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MicroHAWK V430-F
Autofocus Multicode Reader
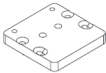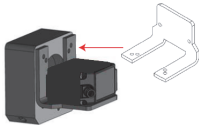
Autofocus to read codes at different distances.

- Simple configuration with WebLink.
- 5 megapixel sensor available.
- Autofocus available.
- Alternate LED configuration available.
- Smallest in class.
- IP65 / IP67.
- Ethernet TCP/IP, EtherNet/IP, and PROFINET.

MicroHAWK V430-F

Mounting Options

Appearance	Type	Part Number
	L Bracket Adjustable Angle Mounting Kit	**V430-AM0**
	¼-20 Camera Mounting Block Kit	**V430-AM1**
	4" (102 mm) Ram Mount Stand	**V430-AM2**
	APG Pan and Tilt Camera Mount	**V430-AM3**
	Nylon Screw and Washer Electrical Isolation Mounting Kit	**V430-AM4**
	MS-4 / MINI to V/F4XX-F Adapter Plate	**V430-AM5**
	Smart Ring Light to V/F4XX-F Mounting Bracket	**V430-AM6**
	QX / Vision HAWK to V/F4XX-F Adapter Plate	**V430-AM7**

Optics Options

Appearance	Type	Part Number
	Front Window Installation Kit	**V430-AF10 ✳**
	Diffuser Installation Kit	**V430-AF11 ✳**
	Polarizer Installation Kit	**V430-AF12 ✳**
	Right Angle Mirror Installation Kit	**V430-AF3**
	YAG Filter Installation Kit	**V430-AF4**
	ESD-Safe Window Installation Kit	**V430-AF5**
	Red Filter Installation Kit	**V430-AF6**
	Blue Filter Installation Kit	**V430-AF7**
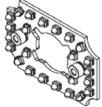
✳ **Note:** V430-AF10, AF11, and AF12 are used for MicroHAWK **V/F4X0-FXXXXXXX-XXX** cameras in this datasheet. The prior generation **MicroHAWK V430-FXXXXXXX** code reader uses part numbers V430-AF0, AF1, and AF2. Please select the correct accessory from the table based on your camera part number format.

Accessory	Prior V430-FXXXXXXX Code Reader	New V/F4X0-FXXXXXXX-XXX Code Reader and Smart Camera
Front Window Installation Kit	V430-AF0	V430-AF10
Diffuser Installation Kit	V430-AF1	V430-AF11
Polarizer Installation Kit	V430-AF2	V430-AF12
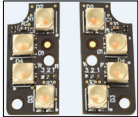
Additional Optics Options

Product	Appearance	Type	Part Number
V430-F Window Kits		Front Window Installation Kit	**V430-AF0R**
		Diffuser Installation Kit	**V430-AF1R**
		Polarizer Installation Kit	**V430-AF2R**

Lighting Options
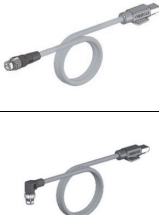
Product	Appearance	Type	Part Number
V430-F Ring Light Kits		Red Ring Light - Installation Kit	**V430-ALRR**
		White Ring Light - Installation Kit	**V430-ALWR**
		Blue Ring Light - Installation Kit	**V430-ALBR**
		IR Ring Light - Installation Kit	**V430-ALIR**
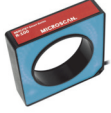
Additional Lighting Options

Appearance	Type	Part Number
	Red Light - Installation Kit	**V430-ALR**
	White Light - Installation Kit	**V430-ALW**
	Blue Light - Installation Kit	**V430-ALB**
	IR Light - Installation Kit	**V430-ALI**

