Animal Health Catalogue

Injection Conventional Systems

BD

BD - Over 100 years of continuous improvement in injection technology

1906 BD builds the first hypodermic needle and syringe manufacturing plant in the U.S.

1925 BD Yale Luer-Lok™ Syringe provides a safe way to attach and remove a needle from a syringe.

1940s BD introduces a partly disposable sterile glass syringe for administering the newly discovered antibiotic, penicillin.

1950s BD Hypak™ Syringe, the first completely disposable glass syringe, is used in field tests for the polio vaccine developed by Dr. Jonas Salk.

1960s BD pioneers the use of polypropylene for syringes by introducing its first disposable BD Plastipak™ Syringe.

1970s BD launches an extensive injection technique training program for hospitals.

1980s BD is the first company to initiate field trials for WHO approval of an auto-disable immunization device, the BD SoloShot™ Syringe.

1990s The BD Safety Compliance Initiative is launched with an expanded safety injection portfolio.

This education program helps to raise awareness about the risk of accidental needlesticks.

2000s BD introduces BD SoloShot™ IX, a low-cost auto-disable injection device for immunization. In addition, a new reuse prevention platform is developed: The BD SoloMed™ Breakable Plunger Syringe designed for urban acute care hospitals.

2010 The BD SoloShot™ Mini, designed with children and the earth in mind, is smaller than similar injection devices for immunization yet provides proven auto-disable technology.

2011 BD Emerald™ family of high-quality syringes are introduced with options to address patient and healthcare worker safety. They have up to 20% less material than similar syringes*.

*Data on file. Based on combined average of leading syringe brands worldwide

Syringes - 2-Piece Technology

2-Piece Design
To ensure leak tightness, the syringe plunger has a larger diameter than the barrel. At the same time, the syringe barrel has to have thin wall technology to be flexible enough to accommodate the plunger movement. This requires precision molding of barrel and plunger. The resin formulation used for the barrel is self-lubricating so there is no need for additional lubrication with silicone oil.

Graduations
Scale markings typically in cubic centimetres (cc) or millilitre (ml) units. These units of measure are equivalent.

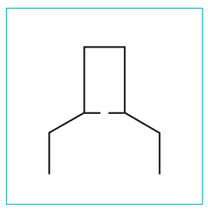
Barrel
Reservoir for holding liquid, clearly graduated to allow accurate and visual measurement of the syringe contents.

Flanges
The "wings" that jut out from the side of the syringe barrel providing an area or surface for the index finger and middle finger to grasp during aspiration or administration.

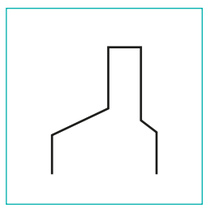
Thumb Press
The clinician presses to push the plunger rod down into the barrel to expel its content

Plunger Rod
A piston-like device inside the barrel

The anatomy of a 2-piece syringe (without stopper)



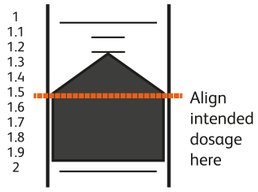
Concentric Luer Slip Tip:
A friction-fit connection that requires the clinician to insert the tip of the syringe into the needle hub or another attaching device in a push-and-twist manner. This will ensure a connection that is less likely to detach. Simply sliding the attaching device onto the syringe tip will not ensure a secure fitting.



Eccentric Luer Slip Tip:
Allows for work requiring closer proximity to the skin. Generally used for venipunctures and aspiration of fluids.

Syringes - 3-Piece Technology

Latex Free Stopper
Prevents leakage of medication around the plunger and acts as an indicator for measuring the syringe contents (see diagram).



Graduations
Scale markings typically in cubic centimetres (cc) or millilitre (ml) units. These units of measure are equivalent. On insulin syringes, however, graduations are displayed in "units" based on the insulin concentration prescribed. (Example: U-100 means 100 units of insulin suspended within 1 ml of fluid. A 3/10 ml insulin syringe will accommodate up to 30 units when using U-100 insulin).

Barrel
Reservoir for holding liquid, clearly graduated to allow accurate and visual measurement of the syringe contents.

