LA42 Series Potentiometer

Product Instruction Manual

Before installing and using the product, please read this instruction manual carefully and keep it for future reference.

Operating Conditions

- Rated power: 0.5 W at 25 °C
- Installation category: Category III
- Pollution degree: Level 3
- Max installation altitude: ≤ 2000 m
- Protection degree: IP40
- Relative air humidity: ≤ 98 %
- Operating torque: 20-120 mN·m



Transport Conditions

Protect product from rain, snow, heavy vibration and compression during transit.

Storage Conditions

Store in well-ventilated environment; ambient temperature: **-25 °C ~ +70 °C**; relative humidity ≤ 90 % (at 20± 5 °C).

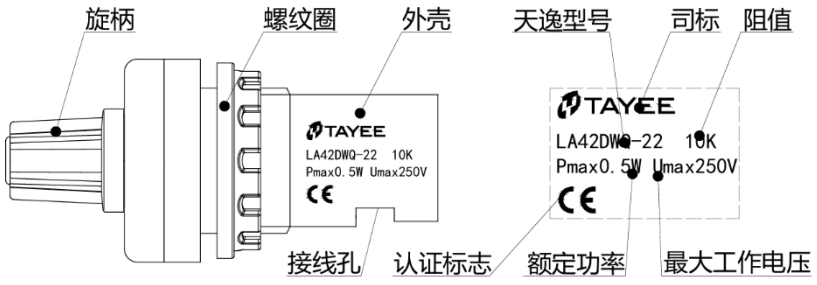
Introduction to LA42 Series Potentiometer

The LA42 series includes two models: **LA42DWQ** and **LA42DWQE**. Main circuit functions: voltage divider, rheostat and current regulator.

Order Code Explanation

LA42-DWQ / ☐

- LA42: TAYEE dedicated model
- DWQ: Series code
- ☐: Resistance specification



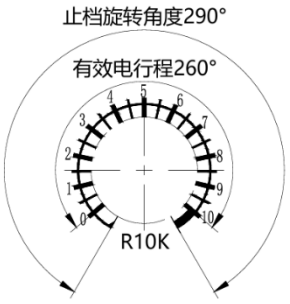
Note: See Table 1 for standard resistance values. Special resistances are available upon request.

表一	电阻规格 (单位：Ω)	100Ω	220Ω	600Ω	1K	2K	2.2K	3.7K	4K	4.7K	5K
		5.6K	10K	20K	22K	33K	50K	100K	150K	250K	470K

Table 1 Resistance Specifications 220Ω, 1K, 2K, 2.2K, 3.7K, 4K, 4.7K, 5K, 10K, 22K, 33K, 470K

Technical Specifications (LA42DWQ)

- Resistance tolerance: ±10 %
- Operating temperature range: -40 °C ~ +125 °C
- Effective electrical travel: 260°
- Mechanical stop rotation angle: 290°



电位器行程示意图
（角度误差为±10°，图示仅作参考）

Notes:

1. Do not apply excessive operating torque (stop torque > 350 mN·m).
2. Knob cannot rotate full 360°.

(Diagram: Travel schematic, mechanical stop angle 290°, effective electrical travel 260°. Angular tolerance ±10°, for reference only.)

Order Code Explanation for LA42DWQE

LA42-DWQE / ☐

- LA42: TAYEE dedicated model
- DWQE: Series code
- ☐: Resistance specification

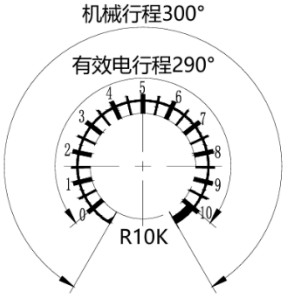
注：电阻规格见表二，特殊阻值不可订购。

表二	电阻规格 (单位：Ω)	1K	2K	4K	4.7K	5K	10K	470K

Note: See Table 2 for resistance values. **Custom special resistances are NOT available.**

Technical Specifications (LA42DWQE)

- Resistance tolerance: +20 %
- Operating temperature range: -40 °C ~ +100 °C
- Effective electrical travel: 290°
- Mechanical travel: 300°



电位器行程示意图
（角度误差为±10°，图示仅作参考）

Notes:

1. Operating torque shall not exceed 150 mN·m. If resistance-scale mismatch arises from excessive force, turn back to zero position with reverse equal-magnitude torque; function will remain intact.
2. Knob cannot rotate full 360°.

(Diagram: Travel schematic, mechanical travel 300°, effective electrical travel 290°. Angular tolerance ±10°, for reference only.)

Product Installation & Removal

Overall Installation Dimensions & Panel Cut-out Dimensions

- Max outer diameter: Ø30.8±0.3 mm

- Panel thickness for mounting: 1 ~ 6 mm
- Panel cut-out hole: Ø22.3$^{+0.4}_{0}$ mm, locating notch 3.2 mm × 24.1$^{+0.4}_{0}$ mm

Potentiometer Wiring Instruction

- Connect terminal **Z1-1**: resistance value **decreases** as scale turns from 0 → 10
- Connect terminal **Z2-1**: resistance value **increases** as scale turns from 0 → 10

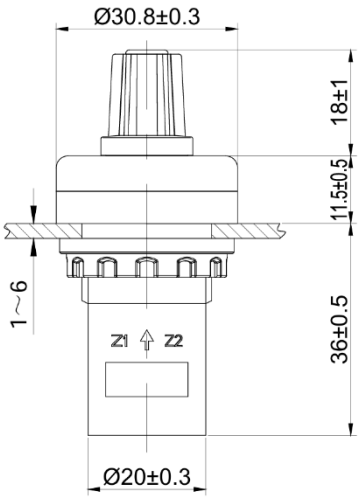
Center-to-Center Spacing for Multiple Side-by-Side Mounting

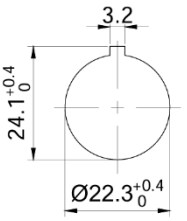
- Horizontal pitch a = 40 mm
- Vertical pitch b = 50 mm Values of a and b are interchangeable.

Installation Steps

1. Unscrew the threaded ring.
2. Pass potentiometer through mounting panel.
3. Re-fit and tighten threaded ring to torque **1.2 N·m**.
4. Insert wires of cross-section 0.5 ~ 1.5 mm² into wiring holes; tighten terminal screws to torque **0.6 N·m**.

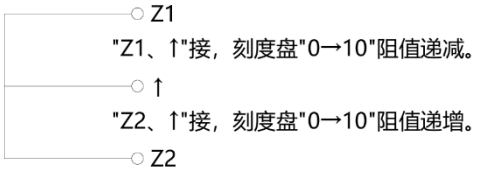
●外形安装尺寸:

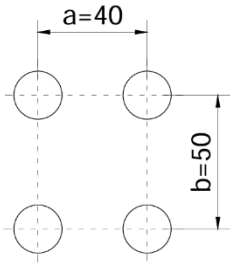




安装面板开孔尺寸

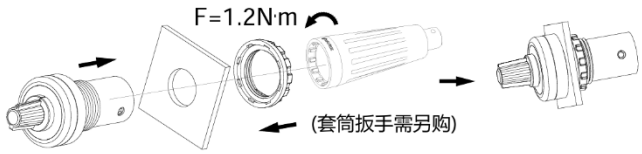
●电位器接线说明:





电位器组的孔中心距

●产品安装
1.拧下螺纹圈
2.将电位器穿过安装面板
3.拧上螺纹圈（拧紧力矩为1.2N·m）
4.将0.5~1.5mm²导线由接线孔插入后用0.6N·m紧固力矩拧紧



电位器安装在面板上

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