



medicina hospital syringe feeding system

leaders in enteral delivery



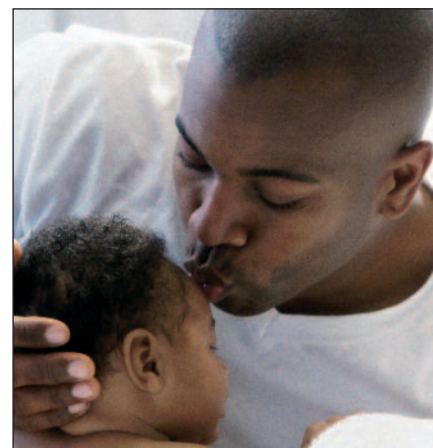
medicina standard hospital oral enteral feeding system

The Medicina standard range of oral/enteral syringes has been developed to deliver enteral feeds, medicines and flushes safely to neonatal, paediatric and adult patients.

The syringes, tubes and accessories are all fitted with a reverse Luer connector and coloured purple to clearly differentiate the enteral feed lines from the other patient access lines. The reverse Luer connector will not fit intravenous equipment and eliminates the risk of harm to patients from accidental misconnections. In addition the use of a standard reverse Luer allows the syringes to be connected and used with all other enteral equipment without the use of adapters.

This system of safety syringes and accessories provides a "trust-wide" solution for safer enteral access because all the components are compatible with all other enteral feeding systems used

within the hospital. A compatible and complimentary home feeding system is also available ensuring a smooth transition from hospital to home. Significant cost advantages can be gained by the use of all the components of these systems. All the products are sterile and single use only. They are individually packed and are available as stock items from NHS Logistics at ward level. They can also be obtained direct from Medicina.



eliminates the
risk of harm to
patients from
accidental
misconnections



“Significant cost advantages can be gained by the use of all the components of these systems”



patients

Firstly we would like to focus on particular patient groups in the hospital to understand their feeding and medication needs and show how the components of this syringe feeding system can be used to aspirate and safely deliver feeds, flushes and medicines to all hospital patients.

neonates

The hospital syringe feeding system has all the necessary devices to feed babies safely either by pump or gravity bolus.

Reverse Luer syringes provide the widest internal tip diameter, which gives a better flow for the delivery of gravity or bolus feeds. Oral syringes and Non-Luer syringes can only deliver gravity feeds very slowly because the feed has to pass through a very narrow syringe port. Reverse Luer syringes also produce lower delivery pressures for medications. It is not simply by chance that the Medicina system of enteral syringes has become the most widely used in UK hospitals.

To compliment the Medicina system, there is a new purple enteral syringe pump. The pump is as distinct from

IV pumps as the Medicina syringes and offers some unique safety features.

The P900 enteral syringe pump has been designed to deliver small volumes of enteral feeds, accurately and safely, using only enteral syringes. The pump is indicated for the delivery of enteral nutritional support in small volumes to neonates and paediatric patients. An important feature of the pump is that only "MEDICINA" syringes will operate in the pump. All other syringes are incompatible. This offers a unique additional safety feature for enterally fed patients.

All the necessary feeding tubes, low volume extension sets and other accessories like drainage bags are available to feed and aspirate all sizes of babies.

Medicina is the only company in Europe that makes all the components necessary to safely feed and administer medicines to babies in the department of neonatal care.



paediatric and adult patients

The Medicina oral enteral syringe system can be used safely to feed, flush and deliver enteral medicines to all types of patients. All patients can be at risk from the harm caused by misconnections of enteral feeds to intravenous devices.

Although these risks are higher in critical care departments many countries have now banned the use of standard I.V. Luers on all enteral feeding equipment and the use of intravenous syringes with enterally fed patients to reduce the risk of accidental misconnections.

Children needing enteral nutritional support are usually pump fed but some smaller children and some patients fed by pump overnight use bolus or gravity feeds. The larger syringes can be used to gravity feed either directly into the tube or using the extension set. Feeding containers can be accessed by using the milk straw. The smaller syringes can be used to deliver feeds into the tubes or directly in to pump administration sets.

Medicines can also be delivered using the smaller syringes both orally and into the feeding devices.

Adults are also often pump fed but it is important to maintain the patency of the enteral feeding device by flushing. All enteral devices should be flushed at least every six hours and also before and after medicines to prevent any drug-feed interaction. The smaller syringes are also used to deliver medicines accurately and safely into enteral feeding devices. It is also important to confirm the correct position of enteral feeding devices and the syringes are very useful for aspiration to check position with universal pH indicator strips.



“many countries have now banned the use of standard I.V. Luers on all enteral feeding equipment”

feeding tubes

Medicina has several ranges of feeding tubes for both short and long term indications.

