

Z-Series Pumps with Proximity Sensor

TRICONTINENT
by Gardner Denver

FEATURES

- > Electronic air displacement pipetting modules
- > Exceptional precision and accuracy
- > Integrated homing sensor
- > Interfaces with the M-Series motion controllers

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

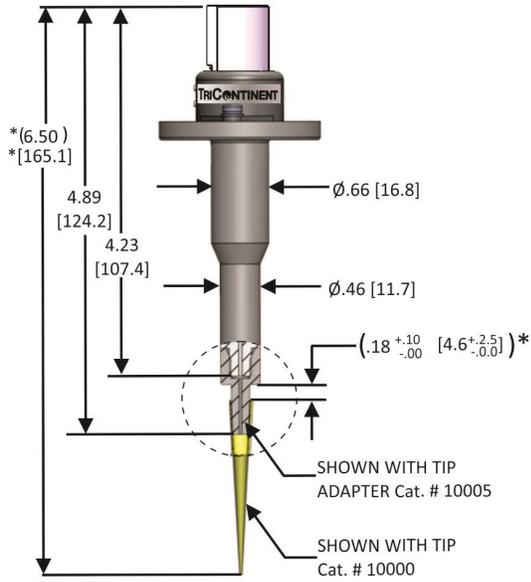
	200 µL Cat. # 10205	1000 µL Cat. # 10206	2000 µL Cat. # 10207	5000 µL Cat. # 10208
Tip Adapter Cat. #	10005	10006	10007	10008
Disposable Tip Cat. #	10000 (96/rack)	10001 (100/rack)	10002 (60/rack)	10003 (24/rack)
Step Resolution Per Full Step Per Half Step	0.381 µL 0.191 µL	1.527 µL 0.763 µL	3.808 µL 1.904 µL	7.616 µL 3.808 µL
Weight Z-Pump without Tip Adapter Z-Pump with Tip Adapter Z-Pump with Tip Adapter and Tip	2.17 oz [61.6 gm] 2.49 oz [70.6 gm] 2.50 oz [70.9 gm]	2.65 oz [75.0 gm] 3.06 oz [86.7 gm] 3.09 oz [87.6 gm]	2.74 oz [77.8 gm] 3.12 oz [88.6 gm] 3.17 oz [90.0 gm]	3.13 oz [88.7 gm] 4.25 oz [120.5 gm] 4.33 oz [122.7 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

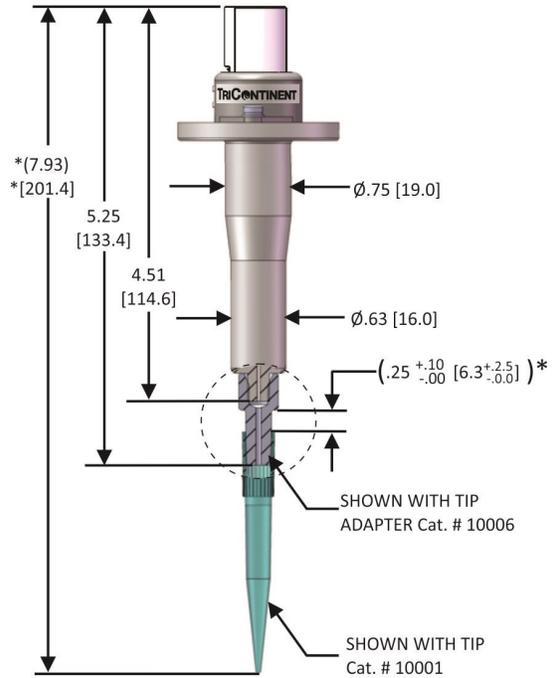
Performance (at full volume) with tip adapter and tip noted above	
Accuracy within	± 3%
Precision within	1%
Motor/Leadscrew Data	
Travel/Full Step	0.001 in. [0.0254 mm]
Travel/Half Step	0.0005 in. [0.0127 mm]
Resistance/Phase	14.7 Ω
Inductance/Phase	8.5 mH
Rated Current	0.34 A
Rated Voltage	5.0 V

