

Smiths Medical Infusion Disposables for Syringe Infusions

FACTORS TO CONSIDER WHEN SELECTING INFUSION DISPOSABLES

Tubing Bore

Using smaller bore tubing may trigger occlusion alarms at the higher rates needed for adult infusions. Below are approximate internal diameters (ID) for infusion disposables manufactured by Smiths Medical.

- Standard bore: 0.094" ID bore size needed for higher flow rates and/or viscous fluids, higher priming and flush volume needed
- Small bore: 0.035 – 0.046" ID
- Micro bore: 0.015 – 0.020" ID smaller bore size needed for slower rates and/or non-viscous fluids, low priming volumes so less drug lost in dead space, less flush volume needed

Tubing Length

Adult patients will likely need minimum of 60" tubing length to permit ambulation and placement of pumps at bedside.

Clamps

Slide or pinch clamp on connectors and extension sets are commonly used during syringe or IV line changes.

Note: not all extension sets include clamps.

IV Line Access Port

Port or ports should be distal to the large volume pump (LVP) pumping mechanism and close to the hub of the vascular access device (VAD) to connect syringe infusions and/or for IV push (IVP) medications. An add-on connector (3-6" length) may be needed for additional access ports. Selection is a clinical decision.

- Single access port for IV push meds. IV push delivers medication through an IV line over a short time period
- Dual access port – one port to push medications, one port to run continuous infusion
- Triple port – one port to push medications, one port for intermittent medications over time, and one port for continuous infusion

Needleless Access Connector (NAC)

Consider adding a NAC (e.g.: SmartSite®) to open ports to allow the system to stay closed with syringe changes. Some connectors have bonded NACs. Some extension sets and IV line access ports do not have NACs so they may need to be added.

Back Check Valves

A one-way valve that prevents retrograde flow from one infusion line to another. Retrograde flow may occur when the main IV line is running faster than the secondary infusion.

- Consider using a connector with back check valve(s) for slower running and/or intermittent infusions

Filters

Some syringe delivered medications may require filtering. Filter selection is determined according to organizational policy and procedures or manufacturer recommendations for medications/solutions. Smiths Medical offers filter extension sets with 0.2 and 1.2 micron filters.

Extension Sets

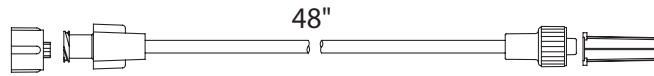
Most commonly used for syringe infusions

Standard Bore

May be needed if rate is high and triggering occlusion alarms on the pump.

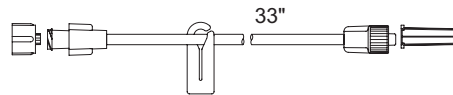
LONGEST STANDARD BORE SET – NO CLAMP

Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
MX048 50351688510301	Standard Bore Extension with Male Luer Lock	• Non-DEHP formulation*	5 mL	49" (124 cm)	50



LONGEST STANDARD BORE SET WITH CLAMP – MAY CONNECT TWO IF LONGER LENGTH IS NEEDED

Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
MX455FL 50351688507158	Standard Bore Extension with Removable Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	4.0 mL	34" (86 cm)	50



Small Bore

Most common and largest selection of choices. Likely non-DEHP, clamp and longer lines are preferred but non-clamp may be substituted if needed.

Note: some of these sets are DEHP formulation

Note: sets boxed in by dark blue will likely be highest use volume

SETS WITH CLAMPS

Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
536035 50351688516358	Small Bore Extension with Non-Removable Blue Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	1.1 mL	61" (155 cm)	50
537235C 50351688516297	Small Bore Extension with Non-Removable Blue Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	1.3 mL	72" (183 cm)	50
539635 50351688516266	Small Bore Extension with Non-Removable Blue Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	1.6 mL	96" (244 cm)	50
MX448L60 50351688507387	Small Bore Extension with Removable Blue Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	1.8 mL	60" (152 cm)	50

Please note: All products listed are not made with natural rubber latex.

Extension Sets

Most commonly used for syringe infusions

Small Bore (continued)

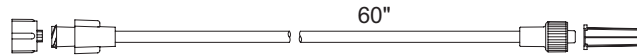
Most common and largest selection of choices. Likely non-DEHP, clamp and longer lines are preferred but non-clamp may be substituted if needed.