The most popular tubes are designed to feed patients for short periods of up to seven days. There are also long term tubes with guide wires and wider bore tubes for aspiration. In addition there are several specialist nasojunal tubes and double lumen feeding and aspiration tubes including a Replogle tube.

nasogastric tube priming volumes

diameter/length	50cm	80cm	120cm
4FR	0.25mls	0.6mls	0.9mls
5FR	0.5mls	0.8mls	1.1mls
6FR	0.7mls	1.1mls	1.6mls
8FR	0.9mls	1.4mls	2.1mls
10FR	1.7mls	2.8mls	4.2mls

short term

The short term tubes are mainly used in neonates and children but can be used in adults who need short term enteral support.

The tubes are used to feed, flush and deliver medicines. The tubes have a male Luer connector which fits Medicina syringes and administration sets. The tubing itself is smooth and carries distance marks to reference tube position. All tubes have a radio-opaque stripe to confirm position with X-ray.

These tubes are made of polyurethane (SG), and silicone (MGSIL) in popular sizes for longer term usage. Additionally there are some specialist nasojunal tubes and double lumen feeding and aspiration tubes including a Replogle tube.



short term wide bore

These tubes are polyurethane and available from 6FR - 20FR diameters with a length of 100cm.

These tubes are used to aspirate and feed adults and children for seven to fourteen days. Typical use would be in intensive care, high dependency units, theatres, crash trolleys and surgical wards. The tubes have a male Luer lock connector which fits Medicina syringes. In addition they have a funnel or bladder type connector to fit suction equipment. The tubing itself is smooth and carries distance marks to reference tube position. All tubes have a radio-opaque stripe to confirm position with X-ray or a pH strip is included in each pouch. These tubes are softer and smoother than normal PVC Ryles type tubes and are easier to pass and more comfortable for the patients.

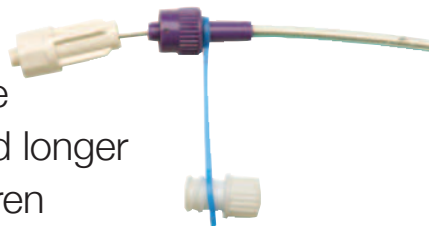


long term

These tubes are polyurethane with guide wires and are used longer term to feed adults and children for up to 60 days.

Some popular sizes in 8FR and 10FR are also available weighted. Typical users would be critical care areas, medical and care of the elderly units, paediatric units and also community patients. The tubes have a male Luer lock connector which fits Medicina syringes and the female Luer ends of pump administration sets. They also have a male-Luer guidewire

holder allowing aspiration to confirm correct position using Medicina syringes. The tubing itself is smooth and carries distance marks to reference tube position. All tubes are fully radio-opaque (40% barium sulphate compounded into the tube), to confirm position with X-ray or a pH strip is included in each pouch.



accessories



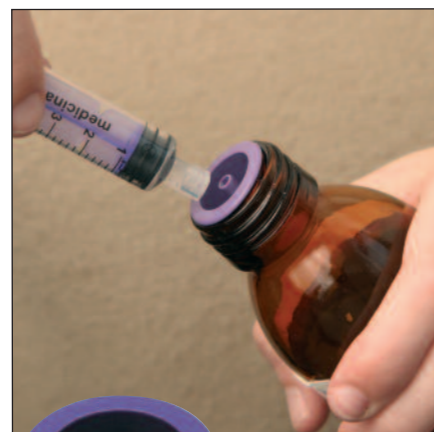
Medicina has put together the largest range of accessories to help with the delivery of feeds and medicines using the syringe feeding system.

There are straws, caps, bottle adapters, sets and a wide variety of small but important accessories to help with the access of enteral equipment. Several long and short extension sets with and without Y-sites are available which are used to connect between the feeding container or syringe and the nasogastric tube.



There are several non IV compatible adapters to help connect to other feeding devices like gastrostomy tubes. There is also a range of drainage bags all with compatible connectors to allow gastric drainage from nasogastric tubes or other devices.

There are also several bottle and container adapters to help access medicine containers and feed containers. A new enteral bag adapter is used to fill syringes for bolus feeds and also allow connection to feed bags via the use of a spike. Liquid medicines are best where possible. There are several press-in tamper-proof bottle adapters to access medicine containers. There are also some bottle adapters with straws which can be used with larger bottles to prevent having to invert heavy medicine bottles.



A dedicated Medicine needle is available which can access multi dose vials with the rubber bung type cap. A filter needle is also available to filter out any possible glass particles when medicines arrive in glass ampoules.

A specialist Surfactant administration kit is also available for the drawing up and delivery of surfactant in babies.



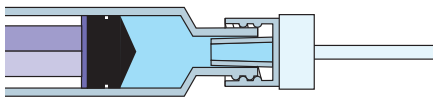
“The largest range of accessories to help with the delivery of feeds and medicines using the syringe feeding system”



connections

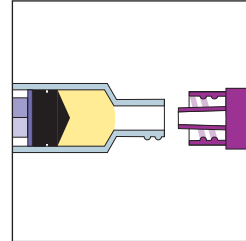
priming connections

It is normal practice, with I.V. fluids, to prime the syringe and connectors with fluid to exclude air. This is not necessary with enteral connections.



