



Infusion

Systems for

Biomedical

Research....

Simplified

Infu-Wodel

Infusion Simplified...

Laboratory animal infusion is greatly simplified with the *Infu-Model*TM infusion system. Infu-ModelTM, consists of only three components. It significantly reduces complexities and costs normally associated with other infusion systems without sacrificing accuracy or dependability.

Infu-Model [™] *Components...*





(see page 4 for details)



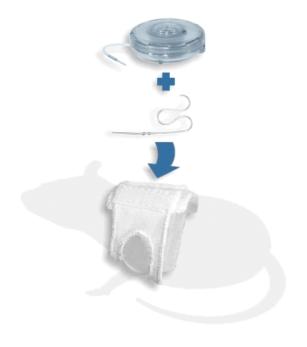






(see page 7 for details)





- · Reliable, accurate and low cost
- Extremely easy to fill and use
- 5 and 10 mL fluid volume
- Flow rates from 0.03 to 4.0 mL/hr
- Durable and extremely easy to use
- Securely holds pump to animal
- Sizes available for any application
- Quick, easy pump placement and removal
- Designed for use with Infu-DiskTM
- Easy connection to *Infu-DiskTM* pumps
- · Available in Silicone or Polyurethane
- Optional CBAS coating to prevent clotting



Application Diversity...

EFFICACY STUDIES

APPLICATION EXAMPLE • A drug efficacy investigation requires continuous infusion for 7 days to a large experimental study group. An aggressive schedule demands a maximum number of concurrent infusions. 5 mL *Infu-DiskTM* pumps with a cannula connectors are chosen to deliver the drug at 0.03 mL/hr to pre-cannulated 200 gram rats. The small *Infu-JacketTM* for rats, model number RJ-01-C, is used to hold the pumps.

TOXICOLOGY

APPLICATION EXAMPLE • A toxicology protocol requires continuous infusion for 120 hours to four sample groups totaling 92 rabbits. The project schedule requires a maximum number of concurrent infusions. 10 mL Infu-Disk pumps with cannula connector are chosen with a delivery rate of 0.083 mL/hr through PU-35-15-C, Infu-CathTM catheters. The medium Infu-JacketTM for rabbits, model number BJ-03-C, is used to hold the pumps.

LAB ANIMAL PAIN MANAGEMENT

APPLICATION EXAMPLE • An analgesic is delivered to dogs postoperatively over a 48 hour period. Lab technicians are not available for epidural administration beyond the labs business hours. 5 mL *Infu-DiskTM* pumps using a male luer connector are chosen with a delivery rate of 0.11 mL/hr. K9-01-C, *Infu-JacketTM* for dogs is chosen to hold the pumps and PU-50-60-L *Infu-CathTM* catheters are used for venous access.

CATHETER PATENCY

APPLICATION EXAMPLE • Catheters implanted for intravascular access must be flushed regularly to avoid vessel thrombosis. Animal population and business hours make scheduled flushing, using injectable saline or heparin, expensive. 10 mL *Infu-DiskTM* pumps with male luer connectors are used to continually administer saline at a rate of 0.06 mL/hr for one week. Pumps are held in a custom swine *Infu-JacketTM*.

HORMONE DELIVERY

APPLICATION EXAMPLE • A hormone is delivered intravaginally to bovine at a rate of 10 mL over a 24 hour period. Environment and budget constraints require an inexpensive delivery method. 10 mL, 0.42 mL/hr, Infu-DiskTM pumps with male luer connectors are chosen to deliver the hormone. The pump is held using a custom pouch and connects directly to catheters with pre-attached female luer connectors.



DESCRIPTION

Infu-DiskTM infusion pumps are the heart of the Infu-ModelTM system. These pumps accurately and continuously deliver fluids at rates from 0.03 to 4.0 mL/hr.

Infu-DiskTM simplifies all aspects normally associated with infusion pumps. Infu-DiskTM pumps are single use—disposable eliminating calibration and maintenance needs required by other pumps.