Z-SERIES PUMPS WITH PROXIMITY SENSOR ENVELOPE DRAWING

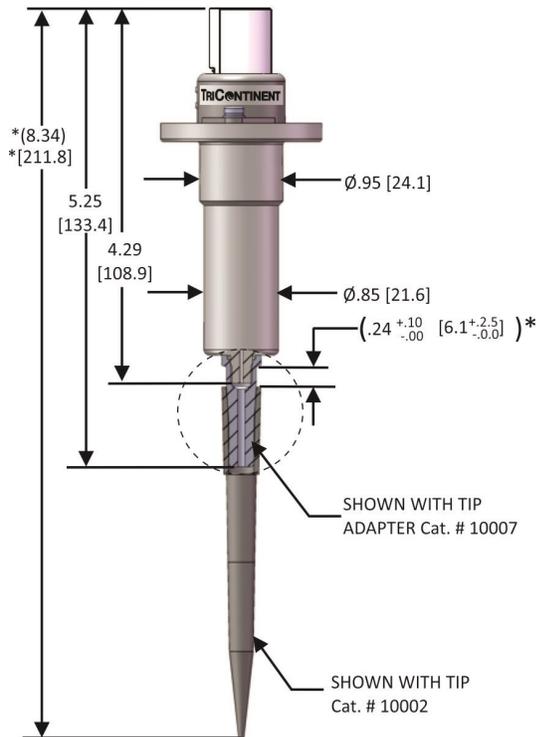
200 μ L, Cat. # 10205



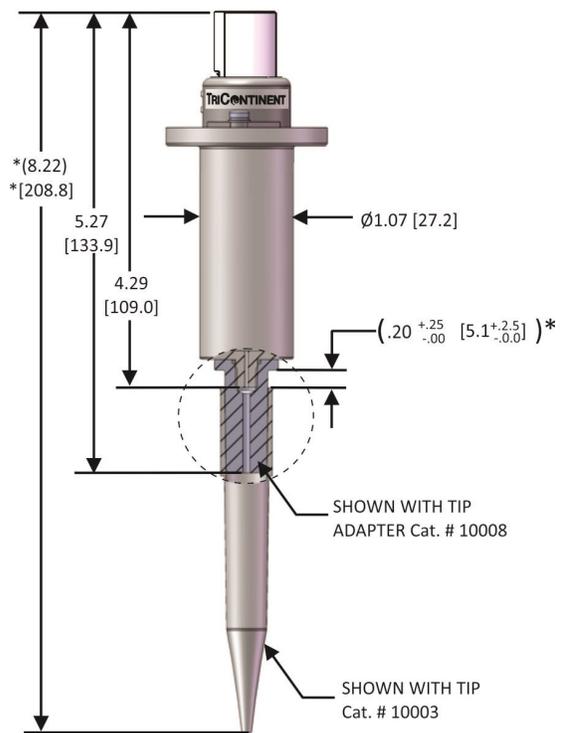
1000 μ L, Cat. # 10206



2000 μ L, Cat. # 10207



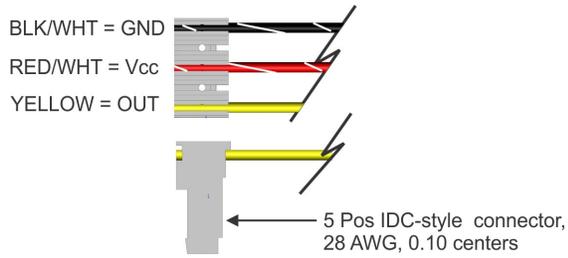
5000 μ L, Cat. # 10208



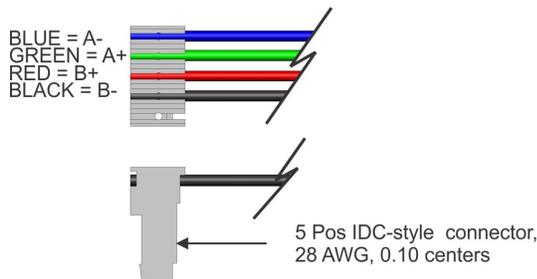
*Note: Each tip is designed to seal within the reference gap dimension shown. Customers should perform their own testing to determine optimum force/location for sealing and tip stripping.