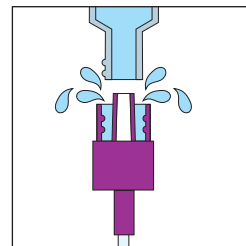
enteral connections

It is important that enteral connections are not primed with feed or thick medicines as it can be difficult to separate the connections. The threads can sometimes become clogged with feed and debris.



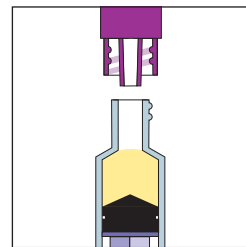
flushing connection threads

It is also good routine practice, following feeds or the delivery of medicines, to flush the inside threads of the connector of Medicina NG tubes. This will prevent any disconnection problems.



priming medicina enteral connections

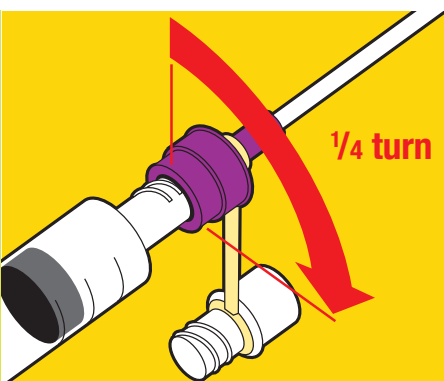
It is therefore recommended that feeding tubes, lines and enteral syringes are only primed up to but not including the connection. The connection is left full of air which is not a problem for enteral nutrition. In this way the internal threads of the male Luer do not become clogged with feed or medicines.



making connections

When making connections to Medicina Luer locks it is only necessary to tighten the connection by one quarter turn.

This will provide a good seal and will allow simple disconnection.



oral and enteral medicines

In general, liquid forms of medicine should be used where possible for both the oral and enteral routes.

Soluble tablets or capsules can be used if they are thoroughly dissolved. Enteric coated medicines should never be crushed or dissolved. If the liquid and soluble forms are unavailable then tablets can be crushed or capsules opened and mixed in 10-15mls of water (5-10mls for children). The tablet crusher should be rinsed and the washings and residue flushed down the tube.

delivery

Medicines should be delivered using an oral enteral syringe. Tubes should be flushed before and after medicines with 20-30mls of water in adults and 5-10mls in children. Each medicine should be administered separately and the tube and the syringe should be flushed between the dose of different medicines. In general medicines should not be added to feeds because of potential interactions. Timing may also be important as some medicines are designed to be absorbed by an empty stomach.

medicine container access

Medicines can be drawn up using the medicine straw and the milk straw for larger volumes and thicker preparations. If glass ampoules are used, then a medicine filter straw is available.

Several bottle adapters are available to fit the various liquid bottles. The universal bottle adapter fits most and there are six other sizes which fit flush into the bottle to allow the use of tamper-proof bottle caps with children. A needle is also available for use with multi-dose bottles with a rubber bung.

medicine and feed interactions

Some medicines can interact with enteral feeds, vitamins and electrolytes and some need to be given on an empty stomach. It is therefore important to flush before and after each feed to prevent any coagulation of the proteins in the feeds, which can block the feeding tubes.

outpatient medicines

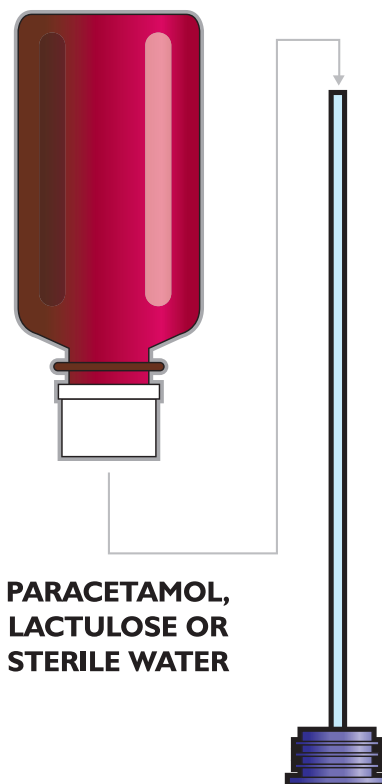
The Bottle adapter can be provided non-sterile so that a suitable adapter can be packed with a suitable syringe for patients leaving hospital. A small instruction pad has also been produced so an instructions leaflet can be torn off for each out-patient as required.

oral medicines

These can be drawn up and used in the same way and all Medicina syringes can be used for this route.

small volume medicines

It is advisable to use the medicine straw for very small volumes of medicines (Less than 0.5mls) as the straw will occupy the dead space of the syringe in the same way as the male Luer lock on the feeding tube. In this way medicines can be delivered accurately without considering the dead space.