Flanges
The "wings" that jut out from the side of the syringe barrel providing an area or surface for the index finger and middle finger to grasp during aspiration or administration.

Thumb Press
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Plunger Rod
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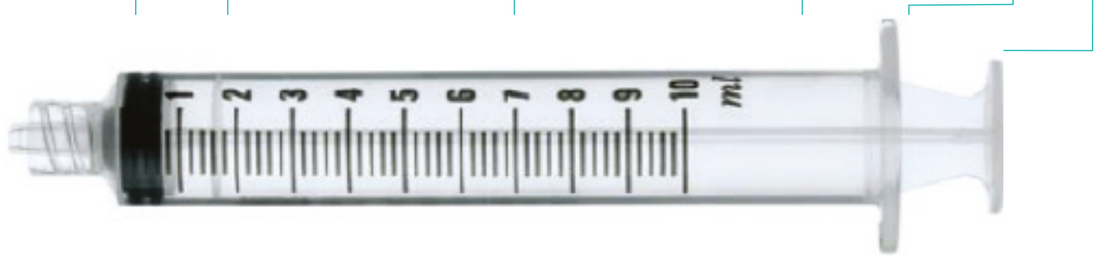
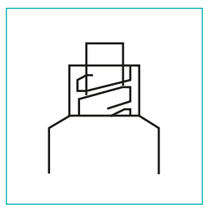
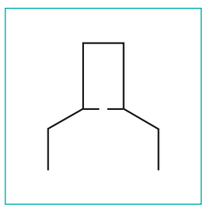


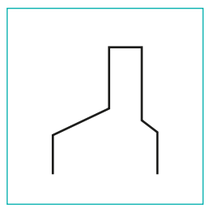
The anatomy of a 3-piece syringe (with stopper)



Luer Lock Tip:
Generally used for injections requiring a secure connection of the syringe to another device. The tip is threaded for a "locking" fit, and is compatible with a variety of needles, catheters and other devices.



Concentric Luer Slip Tip:
A friction-fit connection that requires the clinician to insert the tip of the syringe into the needle hub or another attaching device in a push-and-twist manner. This will ensure a connection that is less likely to detach. Simply sliding the attaching device onto the syringe tip will not ensure a secure fitting.



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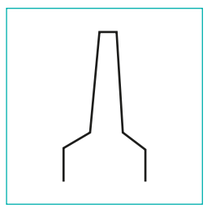

Catheter Tip:
Used for flushing (cleaning) catheters, gastrostomy tubes and other devices. Insert catheter tip securely into catheter or gastrostomy tube.

BD Discardit™ II - 2 piece Syringe

- Transparent barrel for good visualization of syringe content
- Smooth plunger movement - reduced sliding force
- Leak-tight
- Accurate graduation suited to user's needs
- With a retaining ring to prevent accidental plunger rod withdrawal
- Design of finger grip flanges ensures stability and comfort during injection
- Ergonomically designed plunger for single-handed operation
- Sterile, single-use

Capacity (ml)	Tip	Scale (ml)	Shelf Box / Shipping Case	Reference
2	Luer slip concentric	0.1	100 / 3000	**300928**
5	Luer slip eccentric	0.2	100 / 1800	**309050**
10	Luer slip eccentric	0.5	100 / 1200	**309110**
20	Luer slip eccentric	1	80 / 960	**300296**

BD Plastipak™ - 3 piece syringe

- Clear barrel for visualization of syringe content
- Bold scale printing to aid in setting for a more accurate dosage of medication
- Special silicone lubrication ensures that plunger moves smoothly and evenly
- Retaining ring to prevent accidental plunger rod withdrawal
- Leak-tight (locking facility on BD Luer-Lok™ syringes)
- BD Luer-Lok™ needle hub or extension line can be safely locked on the syringe
- Not autoclavable
- Sterile, single-use

BD Plastipak™ Syringes with Luer-Lok™ Tip

Reference	Capacity (ml)	Tip	Scale (ml)	Units / Box
309658	3	concentric	0.1	200/800
309649	5	concentric	0.2	125/500
305959	10	concentric	0.2	100/400
300629	20	concentric	1	120/480
301189	20	concentric	1	60/240
301229	30	concentric	1	60/240
300865	50	concentric	1	60/240
300869	50, amber	concentric	1	60/240