Operation is extremely simple. Flow rates are preset. No adjustment or programming is required. Just fill the fluid reservoir and press the start button.

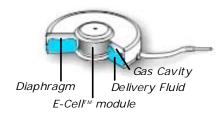


5 and 10 mL Infu-Disk[™] Infusion Pumps

Available with male luer or cannula adapter

PERFORMANCE CHARACTERISTICS

- Flow Rates from 0.03 to 4.0 mL/hr
- Available with 5 mL and 10 mL fluid reservoir
- Accuracy better than ±10%
- 45°C (113°F) maximum operating temperature
- Truly continuous fluid delivery
- Flow rate is not affected by fluid viscosity
- Large bore outlet tubing prevents occlusion
- Minimal influence of temperature and pressure
- Not for human use



Infu- $Disk^{TM}$ operates using Med-e-Cell's patented Prime- $Mover^{TM}$ technology.



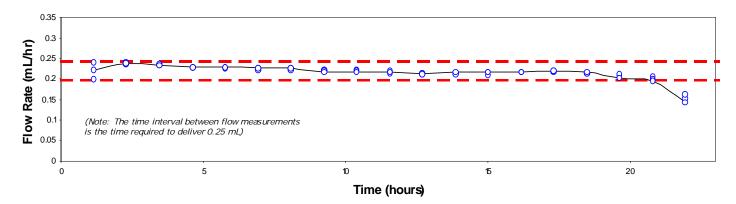
Infu-Model Components

SPECIFICATIONS

	5 mL Infu-Disk TM	10 mL Infu-Disk™
Flow Rate Range Fluid Volume Diameter Height Empty Weight Delivered Volume Outlet Tubing Length	0.03 to 1.0 mL/hr 4.9 to 5.1 mL 1.6 in (4.1 cm) 0.5 in (1.3 cm) less than 12 grams better than 98% 1.5 in (3.8 cm)	0.03 to 4.0 mL/hr 10.1 to 10.3 mL 2.0 in (5.1 cm) 0.63 in (1.6 cm) less than 20 grams better than 98% 1.5 in (3.8 cm)
Connector Type	male luer or 22g cannula	male luer or 22g cannula

FLOW CHARACTERISTICS

Typical *Infu-Disk*TM infusion pump flow rate performance is shown below. Flow profiles shown below are from 3 pumps, (model 05-0230-SC) delivering water at 25°C with a delivery fluid pressure of 11 mm Hg.



SELECTION GUIDE

Below is a table of our most popular Infu-DiskTM infusion pumps, which are typically in-stock and available for immediate delivery. These pumps are available with either the luer or cannula connector.

Part #	Nominal Rate	Duration	Part #	Nominal Rate	Duration
05-0030-Sx	0.03 mL/hr	7 day delivery	10-0060-Sx	0.06 mL/hr	7 day delivery
05-0040-Sx	0.04 mL/hr	5 day delivery	10-0080-Sx	0.08 mL/hr	5 day delivery
05-0050-Sx	0.05 mL/hr	4 day delivery	10-0100-Sx	0.10 mL/hr	4 day delivery
05-0070-Sx	0.07 mL/hr	3 day delivery	10-0140-Sx	0.14 mL/hr	3 day delivery
05-0110-Sx	0.11 mL/hr	2 day delivery	10-0210-Sx	0.21 mL/hr	2 day delivery
05-0210-Sx	0.21 mL/hr	1 day delivery	10-0420-Sx	0.42 mL/hr	1 day delivery

See back cover for additional ordering information



DESCRIPTION

 $Infu-Jacket^{TM}$ is designed specifically to securely hold $Infu-Disk^{TM}$ infusion pumps. These durable jackets are very easy to use, minimizing test setup time especially for large studies.

For small animals, *Infu-DiskTM* pumps are held to the jacket using Velcro. For larger animals the pump is held in a pocket. In either case, pump attachment and removal are quick and simple.

