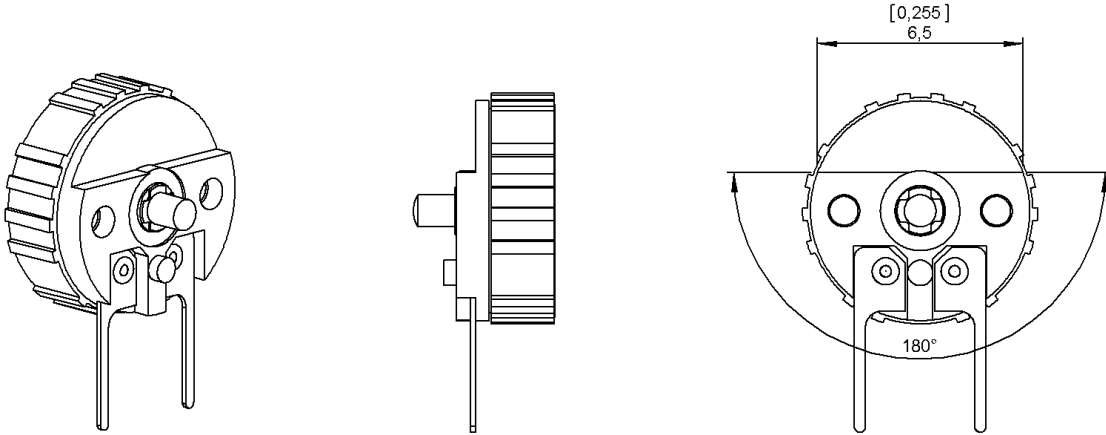


No. 66

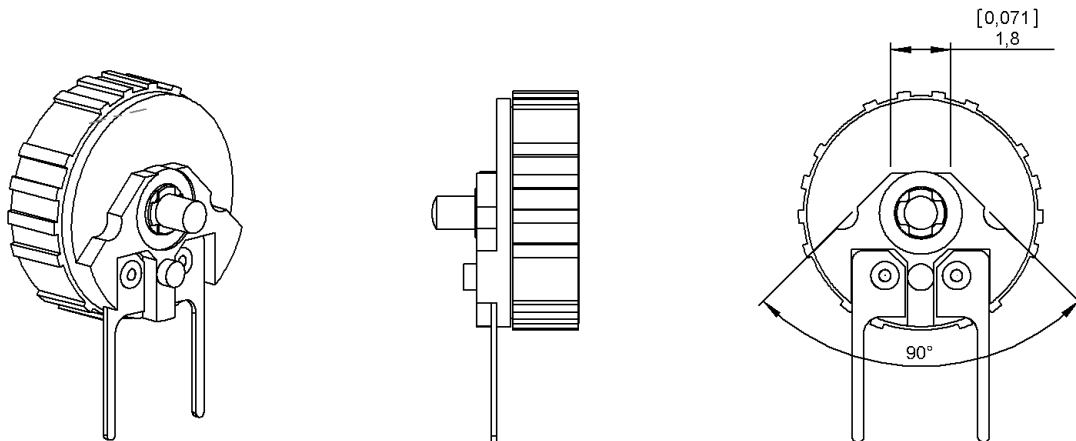


11. Base Styles

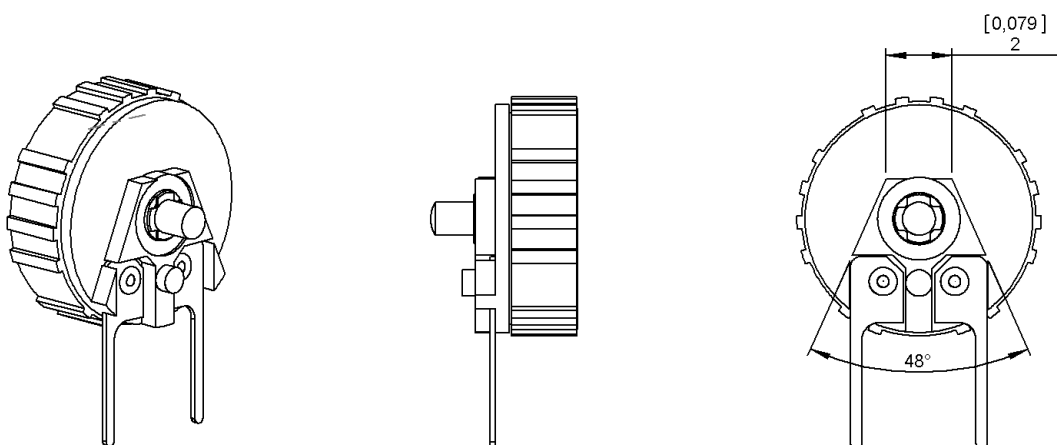
No. 01 - 180°



No. 02 - 90°

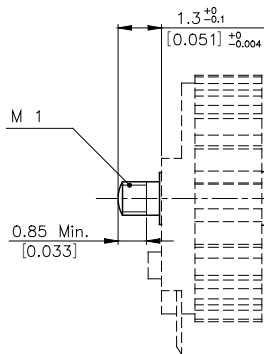


No. 03 - 48°

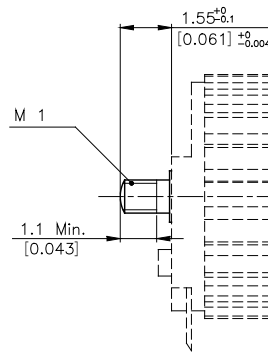


12. Axle Styles

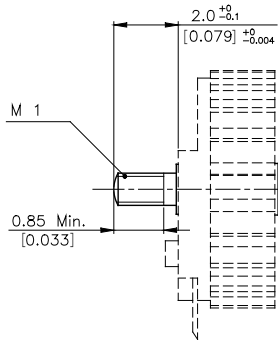
No. 01



No. 02



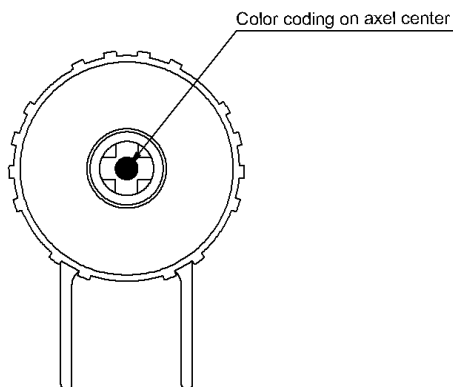
No. 03



13. Color Coding

Axle

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



14. Product Specification Form

Name _____

Company _____

Customer Part No. _____

Parameters	Look at Page	Enter your choices	Guidelines
Model	2	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	10		
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'