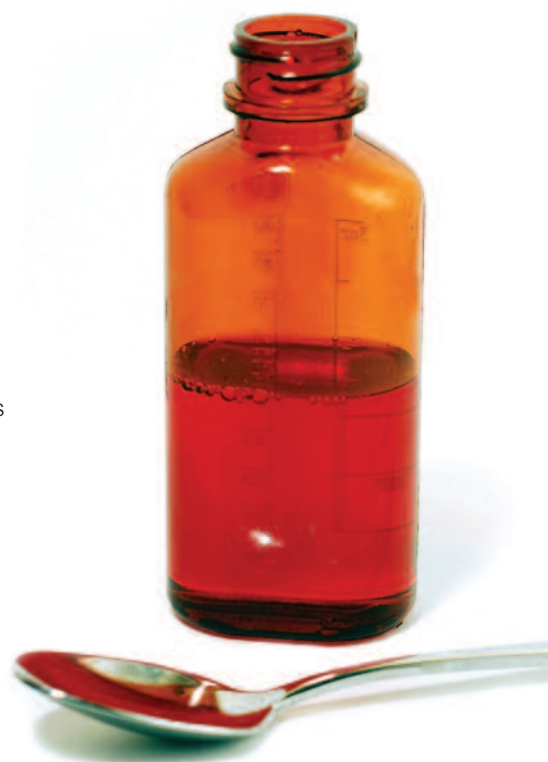


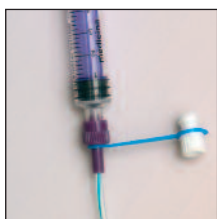
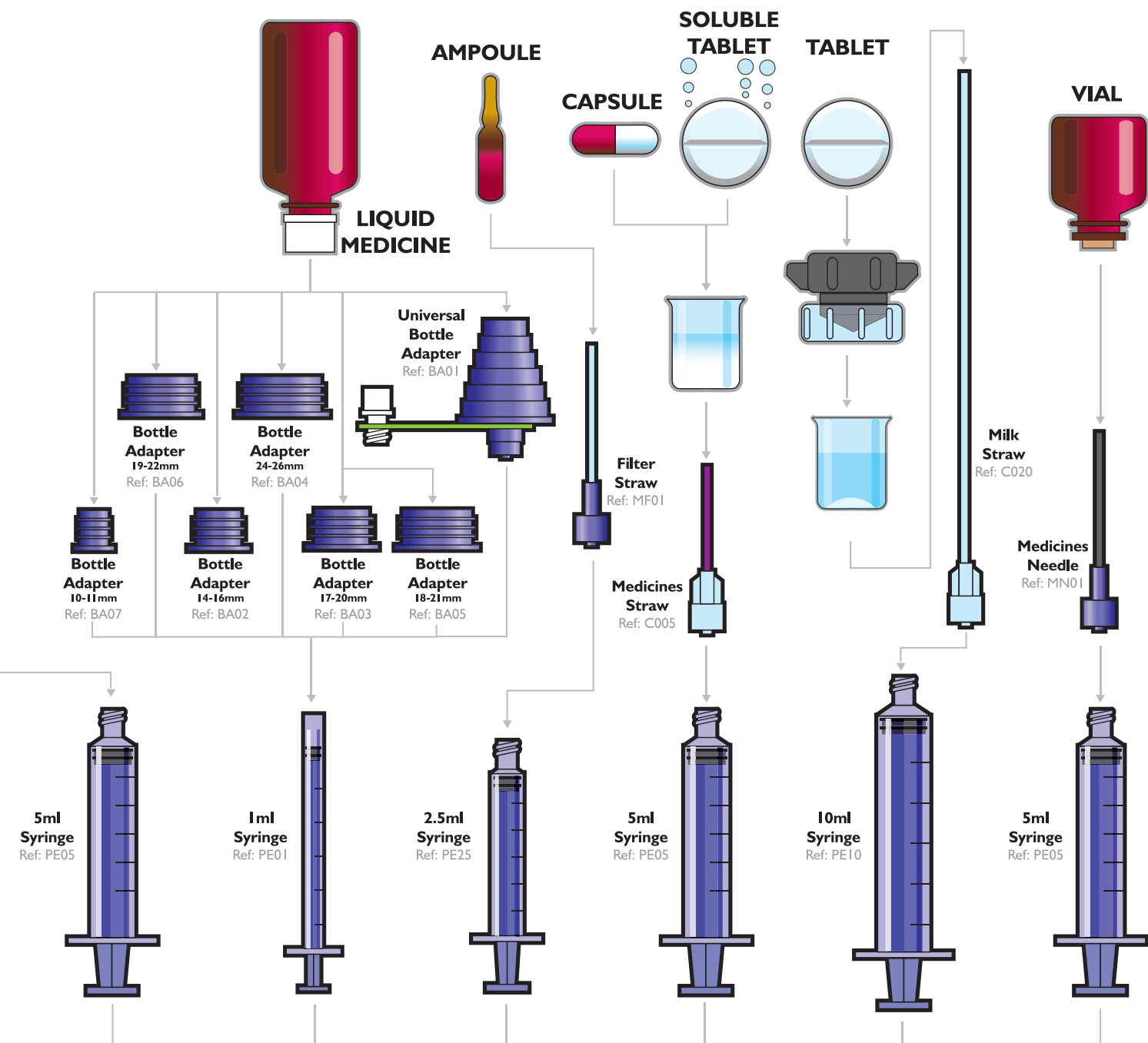
**PARACETAMOL,
LACTULOSE OR
STERILE WATER**