BD Plastipak™ Syringes with Luer Slip Tip

Reference	Capacity (ml)	Tip	Scale (ml)	Units / Box
300613	20	eccentric	1	120/480
301183	20	eccentric	1	60/240
301231	30	eccentric	1	60/240
300866	50	eccentric	1	60/240

BD Plastipak™ Syringes with Catheter Tip

Reference	Capacity (ml)	Tip	Scale (ml)	Units / Box
300867	50	concentric	1	60/240
300605	100 with luer slip adapter	concentric	2	25/50

BD Emerald™ - 3 piece syringe

- Green stopper and bold scale markings to aid in setting an accurate dose
- Clear barrel to allow for visualization of fluid
- Retaining ring to help prevent accidental plunger rod pullout
- Flange size and shape to provide stability and comfort during use
- Textured thumb press to reduce slippage during administration
- Minimizes waste disposal – has up to 20 % less material than other syringes*
- Sterile, single use

Capacity (ml)	Tip	Scale (ml)	Shelf Box / Shipping Case	Reference
2	Luer slip concentric	0.1	100 / 3000	**307727**
3	Luer slip concentric	0.1	100 / 2400	**302986**
5	Luer slip concentric	0.2	100 / 2000	**307731**
10	Luer slip concentric	0.2	100 / 1200	**307736**

With attached needle

Capacity (ml)	Tip	Gauge	Length (inch)	Length (mm)	Scale (ml)	Shelf Box / Shipping Case	Reference
2	Luer slip concentric	22 G	1 1/4"	30	0.1	100 / 2000	**307728**
2	Luer slip concentric	23 G	1"	25	0.1	100 / 2000	**307740**
2	Luer slip concentric	23 G	1 1/4"	30	0.1	100 / 2000	**307741**
5	Luer slip concentric	21 G	1 1/2"	40	0.2	100 / 1500	**307732**
5	Luer slip concentric	22 G	1 1/4"	30	0.2	100 / 1500	**307733**
5	Luer slip concentric	23 G	1 1/4"	30	0.2	100 / 1500	**307735**
10	Luer slip concentric	21 G	1 1/2"	40	0.2	100 / 900	**307737**
10	Luer slip concentric	22 G	1 1/4"	30	0.2	100 / 900	**307738**

*Data on file. Based on combined average of leading syringe brands worldwide

BD Emerald™ Syringe

Combines High-Quality Performance and Reduced Environmental Impact

- Up to 20 % less material than other syringes*
- Manufactured in Europe with 100 % solar energy

*Data on file. Based on combined average of leading syringe brands worldwide

BD

BD Plastipak™, 3-piece Syringe, 1 ml low dosage

- Low dose syringes make it easier to accuractely measure a small dose than with a large capacity syringe
- With or without needle
- 1 ml syringes with 0.01 ml graduations
- Syringe barrel and piston made of polypropylene
- Sterile, single use

1 ml syringe with needle

Capacity (ml)	Gauge	Length (inch)	Length (mm)	Scale (ml)	Shelf Box / Shipping Case	Reference
1	25 G	5/8"	16	0.01	120/960	**303175**
1	26 G	3/8"	10	0.01	120/960	**303176**

Tuberculin syringes

Capacity (ml)	Tip	Scale (ml)	Shelf Box / Shipping Case	Reference
1	Luer slip concentric	0.01	120/960	**303172**

Insulin syringes

Capacity	Tip	Scale	Shelf Box / Shipping Case	Reference
1ml 40 I.U.	Luer slip concentric	International units	120/960	**303173**
1ml 100 I.U.	Luer slip concentric	International units	120/960	**303174**

Insulin syringe with needle

Capacity	Gauge	Length (inch)	Scale	Shelf Box / Shipping Case	Reference
1ml 40 I.U.	30 G	1/2"	International units	120/960	**303177**
1ml 100 I.U.	25 G	5/8"	International units	120/960	**303179**
1ml 100 I.U.	26 G	3/8"	International units	120/960	**303178**