 $Infu-Jacket^{TM}$ is available for most species and in a variety of sizes. Custom designs are also available for any application.



SELECTION GUIDE

Model Number	Application	Jacket Size
RJ-00-C	Rat 100-200g	Extra-small
RJ-01-C	Rat 200-300g	Small
RJ-02-C	Rat 300-340g	Medium
RJ-03-C	Rat >450g	Large
GP-J1-C	Guinea Pig	Small
GP-J2-C	Guinea Pig	Medium
GP-J3-C	Guinea Pig	Large
BJ-02-C	Rabbit	Small
BJ-03-C	Rabbit	Medium
BJ-04-C	Rabbit	Large
NN-NN-C	For all other species or sizes please contact Med-e-Cell	



See back cover for additional ordering information



Infu-Wodel Components



DESCRIPTION

 $Infu-Cath^{TM}$ catheters are optimized for use with $Infu-Disk^{TM}$ infusion pumps. These catheters quickly and easily connect to the outlet of $Infu-Disk^{TM}$ infusion pumps.

 $Infu-Cath^{TM}$ catheters are available in silicone, polyurethane or polyurethane with CBASTM, a clot inhibiting coating in 15 cm and 60 cm lengths.

All catheters include movable retention beads and rounded distal tips. Silicone catheters are provided with insertion depth markings.



SELECTION GUIDE

Model Number	Material	CBAS	Size	Length	Application
PU-20-15-	Polyurethane		2 French	15 cm	Rat <300g
PU-30-15	Polyurethane	available	3 French	15 cm	Rat 200-350g, Primate <1kg
PU-35-15	Polyurethane	available	3.5 French	15 cm	Rat >300g, Cat, Rabbit, Primate >1kg
PU-35-60	Polyurethane	available	3.5 French	60 cm	Rat >300g, Cat, Rabbit, Primate >1kg
PU-50-60	Polyurethane	available	5 French	60 cm	Cat, Rabbit, Dog, Mini-Pig, Primate >3kg
PU-70-60	Polyurethane	available	7 French	60 cm	Rabbit, Dog, Mini-Pig, Pig
SIL-20-15-	Silicone		2 French	15 cm	Rat <300 g
SIL-30-15-	Silicone		3 French	15 cm	Rat 200-350g, Primate <1kg
SIL-35-15-	Silicone		3.5 French	15 cm	Rat >300g, Cat, Rabbit, Primate >1kg
SIL-35-60-	Silicone		3.5 French	60 cm	Rat >300g, Cat, Rabbit, Primate >1kg
SIL-50-60-	Silicone		5 French	60 cm	Cat, Rabbit, Dog, Mini-Pig, Primate >3kg
SIL-70-60-	Silicone		7 French	60 cm	Rabbit, Dog, Mini-Pig, Pig

= specify L for Luer connection or C for Cannula connection

= specify CBAS for optional CBAS clot inhibiting coating

See back cover for additional ordering information



10633 Roselle St. San Diego, CA 92121



ORDERING

• Determining non-stock $Infu-Disk^{TM}$ part numbers



- ① 05 or 10 (volume in mL)
- 3 S (sterile) or N (non-sterile)
- 2) Flow Rate in mL/hr x 1000 4 L (luer fitting) or C (cannula)

Example: Model 10-0083-SC refers to a sterile 10 mL pump with a flow rate of 0.083 mL/hr with a 22 ga. cannula.

- Refer to page 6 and 7 for $Infu-Jacket^{TM}$ and $Infu-Cath^{TM}$ model numbers.
- Order Infu- $Disk^{TM}$, Infu- $Jacket^{TM}$, and Infu- $Cath^{TM}$ by phone or online below.

Infu-Disk™, Infu-Jacket™, Infu-Cath™ and Infu-Model™ and the Med-e-Cell logo are trademarks of Med-e-Cell.

866-4-INFUDISK (TOLL FREE) WWW.MEDECELL.COM •