**Bottle Adapter
with Straw
Paracetamol**
Ref: BAS01

**Bottle Adapter
with Straw
Lactulose**
Ref: BAS02

**Bottle Adapter
with Straw
Sterile Water**
Ref: BAS03





ENTERAL

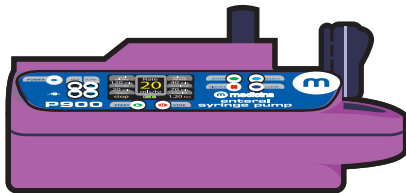


ORAL



product range

enteral syringe pump



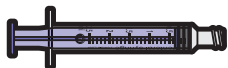
P900 Enteral Syringe Pump (1)
NHS Code: TBA



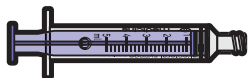
hospital enteral syringes



PE01 1ml Purple Female Luer (100)
NHS Code: FTA039



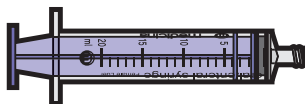
PE25 2.5ml Purple Female Luer (100)
NHS Code: FTA040



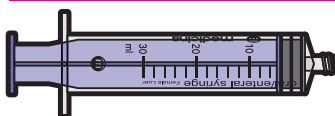
PE05 5ml Purple Female Luer (100)
NHS Code: FTA041



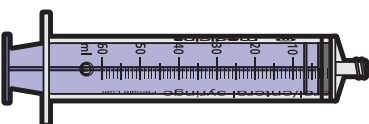
PE10 10ml Purple Female Luer (100)
NHS Code: FTA044



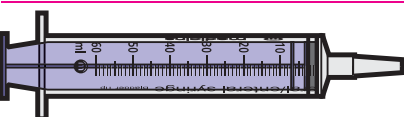
PE20 20ml Purple Female Luer (80)
NHS Code: FTA046



PE30 30ml Purple Female Luer (80)
NHS Code: TBA



PE60 60ml Purple Female Luer (60)
NHS Code: FTA047



PE60B 60ml Purple Bladder Tip (55)
NHS Code: FTA048

home reusable enteral syringes



HE01 1ml Reuseable Female Luer (100)
NHS Code: FTA131



HE25 2.5ml Reuseable Female Luer (100)
NHS Code: FTA132



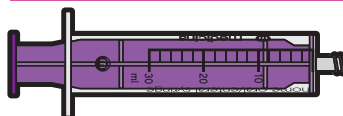
HE05 5ml Reuseable Female Luer (100)
NHS Code: FTA133



HE10 10ml Purple Reuseable Luer (100)
NHS Code: FTA134



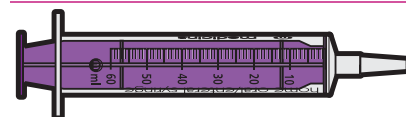
HE20 20ml Reuseable Female Luer (80)
NHS Code: FTA135



HE30 30ml Reuseable Female Luer (80)
NHS Code: TBA



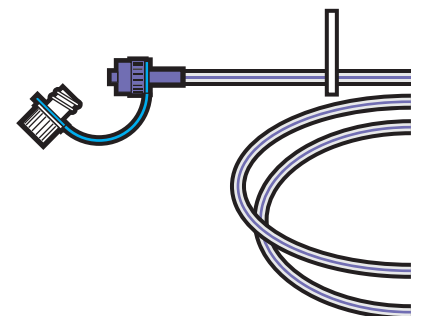
HE60 60ml Reuseable Female Luer (60)
NHS Code: FTA136



