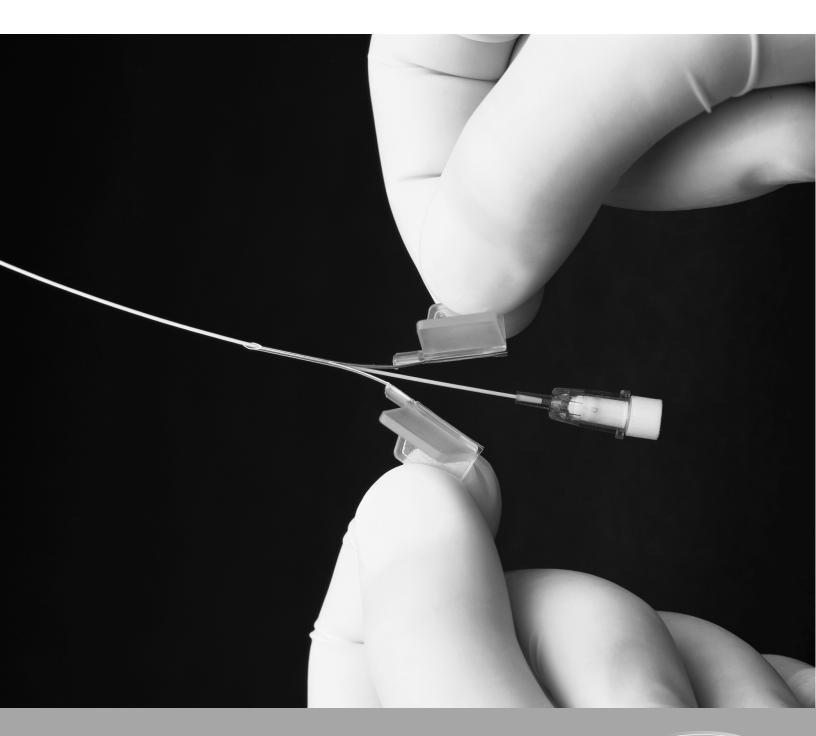
# Vascular Access





IN-10 IN-10N IN-10C	Polyethylene Tubing, .011" ID x .024" OD, 10ft Lengths Introduction needle, sterile, 19g x 1" Infusion Cannula, blunt, 30g x 1"
IN-20 IN-20N IN-20C	Polyethylene Tubing, .015" ID x .043" OD, 10ft Lengths Introduction needle sterile, 16g x 1" Infusion Cannula, blunt, 27g x 1"
IN-50 IN-50N IN-50C	Polyethylene Tubing, .023" ID x .038" OD, 10ft Lengths Introduction needle, sterile, 16g x 1" Infusion Cannula, blunt, 24g x 1"





	PN-7922 PN-7925	Pipet/Infusion Needle, 30g, length 1" Pipet/Infusion Needle, 27g, length 1"
		Pidel/iniusion Needle 270 lendin i
	PN-7930	Pipet/Infusion Needle, 24g, length 1"
	PN-7933	Pipet/Infusion Needle, 20g, length 4"
	PN-7936	Pipet/Infusion Needle, 18g, length 4"
The second secon	PN-7939	Pipet/Infusion Needle, 16g, length 4"
pm	PN-7941	Pipet/Infusion Needle, 14g, length 4"

SINGLEY heart holding forcep

**RS-5255** length 6"



RS-5255 Shown



IN-517 Splitable Introducer Cannula

17GA x 22mm OD 1.50mm I D 1.34mm red



IN-520 Splitable Introducer Cannula

20GA x 17mm OD 0.95mm I D 0.75mm green



IN-522 Splitable Introducer Cannula

22GA x 17mm OD 0.70mm I D 0.50mm blue



**1-800-424-2984** www.roboz.com



## 32 ga micro injection needles uses:

portal vein injections thymus injections bile duct injections blood/fluid extractions

## Advantages:

potential for clotting is reduced reduces trauma greater control of injection site greater volume control

