

Indications:

This HI-TORQUE Guide Wire is intended to facilitate the placement of balloon dilatation catheters during Percutaneous Transluminal Coronary Angioplasty (PTCA) and Percutaneous Transluminal Angioplasty (PTA). This guide wire may also be used with compatible stent devices during therapeutic procedures.



Leading the Way in a Abbott A Promise for Life Guide Wire Technology



Comprehensive portfolio of guide wires

Advanced Technology

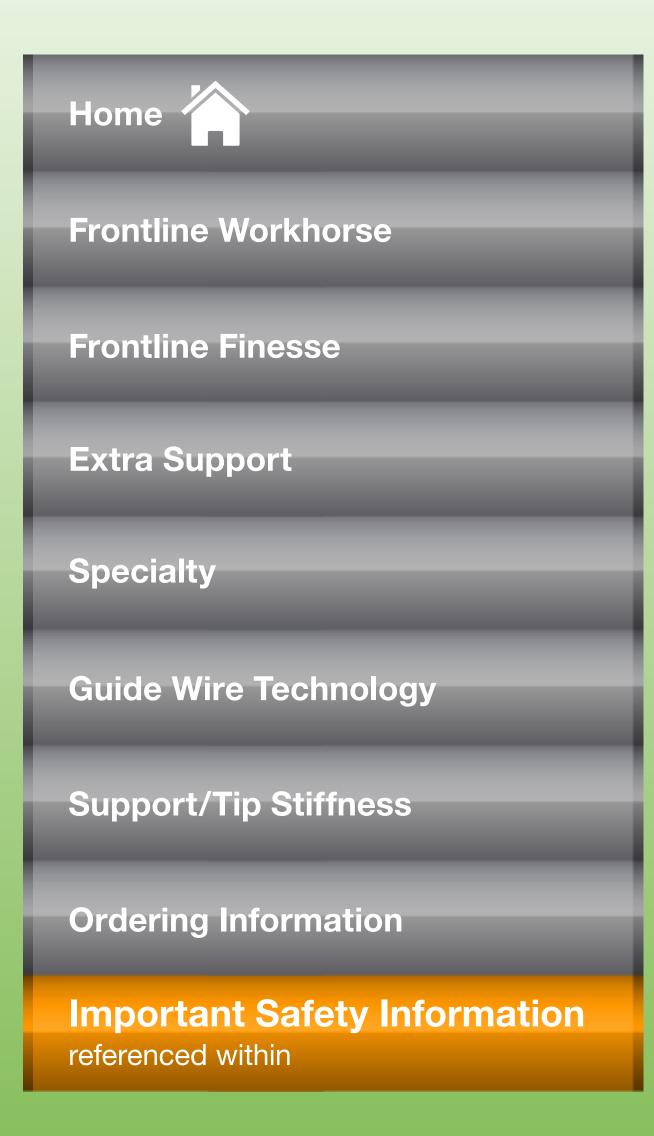
Abbott Vascular Guide Wires











R HI-TORQUE Guide Wires for PTCA, PTA, and Stents

INDICATIONS FOR USE

This HI-TORQUE Guide Wire is intended to facilitate the placement of balloon dilatation catheters during Percutaneous Transluminal Coronary Angioplasty (PTCA) and Percutaneous Transluminal Angioplasty (PTA). This guide wire may also be used with compatible stent devices during therapeutic procedures.

CONTRAINDICATIONS

Not intended for use in the cerebral vasculature or with atherectomy devices.

WARNINGS

This device is designed and intended for ONE-TIME USE ONLY. Do not resterilize and / or reuse.

Carefully observe the instructions under "Do Not" and "Do" below. Failure to do so may result in vessel trauma, guide wire damage, guide wire tip separation, or stent damage. If resistance is observed at any time, determine the cause under fluoroscopy and take remedial action as needed.

DO NOT:

- Push, auger, withdraw, or torque a guide wire that meets resistance.
- Torque a guide wire if the tip becomes entrapped within the vasculature.
- Allow the guide wire tip to remain in a prolapsed condition.
- Deploy a stent such that it will entrap the wire between the vessel wall and the stent

DO:

- Advance or withdraw the guide wire slowly.
- Use the radiopaque marker of the interventional device to confirm position.
- Examine the tip movement under fluoroscopy before manipulating, moving, or torquing the guide wire.
- Observe the wire under fluoroscopy for tip buckling, which is a sign of resistance.
- Maintain continuous flush while removing and reinserting the guide wire to prevent air from entering the catheter system. Perform exchanges slowly to prevent air entry and / or trauma.
- When reintroducing the guide wire, confirm that the interventional device tip is free within the vessel lumen and that the tip is parallel with the vessel wall.
- Use extreme caution when moving a guide wire through a non-endothelialized stent, or through stent struts into a bifurcated vessel. Use of this technique carries additional patient risks, including the risk that the wire may become caught on the stent strut.

For PROGRESS family only: The PROGRESS family of guide wires have distal ends of varying stiffness. Operate these guide wires carefully so as to not injure the blood vessel, observing the information in these instructions. The higher torque performance, stiffer distal ends, and / or higher advancement force may present a higher risk of perforation or injury than a guide wire with a more

pliable distal end. Therefore, use the guide wire with the least stiff distal end that will treat the lesion, and use extreme care to minimize the risk of perforation or other damage to blood vessels. Use the most suitable guide wire for the lesion being treated.

PRECAUTIONS

Guide wires are delicate instruments and should be handled carefully. Prior to use and when possible during the procedure, inspect the guide wire carefully for bends, kinks, or other damage. Do not use damaged guide wires. Using a damaged guide wire may result in vessel damage and / or inaccurate torque response.

Confirm the compatibility of the guide wire diameter with the interventional device before actual use.

Free movement of the guide wire within the interventional device is an important feature of a steerable guide wire system because it gives the user valuable tactile information. Test the system for any resistance prior to use. Adjust or replace the hemostatic valve with an adjustable valve if it is found to inhibit guide wire movement.

Never attach the torque device to the <u>modified</u> <u>portion of the proximal end</u> of the extendable guide wire; otherwise, guide wire damage may occur, preventing the ability to attach the DOC Guide Wire Extension.

HI-TORQUE Guide Wires with Hydrophilic Coating: Avoid abrasion of the hydrophilic coating. Do not withdraw or manipulate the hydrophilic-coated wire in a metal cannula or sharp-edged object.

R HI-TORQUE® Guide Wires

INDICATIONS

Refer to the device label for any additional product-specific indications that may apply.

CONTRAINDICATIONS

HI-TORQUE Guide Wires are not intended for use in the cerebral vasculature.

Refer to the device label for any additional product-specific contraindications that may apply.

WARNINGS

This device is designed and intended for ONE-TIME USE ONLY. Do not resterilize and/or reuse.

Carefully observe the instructions under "Do Not" and "Do" below. Failure to do so may result in vessel trauma, guide wire damage, guide wire tip separation, or stent damage. If resistance is observed at any time, determine the cause under fluoroscopy and take remedial action as needed.

Do Not:

- Push, auger, withdraw or torque a guide wire that meets resistance.
- Torque a guide wire if the tip becomes entrapped within the vasculature.
- Allow the guide wire tip to remain in a prolapsed condition.

Do:

- Advance or withdraw the guide wire slowly.Use the radiopaque marker of the
- interventional device to confirm position.

- Examine the tip movement under fluoroscopy before manipulating, moving or torquing the guide wire.
- Observe the wire under fluoroscopy for tip buckling, which is a sign of resistance.
- Maintain continuous flush while removing and reinserting the guide wire to prevent air from entering the catheter system. Perform exchanges slowly to prevent air entry and / or trauma.
- When reintroducing the guide wire, confirm that the interventional device tip is free within the vessel lumen and that the tip is parallel with the vessel wall.
- Use extreme caution when moving a guide wire through a non-endothelialized stent, or through stent struts into a bifurcated vessel. Use of this technique carries additional patient risks, including the risk that the wire may become caught on the stent strut.
- Consider that if a secondary wire is placed in a bifurcation branch, this wire may need to be retracted prior to stent deployment because there is additional risk that the secondary wire may become entrapped between the vessel wall and the stent.

