

The IMI Norgren 6cm Syringe line is designed to couple with the V6 Syringe Pump and the corresponding rotary valves. These syringes are rated to 80 psi and are suitable for use in various life science instruments serving analytical, biotechnology and diagnostic applications. These syringes are available in an array of dispense volumes, tip materials and tip styles.

## **Specifications**

Physical Length (Dispensed)

Thread Type 1/4-28 UNF-2A

4.37

**Test Pressure** 

80 psi

Life cycle (Minimum) 100,000\* 50°F to 104°F (10°C to 40°C) **Storage Temperature** 13°F to 185°F (-25° to 85°C) **Relative Humidity** 

**Operating Temperature** 

**Environmental** 

Up to 100%

Borosilicate Glass, PCTFE, PTFE (or UHMW-PE) Syringe Tips

Chemical

**Wetted Materials** 

Lubricated with laboratorygrade Silicone

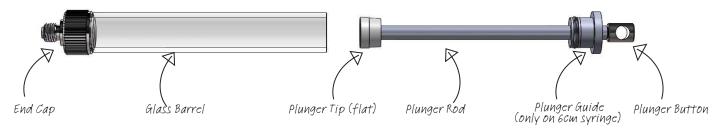


## Mechanical

Syringe Sizes		10μΙ	25μΙ	50μΙ	100μΙ	250μΙ	500µl	1.0ml	1.25ml	2.5ml	5.0ml	10ml	25ml	50ml
Orifice Diameter (in)		0.027	0.027	0.024	0.032	0.039	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076
Syringe (End Cap) Diameter (in	n)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.75	1.12	1.5
*Max Drag Force (lbs)	PTFE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	8.0	8.0
	UHMW	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	10.0	10.0	15.0	-

<sup>\*</sup>Add 1 pound drag force to non-lubricated plunger tip requests. Installation torque = 20 oz-in

# Syringe Anatomy



## **Syringe Enhancements**



### **Zero Dead Volume Plunger Tip**

IMI Norgren Syringes are available with an enhanced Zead 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 and ensuring no 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 particulates.



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

For increased safety when using IMI Norgren Syringes in high pressure environments, the syringes can be supplied with a shrink-wrapped glass barrel. This enhancements is available on request and can be applied to any syringe volume dispense size.

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



<sup>\*</sup>Tested with DI Water using IMI Standard protocol



## **UHMW Syringes** (individually boxed):

Size	Orifice (in)	Standard	ZDV
25μL**	0.027	26662	-
50μL	0.024	24681	-
100µL	0.032	24518	-
250µL	0.039	19513	-
500µL	0.076	24694	25427
1.0mL	0.076	24690	25413
1.25mL	0.076	-	25438
2.5mL	0.076	24685	25388
5.0mL	0.076	18857	24691
10.0mL	0.076	19110	24139
25.0mL	0.076	24688	25380

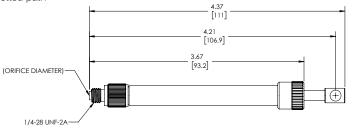
Wetted materials: Borosilicate glass, PCTFE, UHMW-PE, PTFE

## PTFE Syringe Assembly (individually boxed):

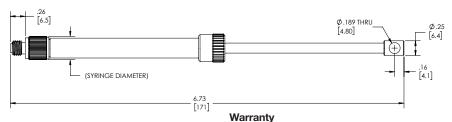
Size	Orifice (in)	Standard	ZDV
10μL**	0.027	18883	-
25μL**	0.027	17591	-
50μL	0.024	17592	-
100µL	0.032	17593	-
250µL	0.039	17594	19509
500µL	0.076	17595	19537
1.0mL	0.076	17596	25429
1.25mL	0.076	17597	25431
2.5mL	0.076	17598	19539
5.0mL	0.076	17599	18463
10.0mL	0.076	17600	18469
25.0mL	0.076	17601	23734
50.0mL	0.076	17602	-

Wetted materials: Borosilicate glass, PCTFE, PTFE

<sup>\*\*</sup>contains stainless steel in wetted path



Dimensions in inches [mm] 1mL syringe shown



#### 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.

The products described herein are warranted subject to seller's Standard Terms and Condition of Sale, available at seller's website.

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

<sup>\*\*</sup>contains stainless steel in wetted path