HE60B 60ml Reuseable Bladder Tip (55)
NHS Code: FTA137

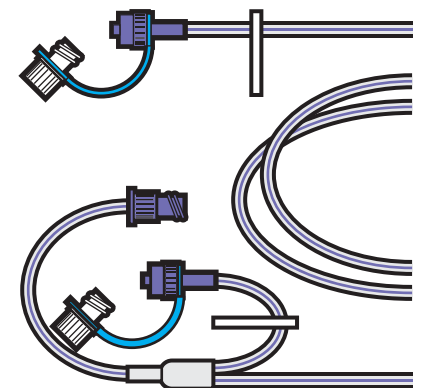
accessories

extension sets



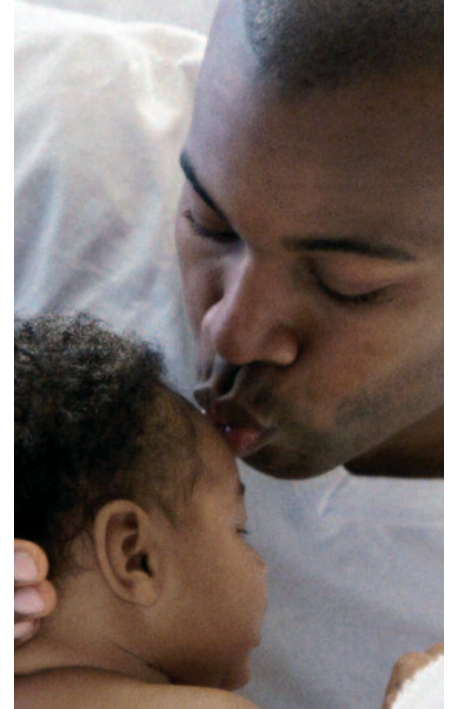
EP075 75cm long Purple Enteral Extension Set (200)
NHS Code: FWM893

EP150 150cm long Purple Enteral Extension Set (200)
NHS Code: FWM744



EP075Y 75cm long Y Site Purple Enteral Extension Set (50)
NHS Code: TBA

EP150Y 150cm long Y Site Purple Enteral Extension Set (50)
NHS Code: TBA



accessories

bottle adapters



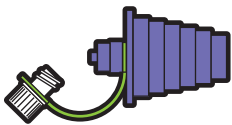
BAS01 Bottle Adapter with straw (Paracetamol) (50)
NHS Code: TBA



BAS02 Bottle Adapter with straw (Lactulose) (50)
NHS Code: TBA



BAS03 Bottle Adapter with straw (Sterile Water) (50)
NHS Code: TBA



BA01 Stepped Bottle Adapter (50)
NHS Code: FWM1026

BA01B Bulk pack of Stepped
Bottle Adapters (50)
NHS Code: TBA



BA02 14-16mm Bottle Adapter (50)
NHS Code: TBA

BA02B Bulk pack of 14-16mm
Bottle Adapters (50)
NHS Code: TBA



BA03 17-20mm Bottle Adapter (50)
NHS Code: TBA

BA03B Bulk pack of 17-20mm
Bottle Adapters (50)
NHS Code: TBA



BA04 24-26mm Bottle Adapter (50)
NHS Code: TBA

BA04B Bulk pack of 24-26mm
Bottle Adapters (50)
NHS Code: TBA



BA05 18-21mm Bottle Adapter (50)
(Oromorph)
NHS Code: TBA



BA06 19-22mm Bottle Adapter (50)
NHS Code: TBA



BA07 10-11mm Bottle Adapter (50)
NHS Code: TBA

miscellaneous



C005 Medicine Straw (200)
NHS Code: FVK136



C020 Milk Straw (200)
NHS Code: FVK137



MF01 Filter Straw (50)
NHS Code: TBA



MN01 Enteral Needle (100)
NHS Code: TBA



M158/1 Male Cap (packed singly) (200)
NHS Code: FWD090

M158/8 Male Caps
(200 packs of 8) (1600)
NHS Code: FWD077



M19400/V Gastrostomy Adapter (100)
NHS Code: FWM746

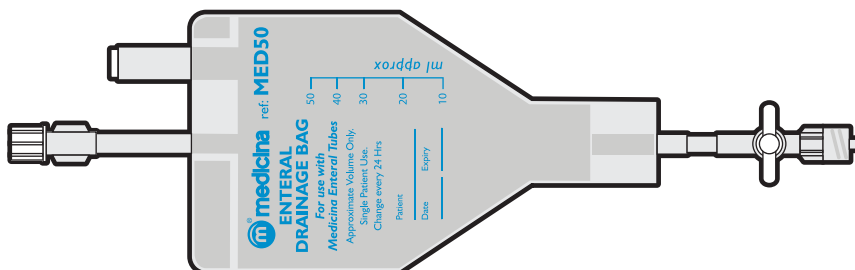


20-110/V Syringe Male/Female
End Cap (200)
NHS Code: FWD089



SA01 Pre-Filled Bag Spike Adapter (50)
NHS Code: TBA

enteral drainage bags



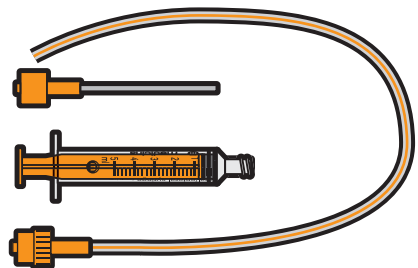
MED50 50ml Enteral Drainage Bag (50)
NHS Code: TBA

