



Potentiometer max. 8 W with cable tail



Potentiometer

Features

- High IP-protection class
- Simple installation
- No further approvals required

Description

This standard range of up to 8 W potentiometers with wire-wound resistors show that EEx potentiometers can be small and compact.

The external dimensions are approximately the same as those of standard industrial potentiometer enclosures. Central fixing in a single hole and the standard size of shaft have been included. From the variety of resistors on the market we have chosen the most commonly used types and developed a standard program range.

The metal EEx d enclosures are tailored to the dimensions of the resistors and features 30 mm to 60 mm diameters. The potentiometers have been designed to utilize the total nominal capacities of temperature classes T5 and T6 and to be used in all Ex areas except zone 0.

They can be fixed and protected against turning in different ways. Two nuts are included in each consignment. At an extra charge BARTEC provides either threaded holes in the front panel of the enclosure or an antirotation pin.

For the correct connection of the cable ends we have developed special Ex terminals and enclosures. The most important data such as resistance values, power ratings and dimensions can be found in the table on the right. We also supply accessories such as rotary and pointer knobs, scales and slip clutches.

In addition to the standard models all other versions such as tandem potentiometers, potentiometers with microswitches, non-standard shafts or larger resistor diameters can be encapsulated in enclosures of up to 120 mm diameter.

Explosionsschutz

Ex protection type
EEx dII C T6 or T5/EN 50014
and EN 50018

Certifications
PTB no. Ex-85/1131

Technical data

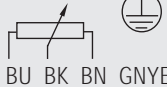
Protection class
min. IP 54/IEC 529

Enclosure
metal

Tightening torque (for nuts)
200 Ncm

Resistance characteristic
linear

Electrical connection
cable
H05VV-F4G 0.75



BU BK BN GNYE

■ Cemented wire-wound resistors:

Resistance values/power ratings
See selection chart

Resistance tolerance
± 5 %

Linearity tolerance
max. 3 % of final value

Insulation resistance
≥ 100 M Ω

Rotation
electr./mech. 250°/270°

End stop strength
30 Ncm

Weight with cable (1 m)		
2.5 W	6 W	8 W
250 g	320 g	550 g

■ Carbon-film resistors on ceramic:

Resistance values/power ratings
See selection chart

Insulation resistance
≥ 100 M Ω

Rotation
electr./mech. 270°

End stop strength
100 Ncm

Weight with cable (1 m)
240 g

■ Precision wire-wound resistors:

Resistance values/power ratings
see selection chart

Resistance tolerance
1 turn ± 5 % / 10 turns > 50 Ω ± 3 %

Linearity tolerance
1 turn to 500 Ω ± 1 %
> 500 Ω ± 0.5 %
10 turns potentiometer ± 0.25 %

Insulation resistance
min. 1 000 M Ω

Rotation
electr./mech. 1 turn 320° ± 2°
10 turns 10 x 360° + 10°

Weight with cable (1 m)
1 turn 210 g / 10 turns 300 g

End stop strength
1 turn 100 Ncm / 10 turns 6 Ncm



Potentiometer max. 8 W with cable tail

Dimensions in mm						Selection chart				
						Resistor type/ standard resistance values (stock items printed bold)			Temperature class power rating	Complete order no. (indicate resistance values in plain text)
a	b	c	d	e	f	Cemented wire-wound resistors higher power ratings			T6 / 2.5 W or T5 / 3 W	07-6622- <input type="text"/> 111 or 07-6623- <input type="text"/> 111
∅ 30	55	∅ 6	11	M 12 x 1.5	∅ 12	10 Ω 180 Ω 3.3 k Ω to 12 Ω 220 Ω 3.9 k Ω 10 k Ω 15 Ω 270 Ω 4.7 k Ω 18 Ω 330 Ω 5.6 k Ω 22 Ω 390 Ω 6.8 k Ω 27 Ω 470 Ω 8.2 k Ω 33 Ω 560 Ω 10 k Ω 39 Ω 680 Ω 12 k Ω 47 Ω 820 Ω 15 k Ω 56 Ω 1 k Ω 18 k Ω 68 Ω 1.2 k Ω 20 k Ω 82 Ω 1.5 k Ω 22 k Ω 100 Ω 1.8 k Ω 27 k Ω 120 Ω 2.2 k Ω 30 k Ω 150 Ω 2.7 k Ω			T6 / 5 W or T5 / 6 W	07-6624- <input type="text"/> 111 or 07-6625- <input type="text"/> 111
∅ 45	90	∅ 6	11	M 12 x 1.5	∅ 12	Carbon-film resistors 100 k Ω 100 Ω 1k Ω 10 k Ω 220 k Ω 220 Ω 2.2 k Ω 22 k Ω 470 k Ω 470 Ω 4.7 k Ω 47 k Ω 1 M Ω			T6 / 2 W	07-6622- <input type="text"/> 113
∅ 60	87	∅ 6	11	M 12 x 1.5	∅ 12	Precision wire-wound resistors 10 Ω 100 Ω 1 k Ω 10 k Ω 20 Ω 200 Ω 2 k Ω 20 k Ω 50 Ω 500 Ω 5 k Ω			T6 / 1.2 W	07-6622- <input type="text"/> 112
∅ 30	45	∅ 6	11	M 12 x 1.5	∅ 12	10 turns potentiometer 20 Ω 500 Ω 10 k Ω 50 Ω 1 k Ω 20 k Ω 100 Ω 2 k Ω 50 k Ω 200 Ω 5 k Ω 100 k Ω			T6 / 2 W	07-6624- <input type="text"/> 102 Lead length: <input type="text"/> 5 = standard 500 mm 0 = length in plain text
∅ 38	50	∅ 6.35	8	3/8-32	∅ 10.3	Special versions, Please indicate particulars in plain text				
						<ul style="list-style-type: none"> ■ Anti-rotation pin on front of enclosure ■ Threaded holes on front of enclosure ■ Side entry of cable ■ Other resistance values 				

Accessories/Order no.

Rotary knob shaft ∅ 6 mm Order no. 03-5401-0001	Pointer knob shaft ∅ 6 mm Order no. 03-5401-0002	scale 0 - 100 Order no. 05-0144-0112 (270 °) 05-0144-0127 (320 °)	10 turn drive shaft ∅ 6.35 mm Order no. 03-5425-0001	Slip clutch, adjustable to 50 Ncm, shaft ∅ 6 mm Order no. 03-5600-0001

03-0330-0165-10/99-BCS-A129472E