Micro Injection Needle .009" OD x .003" ID

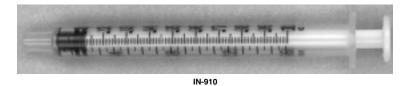
32 ga

needle length 10mm use with IN-910

IN-900 straight

**IN-905** 45 deg angle

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IN-910

Syringe plastic Volume 1mm for use with IN-900 and IN-905 needles

Photo Not Available For IN-940

IN-940

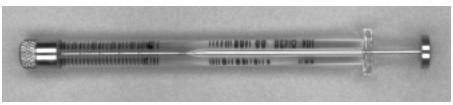
Micro Injection Needle

straight

.009" OD x .003" ID

32 ga

needle length 12mm use with IN-950



IN-950

IN-950

Syringe glass 5 microliters for use with IN-940

needles



## IN-1000 Advance Infusion Pump

The **Advance Infusion Pump Series 1200** is a simple, accurate, affordable single syringe pump. Easily input the syringe diameter, volume, and time into the large number keypad that no other pump on the market has and let Advance do the rest.

No need to scroll through long lists of syringe sizes and infusion rates again with Advance!

#### **Specifications**

Pump Type Infusion Max.No. Syringes One Syringe Size .5µL to 60mL Linear Force 22lbs. Min Flow Rate  $> .1 \mu L/hr$ Max Flow Rate 8.87mL/min Accuracy ± 3% Reproducibility ± 1%

 Power
 9Volt DC @ 1000mA

 Dimensions
 9.0" x 5.75" x 4.93"

 Weight
 3.9 lbs.

Weight 3.9 lb Steps per Revolution 400

#### IN-1010 Advance Infusion Table

The **Advance Infusion Table** is the latest design in tail infusions for rats. This unique setup has allowed for tail infusions lasting up to three hours.

### **Features**

- 4 folding legs for optional angled display and compact storage
- Easy customization using the silicone tubing and perforated table top
- Cage washable

## **Dimensions**

15 3/4" x 15 3/4" square table top (40cm x 40cm) Height with legs open, 6 1/2" (16.5cm)





	COMPARISON OF MILLIMETERS TO INCHES					
ММ	INCHES	ММ	INCHES			
0.33	.013	6	.236			
0.5	.020	6.33	.249			
0.67	.026	6.5	.256			
1	.039	6.67	.263			
1.33	.052	7	.275			
1.5	.059	7.33	.288			
1.67	.066	7.5	.295			
2	.079	7.67	.302			
2.33	.092	8	.315			
2.5	.098	8.33	.328			
2.67	.105	8.5	.335			
3	.118	8.67	.341			
3.33	.131	9	.354			
3.5	.138	9.33	.367			
3.67	.144	9.5	.374			
4	.157	9.67	.380			
4.33	.170	10	.394			
4.5	.177	10.33	.407			
4.67	.184	10.67	.420			
5	.197	11	.433			
5.33	.210	11.33	.446			
5.5	.216	11.67	.459			
5.67	.223	12	.472			

COMPARISON OF INCHES TO MILLIMETERS			COMPARISON OF INCHES TO CENTIMETERS		COMPARISON OF CENTIMETERS TO INCHES		
INCHES	MM	INCHES	MM			1	
1/32	0.79	17/32	13.49	INCHES	CM	_CM_	INCHES
1/16	1.59	9/16	14.29	1 1	2.54	1 1	.3937
3/32	2.38	19/32	15.08	2	5.08	2	.7874
1/8	3.18	5/8	15.88	2 3	7.62	3	1.1811
5/32	3.97	21/32	16.67	4	10.16	4	1.5748
3/16	4.76	11/16	17.46	5	12.7	5	1.9685
7/32	5.56	23/32	18.26	6 7	15.24	6 7	2.3622
1/4	6.35	3/4	19.05	7	17.78	7	2.7559
9/32	7.14	25/32	19.84	8	20.32	8	3.1496
5/16	7.94	13/16	20.64	9	22.86	9	3.5433
11/32	8.73	27/32	21.43	10	25.40	10	3.937
3/8	9.53	7/8	22.22	11	27.94	20	7.8740
13/32	10.32	29/32	23.02	12	30.48	30	11.811
7/16	11.11	15/16	23.81	13	33.02	40	15.748
15/32	11.91	31/32	24.61	14	35.56	1	
1/2	12.7	1"	25.4	15	38.10	1	