Note: some of these sets are DEHP formulation

Note: sets boxed in by dark blue will likely be highest use volume

SET WITHOUT CLAMP

Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
5360225	Small Bore Extension with Male Luer Lock	• DEHP Formulation	2.4 mL	60" (152 cm)	25



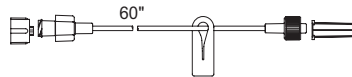
Micro Bore

Microbore tubing may trigger occlusion alarms at high rates needed for adult infusions.

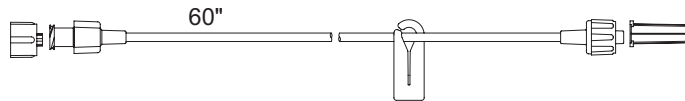
Note: MX448HL60 and MX448HL36 have lipid-resistant yellow-tinted connectors indicated by ULTRA™.

SETS WITH CLAMPS

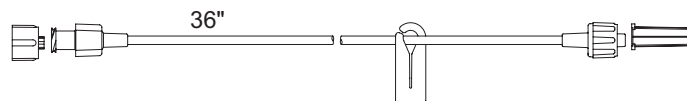
Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
536040C 50351688516327	Micro Bore Extension with Non-Removable Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	0.3 mL	61" (155 cm)	50



MX448HL60 50351688507424	ULTRA™ Small Bore Extension with Removable Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation • Lipid Resistant • Non-PVC 	1.7 mL	60" (152 cm)	50
-----------------------------	--	--	--------	--------------	----



MX448HL36 50351688507431	ULTRA™ Small Bore Extension with Removable Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation Fluid Path • Lipid Resistant • Non-PVC 	1.1 mL	37" (94 cm)	50
-----------------------------	--	---	--------	-------------	----



IV Line Access Ports

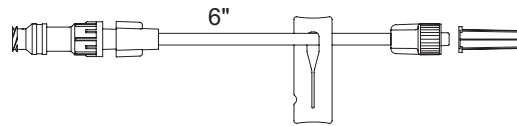
May be needed to provide additional access ports for continuous, intermittent, and IVP meds.

Usually connected directly to hub of the vascular access device.

Standard Bore

SETS WITH CLAMPS

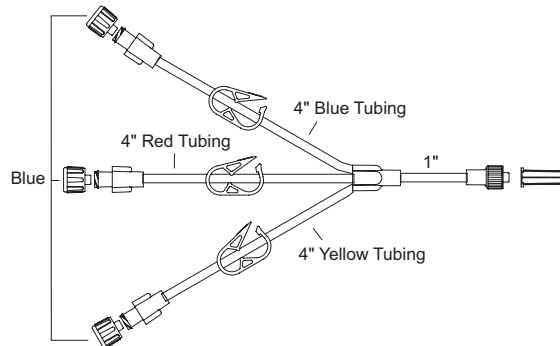
Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
SM5011 50351688500579	Standard Bore Extension with SmartSite® Needle-Free Valve, Non-Removable Blue Slide Clamp, Male Luer Lock	• Non-DEHP Formulation	0.8 mL	8" (20 cm)	100



MX452 50351688507288	Standard Bore Extension with Pinch Clamp, Male Luer Lock	• Non-DEHP Formulation	0.8 mL	7" (18 cm)	50
-------------------------	--	------------------------	--------	------------	----

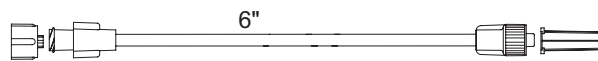


MX458L 50351688507073	Standard Bore Color-Coded Trifurcated Extension with Pinch Clamps, Non-Vented Blue Caps, Male Luer Lock	• DEHP Formulation	1.8 mL	6" (15.2 cm)	50
--------------------------	---	--------------------	--------	--------------	----

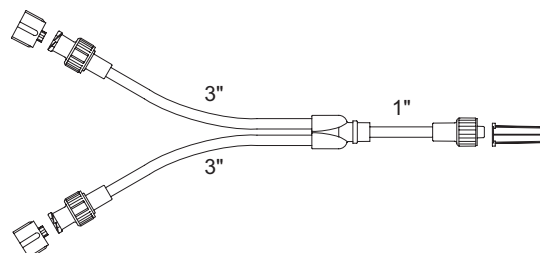


SETS WITHOUT CLAMPS

Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
MX452FL 50351688507271	Standard Bore Extension with Male Luer Lock	• Non-DEHP Formulation	0.8 mL	7" (18 cm)	50



MX456CVL 50351688507134	Standard Bore Bifurcated Extension with 2 Back Check Valves, Male Luer Lock	• Non-DEHP Formulation	1.0 mL	5" (13 cm)	50
----------------------------	---	------------------------	--------	------------	----



Please note: All products listed are not made with natural rubber latex.