Z-SERIES PUMPS WITH PROXIMITY SENSOR INTERFACE DETAILS

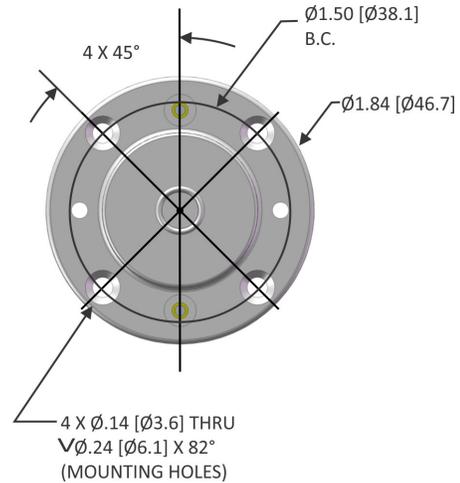
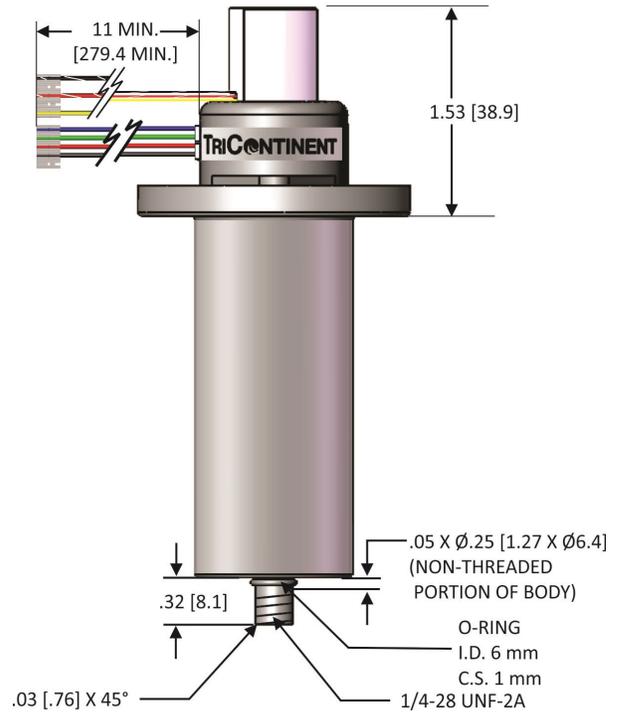
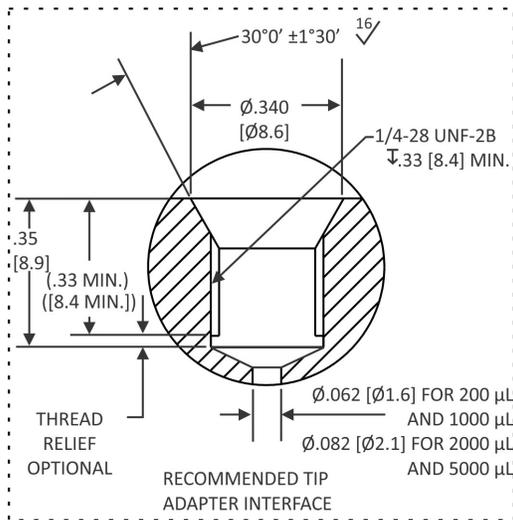
Dimensions/Features noted are typical for any size, Z-Series Pump (5000 uL shown).



SENSOR WIRE PIN OUT



MOTOR WIRE PIN OUT



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

AIR DISPLACEMENT PUMP SOLUTIONS FOR OEMS WORLDWIDE

tricontinent.com



TriContinent Scientific, Inc.
12740 Earhart Ave
Auburn, CA 95602
USA
Tel: 800-937-4738
Fax: 530-273-2586
liquidhandling.tcs@gardnerdenver.com

Gardner Denver Thomas GmbH
Livry-Gargan-Str. 10
82256 Fürstenfeldbruck
Germany
Tel: +49 8141 2280 0
Fax: +49 8141 8892136
thomas.de@gardnerdenver.com

TRICONTINENT

by Gardner Denver

Gardner Denver Hong Kong, Limited
Unit 1317-1318 Delta House, 3 On Yiu Street
Siu Lek Yuen, Shatin, New Territories
Hong Kong
Tel: +852 26903502
Fax: +852 27924598
thomas.hk@gardnerdenver.com

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