

## Z-Series Instrument Ready Pumps

### FEATURES

- > Electronic air displacement pipetting modules
- > Exceptional precision and accuracy
- > Can be configured for mounting to a robotic arm

### CUSTOMER REQUIREMENTS

- > Drive Recommendations      Pump should typically be driven with a 24 VDC bipolar chopper drive, ½ step, at rated current. Higher voltage may be required at higher step rates.

### CONFIGURED OPTIONS

- > Available in 200 µL, 1000 µL, 2000 µL and 5000 µL

### BASE MODEL

- 200 µL
- 1000 µL
- 2000 µL
- 5000 µL



(Shown with optional Tip Adapter and Tip)

## SPECIFICATIONS

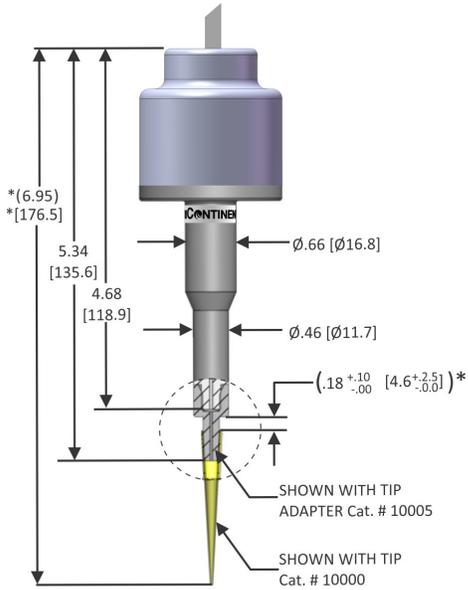
	<b>200 <math>\mu</math>L Cat. # 0879</b>	<b>1000 <math>\mu</math>L Cat. # 0880</b>	<b>2000 <math>\mu</math>L Cat. # 0881</b>	<b>5000 <math>\mu</math>L Cat. # 0906</b>
Tip Adapter Cat. #	10005	10006	10007	10008
Disposable Tip Cat. #	10000 (96/rack)	10001 (100/rack)	10002 (60/rack)	10003 (24/rack)
Step Resolution Per Full Step Per Half Step	0.381 $\mu$ L 0.191 $\mu$ L	1.527 $\mu$ L 0.763 $\mu$ L	3.808 $\mu$ L 1.904 $\mu$ L	7.616 $\mu$ L 3.808 $\mu$ L
Weight Z-Pump without Tip Adapter Z-Pump with Tip Adapter Z-Pump with Tip Adapter and Tip	4.00 oz [113.4 gm] 4.32 oz [122.5 gm] 4.33 oz [122.8 gm]	4.47 oz [126.7 gm] 4.88 oz [138.3 gm] 4.91 oz [139.2 gm]	4.57 oz [129.6 gm] 4.95 oz [140.3 gm] 5.00 oz [141.8 gm]	4.96 oz [140.6 gm] 6.08 oz [172.4 gm] 6.16 oz [174.6 gm]
Syringe Data Bore Stroke	0.1721 in. [4.37 mm] 0.709 in. [18.00 mm]	0.3441 in. [8.74 mm] 0.709 in. [18.00 mm]	0.5441 in. [13.82 mm] 0.709 in. [18.00 mm]	0.7694 in. [19.54 mm] 0.709 in. [18.00 mm]
Fluid Contact Materials (in case of accidental fluid aspiration)	Acetal, PTFE, Silicone Lubricant, Buna N, Neoprene, Borosilicate Glass and Stainless Steel			