MED100 100ml Enteral Drainage Bag (50)
NHS Code: FWM996

MED250 250ml Enteral Drainage Bag (50)
NHS Code: FWM997

MED500 500ml Enteral Drainage Bag (50)
NHS Code: FWM998

surfactant kit



SF01 Surfactant Kit (25)
NHS Code: TBA

feeding tubes

short term Infant polyurethane feeding tubes



SG4/40	4FR x 40cm (50) NHS Code: TBA
SG4/50	4FR x 50cm (50) NHS Code: TBA
SG4/80	4FR x 80cm (50) NHS Code: TBA
SG5/40	5FR x 40cm (50) NHS Code: TBA
SG5/50	5FR x 50cm (50) NHS Code: FWM751
SG5/80	5FR x 80cm (50) NHS Code: FWM747
SG6/40	6FR x 40cm (50) NHS Code: TBA
SG6/50	6FR x 50cm (50) NHS Code: FWM752
SG6/80	6FR x 80cm (50) NHS Code: FWM748
SG6/100	6FR x 100cm (50) NHS Code: TBA
SG6/120	6FR x 120cm (50) NHS Code: TBA
SG8/40	8FR x 40cm (50) NHS Code: TBA
SG8/50	8FR x 50cm (50) NHS Code: FWM753
SG8/80	8FR x 80cm (50) NHS Code: FWM749
SG8/120	8FR x 120cm (50) NHS Code: FWM755
SG10/80	10FR x 80cm (50) NHS Code: FWM750
SG10/120	10FR x 120cm (50) NHS Code: FWM754
SG12/80	12FR x 80cm (50) NHS Code: FWM865
SG14/80	14FR x 80cm (50) NHS Code: FWM866

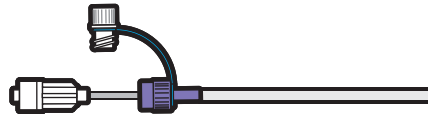
weighted tubes

SG6/50W	6FR x 50cm (50) NHS Code: FWM867
SG6/80W	6FR x 80cm (50) NHS Code: FWM868
SG8/80W	8FR x 80cm (50) NHS Code: FWM869
SG10/80W	10FR x 80cm (50) NHS Code: FWM870
SG12/80W	12FR x 80cm (50) NHS Code: FWM871

short term Infant weighted silicone feeding tubes

SG6/85WSIL	6FR x 85cm (10) NHS Code: TBA
SG8/85WSIL	8FR x 85cm (10) NHS Code: TBA
SG10/85WSIL	10FR x 85cm (10) NHS Code: TBA

long term polyurethane feeding tubes



NGP6/55	6FR x 55cm (25) NHS Code: FWM1007
NGP6/75	6FR x 75cm (25) NHS Code: FWM1006
NGP6/85	6FR x 85cm (25) NHS Code: FWM1005
NGP8/55	8FR x 55cm (25) NHS Code: FWM1004
NGP8/75	8FR x 75cm (25) NHS Code: FWM1003
NGP8/85	8FR x 85cm (25) NHS Code: FWM1002
NGP8/120	8FR x 120cm (25) NHS Code: FWM1001
NGP10/85	10FR x 85cm (25) NHS Code: FWM1000
NGP10/120	10FR x 120cm (25) NHS Code: FWM999

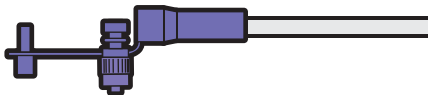
weighted tubes

NGP8/85W	8FR x 85cm (25) NHS Code: FWM882
NGP10/85W	10FR x 85cm (25) NHS Code: FWM883

nasojejunal tubes

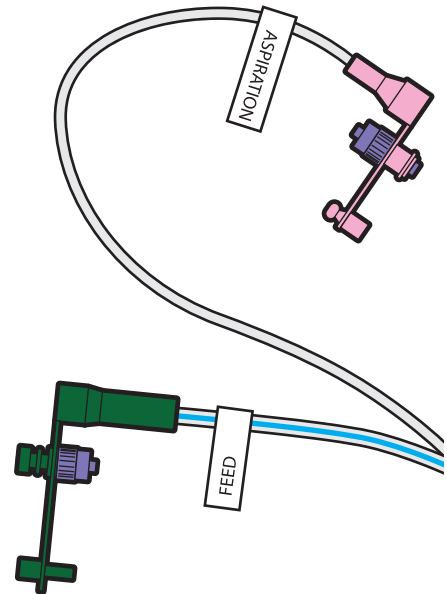
NJP6/120	6FR x 120cm (10) NHS Code: TBA
NJP8/120	8FR x 120cm (10) NHS Code: TBA
NJP8/130	8FR x 130cm (10) NHS Code: TBA
NJP10/130	10FR x 130cm (10) NHS Code: FWM1004

short term polyurethane Ryles feeding tubes

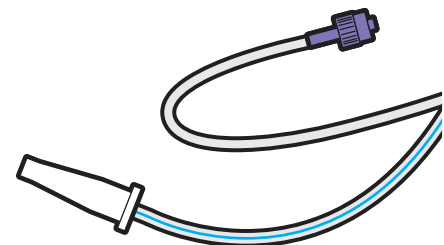


RT6/80	6FR x 80cm (50) NHS Code: TBA
RT8/80	8FR x 80cm (50) NHS Code: TBA
RT10/100	10FR x 100cm (50) NHS Code: TBA
RT12/100	12FR x 100cm (50) NHS Code: FWM884
RT14/100	14FR x 100cm (50) NHS Code: FWM885
RT16/100	16FR x 100cm (50) NHS Code: FWM886
RT18/100	18FR x 100cm (50) NHS Code: FWM887
RT20/100	20FR x 100cm (50) NHS Code: FWM888