PRECAUTIONS

Guide wires are delicate instruments and should be handled carefully. Prior to use and when possible during the procedure, inspect the guide wire carefully for bends, kinks, or other damage. Do not use damaged guide wires. Using a damaged guide wire may result in vessel damage and / or inaccurate torque response.

Confirm the compatibility of the guide wire diameter with the interventional device before actual use.

Free movement of the guide wire within the interventional device is an important feature of a steerable guide wire system because it gives the user valuable tactile information. Test the system for any resistance prior to use. Adjust or replace the hemostatic valve with an adjustable valve if it is found to inhibit guide wire movement.

Never attach the torque device to the <u>modified</u> <u>portion of the proximal end</u> of the extendable guide wire; otherwise, guide wire damage may occur, preventing the ability to attach the DOC Guide Wire Extension.

HI-TORQUE Guide Wires with Hydrophilic Coating: Avoid abrasion of the hydrophilic coating. Do not withdraw or manipulate the hydrophilic-coated wire in a metal cannula or sharp-edged object

R ASAHI® PTCA Guide Wires

INDICATIONS FOR USE

ASAHI PTCA guide wires are intended to facilitate the placement of balloon dilatation catheters during percutaneous transluminal coronary angioplasty (PTCA) and percutaneous transluminal angioplasty (PTA). The ASAHI PTCA guide wire is not to be used in the cerebral blood vessels.

WARNINGS

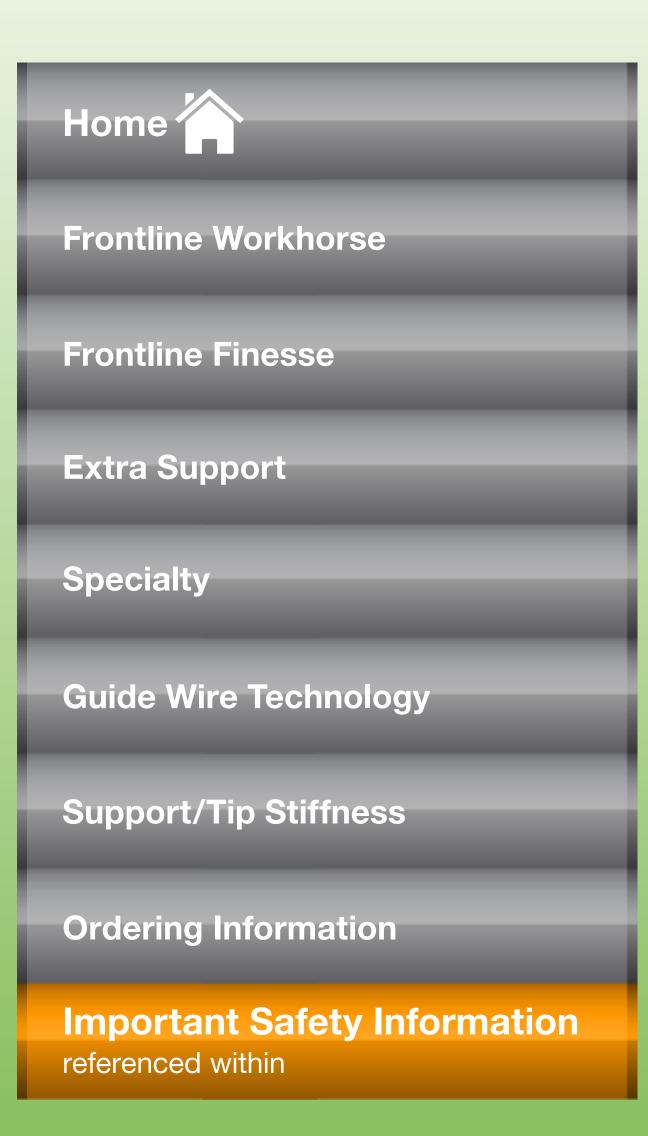
 This guide wire is for single use only. Do not reuse or resterilize. If reused or resterilized, the performance or quality of the guide wire may be compromised and there is a risk of complications, including infection.

- Do not use the guide wire after the expiration date indicated on the label.
 Discard any guide wire that exceeds the expiration date.
- This guide wire must be used only by a physician who is fully trained in PTCA/PTA treatment.
- The coil section is especially fragile, so do not bend or pull it more than necessary.

 Otherwise, the guide wire may be damaged.
- Do not use a damaged guide wire. Using a damaged guide wire may result in blood vessel damage and/or inaccurate torque response. Injury to the patient may result.
- Always advance and withdraw the guide wire slowly.
- Observe guide wire movement in the vessels. Before a guide wire is moved or torqued, the tip movement should be examined and monitored under fluoroscopy. Do not move or torque a guide wire without observing corresponding movement of the tip; otherwise, the guide wire may be damaged and/or vessel trauma may occur. In addition, ensure that the distal guide wire tip and its location in the vessel are visible during wire manipulations.
- Never push, auger, withdraw, or torque a guide wire that meets resistance. Torquing or pushing a guide wire against resistance may cause guide wire damage and/or guide wire tip separation or direct damage to a vessel. Resistance may be felt and/ or observed under fluoroscopy by noting any buckling of the guide wire tip. If guide wire tip prolapse is observed, do not allow the tip to remain in a prolapsed position; otherwise damage to the guide wire may occur. Determine the cause of resistance under fluoroscopy and take any necessary remedial action.
- If any resistance is felt due to spasm or the guide wire being bent or trapped while operating the guide wire in the blood vessel or removing it, do not move or torque the guide wire. Stop the procedure. Determine the cause of resistance under fluoroscopy and take appropriate remedial action. If the guide wire is moved excessively, it may break or become damaged, which may cause blood vessel injury or result in fragments being left inside the vessel.
- When torquing this guide wire inside the blood vessel, do not torque continuously in the same direction. This may cause the guide wire to become damaged or break apart, causing injury to the blood vessel or leaving fragments inside the vessel. When torquing the guide wire, rotate it clockwise and counterclockwise alternately. Do not exceed two rotations (720°) in the same direction.







- Do not push the guide wire more than is necessary to advance the tip through the narrowed part of the vessel. (For example, do not push the guide wire when the distal tip of the guide wire is bent by the force of manipulation.) After crossing the targeted area, do not roughly twist, push or pull the guide wire. If the guide wire is moved excessively, it may be damaged or break apart, which may injure the blood vessel or leave fragments inside the vessel.
- Use proper technique to ensure and verify that no air enters the interventional device when pulling the guide wire from the interventional device or re-inserting it.
 Otherwise air embolism could occur.
- Flush the guide wire with heparinized saline or other suitable solution while removing and reinserting it to prevent air from entering the interventional device. Perform guide wire exchanges carefully to prevent air entry and/or trauma. When reintroducing the guide wire, confirm that the interventional device tip is free within the vessel lumen and is not against the vessel wall. Failure to do so may result in vessel trauma when the guide wire is removed. Use the radiopaque marker of the interventional device to confirm position.
- Free movement of the guide wire within the interventional device is an important feature of a steerable guide wire system because it gives the user valuable tactile information. Test the system for any resistance prior to use. Adjust or replace the hemostatic valve with an adjustable valve if it is found to inhibit guide wire movement.
- Do not use in areas of vessel that are not or cannot be visualized.
- For ASAHI CONFIANZA and ASAHI MIRACLEbros Series Only: ASAHI **CONFIANZA and ASAHI MIRACLEbros** Series have stiff distal ends. Operate these guide wires carefully so as not to injure the blood vessel, observing information in these instructions. The higher torque performance, stiffer ends, and/or higher advancement force may present a higher risk of perforation or injury than if using a more flexible guide wire. Therefore, use the most flexible guide wire that will treat the lesion (i.e., the guide wire with the smallest flexibility number that will treat the lesion), and take due care to minimize the risk of perforation or other damage to blood vessels.

