

Accessories Guide

Fixed Industrial Scanners

Machine Vision Smart Cameras



Accessory Guide

FS10

Fixed Industrial Scanners and Machine Vision Solutions

This comprehensive guide provides the details on the accessory family for Zebra's portfolio of Fixed Industrial Scanners and Machine Vision Solutions.

You'll find accessories that are shared between all models, such as cables and external lighting, as well as model specific accessories, such as internal lighting components for the FS40/VS40.

For more information, please visit www.zebra.com/us/en/products/accessories/ industrial-machine-vision-fixed-scannersaccessories.html

To order accessories, please contact your Zebra sales representative.

Communication Cables







USB Cables

USB-C Cable, 2M (6.5 ft.)

PN#: CBL-USB00200-USC00

- Dual screw locking USB Type-C connector to standard USB Type-C connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 3A current
- SuperSpeed USB (5 Gbps) and Display Port Alt-Mode support
- Compatible with all FS/VS devices with USB-C ports

USB-C Cable, 4M (13 ft.)

PN#: CBL-USB00400-USC00

- Dual screw locking USB Type-C connector to standard USB Type-C connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 1.5A current
- High Speed USB (480 Mbps) support
- Compatible with all FS/VS devices with USB-C ports

USB-A Cable, 2M (6.5 ft.)

PN#: CBL-USB00200-USA00

- Dual screw locking USB Type-C connector to standard USB Type-A connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 1.5A current
- SuperSpeed USB (5 Gbps) support
- Compatible with all FS/VS devices with USB-C ports

USB-A Cable, 4M (13 ft.)

PN#: CBL-USB00400-USA00

- Dual screw locking USB Type-C connector to standard USB Type-A connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 1.5A current
- High Speed USB (480 Mbps) support
- Compatible with all FS/VS devices with USB-C ports

Ethernet Cables

Ethernet Cable, 5M (16ft.)

PN#: CBL-ENT00500-M1200

- X-Coded male M12 connector to standard male RJ45 connector
- Shielded Category 6 cable
- Compatible with all FS/VS devices with Ethernet ports

Ethernet Cable, 15M (49 ft.)

PN#: CBL-ENT01500-M1200

- X-Coded male M12 connector to standard male RJ45 connector
- Shielded Category 6 cable
- Compatible with all FS/VS devices with Ethernet ports

Lighting







FS40/VS40 Internal Ring Lighting

FS40/VS40 Internal Ring Light, White LED

PN#: ZLED-XS40WH-0000

- Color temperature 2700K
- Provides 8 LEDs, controllable in individual banks of two lights
- White lighting is typically used for barcodes printed in color or when taking images of metal objects

FS40/VS40 Internal Ring Light, Blue LED

PN#: ZLED-XS40BL-0000

- LED wavelength: 470 nm
- Provides 8 LEDs, controllable in individual banks of two lights
- Blue lighting is typically used when taking images of metal objects, such as stainless steel

FS40/VS40 Internal Ring Light, Red LED

PN#: ZLED-XS40RD-0000

- LED wavelength: 660 nm
- Provides 8 LEDs, controllable in individual banks of two lights
- · Red lighting is typically used to capture images on paper

FS40/VS40 Internal Ring Light, IR LED

PN#: ZLED-XS40IR-0000

- LED wavelength: 850 nm
- Provides 8 LEDs, controllable individual banks of two lights
- Typical applications:
 - Environments where users do not want to see any visible lighting
 - Detecting clear liquids, for example to determine if a bottle is filled
 - Inspecting fruit and other foods for bruising

FS40/VS40 Internal Ring Light, Multi-Color (White, Blue, Red, IR) LED

PN#: ZLED-XS40MC-0000

- Provides 24 LEDs: 8 White, 4 Red, 4 Blue, 8 IR
- White LEDs are controllable in individual banks of 4 LEDs; IR, Red and Blue are controllable in individual banks of 2 LEDs

FS40/VS40 Replacement Ring Light Covers

Replacement Integrated Light Cover, Cross Polarizer — Standard Lens

PN#: ZLED-XS40PS-0000

- Compatible with Standard Range (SR) FS40/VS40 only
- Provides protective covering for LEDs and imager
- Reduces glare from reflective surfaces
- Not for use when IR image capture is required

Replacement Integrated Light Cover, Cross Polarizer — Wide Angle Lens

PN#: ZLED-XS40PW-0000

- Compatible with Wide Angle (WA) FS40/VS40 only
- Provides protective covering for LEDs and imager
- Reduces glare from reflective surfaces
- Not for use when IR image capture is required

Lighting (continued)







FS40/VS40 Replacement Ring Light Covers — continued

Replacement Integrated Light Cover — Standard Lens

PN#: ZLED-XS40CS-0000

- Compatible with Standard Range (SR) FS40/VS40 only
- Provides protective covering for LEDs and imager

