

- > Designed for use with IMI Norgren Cadent<sup>™</sup> 6M Multi-Channel syringe pumps
- Available in various materials and tip styles and available with Zero Dead Volume (ZDV) to fully sweep the wetted path
- > Syringes available in sizes between 250µL and 5mL
- > Rated to 80 psig (5.52 barg)
- Suitable for use in analytical, biotechnology, medical device, and diagnostic applications





# **Specifications**

Physical Length (Dispensed): 4.61" (11.7cm) Thread Type: 1/4-28 UNF-2A Test Pressure:

80 psig (5.52 barg)

Environmental
Operating Temperature:
10°C to 40°C (50°F to 104°F)
Storage Temperature:
-25° to 85°C (-13°F to 185°F)
Relative Humidity:
Up to 100%

# Chemical Wetted Materials:

Borosilicate glass, PCTFE, PTFE (or UHMW-PE)

### Syringe Tips:

Lubricated with laboratory grade silicone (syringes without silicone available on request)

# **Mechanical Specifications**

Syringe Sizes		250µL	500μL	1.0mL	1.25mL	2.5mL	5.0mL
Orifice Diameter (in)		0.039	0.076	0.076	0.076	0.076	0.076
Syringe (End Cap) Diameter (in)		0.4	0.4	0.4	0.4	0.5	0.6
*Max Drag Force (lbs)	PTFE	3.0	3.0	3.0	3.0	3.0	6.0
	UHMW	7.0	7.0	7.0	7.0	7.0	10.0

<sup>\*</sup>Add 1 pound drag force to non-lubricated plunger tip requests.



# Kloehn™ Syringe Enhancements



# Zero Dead Volume Plunger Tip

Kloehn<sup>TM</sup> Syringes are available with an enhanced Zero Dead Volume (ZDV) plunger tip. These tips have a pointed end and extend into the end cap, providing a fully swept wetted path, minimizing the presence of residual fluids to address cross-contamination or carryover into subsequent operations.

Both flat and ZDV plunger tips can be supplied in either PTFE, a chemically inert material offering high durability, or UHMW-PE, offering high impact strength and suitable for use with fluids containing particulate.



#### **Glass Barrel Shrink Wrap**

For increased safety when using Kloehn $^{\text{TM}}$  syringes in high pressure environments, the syringes can be supplied with a shrink-wrapped glass barrel.

This enhancement is available on request and can be applied to any syringe volume dispense size.

For other customization requests, contact us at IMIKloehncustomersupport@imi-precision.com





# PTFE Kloehn™ Syringe Assembly:

**Thread Type** 

1/4-28 UNF-2A

**Wetted Materials** 

Borosilicate glass, PCTFE, PTFE

**Fine Tuning Adjustment** 

Zero dead volume only

Size	Orifice (in)	Standard Lubricated Syringe	Zero Dead Volume (Lubricated)
250µL	0.039	29439	29441*
500μL	0.076	29442	29443
1.0mL	0.076	29447	29448
1.25mL	0.076	29451	29450
2.5mL	0.076	29454	29452
5.0mL	0.076	29456	29458

<sup>\*</sup> Tip nose is 316L SS PTFE coated

# **UHMW-PE** Kloehn™ Syringe Assembly:

Thread Type 1/4-28 UNF-2A

**Wetted Materials** 

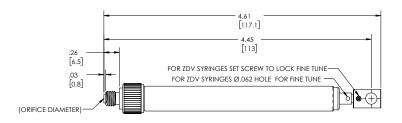
Borosilicate glass, PCTFE, PTFE, UHMW-PE

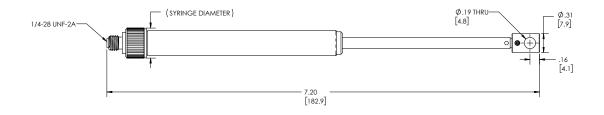
**Fine Tuning Adjustment** 

Zero dead volume only

Size	Orifice (in)	Standard Lubricated Syringe	Zero Dead Volume (Lubricated)
250µL	0.039	29440	29861*
500μL	0.076	29444	29863
1.0mL	0.076	29445	29446
1.25mL	0.076	29864	29449
2.5mL	0.076	29455	29453
5.0mL	0.076	29457	29459

#### Dimensions in inches [mm]





#### Warning

Improper selection, misuse, age or malfunction of components used in systems can cause failure in various modes. The system designer is warned to consider the failure modes of all component parts and to provide adequate safeguards to prevent personal injury or damage to equipment or property in the event of such failure modes. System designers and end-users are cautioned to consult instruction sheets and specifications available from the factory. The system designer/end-user is responsible for verifying that all requirements for the application are met. Due to unlimited application, system conditions and chemistries, it is the buyers responsibility to validate the product within their specific application.

**Proposition 65:** These products may contain chemicals known to the state of California to cause cancer, or birth defects, or other reproductive harm.