FOR ALL GUIDE WIRES

Use the most suitable guide wire that will treat the lesion.

There are patient risks when using any guide wire including those that may result from damage to, or breakage of, the guide wire. If guide wire damage or breakage occurs, it may cause damage to the vessel and injury to the patient, or death. Accordingly, care should be taken that all persons who operate guide wires are properly trained in their use, that they observe proper technique, and that guide wires are used carefully in accordance with the Instructions for Use.

PRECAUTIONS

- If the package is opened or damaged, do not use the product. Do not to open the package until just prior to use. Use aseptic technique in handling and using the guide wire.
- Contraindications, warnings, precautions, and intended uses of interventional devices that are compatible with ASAHI PTCA guide wires are described in the user manuals supplied with the respective interventional devices. Before using an ASAHI PTCA guide wire with other interventional devices, read the user manual of the other devices to ensure the other devices are compatible with ASAHI PTCA guide wire. Ensure you choose the correct ASAHI PTCA guide wire and that its use is consistent with the contraindications, warnings, precautions, and Instructions for Use of both the other devices and ASAHI PTCA guide wire.
- Guide wires are delicate instruments and should be handled carefully. When taking the guide wire out of the holder tube, do not handle the guide wire roughly or pull it out abruptly.
- Inspect the guide wire carefully for bends, kinks, or other damage prior to use and whenever possible during the procedure.
- Take due care when using the guide wire to prevent bending or kinking, and stay within standard practice when using the guide wire.
- When shaping the distal end, use the minimum force needed so that the coil is not damaged. Inspect the coil and guide wire for damage after shaping and before using.
- Verify which is the distal end before insertion and be sure to insert the distal end (coiled end).
- Do not wipe this guide wire using an organic solution such as alcohol.

ADVERSE EVENTS OF GUIDE WIRE USE INCLUDE, BUT ARE NOT LIMITED TO:

 Failure to cross a lesion
 Separation or breakage of the guide wire
 Damage to a vessel, including possible vessel perforation Coronary artery dissection • Cardiac tamponade due to coronary artery perforation
 Air embolism • Infection • Coronary artery spasm • Coronary artery thrombus
 Hemotoma at puncture site • Cardiac perforation

R HI-TORQUE ADVANCETM Guide Wires

CAREFULLY READ ALL INSTRUCTIONS PRIOR TO USE. OBSERVE ALL WARNINGS AND PRECAUTIONS NOTED THROUGHOUT THESE INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN COMPLICATIONS.

INDICATIONS FOR USE

The HI-TORQUE ADVANCE™ Guide Wires are intended to facilitate the placement of interventional percutaneous transluminal coronary angioplasty (PTCA) and percutaneous transluminal angioplasty (PTA) catheters, and other interventional devices including: intravascular stents, intravascular ultrasound devices and intravascular drug eluting stents.

CONTRAINDICATIONS

The HI-TORQUE ADVANCE™ Guide Wires are not intended for use in the cerebral vasculature.

WARNINGS

- This device is designed and intended for ONE TIME USE ONLY. DO NOT RESTERILIZE AND/OR REUSE.
- Carefully observe the instructions under "Do Not" and "Do" below.
 Failure to do so may result in vessel trauma, guide wire damage, guide wire tip separation, or stent damage.
 If resistance is observed at any time, determine the cause under fluoroscopy and take remedial action as needed.

Do Not:

- Push, auger, withdraw or torque a guide wire that meets resistance.
- Torque a guide wire if the tip becomes entrapped within the vasculature.
- Allow the guide wire tip to remain in a prolapsed condition.

Do:

- Advance or withdraw the guide wire slowly.
- Use the radiopaque marker of the interventional device to confirm position.
- Examine the tip movement under fluoroscopy before manipulating, moving or torquing the guide wire.

- Observe the wire under fluoroscopy for tip buckling, which is a sign of resistance.
- Maintain continuous flush while removing and reinserting the guide wire to prevent air from entering the catheter system.
 Perform exchanges slowly to prevent air entry and/or trauma.
- When reintroducing the guide wire, confirm that the interventional device tip is free within the vessel lumen and that the tip is parallel with the vessel wall
- Use extreme caution when moving a guide wire through a non-endothelialized stent, or through stent struts into a bifurcated vessel. Use of this technique carries additional patient risks, including the risk that the wire may become caught on the stent strut.
- Consider that if a secondary wire is placed in a bifurcation branch, this wire may need to be retracted prior to stent deployment because there is additional risk that the secondary wire may become entrapped between the vessel wall and the stent.

PRECAUTIONS

- Guide wires are delicate instruments and should be handled carefully. Prior to use and when possible during the procedure, inspect the guide wire carefully for bends, kinks, or other damage. Do not use damaged guide wires. Using a damaged guide wire may result in vessel damage and/or inaccurate torque response.
- Confirm the compatibility of the guide wire diameter with the interventional device before actual use.
- Free movement of the guide wire within the interventional device is an important feature of a steerable guide wire system because it gives the user valuable tactile information.
 Test the system for any resistance prior to use. Adjust or replace the hemostatic valve with an adjustable valve if it is found to inhibit guide wire movement.
- Never attach the torque device to the modified portion of the proximal end of the extendable guide wire; otherwise, guide wire damage may occur, preventing the ability to attach the DOC® Guide Wire Extension.
- Avoid abrasion of the hydrophilic coating.
- Do not withdraw or manipulate the hydrophilic-coated wire in a metal cannula or sharp-edged object.

Abbott Vascular

3200 Lakeside Dr., Santa Clara, CA 95054 USA, Tel: 1.800.227.9902

Caution: These products are intended for use by or under the direction of a physician. Prior to use, it is important to read the package insert thoroughly for Instructions for Use, Warnings and Potential Complications associated with use of these devices.

All tests performed by and data on file at Abbott Vascular. All tip stiffness values are averages, based on a sample of 5 guide wires, tested with an automated machine in a controlled environment.

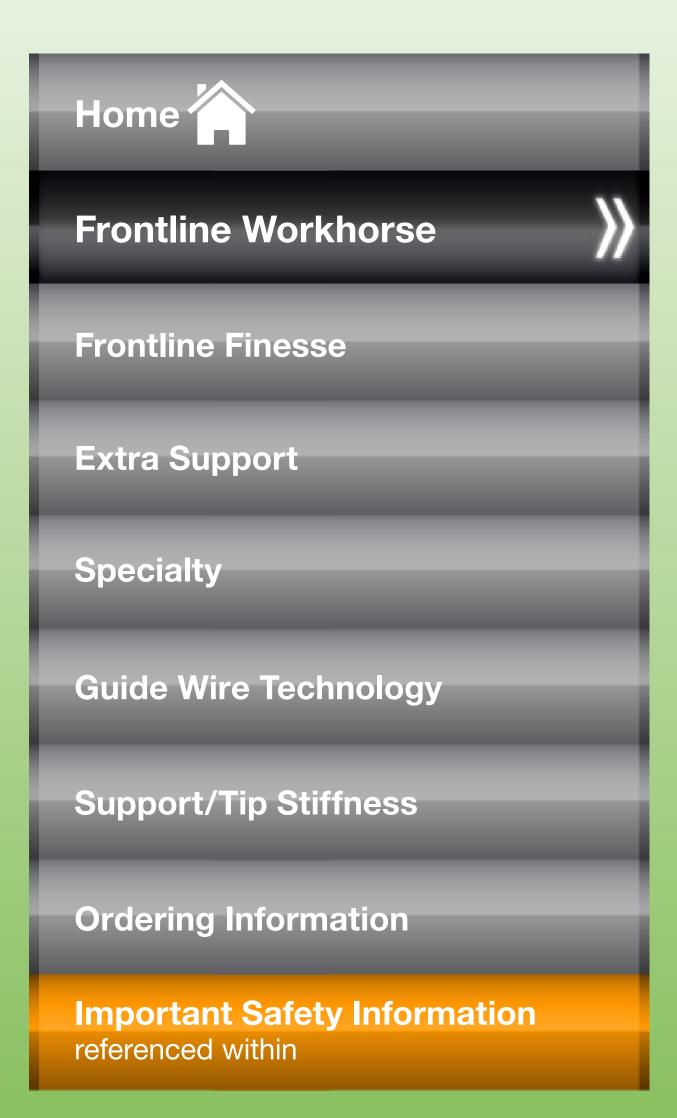
All Device Support Level values are test results on a single guide wire under the same ambient conditions. All illustrations included are artist's renditions. Not drawn to scale.

www.AbbottVascular.com ©2012 Abbott. All rights reserved. AP2937584-US Rev. A 10/12 Technical Data are on file with ASAHI. Manufactured by: ASAHI Intecc Co., Ltd. 3-100 Akatsuki-cho, Seto, Aichi 489-0071, Japan. ASAHI is a registered trademark of ASAHI Intecc Co., LTD.