Wiring Options
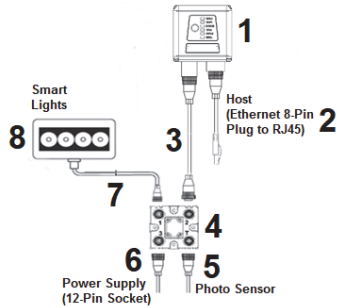
Drawing Reference	Appearance	Category	Length / Spec	Part Number
2		Ethernet Communication Cables – Straight Connectors M12 Plug on Camera to RJ45 Connector	1 Meter	**V430-WE-1M**
			3 Meters	**V430-WE-3M**
			5 Meters	**V430-WE-5M**
		Ethernet Communication Cables – Right Angle M12 Connectors* M12 Plug on Camera to RJ45 Connector	3 Meters – Right Angle Up*	**V430-WELU-3M**
			3 Meters – Right Angle Down*	**V430-WELD-3M**
3		Camera to QX-1 Interconnect Cables M12 Socket to M12 Plug QX-1 is used as breakout module for common IO signals and power.	1 Meter	**V430-WQ-1M**
		M12 Socket to M12 Plug, with Power Filter	300 mm	**V430-WQF-1M**
		Camera to QX-1 Interconnect Cables M12 Socket to M12 Plug QX-1 is used as breakout module for common IO signals and power.	3 Meters	**V430-WQ-3M**
			5 Meters	**V430-WQ-5M**
4		QX-1 Interconnect Module – Power, Trigger, Smart Light Control Breakout		**98-000103-02**
5		QX-1 Photo Sensor, M12 4-Pin Plug, NPN	2 Meters – Light ON/ Dark ON	**99-9000016-01**
		QX-1 Field-Wireable M12 4-Pin Plug for Any Trigger Source or Photo Sensor	Screw Terminals	**98-9000239-01**
6		Power Supply, 100-240VAC, +24VDC, M12 12-Pin Socket	1 Meter US/Euro Plug	**97-000012-01**

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Drawing Reference	Appearance	Category	Length / Spec	Part Number
7		QX-1 M12 to Smart Light Power and Strobe Control Cables M12 Plug on QX-1 to 5 Pin Socket on light	3 Meters – Continuous Power	**61-000204-01**
			3 Meters – Strobe Control	**61-000218-01**
8		Omron Microscan Smart Light Series	Integrated Power and Strobe Control Module	**See Omron Microscan Smart Light Offering - Ring, DOAL, Large Area Lighting**

* Right angle cables.