Replacement Integrated Light Cover — Wide Angle Lens

PN#: ZLED-XS40CW-0000

- Compatible with Wide Angle (WA) FS40/VS40 only
- Provides protective covering for LEDs and imager

External Lighting for All Models

100mm LED Light Bar, White

PN#: LGHT-B100WH-0000

PN#: LGHT-B100RD-0000

- 4-pin male M12 connector
- 20W strobe for two seconds, not to exceed 30% duty cycle
- 8W continuous after two seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- White lighting is typically used for barcodes printed in color or when taking images of metal objects
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

100mm LED Light Bar, Red-625nm Wavelength

- 4-pin male M12 connector
- 20W strobe for two seconds, not to exceed 30% duty cycle
- 8W continuous after two seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- Red lighting is typically used to capture images on paper
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

100mm LED Light Bar, Blue-465nm Wavelength

PN#: LGHT-B100BL-0000

- 4-pin male M12 connector
- 20W strobe for two seconds, not to exceed 30% duty cycle
- 8W continuous after two seconds
- Light is semi-diffused
- Includes transparent and opaque filters
- Blue lighting is typically used when taking images of metal objects (such as stainless steel)
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

100mm LED Light Bar, IR-850nm Wavelength

PN#: LGHT-B100IR-0000

- 4-pin male M12 connector
- 20W strobe for two seconds, not to exceed 30% duty cycle
- 8W continuous after two seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- Typical applications:
 - Environments where users do not want to see any visible lighting
 - Detecting clear liquids, for example to determine if a bottle is filled
 - Inspecting fruit and other foods for bruising
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

Lighting (continued)







External Lighting for All Models — continued

300mm LED Light Bar, White

PN#: LGHT-B300WH-0000

- 4-pin male M12 connector
- \bullet $\,$ 60W strobe for two seconds, not to exceed 30% duty cycle
- 20W continuous after two seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- · White lighting is typically used for barcodes that are printed in color or when taking images of metal objects
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

300mm LED Light Bar, Red-625nm Wavelength

PN#: LGHT-B300RD-0000

- 4-pin male M12 connector
- 60W strobe for two seconds, not to exceed 30% duty cycle
- 20W continuous after two seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- Red lighting is typically used to capture images on paper
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

300mm LED Light Bar, Blue-465nm Wavelength

PN#: LGHT-B300BL-0000

- 4-pin male M12 connector
- 60W strobe for two seconds, not to exceed 30% duty cycle
- 20W continuous after two seconds
- Light is semi-diffused
- Includes transparent and opaque filters
- Blue lighting is typically used when taking images of metal objects, such as stainless steel
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

300mm LED Light Bar, IR-850nm Wavelength

PN#: LGHT-B300IR-0000

PN#: LGHT-R100WH-0000

- 4-pin male M12 connector
- 60W strobe for two seconds, not to exceed 30% duty cycle
- 20W continuous after two seconds
- Light is semi-diffused
- Includes transparent and opaque filters
- Typical applications:
 - Environments where users do not want to see any visible lighting
 - Detecting clear liquids, for example to determine if a bottle is filled
- Inspecting fruit and other foods for bruising
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

100mm LED Ring Light, White

- 72W strobe for 1.4 seconds, not to exceed 15% duty cycle
 10.8W continuous after 1.4 seconds
- Light is semi-diffused

• 5-pin male M12 connector

- Includes transparent and opaque filters
- White lighting is typically used for barcodes that are printed in color or when taking images of metal objects
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

Lighting (continued)







External Lighting for All Models — continued

100mm LED Ring Light, Red-625nm Wavelength

PN#: LGHT-R100RD-0000

- 5-pin male M12 connector
- 72W strobe for 1.4 seconds, not to exceed 15% duty cycle
- 10.8W continuous after 1.4 seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- Red lighting is typically used to capture images on paper
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

100mm LED Ring Light, Blue-465nm Wavelength

PN#: LGHT-R100BL-0000

- 5-pin male M12 connector
- 72W strobe for 1.4 seconds, not to exceed 15% duty cycle
- 10.8W continuous after 1.4 seconds
- Light is semi-diffused
- Includes transparent and opaque filters
- Blue lighting is typically used when taking images of metal objects (such as stainless steel)
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

100mm LED Ring Light, IR-850nm Wavelength

PN#: LGHT-R100IR-0000

- 5-pin male M12 connector
- 72W strobe for 1.4 seconds, not to exceed 15% duty cycle
- 10.8W continuous after 1.4 seconds
- · Light is semi-diffused
- Includes transparent and opaque filters
- Typical applications:
 - Environments where users do not want to see any visible lighting
 - Detecting clear liquids, for example to determine if a bottle is filled
 - Inspecting fruit and other foods for bruising
- Required: External Light Control Cable (CBL-LGT00000-M1200 or CBL-LGT00200-M1200)