Frontline Workhorse guide wires are designed to be flexible, have a soft tip, and provide enough support to deliver most interventional devices

NITINOL (ELASTINITE®)

HI-TORQUE BALANCE MIDDLEWEIGHT UNIVERSAL II®

TIP STIFFNESS	CORE	RADIOPACITY	COATING	
0.7 g	ELASTINITE®	3 cm	HYDROPHILIC	
• Exposed tip co	oils	 Soft shaping r Intermediate p for excellent c 	•	

HI-TORQUE BALANCE MIDDLEWEIGHT UNIVERSAL

TIP STIFFNESS	CORE	RADIOPACITY	COATING	
0.6 g	ELASTINITE®	3 cm	HYDROPHILIC	
• Exposed tip co	oils	Soft shaping rIntermediate pfor excellent o	•	

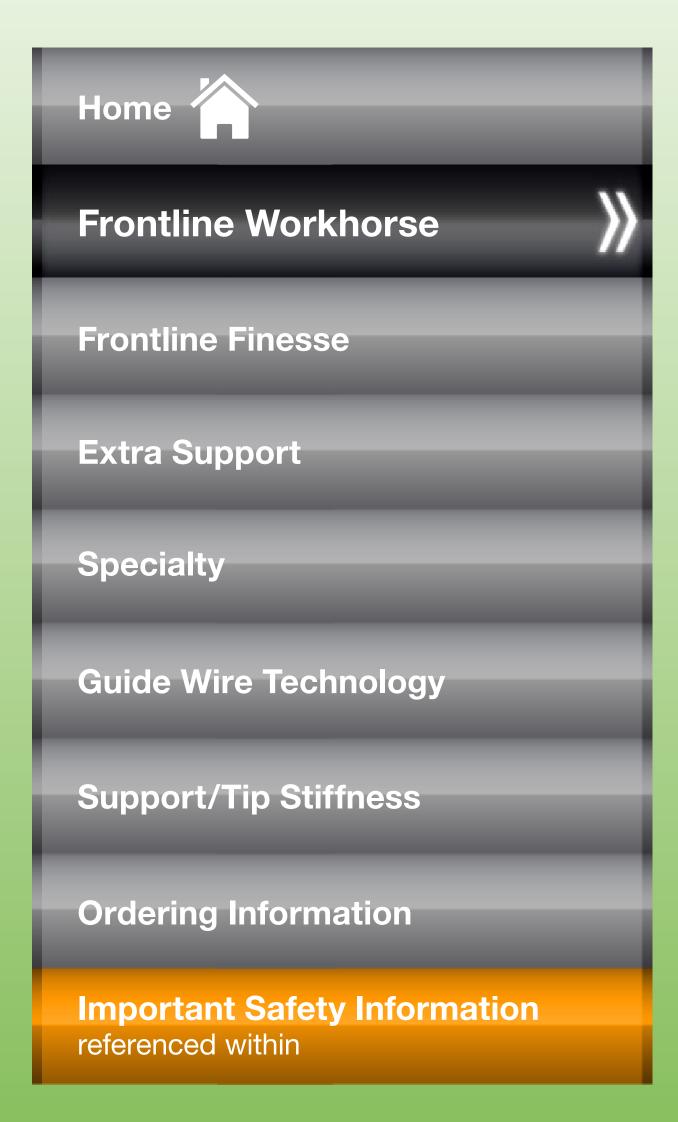
HI-TORQUE BALANCE MIDDLEWEIGHT

0.7 g	ELASTINITE®	3 cm	HYDROPHILIC OR HYDROPHOBIC
TIP STIFFNESS	CORE F	RADIOPACITY	COATING

Soft shaping ribbon tip









Frontline Workhorse guide wires are designed to be flexible, have a soft tip, and provide enough support to deliver most interventional devices

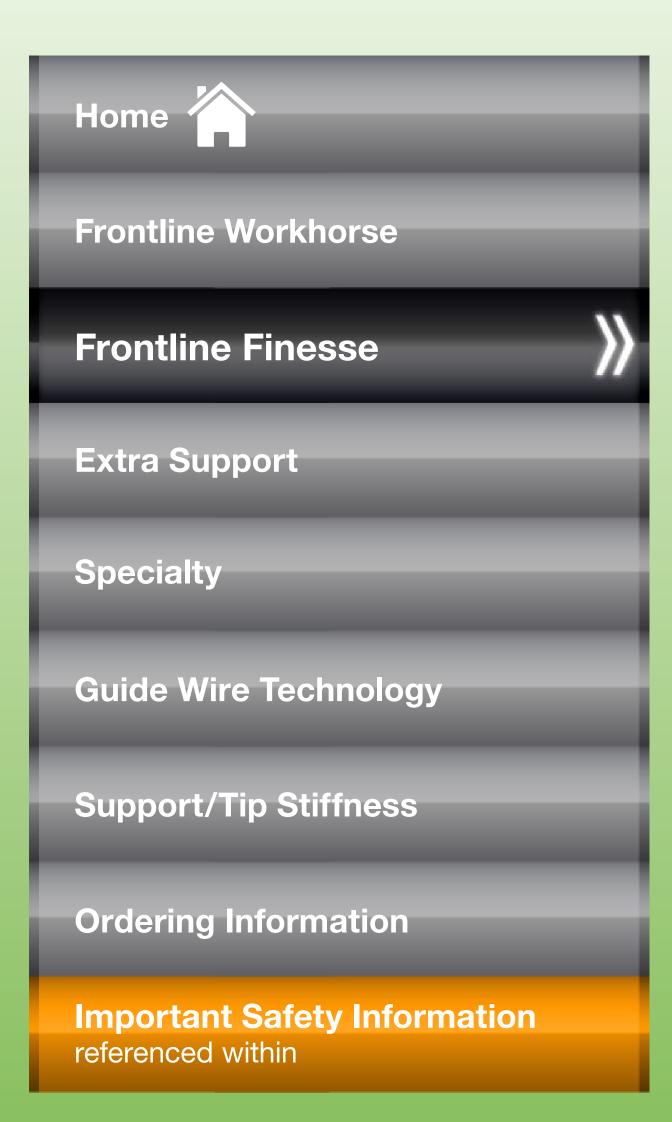
STAINLESS STEEL (DURASTEEL or TruTorq®)

HI-TORQUE ADVANCE®

	CORE	RADIOPACITY	COATING
1.0 g	DURASTEEL	3 cm	HYDROPHILIC
Core-to-tip fc	r precise steering	• RESPONSEAS transitionless	
SAHI PF	ROWATER®)	
TIP STIFFNESS	CORE	RADIOPACITY	COATING
1.1 g	TruTorq® Steel	3 cm	HYBRID
		• Core-to-tip fo	r precise steering
SAHI PF	OWATER	FLEX ®	
IP STIFFNESS	CORE	RADIOPACITY	COATING
0.8 g	TruTorq® Steel	3 cm	HYBRID
SAHI SC	FT	• Core-to-tip fo	r precise steering
TIP STIFFNESS	CORE	RADIOPACITY	COATING
1.0 g	TruTorq® Steel	3 cm	HYDROPHOBIC
1.0 g	TruTorq® Steel		r precise steering
	TruTorq® Steel JE FLOPP	• Core-to-tip fo	
		• Core-to-tip fo	