Right angle up   **Right angle down**

Ethernet Cables

EtherNet/IP

Host

Read data output → PC

Ethernet
Web browser connection

I/O Cables

Control I/O → PLC

Power supply → 24 VDC Power supply

Cordset, M12 12-Pin Socket to DB9 Socket with M12 12-Pin Plug

<RS-232C connector>
Serial communications
Read data output → PLC

<I/O connector> *2

→ 24 VDC Power supply

I/O Cables
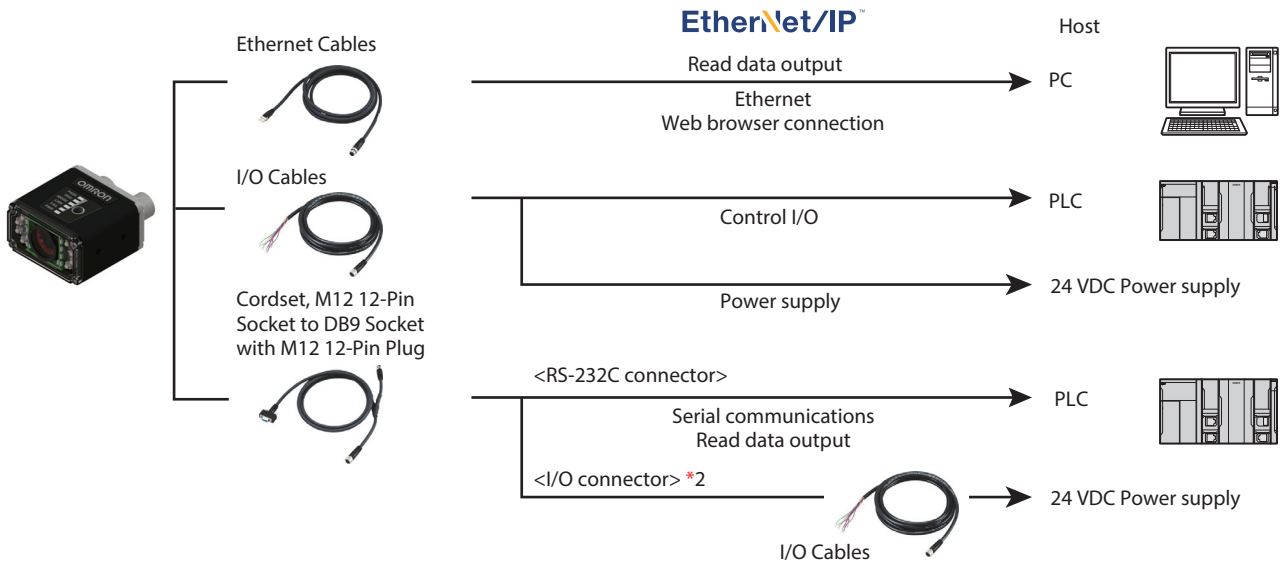
Alternate Wiring Options
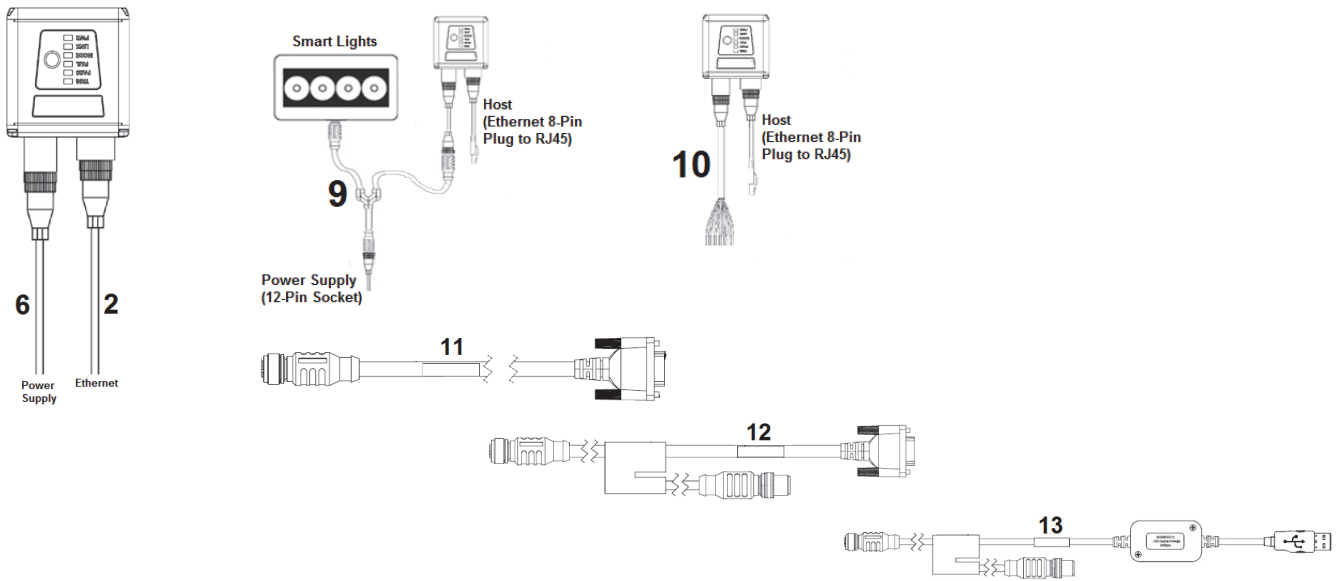
Drawing Reference	Appearance	Category	Length / Spec	Part Number
9		Y Cable, Camera/Power and Smart Light Power (Continuous On)	1 Meter	**61-9000135-01**
		Y Cable, Camera/Power and Smart Light Strobe Control	1 Meter	**61-9000137-01**
10		M12 to Flying Leads Cable, Straight Power, IO, RS-232, USB	3 Meters	**V430-W8-3M**
		M12 to Flying Leads Cable, with Power Filter		**V430-W8F-3M**
		M12 to Flying Leads Cable, Straight Power, IO, RS-232, USB	5 Meters	**V430-W8-5M**
		M12 to Flying Leads Cable, with Power Filter		**V430-W8F-5M**
		M12 to Flying Leads Cable Right Angle Power, IO, RS232, USB	3 Meters – Right Angle Up	**V430-W8LU-3M**
		M12 to Flying Leads Cable Right Angle, with Power Filter		**V430-W8LUF-3M**
		M12 to Flying Leads Cable Right Angle Power, IO, RS232, USB	3 Meters – Right Angle Down	**V430-W8LD-3M**
		M12 to Flying Leads Cable Right Angle, with Power Filter		**V430-W8LDF-3M**
11		M12 to RS-232 Breakout	1 Meter	**V430-WR-1M**
			3 Meters	**V430-WR-3M**
12		Camera to QX-1 Interconnect Cables with RS-232 Breakout	2.7 Meters	**V430-WQR-3M**
13		Camera to QX-1 Interconnect Cables with USB Keyboard Wedge Breakout	2.7 Meters	**V430-WQK-3M**

