

# Thermocouples and Thermopiles

## Q313 Thermopile Generators



The Q313 Thermopile generates 750 mV, which is sufficient to operate an automatic millivolt gas control system, independent of any outside power source.

- Push-in clip, split nut, and adapter assembly for easy pilot burner installation.
- Spade or quick-connect terminals available for millivolt gas control connections.

**Application:** Thermopile

**Voltage:** 750 mV; Open circuit output – 600 mV to 750 mV

**Temperature Ratings:** Hot Junction – 1400°F; Cold Junction – 780°F  
(Hot Junction – 760°C; Cold Junction – 416°C)

**Used With:** Q314, Q324, Q327, Q377, Q379, Q382 Pilot Burners

**Approvals:** CSA International: 112395

	Material Number	Length	Connection Type	Resistance	Includes
	Q313B1005/U	35 in. (889 mm)	Spade Terminals	2.89 ohms	Terminal Block
U	Q313U3000/U	35 in. (889 mm)	Spade Terminals	2.89 ohms	1/2 in. attaching nut, split nut, spade to quick connect adapter, push-in clip, PG9 adapter
	Q313A1055/U	47 in. (1194 mm)	Spade Terminals	2.90 ohms	1/2 in. attaching nut

U Universal Service Parts

## Q340 Universal 30 mV Thermocouple



The Q340A premium thermocouples generate 30mV. They are used to sense the pilot flame on gas-fired heating systems. The Q340's have the maximum amount of Copel, which provides long-lasting service.

- Push-in clip, split nut, and adapter assembly for easy pilot burner installation.
- Male nut connector for Pilotstat® safety control power units.
- Available in a variety of lead lengths.

**Application:** Thermocouple

**Voltage:** 30 mV; Open circuit output – 26 mV to 32 mV

**Temperature Ratings:** Hot Junction – 1400°F; Cold Junction – 780°F  
(Hot Junction – 760°C; Cold Junction – 416°C)

**Approvals:** CSA International: 112395

	Material Number	Length	Connection Type	Resistance	Includes
U	Q340A1066/U	18 in. (457 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
U	Q340A1074/U	24 in. (610 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
U	Q340A1082/U	30 in. (762 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
U	Q340A1090/U	36 in. (914 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
U	Q340A1108/U	48 in. (1219 mm)	11/32 32 Male Connector Nut	0.03 ohms	Adapter and Push In Clip

U Universal Service Parts

## Q390 Thermocouple



The Q390A thermocouples generate 30mV that is used to sense the pilot flame on gas-fired heating systems.

- Push-in clip, split nut, and adapter assembly for easy pilot burner installation.
- Male nut connector for Pilotstat® safety control power units.
- Available in a variety of lead lengths.

**Application:** Thermocouple

**Voltage:** 30 mV; Open circuit output – 26 mV to 32 mV

**Temperature Ratings:** Hot Junction – 1400°F; Cold Junction – 780°F  
(Hot Junction – 760°C; Cold Junction – 416°C)

**Approvals:** CSA International: 112395

	Material Number	Length	Connection Type	Resistance	Includes
	Q390A1095/U	18 in. (457 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
	Q390A1046/U	24 in. (610 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
	Q390A1053/U	30 in. (762 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
	Q390A1061/U	36 in. (914 mm)	11/32 32 Male Connector Nut	0.02 ohms	Adapter and Push In Clip
	Q390A1103/U	48 in. (1219 mm)	11/32 32 Male Connector Nut	0.03 ohms	Adapter and Push In Clip

# Thermopiles and Thermocouples Selection Guide

## Q370A Thermocouple



The Q370 Thermocouple is a quick dropout thermocouple that generates 30mV.

- The Q370 has various adapters for different mounting possibilities in various pilot burners.

**Application:** Thermocouple

**Voltage:** 30 mV; Output after 60 S: 22mV minimum

**Drop Out Time:** 30 sec

**Temperature Ratings:** Hot Junction – 650°C ± 50°C; Cold Junction – 415°C

Material Number	Description	Length	Resistance
Q370A 1014	This 30 mV Thermocouple includes 900 mm leads with 8 adapters.	35 1/2 in. (900 mm)	0.025 to 0.031 ohms

## Thermocouple and Thermopile Accessories

Material Number	Description	
394530/U	Thermocouple Tester	

## Thermopiles and Thermocouples Selection Guide

Thermocouples						
Lead Length (in.)	Universal	Tradeline	Cross Reference			
			White-Rodgers	Robertshaw	Husky	Johnson Controls
18	Q340A1066/U	Q390A1095/U	H06E-518, H06E-18	—	K16BT-18	K19AT-18
24	Q340A1074/U	Q390A1046/U	H06E-524, H06E-24	1970-24, 1980-24	K16BT-24	K19AT-24
30	Q340A1082/U	Q390A1053/U	H06E-530, H06E-30	1970-30	K16BT-30	K19AT-30
36	Q340A1090/U	Q390A1061/U	H06E-536, H06E-36	1970-36, 1980-36	K16BT-36	K19AT-36
48	Q340A1108/U	Q390A1103/U	H06E-548, H06E-48	—	K16BT-48	K19AT-48

Thermopiles				
Lead Length (in.)	Universal	Connection	Includes	Replaces
35	Q313U3000	Spade Terminal	Push-In clip, PG9 adapter, 1/2" attaching nut, Split nut, spade to QC adapter	Q313A1022, Q313A1139, Q313A1170, Q313A1188
47	Q313A1055		1/2" attaching nut	