Frontline Finesse guide wires are designed to be flexible, with a polymer cover and soft tip, designed for outstanding deliverability and distal access in tortuous anatomy

HI-TORQUE WHISPER® MS

TIP STIFFNESS	CORE	RADIOPACITY	COATING	
1.0 g	DURASTEEL	3 cm	HYDROPHILIC	
• Full polymer co	over	RESPONSEAS transitionlessCore-to-tip for	core	

HI-TORQUE WHISPER® EXTRA SUPPORT

TIP STIFFNESS	CORE	RADIOPACITY	COATING
1.2 g	DURASTEEL	3 cm	HYDROPHILIC
 1.2 g DURASTEE Full polymer cover Core-to-tip for steerability 		 RESPONSEAS transitionless Enhanced cor increased supp with HT Whisp 	core e profile for oort as compared

HI-TORQUE PILOT® 50

ASAHI FIELDER®

3.7 g	TruTorq [®] Steel	3 cm	HYDROPHILIC
TIP STIFFNESS	CORE	RADIOPACITY	COATING

Full polymer cover

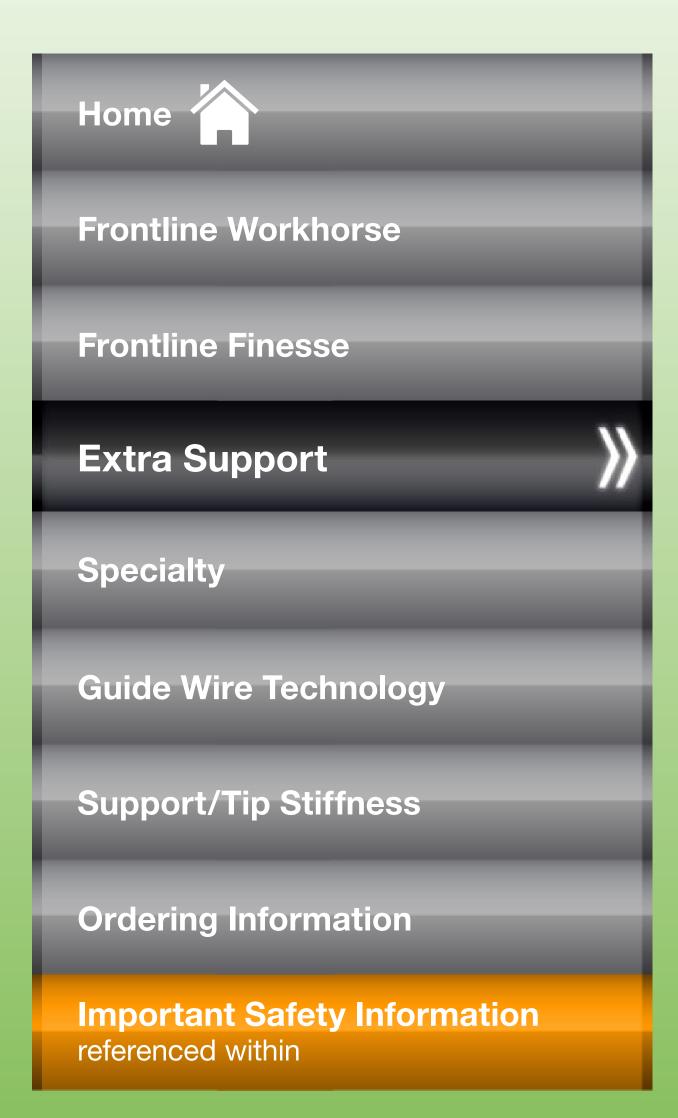
• Core-to-tip for steerability

transitionless core

Core-to-tip for steerability









Extra Support guide wires are designed to provide additional support for delivery of bulky devices

HI-TORQUE BALANCE HEAVYWEIGHT

TIP STIFFNESS RADIOPACITY COATING CORE HYDROPHILIC 0.7 g **ELASTINITE®** 4.5 cm

Soft shaping ribbon tip

HI-TORQUE ALL STAR

RADIOPACITY COATING TIP STIFFNESS CORE **HYDROPHOBIC** Stainless Steel 3 cm 0.7 g

- Core-to-tip design
- Jointless spring coil
- Intermediate polymer sleeve for excellent device interaction

ASAHI GRAND SLAM®

TIP STIFFNESS CORE RADIOPACITY COATING 0.8 g TruTorq® Steel **HYDROPHOBIC** 4 cm

 Extremely supportive for bulky • Core-to-tip design

device delivery

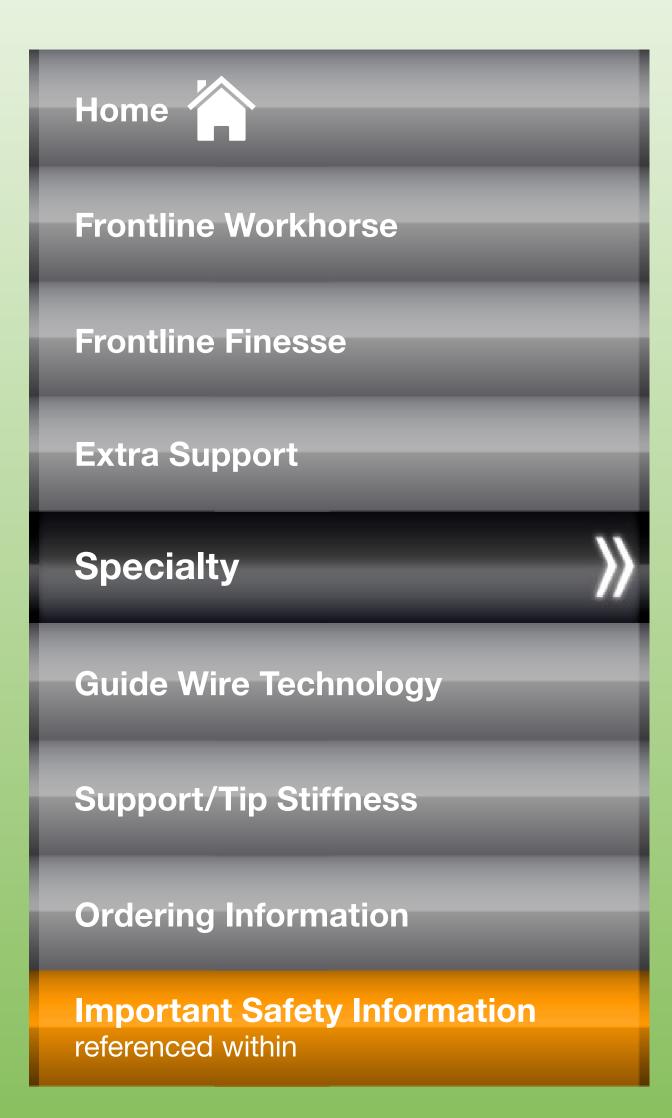
HI-TORQUE IRON MAN

RADIOPACITY COATING TIP STIFFNESS CORE Stainless Steel **HYDROPHOBIC** 1.0 g 3 cm

• Core-to-tip design









Specialty guide wires are designed to provide increasing tip stiffness and excellent torque response for superb crossing performance

FULL POLYMER COVER

HI-TORQUE PILOT® 200



ASAHI FIELDER® XT

1.2 g	CORE TruTorq® Steel	RADIOPACITY 16 cm	COATING HYDROPHILIC
• Full polymer co	over	• Tapered .009"	tip diameter