## FUNCTIONAL PARAMETERS

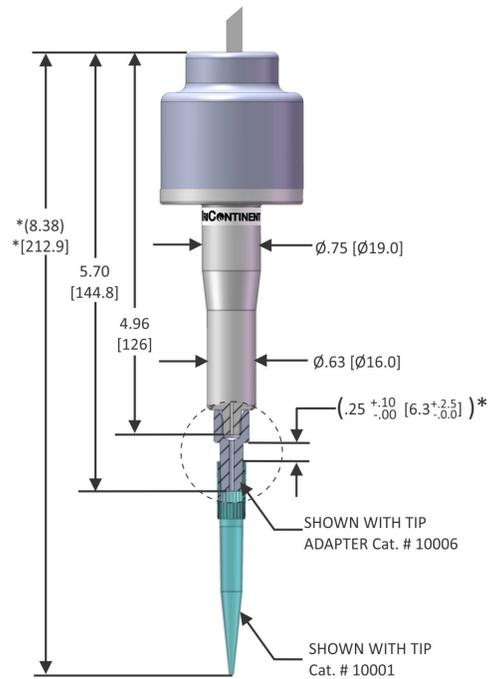
Performance (at full volume) with tip adapter and tip noted above	
Accuracy within	$\pm 3\%$
Precision within	1%
Motor/Leadscrew Data	
Travel/Full Step	0.001 in. [0.0254 mm]
Travel/Half Step	0.0005 in. [0.0127 mm]
Resistance/Phase	14.7 $\Omega$
Inductance/Phase	8.5 mH
Rated Current	0.34 A
Rated Voltage	5.0 V

