

- > Gas and liquid tight manual Kloehn™ syringes using PTFE tips to provide seal
- > Suitable for use on GC, LC & HPLC applications
- > Capable of handling corrosive fluids
- > Available in various volumes (10µL to 500µL) and terminations
- > Available in five needle point styles to suit septum piercing and suction needs
- > Color coded flange caps for easy identification



## Specifications

### Physical

#### Length (Dispensed)

FN/RN - 6.0"

TLL/TLT - 4.5"

#### Pressure

80 psi

#### Needle Length

2 in.

### Environmental

#### Operating Temperature

10°C to 40°C (50°F to 104°F)

#### Storage Temperature

-33°C to 71°C (-27°F to 160°F)

#### Relative Humidity

Up to 100%

#### Accuracy

±1%

### Chemical

#### Wetted Materials

Borosilicate Glass, 304 SS (Needle), PTFE

#### Syringe tips

Lubricated with laboratory grade Silicone

## Mechanical Specifications

Kloehn™ Syringe Sizes	10µL	25µL	50µL	100µL	250µL	500µL	5.0ml
Button Diameter (in)	0.312	0.375	0.375	0.375	0.375	0.375	0.073
*Max Drag Force (lbs)	3.0	3.0	3.0	3.0	3.0	3.0	0.72

\*Add 1 pound drag force to non-lubricated plunger tip requests.

Syringe Termination	Needle Point Style	10µL (Blue)	25µL (Green)	50µL (Yellow)	100µL (Orange)	250µL (Red)	500µL (Black)
Fixed Needle (FN)	A (22° bevel curve)	3010FN-A	3025FN-A	3050FN-A	3100FN-A	3250FN-A	3500FN-A
	B (90° bevel)	3010FN-B	3025FN-B	3050FN-B	3100FN-B	3250FN-B	3500FN-B
	C (22° bevel)	3010FN-C	3025FN-C	3050FN-C	3100FN-C	3250FN-C	3500FN-C
	D (Side hole)	3010FN-D	3025FN-D	3050FN-D	3100FN-D	3250FN-D	3500FN-D
	E (Round Taper)	3010FN-E	3025FN-E	3050FN-E	3100FN-E	3250FN-E	3500FN-E
Removable Needle (RN)	A (22° bevel curve)	3010RN-A	3025RN-A	3050RN-A	3100RN-A	3250RN-A	3500RN-A
	B (90° bevel)	3010RN-B	3025RN-B	3050RN-B	3100RN-B	3250RN-B	3500RN-B
	C (22° bevel)	3010RN-C	3025RN-C	3050RN-C	3100RN-C	3250RN-C	3500RN-C
	D (Side hole)	3010RN-D	3025RN-D	3050RN-D	3100RN-D	3250RN-D	3500RN-D
	E (Round Taper)	3010RN-E	3025RN-E	3050RN-E	3100RN-E	3250RN-E	3500RN-E
Tapered Luer Lock (TLL)	TLL	3010TLL	3025TLL	3050TLL	3100TLL	3250TLL	3500TLL
Tapered Luer Tip (TLT)	TLT	3010TLT	3025TLT	3050TLT	3100TLT	3250TLT	3500TLT

Syringe Termination	Needle Point Style	10µL (Blue)	25µL (Green)	50µL (Yellow)	100µL (Orange)	250µL (Red)	500µL (Black)
Needle Gauge		26s	22s	22s	22s	22s	22
Needle OD (in)		0.019	0.028	0.028	0.028	0.028	0.028
Needle ID (in)		0.005	0.006	0.006	0.006	0.006	0.016
Replacement Needle Part Number	A (22° bevel curve)	100749	100759	100759	100759	100759	100782
	B (90° bevel)	100750	100760	100760	100760	100760	100786
	C (22° bevel)	100751	100761	100761	100761	100761	100787
	D (Side hole)	100752	100762	100762	100762	100762	100788
	E (Round Taper)	100753	100763	100763	100763	100763	100789
Luer Orifice Diameter (in)		0.016	0.025	0.027	0.040	0.040	0.038