TAPERED TIP

ASAHI CONFIANZA PRO® 9

	NFIANZA	Pho 9			
TIP STIFFNESS	CORE	RADIOPACITY	COATING		
9.3 g	TruTorq [®] Steel	20 cm	HYBRID		
		• Tapered .009"	tip diameter		*************************************
				***************************************	***************************************
				19.9 cm	
		DDO8 40		Hydrophilic Coating	Hydrophobic Coating
	NFIANZA				
TIP STIFFNESS	CORE	RADIOPACITY	COATING		
12.4 g	TruTorq® Steel	20 cm	HYBRID		
		• Tapered .009"	tip diameter	***************************************	<u> </u>
		• Tapered .009"	tip diameter	***************************************	
		• Tapered .009"	tip diameter		

Hydrophilic

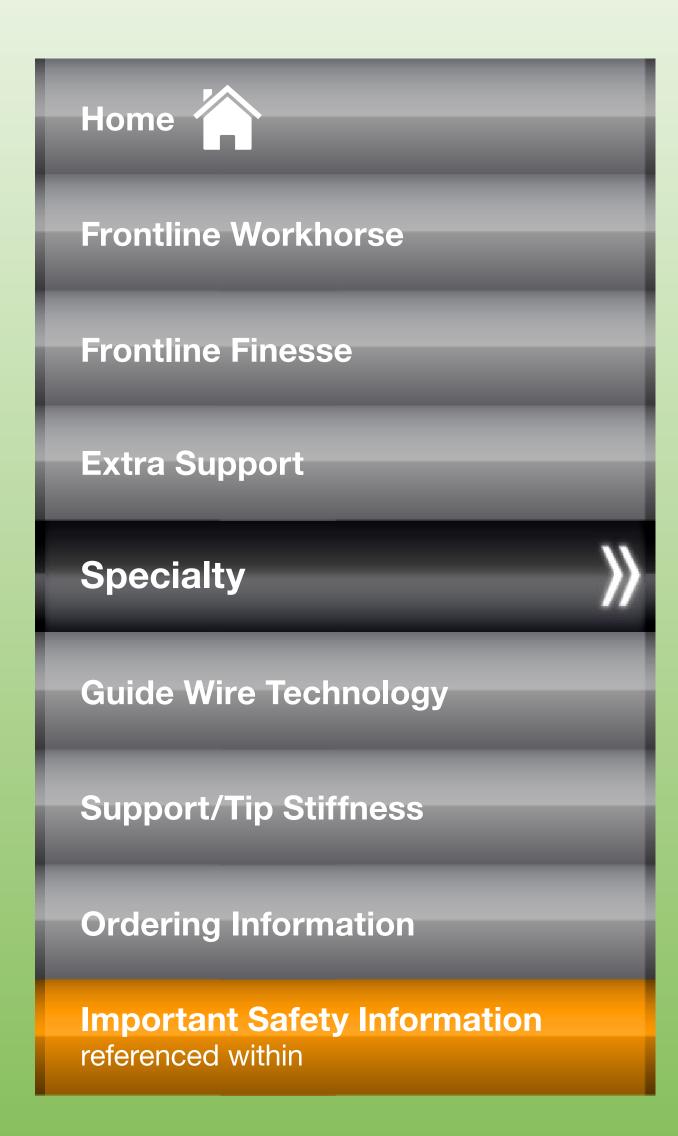
Coating





Hydrophobic Coating







Specialty guide wires are designed to provide increasing tip stiffness and excellent torque response for superb crossing performance

STRAIGHT TIP

ASAHI MIRACLEBROS® 3

TIP STIFFNESS	CORE RADIOPACITY	COATING
3.9 g	TruTorq® Steel 11 cm	HYDROPHOBIC

ASAHI MIRACLEBROS® 4.5

4.4 g	TruTorq® Steel	11 cm	HYDROPHOBIC
TIP STIFFNESS	CORE	RADIOPACITY	COATING

ASAHI MIRACLEBROS® 6

8.8 g	TruTorq® Steel	11 cm	HYDROPHOBIC	
TIP STIFFNESS	CORE	RADIOPACITY	COATING	

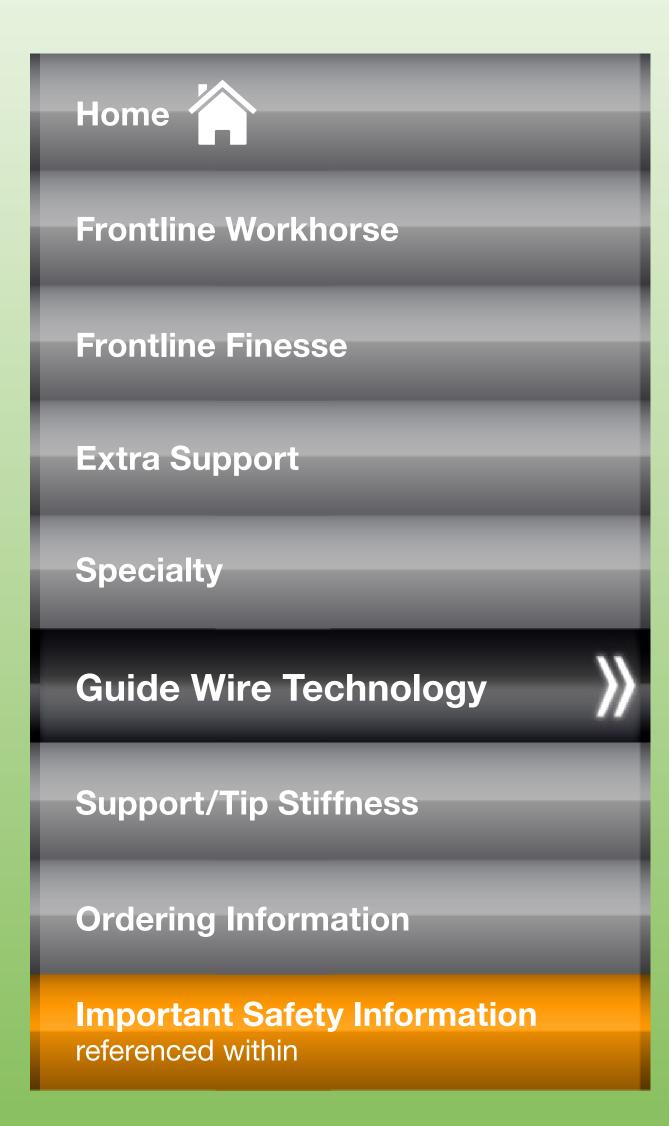
ASAHI MIRACLEBROS® 12

TIP STIFFNESS	00112	RADIOPACITY	COATING
13.0 g	TruTorq® Steel	11 cm	HYDROPHOBIC







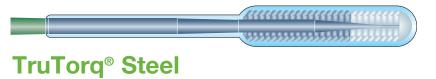


Celebrating 30 Years of Pioneering Guide Wire Technology for Interventional Success

Core Materials

3 different core material options let you choose the level of strength, flexibility and durability you need

- ASAHI TruTorq® Steel for excellent durability and torque response
- DURASTEEL stronger than conventional stainless steel for outstanding durability
- ELASTINITE® Nitinol known for its flexible and durable properties giving you exceptional push and torque control







Core Tapers

Our core taper designs provide excellent guide wire tracking

- Longer core tapers yield superb wire tracking and a lower propensity to prolapse
- Shorter core tapers yield longer segments of consistent support but provide increased propensity to prolapse
- Proprietary RESPONSEASE™ transitionless core taper is designed to maximize tracking while providing progressive support

Tip Styles

Offering 2 different designs, each providing different advantages

- Shaping ribbon for tip shape retention and softness
- Core-to-tip design provides tactile feedback and tip control, enabling exceptional 1:1 torque





Shaping ribbon

Core-to-tip design

Spring Coil Design

For outstanding torque transmission and control

- Abbott's spring coil design contributes to the wire's tip shapeability, tip shape retention and tactile feedback
- Platinum alloy tip coils are radiopaque and stainless steel coils are radiolucent
- Asahi uses a proprietary method of fusing stainless steel to platinum spring coils that yields excellent torque response, delivery and device interaction