Z-SERIES INSTRUMENT READY PUMPS ENVELOPE DRAWING

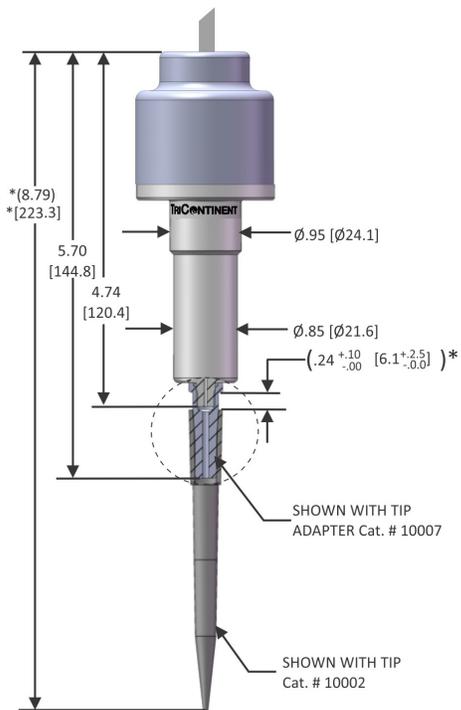
200 µL, Cat. # 0879



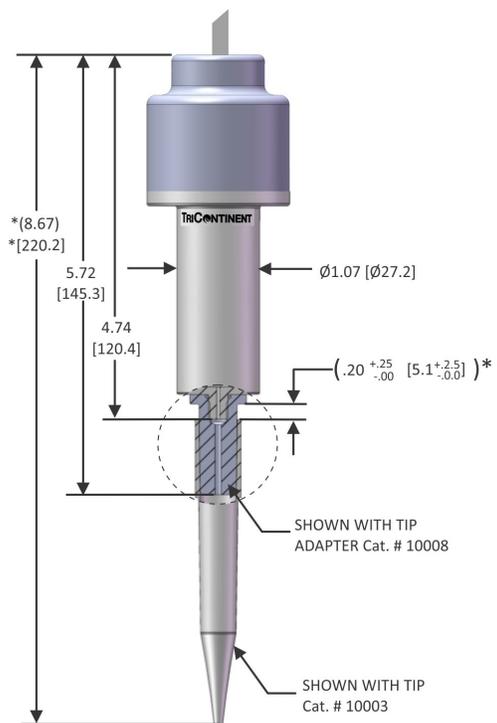
1000 µL, Cat. # 0880



2000 µL, Cat. # 0881



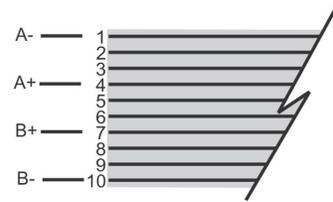
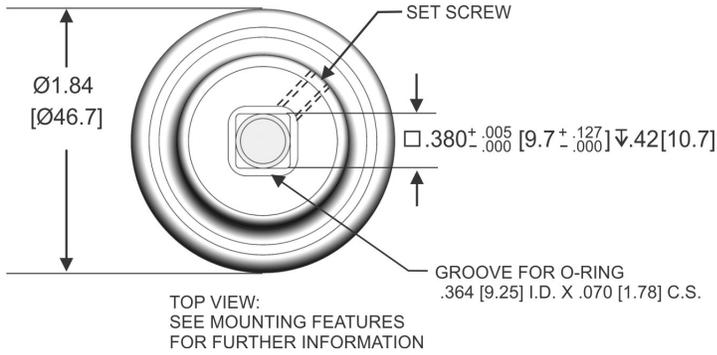
5000 µL, Cat. # 0906



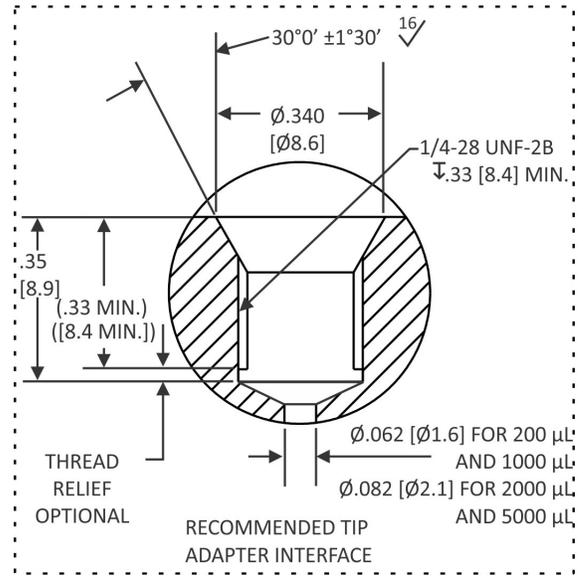
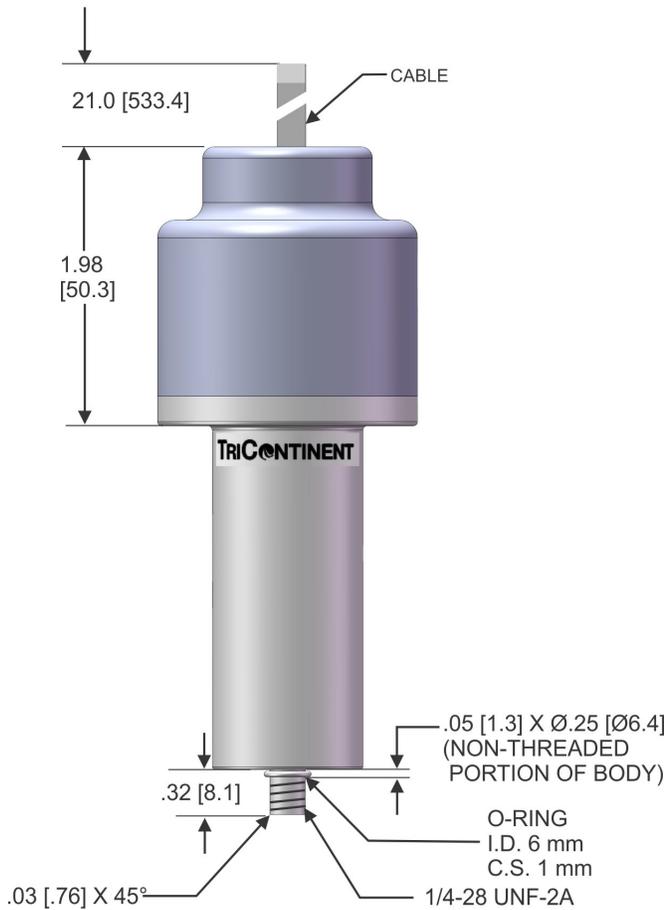
\*Note: Each tip is designed to seal within the reference gap dimension shown. Customers should perform their own testing to determine optimum force/location for sealing and tip stripping.