IV Line Access Ports

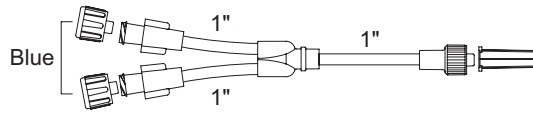
May be needed to provide additional access ports for continuous, intermittent, and IVP meds.

Usually connected directly to hub of the vascular access device.

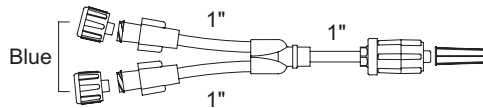
Standard Bore (continued)

SETS WITHOUT CLAMPS (continued)

Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
MX456L 50351688507127	Standard Bore Bifurcated Extension, Non-Vented Blue Caps, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation 	0.6 mL	3" (8 cm)	50



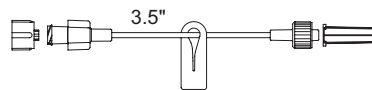
MX456R 50351688507110	Standard Bore Bifurcated Extension, Non-Vented Blue Caps with Rotating Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation 	0.6 mL	3" (8 cm)	50
--------------------------	---	--	--------	-----------	----



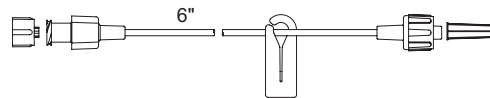
Small Bore

SETS WITH CLAMPS

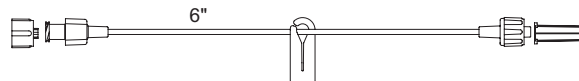
Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
53035 50351688516464	Small Bore Extension with Non-Removable Blue Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation 	0.2 mL	5" (13 cm)	50



MX448HL 50351688507448	ULTRA™ Small Bore Extension, Removable Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation • Lipid Resistant • Non-PVC 	0.3 mL	7" (18 cm)	50
---------------------------	--	--	--------	------------	----



MX448L 50351688507400	Small Bore Extension with Removable Blue Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation 	0.3 mL	7" (18 cm)	50
--------------------------	--	--	--------	------------	----



IV Line Access Ports

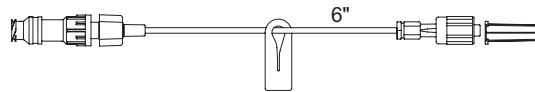
May be needed to provide additional access ports for continuous, intermittent, and IVP meds.

Usually connected directly to hub of the vascular access device.

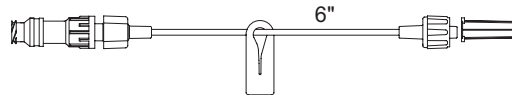
Small Bore (continued)

SETS WITH CLAMPS

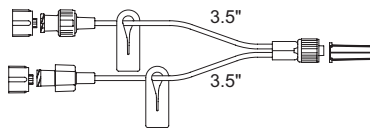
Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
SM5001 50351688500678	Small Bore Extension with SmartSite® Needle-Free Valve, Non-Removable Blue Slide Clamp, Slide Swivel Luer Lock	<ul style="list-style-type: none"> Non-DEHP Formulation 	0.3 mL	9" (23 cm)	100



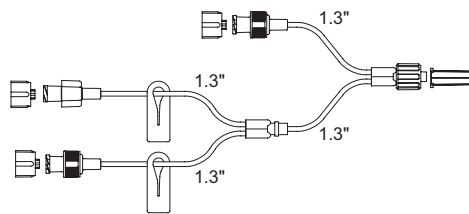
SM5002 50351688500661	Small Bore Extension with SmartSite® Needle-Free Valve, Non-Removable Blue Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> Non-DEHP Formulation 	0.3 mL	8" (20 cm)	100
--------------------------	--	--	--------	------------	-----