double lumen feeding tubes

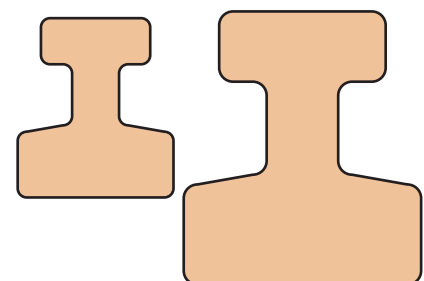


EF2	Standard Nasojejunal Feed/ Aspiration Tube 7/9FR x 130cm (5) NHS Code: FWM617
EF2E	Endoscopic Nasojejunal Feed/ Aspiration Tube 7/9FR x 130cm (5) NHS Code: FWM618

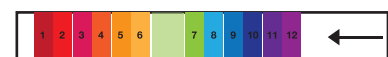


NF02	Double Lumen "Replogle Tube" 10FR (10) NHS Code: TBA
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accessories



NP02	Paediatric NG Plaster (100) NHS Code: TBA
NP01	Adult NG Plaster (100) NHS Code: TBA

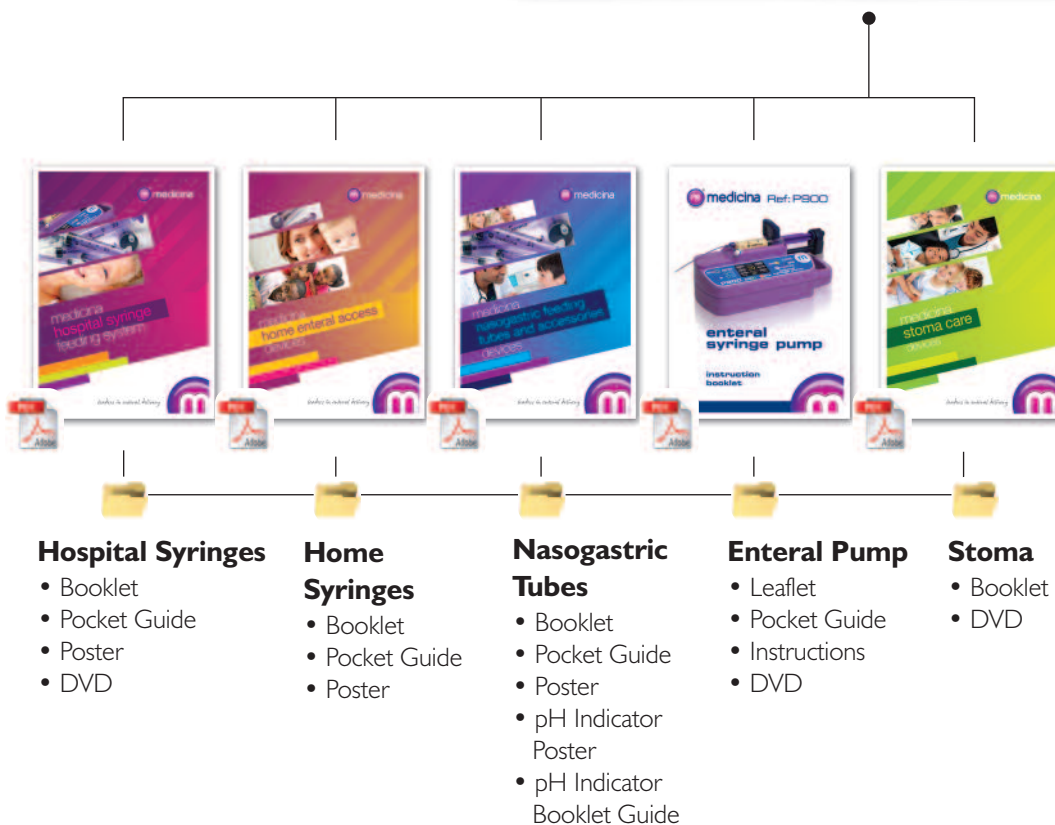


IN01	pH Indicator Strips (200) NHS Code: FWM745
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information guides for medicina products

Medicina produces a large number of more detailed guides for the safe use of all Medicina products.

There is a comprehensive web site which has a large download section. Booklets, instructions posters and pocket guides can be downloaded in PDF format. Alternatively contact Medicina on 01204 695050 to request hard copies. Below are some examples of the information we provide.



medicina hospital syringe feeding system

The Medicina hospital syringe system has been developed to deliver enteral feeds, medicines and flushes safely to neonatal, paediatric and adult patients. This system provides a “trust-wide” solution for safer enteral access because all the components are compatible with all other enteral feeding systems used within the hospital environment.



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leaders in enteral delivery