External Lighting Options for All Models

Light Polarizer, for 100mm Light Bar PN#: LGHT-A100BP-0000

- Reduces glare from reflective surfaces
- Not for use when IR image capture is required
- Used with 100mm External Light Bars (LGHT-B100xx-0000)

Light Polarizer, for 300mm Light Bar

PN#: LGHT-A300BP-0000

- Reduces glare from reflective surfaces
- Not for use when IR image capture is required
- Used with 300mm External Light Bars (LGHT-B300xx-0000)

Light Polarizer, for 100mm Ring Light

PN#: LGHT-A100RP-0000

- Reduces glare from reflective surfaces.
- Not for use when IR image capture is required.
- Used with 100mm External Ring Lights (LGHT-R100xx-0000)

Lighting (continued)







External Light Control Cables for All Models

External Light Control Cable, .3M (1 ft.)

PN#: CBL-LGT00000-M1200

- 5-pin male M12 connector to 5-pin female M12 connector
- Shielded with 18AWG conductors for high current applications
- Compatible with all FS/VS devices with external light ports

External Light Control Cable, 2M (6.5 ft.)

PN#: CBL-LGT00200-M1200

- 5-pin male M12 connector to 5-pin female M12 connector
- Shielded with 18AWG conductors for high current applications
- Compatible with all FS/VS devices with external light ports

Filters







FS40/VS40 Filters

Red Bandpass Filter

PN#: ZFLT-XS40RD-0000

- 660 nm
- Reduces contribution of ambient light
- Used with Red LED lighting to optimize image capture
- Compatible with FS40/VS40

Blue Bandpass Filter

PN#: ZFLT-XS40BL-0000

- 470 nm
- Reduces contribution of ambient light
- Used with Blue LED lighting to optimize image capture
- Compatible with FS40/VS40

IR Bandpass Filter

PN#: ZFLT-XS40IR-0000

- 850 nm
- Reduces contribution of ambient light
- $\bullet \quad \text{Used with IR LED lighting to optimize image capture} \\$
- Compatible with FS40/VS40

IR Blocker Filter

PN#: ZFLT-XS40MC-0000

- 550 nm
- Reduces contribution of sunlight or other IR sources
- Used with white lighting
- Compatible with FS40/VS40

Filters (continued)







FS70/VS70 Series Filters — Internal Installation (in between C-Mount lens and imager)

Red Bandpass Filter

- PN#: FLTR-BP635-25400
- For use between C-mount lens and imager, M25.4 filter thread
- 635 nm
- Reduces contribution of ambient light
- Used with Red LED lighting to optimize image capture

Blue Bandpass Filter

- PN#: FLTR-BP470-25400
- For use between C-mount lens and imager, M25.4 filter thread
- 470 nm
- Reduces contribution of ambient light
- Used with Blue LED lighting to optimize image capture

IR Bandpass Filter

PN#: FLTR-BP850-25400

- For use between C-mount lens and imager, 25.4 filter thread
- 850 nm
- Reduces contribution of ambient light
- Used with IR LED lighting to optimize image capture

IR/UV Blocking Filter

- PN#: FLTR-BP550-25400
- For use between C-mount lens and imager, 25.4 filter thread
- 550 nm
- Reduces contribution of sunlight or other IR sources
- Used with white lighting

FS70/VS70 Series Filters — External Installation (on end of C-Mount lens)

Red Bandpass Filter

PN#: FLTR-BP635-25500

- For use on C-mount lens, M25.5 filter thread
- 635 nm
- Reduces contribution of ambient light
- Used with Red LED lighting to optimize image capture

Blue Bandpass Filter

PN#: FLTR-BP470-25500

- For use on C-mount lens, M25.5 filter thread
- 470 nm
- Reduces contribution of ambient light
- Used with Blue LED lighting to optimize image capture

IR Bandpass Filter

PN#: FLTR-BP850-25500

- For use on C-mount lens, M25.5 filter thread
- 850 nm
- Reduces contribution of ambient light
- $\bullet \hspace{0.1in}$ Used with IR LED lighting to optimize image capture

Filters (continued)







FS70/VS70 Series Filters — External Installation — continued

IR/UV Blocking Bandpass Filter

PN#: FLTR-BP550-25500

- For use on C-mount lens, M25.5 filter thread
- Reduces contribution of sunlight or other IR sources only lets in visible light
- Used with white lighting

Ultra High Contrast Polarizer Filter

PN#: FLTR-PZ120-25500

- For use on C-mount lens, M25.5 filter thread
- Not for use when IR image capture is required
- Used to reduce glare, increase color saturation and improve overall $image\ quality\ when\ inspecting\ highly\ reflective\ surfaces\ in\ harsh,\ high\ temperature\ environments$
- Required: Light Polarizer (LGHT-A100BP-0000 or LGHT-A300BP-0000 or LGHT-A100RP-0000)