For dimensional drawings of any syringe configuration, please contact us at [IMIKloehn™customersupport@imi-precision.com](mailto:IMIKloehn™customersupport@imi-precision.com)

- > Gas and liquid tight manual Kloehn™ syringes using PTFE tips to provide seal
- > Suitable for use on GC, LC, HPLC and autosampler applications
- > Capable of handling corrosive fluids
- > Incorporates 6-32 thread connections for mounting
- > Available in various volumes (1mL to 50mL) and terminations
- > PTFE coated plunger rods (for syringes > 1.25mL) to protect glass barrel
- > Available in five needle point styles to suit septum piercing and suction needs



## Specifications

### Physical

#### Length (Dispensed)

FN - 6.3"

TLL/TLT - 4.5" - 6.3"

#### Pressure

80 psi

#### Needle Length

2 in.

### Environmental

#### Operating Temperature

10°C to 40°C (50°F to 104°F)

#### Storage Temperature

-33°C to 71°C (-27°F to 160°F)

#### Relative Humidity

Up to 100%

#### Accuracy

±1%

### Chemical

#### Wetted Materials

Borosilicate Glass, 304 SS (Needle), PTFE

#### Syringe tips

Lubricated with laboratory grade Silicone

## Mechanical Specifications

Kloehn™ Syringe Sizes	1mL	1.25mL	2.5mL	5mL	10mL	25mL	50mL
Button Diameter (in)	0.375	0.375	0.500	0.620	0.870	0.870	1.125
*Max Drag Force (lbs)	3.0	3.0	3.0	6.0	6.0	8.0	8.0

\*Add 1 pound drag force to non-lubricated plunger tip requests.

Syringe Termination	Needle Point Style	1mL	1.25mL	2.5mL	5mL	10mL	25mL	50mL
<b>Fixed Needle (FN)</b>	<b>A</b> (22° bevel curve)	4001FN-A	4001.25FN-A	4002FN-A	4005FN-A	4010FN-A	4025FN-A	4050FN-A
	<b>B</b> (90° bevel)	4001FN-B	4001.25FN-B	4002FN-B	4005FN-B	4010FN-B	4025FN-B	4050FN-B
	<b>C</b> (22° bevel)	4001FN-C	4001.25FN-C	4002FN-C	4005FN-C	4010FN-C	4025FN-C	4050FN-C
	<b>D</b> (Side hole)	4001FN-D	4001.25FN-D	4002FN-D	4005FN-D	4010FN-D	4025FN-D	4050FN-D
	<b>E</b> (Round Taper)	4001FN-E	4001.25FN-E	4002FN-E	4005FN-E	4010FN-E	4025FN-E	4050FN-E
<b>Tapered Luer Lock (TLL)</b>	<b>TLL</b>	4001TLL	4001.25TLL	4002TLL	4005TLL	4010TLL	4025TLL	4050TLL
<b>Tapered Luer Tip (TLT)</b>	<b>TLT</b>	4001TLT	4001.25TLT	4002TLT	4005TLT	4010TLT	4025TLT	4050TLT

Syringe Termination	1mL	1.25mL	2.5mL	5mL	10mL	25mL	50mL
<b>Needle Gauge</b>	22	22	22	22	22	22	22
<b>Needle OD (in)</b>	0.028	0.028	0.028	0.028	0.028	0.028	0.028
<b>Needle ID (in)</b>	0.016	0.016	0.016	0.016	0.016	0.016	0.016
<b>Luer Orifice Diameter (in)</b>	0.063	0.038	0.070	0.046	0.039	0.073	0.073

For dimensional drawings of any syringe configuration, please contact us at [IMIKloehncustomersupport@imi-precision.com](mailto:IMIKloehncustomersupport@imi-precision.com)

## 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.