

Model 7280 Series

Precision Potentiometer



Features:

- Lead-free
- RoHS 2 compliant
- 7/8" diameter
- 10 turn wirewound

Applications:

- Pedal position
- Joystick controls
- Valve control
- Wind vane
- Panel control
- Test and measurement
- Medical equipment
- Angular position

Model Styles Available

7281	1/8" shaft, 1/4" bushing
7283	1/8" shaft, servo
7284	6 mm shaft, 3/8" bushing
7286	1/4" shaft, 3/8" bushing
7288 (for heavy side load applications)	1/4" shaft, 3/8" bushing

Electrical

Resistance range	100 to 100K ohms
Standard resistance tolerance	±5%
Minimum practical resistance tolerance	±1%
Independent linearity	±0.25%
Minimum practical independent linearity	±0.15% (<300 ohms), ±0.075% (≥300 ohms)
Power rating	2.0 Watts at 70°C, derating to 0 at 125°C
Dielectric strength	1,000 V rms
Insulation resistance	1,000 Megohms minimum
Noise	100 ohms maximum
Actual electrical travel	3600° +10° -0° (>100 ohms), 3600° +10° -5° (≤100 ohms)
End voltage	Maximum 0.25% of input voltage
Tap tolerance	±3°

General Note
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

© TT electronics plc

TT Electronics | BI Technologies
413 Rood RD, Suite 7
Calexico, CA 92231
Ph: +1 714 447 2345
www.ttelectronics.com/bi-technologies

Model 7280 Series

Precision Potentiometer



Mechanical

Total mechanical travel	3600° +15° -0°	
Number of gangs	2 maximum	
Weight (single gang)	0.75 oz. nominal	
Backlash	1° maximum	
	7281, 7284, 7286, 7288	7283
Static stop strength	Maximum 48 oz.-in.	36 oz.-in.
Panel nut tightening torque	Maximum 25 lb.-in.	n/a
Shaft end play	Maximum 0.010"	0.005"
Shaft runout	Maximum T.I.R. 0.003"	0.002"
Pilot diameter runout	Maximum T.I.R. 0.004"	0.002"
Lateral runout	Maximum T.I.R. 0.005"	0.004"
Shaft radial play	Maximum 0.003"	0.002"
Start/run torque (per gang, ES option adds 0.5 oz.-in.)	Maximum 0.8 oz.-in.	0.6 oz.-in.

Environmental

Operating temperature range	-40°C to +125°C dynamic, -55°C to +125°C static	
Temperature cycling	5 cycles, -55°C to +125°C, maximum 5% ΔR	
Shock	6 ms saw-tooth, 100 G's, 0.1 ms maximum discontinuity	
Vibration	15 G's, 10 to 2,000 Hz, maximum 5% ΔR, 0.1 ms maximum discontinuity	
Moisture resistance	Five 24 hour cycles, maximum 3% ΔR	
High temperature exposure	1,000 hours at 125°C, maximum 5% ΔR	
Rotational load life (1 lb side load for 7288)	1M shaft revolutions + 900 hours at 2.0 Watts & 70°C, maximum 5% ΔR	
Ingress protection rating (IP Code)	IP50, IP66 available as option (feature code ES)	

Ordering Information



General Note
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

TT Electronics | BI Technologies
413 Rood RD, Suite 7
Calexico, CA 92231
Ph: +1 714 447 2345
www.ttelectronics.com/bi-technologies

Model 7280 Series

Precision Potentiometer



Feature Codes

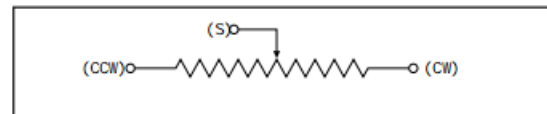
7281, 7283 plain shaft; 7284, 7286, 7288 slotted shaft	No code
Center tap	CT
Linearity tape	LT
Flatted shaft	FS
Slotted shaft (standard on single cup 7284, 7286 & 7288 without RS feature)	SS
Rear shaft extension (7281, 7286, 7288 single cup only)	RS
Shaft lock (7286 & 7288 only)	SL
High torque 2-6 oz.-in. (7286 & 7288 only)	HT
Additional gang	2G
Gold plated solder lug terminals (see optional terminal configuration)	FT
Seal (IP66) 7284, 7286, or 7288 only	ES

When multiple feature codes are used the P/N shall be in the same sequence as listed in this table (top to bottom).

Standard Resistance Values

Total Resistance (Ohms)	Theoretical Resolution (% nominal)	Tempco of Wire (ppm/°C)
100	0.059	±20
200	0.037	±20
500	0.030	±20
1K	0.024	±20
2K	0.020	±20
5K	0.018	±20
10K	0.017	±20
20K	0.016	±20
50K	0.010	±20
100K	0.008	±20

Circuit Diagram



Feature Codes

7281: RBJ, 2601, 2641

7286, 7288: RB, 2126, 2606, 2606S, 2607, 2607S, 2626, 2627, 2646, 2646S, 2647, 2647S

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

© TT electronics plc

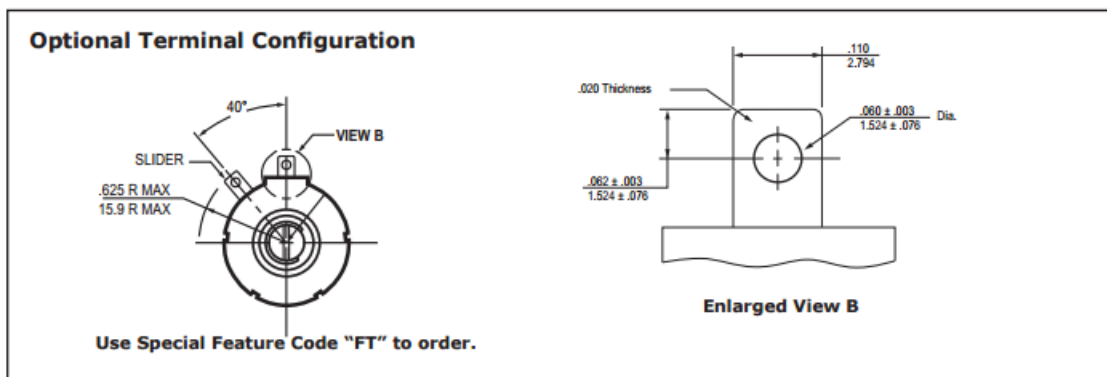
TT Electronics | BI Technologies
413 Rood RD, Suite 7
Calexico, CA 92231
Ph: +1 714 447 2345
www.ttelectronics.com/bi-technologies

Model 7280 Series

Precision
Potentiometer



Outline Drawing



General Note
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

© TT electronics plc

TT Electronics | BI Technologies
413 Rood RD, Suite 7
Calexico, CA 92231
Ph: +1 714 447 2345
www.ttelectronics.com/bi-technologies

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: org@lifeelectronics.ru