Polymer Covers

Designed for deliverability in tortuous anatomy and excellent distal access

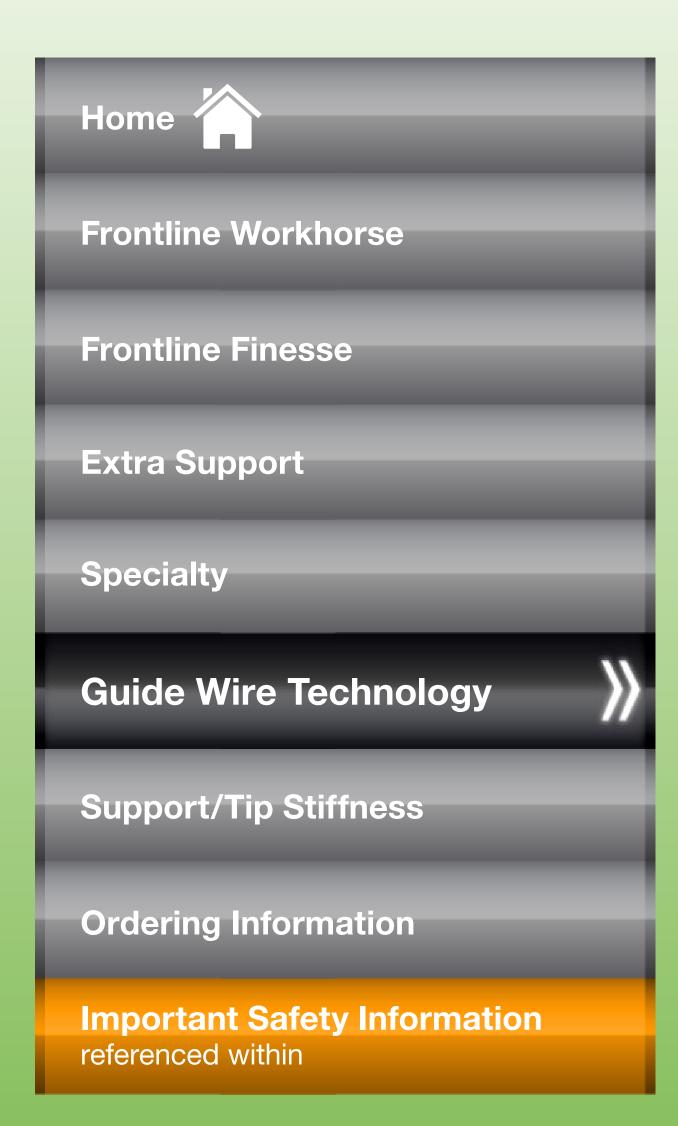
- Full polymer covers over tip coils for outstanding deliverability
- Intermediate polymer sleeves maintain exposed gentle tip coils while providing a lubricious surface for device delivery











Celebrating 30 Years of Pioneering Guide Wire Technology for Interventional Success

Coatings

Precision-engineered coatings designed to reduce surface friction, improve device interaction and guide wire tracking

- Hydrophilic coatings (Hydrocoat®) attract water to create a slippery "gel-like" surface for improved lubricity and smooth device delivery
- Hydrophobic coatings (Microglide® and SmoothGlide™) repel water to create a "wax-like" surface for outstanding tactile feedback and smooth device interaction
- Hybrid coatings combine hydrophobic tip coils for tactile feedback and tip control with hydrophilic intermediate coils for smooth device delivery

Support

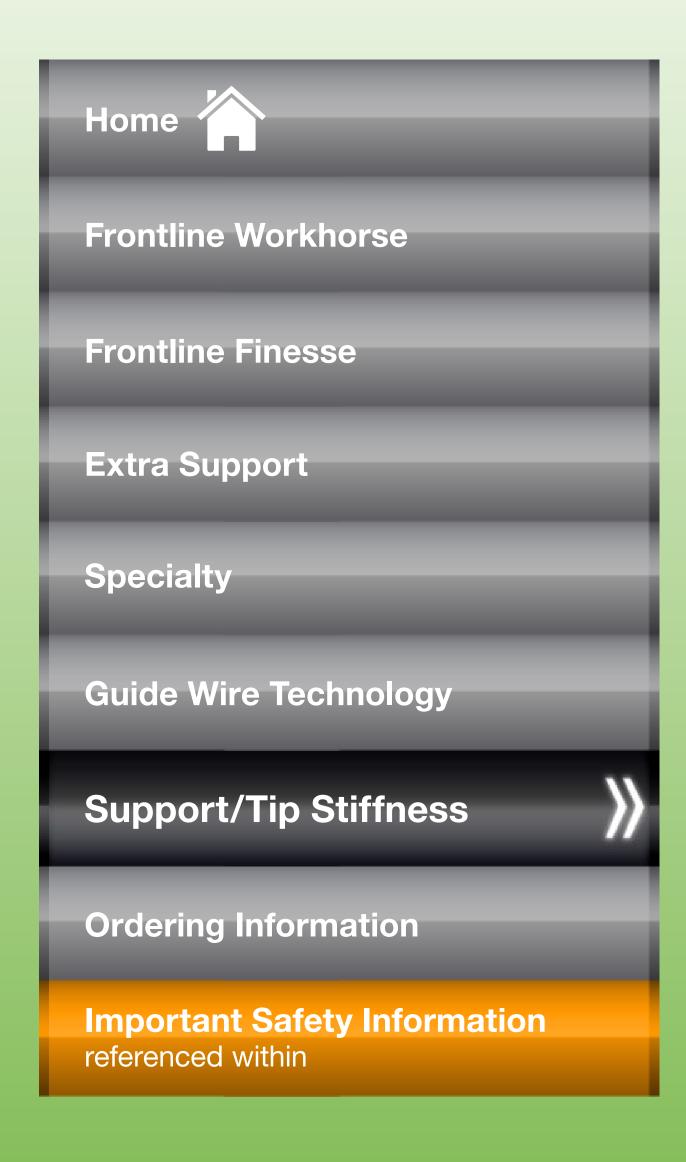
- Support is a measure of a guide wire's resistance to a bending force
- A more supportive wire can aid in bulky device delivery
- A less supportive wire is designed to be flexible and can aid in access through tortuous anatomy

Tip Stiffness

- Sometimes referred to as "tip load," tip stiffness is a measure of the buckling force exerted by the tip of the wire on a surface
- A high tip load is designed to help cross a challenging lesion
- A low tip load makes the tip very soft and gentle
- Abbott Vascular reports tip loads measured on the distal 10 mm of the tip

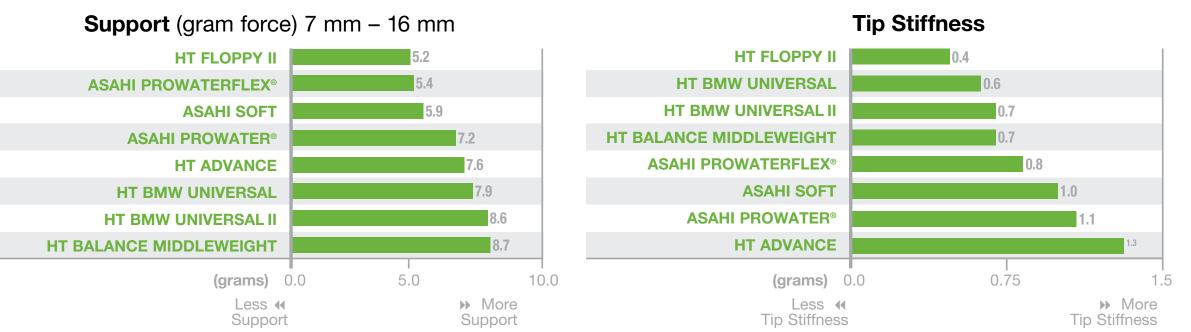


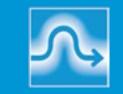




The Abbott Vascular Family of Guide Wires: HI-TORQUE® and ASAHI®







Frontline Finesse Guide Wires

Tip Stiffness Support (gram force) 7 mm – 16 mm HT WHISPER MS HT WHISPER EXTRA SUPPORT HT PILOT 50 HT WHISPER EXTRA SUPPORT **ASAHI FIELDER®** 8.0 2.0 (grams) 0.0 More Support Less ◀ More Tip Stiffness Support Tip Stiffness