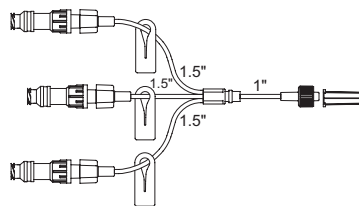
BBF26 50351688512015	Small Bore Extension, 1 Back Check Valve, Non-Removable Blue Slide Clamps, Swivel Male Luer Lock	<ul style="list-style-type: none"> Non-DEHP Formulation 	0.3 mL	5" (13 cm)	25
-------------------------	--	--	--------	------------	----



BTF36 50351688511605	Small Bore Trifurcated Extension with 2 Back Check Valves, Non-Removable Blue Slide Clamps, Swivel Male Luer Lock	<ul style="list-style-type: none"> Non-DEHP Formulation 	0.4 mL	4" (10 cm)	25
-------------------------	---	--	--------	------------	----



SM5014 50351688500555	Small Bore Trifurcated Extension with Non-Removable Blue Slide Clamps, 3 SmartSite® Needle-Free Valves, Male Luer Lock	<ul style="list-style-type: none"> Non-DEHP Formulation 	0.7 mL	5" (13 cm)	100
--------------------------	--	--	--------	------------	-----



Needleless Access Connector (NAC)

Add to open female ports on extensions sets and IV line access ports to create a closed system for syringe changes.

Note they may also opt to add their own NAC for this purpose.

NAC					
Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
SM5000 50351688500685	SmartSite® Needle-Free Valve with Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP Formulation Fluid Path • Non-PVC 	0.1 mL	1" (3 cm)	100

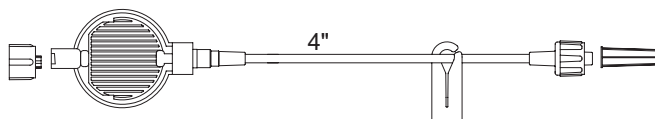


Filter Extension Sets

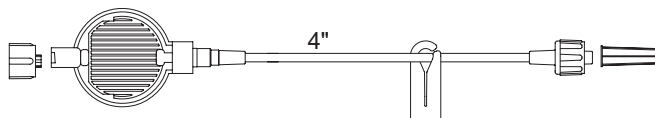
Some syringe-delivered medications may require filtering.

Smiths Medical offers filter extension sets with 0.2 and 1.2 micron filters.¹

Small Bore May be added if syringe-delivered medication needs to be filtered					
Product Code	Description	Features	Approx Priming Volume	Approx Overall Length	Units Per Case
MX448HF 50351688507462	ULTRA™ Small Bore Extension with 0.2 Micron Filter and Removable Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP formulation • Lipid Resistant • Non-PVC • Low Protein Binding Filter • Air Eliminating Filter 	1.0 mL	7" (18 cm)	50



MX448HFB 50351688507455	ULTRA™ Small Bore Extension with 1.2 Micron Filter and Removable Slide Clamp, Male Luer Lock	<ul style="list-style-type: none"> • Non-DEHP formulation • Lipid Resistant • Non-PVC • Low Protein Binding Filter • Air Eliminating Filter 	1.0 mL	7" (18 cm)	50
----------------------------	--	--	--------	------------	----



1. Filter selection is determined according to organizational policy and procedures or manufacturer recommendations for medications/solutions.

*Analytic testing did not detect DEHP.

PRODUCT(S) DESCRIBED MAY NOT BE LICENSED OR AVAILABLE FOR SALE IN CANADA AND OTHER COUNTRIES

Smiths Medical ASD, Inc.

6000 Nathan Lane North
Minneapolis, MN 55442, USA
Tel: 1-214-618-0218
Toll-Free USA: 1-800-258-5361

Find your local contact information at: www.smiths-medical.com/customer-support

Smiths Medical is part of the global technology business Smiths Group plc. Please see the Instructions for Use/Operator's Manual for a complete listing of the indications, contraindications, warnings and precautions. SmartSite, ULTRA and the Smiths Medical design mark are trademarks of Smiths Medical. The symbol © indicates the trademark is registered in the U.S. Patent and Trademark Office and certain other countries. All other names and marks mentioned are the trademarks or service marks of their respective owners. Product referenced is CE-marked. ©2017 Smiths Medical. All rights reserved. IN193747EN-122017

MMSPCA-0048

Rx
ONLY

smiths medical