**Z-SERIES INSTRUMENT READY PUMP INTERFACE DETAILS**

Dimensions/Features noted are typical for any size, Z-Series Pump (5000 µl shown)



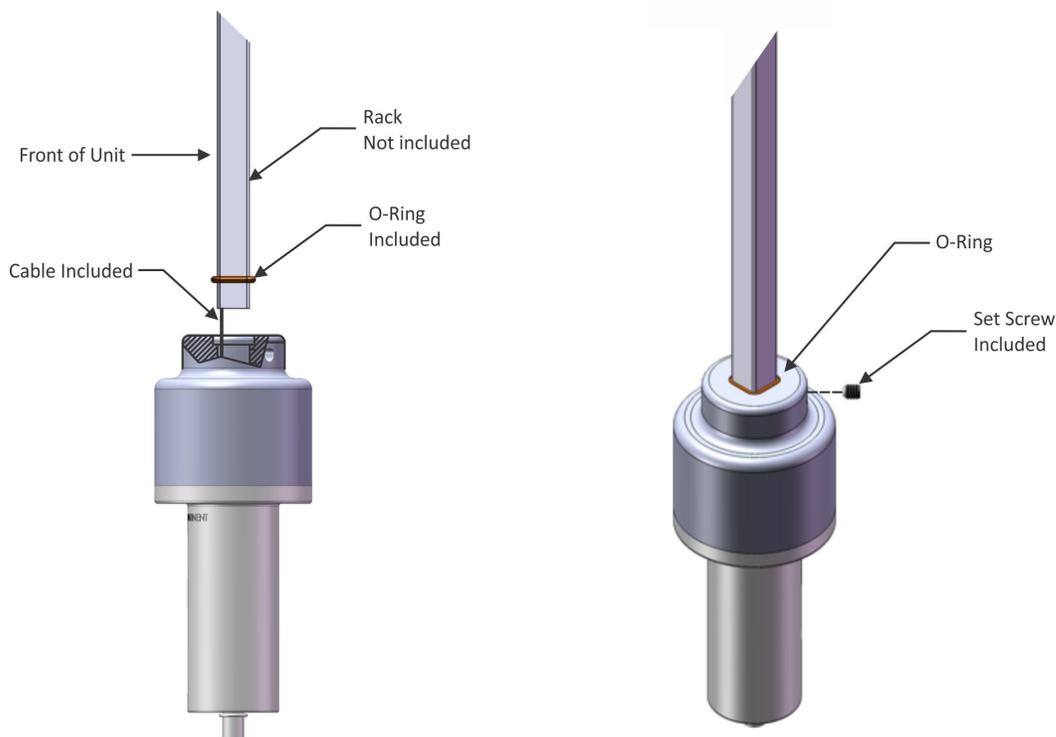
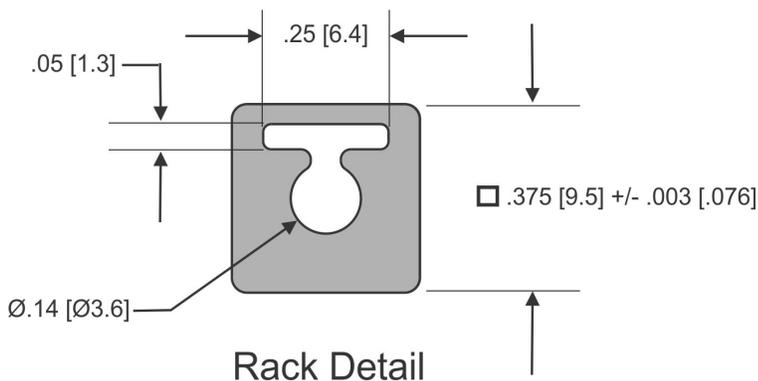
Cable Pin Out  
Silver Side Up



Note: Dimensions in inches [mm] unless otherwise specified.

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AIR DISPLACEMENT PUMP SOLUTIONS FOR OEMS WORLDWIDE

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