Extra Support Guide Wires

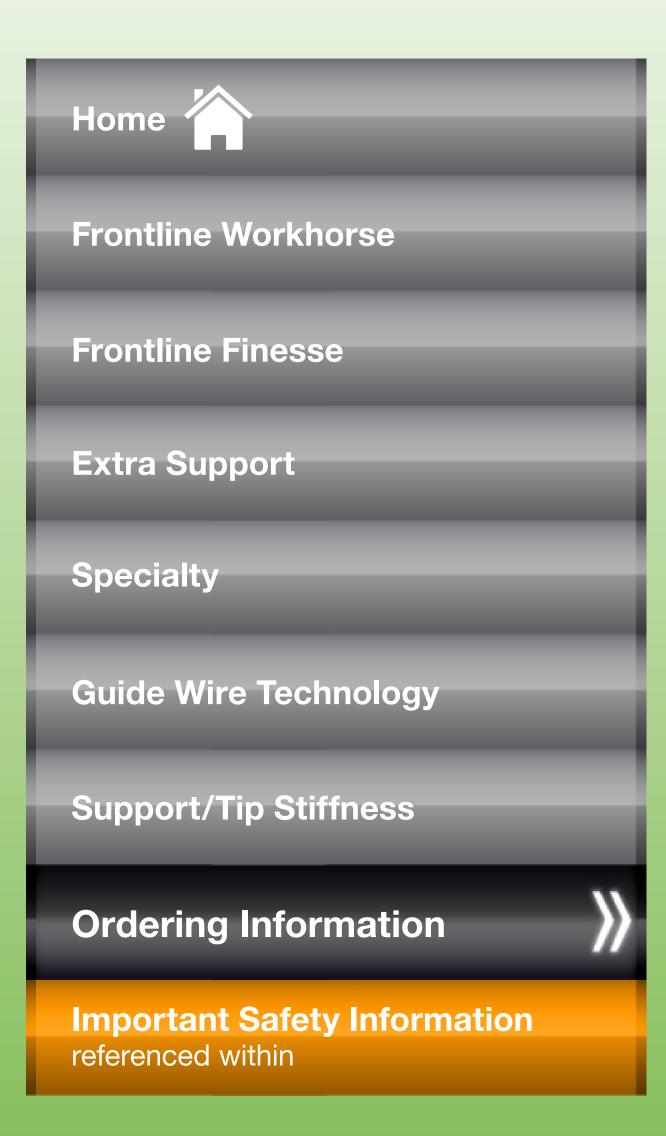
Support (gram force) 7 mm - 16 mm **Tip Stiffness** HT BALANCE HEAVYWEIGHT HT BALANCE HEAVYWEIGHT HT ALL STAR **HT ALL STAR ASAHI GRAND SLAM® ASAHI GRAND SLAM® HT IRON MAN HT IRON MAN** (grams) 0 (grams) 0.0 Less ◀ More Less ◀ More Tip Stiffness Tip Stiffness Support Support



Specialty Guide Wires







Product Ordering Information for HI-TORQUE® and ASAHI® Guide Wires

	STOCK NUMBER	TIP RADIOPACITY (cm)	TIP SHAPE	WIRE SIZE (in)	WIRE LENGTH (cm)
HT BALANCE	1009664	3	Straight	.014	190
MIDDLEWEIGHT UNIVERSAL II	1009664J 1009665	3	J Straight	.014 .014	190 300
	1009665J	3	J	.014	300
HT BALANCE	1009660	3	Straight	.014	190
HT BALANCE MIDDLEWEIGHT UNIVERSAL	1009660J	3	J	.014	190
UNIVERSAL	1009661	3	Straight	.014	300
HT BALANCE	1009661J 1001780-HC	3	J Straight	.014 .014	300 190
	1001780J-HC	3	J	.014	190
MIDDLEWEIGHT	1001782-HC	3	Straight	.014	300
Z	1001782J-HC	3	J	.014	300
	1001780 1001780J	3	Straight	.014	190 190
	10017803	3	Straight	.014 .014	300
	1001782J	3	J	.014	300
HT ADVANCE	1044588	3	Straight	.014	190
	1044588J 1044589	3	J Stroight	.014 .014	190
	1044589J	3	Straight J	.014	300 300
ASAHI PROWATER®	12776-01	3	Straight	.014	180
	12776-02	3	J	.014	180
<u> </u>	14935-01	3	Straight	.014	300
ASAHI PROWATERFLEX®	14935-02 82358-01	<u>3</u> 3	J Straight	.014 .014	300 180
	82358-11	3	J	.014	180
ASAHI SOFT	82358-02	3	Straight	.014	300
E ACALILOSET	82358-12	3	J	.014	300
ASAHI SOFT	12780-01 12780-02	3	Straight .I	.014 .014	180 180
V /	14939-01	3	Straight	.014	300
	14939-02	3	J	.014	300
HT FLOPPY II	22339M	2	Straight	.014	190
	22339MJ 22359M	2	J Straight	.014 .014	190 300
	22359MJ	2	Straight J	.014	300
	22359MJ-903	30	Straight	.014	300
HT WHISPER MS	1005357H	3	Straight	.014	190
	1005357HJ	3	J Chroimht	.014	190
	1005359H 1005359HJ	3 3	Straight .I	.014 .014	300 300
HT WHISPER	1011834H	3	Straight	.014	190
EXTRA SUPPORT (ES)	1011834HJ	3	J	.014	190
	1011835H	3	Straight	.014	300
HT PILOT 50	1011835HJ 1010480-H	3 3	J Straight	.014 .014	300 190
III FILOT 30	1010480-HJ	3	J	.014	190
	1010483-H	3	Straight	.014	300
	1010483-HJ	3	J	.014	300
ASAHI FIELDER®	82359-01 82359-02	3	Straight Straight	.014 .014	180 300
	82359-11	3	J	.014	180
	82359-12	3	J	.014	300
HT BALANCE	1000462H	4.5	Straight	.014	190
HEAVYWEIGHT	1000462HJ 1000463H	4.5 4.5	J Straight	.014 .014	190 300
	1000463HJ	4.5 4.5	Straight J	.014	300
HT ALL STAR	1001740	3	Straight	.014	190
	1001740J	3	J	.014	190
	1001741	3	Straight	.014	300
ASAHI GRAND SLAM®	1001741J 12781-01	<u> </u>	J Straight	.014 .014	300 180
SIDNE CENT	12781-02	4	J	.014	180
	14940-01	4	Straight	.014	300
UT IDON MAN	14940-02	4	J Otro-lark I	.014	300
HT IRON MAN	1001309 1001309J	3	Straight .I	.014 .014	190 190
HT PILOT 200	1010482-H	3	Straight	.014	190
	1010482-HJ	3	J	.014	190
	1010485-H	3	Straight	.014	300
ASAHI FIELDER® XT	1010485-HJ AGP140002	<u>3</u> 16	J Straight	.014 .014	300 190
AVAIII I ILLULII - A I	AGP140002 AGP140302	16	Straight	.014	300
ASAHI MIRACLEBROS® 3	12778-01	11	Straight	.014	180
	14937-01	11	Straight	.014	300
ASAHI MIRACLEBROS® 4.5	12777-01	11	Straight	.014	180
ASAHI MIRACLEBROS® 6	14936-01 12779-01	11 11	Straight Straight	.014 .014	300 180
. C. a.	14938-01	11	Straight	.014	300
ASAHI MIRACLEBROS® 12	82903-01	11	Straight	.014	180
	82903-02	11	Straight	.014	300
ASAHI CONFIANZA PRO® 9	20629-01 20629-02	20 20	Straight Straight	.014 .014	180 300
	ZUUZJ-UZ	۷	_		
ASAHI CONFIANZA PRO® 12	82902-01	20	Straight	.014	180