BD Plastipak™ 1 ml Sub-Q and BD Plastipak™ 1 ml Test syringes

- Scale graduation 0.01 ml
- Without dead space
- Minimizes the formation of air bubbles
- Helps ensuring administration of full dose
- BD Plastipak™ Sub-Q syringe with a short bevel needle for intradermal injections
- Packed in polybags of 10 syringes each
- Sterile, single use

Capacity (ml)	Gauge	Length (mm)	Length (inch)	Bevel	Scale (ml)	Color Code	Shelf Box / Shipping Case	Reference
1 (Sub-Q)	26 G	12.7	1/2"	Intradermal	0.01	Brown	100 / 500	**305501**
1 (Test)	27 G	10	3/8"	Regular	0.01	Grey	100 / 500	**305502**

Needle bevel types

Regular Bevel

Short Bevel

Intradermal Bevel

Needle wall thickness

Regular Wall

Thin Wall

Needle ISO color codes

30G	23G
29G	22G
28G	21G
27G	20G
26G	19G
25G	18G
24G	

BD Microlance™ 3 needle

- Easy penetration, smooth gliding force during insertion/withdrawal and reduced catheter friction while sliding through tissue is a result of the following:
  - Three bevel precision grinding of needle bevel
  - Targeted needle surface polishing process
  - Proprietary needle lubrication process
- Thin walls permit the use of thinner needles with larger lumen thus increasing flow rates during injection and collection
- Recommended use: intradermal, subcutaneous, intramuscular, intravenous injections and aspiration
- BD Microlance™ needles can be connected to a Luer slip adapter or Luer-Lok™ connector
- Hub and colour coding in compliance with ISO standards
- Sterile, single use

Gauge	Length (mm)	Length (inch)	Wall	Bevel	Color Code	Shelf Box / Shipping Case	Reference
30 G	13	1/2"	Regular	Regular	Yellow	100 / 5000	**304000**
27 G	19	3/4"	Regular	Regular	Grey	100 / 5000	**302200**
27 G	13	1/2"	Regular	Regular	Grey	100 / 5000	**300635**
26 G	16	5/8"	Regular	Regular	Brown	100 / 5000	**304300**
26 G	13	1/2"	Regular	Regular	Brown	100 / 5000	**303800**
26 G	10	3/8"	Regular	Regular	Brown	100 / 5000	**300300**
25 G	25	1"	Regular	Regular	Orange	100 / 5000	**300400**
25 G	16	5/8"	Regular	Regular	Orange	100 / 5000	**300600**
24 G	25	1"	Regular	Regular	Purple	100 / 5000	**304100**
23 G	30	1 1/4"	Thin	Regular	Blue	100 / 5000	**300700**
23 G	25	1"	Thin	Regular	Blue	100 / 5000	**300800**
23 G	16	5/8"	Thin	Regular	Blue	100 / 5000	**306088**
22 G	50	2"	Regular	Regular	Black	100 / 4000	**300094**
22 G	40	1 1/2"	Thin	Regular	Black	100 / 5000	**301000**
22 G	30	1 1/4"	Thin	Regular	Black	100 / 5000	**300900**
22 G	25	1"	Thin	Regular	Black	100 / 5000	**304727**
21 G	50	2"	Thin	Regular	Green	100 / 4000	**301155**
21 G	40	1 1/2"	Thin	Regular	Green	100 / 5000	**304432**
21 G	25	1"	Thin	Regular	Green	100 / 5000	**301156**
21 G	16	5/8"	Thin	Regular	Green	100 / 5000	**304434**
20 G	40	1 1/2"	Thin	Regular	Yellow	100 / 5000	**301300**
20 G	25	1"	Thin	Regular	Yellow	100 / 5000	**304827**
19 G	50	2"	Thin	Regular	Cream	100 / 4000	**301750**
19 G	40	1 1/2"	Thin	Regular	Cream	100 / 5000	**301500**
19 G	25	1"	Thin	Regular	Cream	100 / 5000	**301700**
18 G	40	1 1/2"	Thin	Short	Pink	100 / 5000	**304622**
16 G	40	1 1/2"	Regular	Regular	White	100 / 5000	**300637**

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