External Lens for FS70/VS70 Series







8mm Focal Length Lens

- C-Mount lens, M25.4 thread
- Compatible with FS70/VS70 series only

12mm Focal Length Lens

PN#: LENS-M1200-0100

PN#: LENS-M0800-0100

- C-Mount lens, M25.4 thread
- Compatible with FS70/VS70 series only

16mm Focal Length Lens

PN#: LENS-M1600-0100

- C-Mount lens, M25.4 thread
- Compatible with FS70/VS70 series only

25mm Focal Length Lens

PN#: LENS-M2500-0100

- · C-Mount lens, M25.4 mm thread
- Compatible with FS70/VS70 series only

35mm Focal Length Lens

PN#: LENS-M3500-0100

- C-Mount lens, M25.4 thread
- · Compatible with FS70/VS70 series only

External Lens for FS70/VS70 Series (continued)





PN#: LENS-XTC70-0000

PN#: LENS-XRC70-0000

PN#: PWR-24V03A-0000

PN#: PWR-24V05A-0000



Threaded Lens Cover Adapter for FS70/VS70

- Replacement for the standard lens cover included with the FS70/VS70
- May be required when using a longer lens or multiple filters that exceed the length of the standard lens cover included with the FS70/VS70
- Adapts to third party lens covers
- Uses M60 x .75mm thread size
- Required: Requires third party lens cover/enclosure. Example is EN-LC55 55mm-IP67 series Enclosures from Components Express, Inc. www.componentsexpress.com

Replacement IP67 Lens Cover for FS70/VS70

- Replaces the FS70/VS70 Lens Cover due to damage, loss, etc.
- Does not include screws

Power Supplies/ Power Cords







Power Supply, 24V DC, 3.3A

- Allen Bradley 1606-XLE80E
- 100-240V AC Input
- 80W, 24-28V DC Output
- DIN Rail Mount
- Screw Terminals
- Required: Power Cable (CBL-PWR00500-M1200 or CBL-PWR01500-M1200)

Power Supply, 24V DC, 5A

- Allen Bradley 1606-XLE120E
- 100-240V AC Input
- 120W, 24-28V DC Output
- DIN Rail Mount
- · Screw Terminals
- Required: Power Cable (CBL-PWR00500-M1200 or CBL-PWR01500-M1200)

Power Over Ethernet (POE) Injector

PN#: PWR-POE30W-0000

- Microsemi PD-9501GR
- 100-240V AC Input
- 30W, 55V DC Output
- Supports up to 1000 Base-T connections
- Required: Ethernet Cable (CBL-ENT00500-M1200 or CBL-ENT01500-M1200)

Power Cable, 5M (16 ft.)

- PN#: CBL-PWR00500-M1200
- A-Coded 12-pin female M12 connector to flying leads • Shielded with 24AWG conductors

Power Supplies/ Power Cords (continued)







Power Cable, 15M (49 ft.)

- PN#: CBL-PWR01500-M1200
- A-Coded 12-pin female M12 connector to flying leads
- Shielded with 24AWG conductors
- 18AWG power and ground conductors for low cable loss

USB-C Cable, 2M (6.5 ft.)

- Dual screw locking USB Type-C connector to standard USB Type-C connector • Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 3A current
- SuperSpeed USB (5 Gbps) and Display Port Alt-Mode support
- Compatible with all FS/VS devices with USB-C ports

USB-C Cable, 4M (13 ft.)

PN#: CBL-USB00400-USC00

PN#: CBL-USB00200-USC00

- Dual screw locking USB Type-C connector to standard USB Type-C connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 1.5A current
- High Speed USB (480 Mbps) support
- Compatible with all FS/VS devices with USB-C ports

USB-A Cable, 2M (6.5 ft.)

PN#: CBL-USB00200-USA00

- Dual screw locking USB Type-C connector to standard USB Type-A connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 1.5A current
- SuperSpeed USB (5 Gbps) support
- Compatible with all FS/VS devices with USB-C ports

USB-A Cable, 4M (13 ft.)

PN#: CBL-USB00400-USA00

- Dual screw locking USB Type-C connector to standard USB Type-A connector
- Proprietary gasket on locking connector provides environmental seal
- Power conductors support up to 1.5A current
- High Speed USB (480 Mbps) support
- · Compatible with all FS/VS devices with USB-C ports

Miscellaneous



L-Mount Bracket

PN#: BRKT-LMNT-U000

Bracket is compatible with all FS/VS series devices

ACCESSORY GUIDE

FIXED INDUSTRIAL SCANNERS AND MACHINE VISION SMART CAMERAS