V430-F Part Number Structure

Use this legend when defining product part numbers. Please note that not all combinations of parameters are valid. For instance, color cameras are only available with white lighting, and 400 mm fixed focus is only available with UHD lenses. When ordering, use valid part numbers from the tables in the Ordering Information section only.

V430-F[XXX][Y][ZZZ]-[L][C][P]

Key	Classification	Code	Meaning
XXX	Focus Distance (mm)	000	Autofocus – Variable Distance
		050	Fixed Focus at 50 mm
		064	Fixed Focus at 64 mm
		081	Fixed Focus at 81 mm
		102	Fixed Focus at 102 mm
		133	Fixed Focus at 133 mm
		190	Fixed Focus at 190 mm
		300	Fixed Focus at 300 mm
		400	Fixed Focus at 400 mm
Y	Lens	W	Wide Field of View – 5.2 mm Focal Length Lens
		M	Medium Field of View – 7.7 mm Focal Length Lens
		N	Narrow Field of View – 16 mm Focal Length Lens
		L	Narrow 16 mm Lens – Autofocus to 1160 mm
ZZZ	Sensor	03M	752 x 480 (0.3 MP) Pixel, Mono Sensor, Global Shutter
		12M	1280 x 960 (1.2 MP) Pixel, Mono Sensor, Global Shutter
		50C	2592 x 1944 (5 MP) Pixel, Color Sensor, Rolling Shutter
L	Light Type	N	No Outer Light
		S	Standard Outer Light
		R	Ring Light
C	Light Color	N	No Outer Light
		R	Red
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

Example Part Numbers:
- V430-F081W03M-NNP: Fixed Focus at 81 mm, Wide Lens, 0.3 MP Monochrome Sensor, No Outer Light, High Speed, Plus Mode
- V430-F000N12M-RRX: Autofocus, Narrow Lens, 1.2 MP Mono, Ring Light, Red, High Speed, X-Mode
- V430-F000L50C-SWP: Autofocus, Long Range Lens, 5 MP Color, Standard Light, White, High Speed, Plus Mode

V430-F Valid Product Matrix

Model	Category	Focus Type	Sensor	Lens	Focus Distance (mm)	Light	License
V430-F	Monochrome	Fixed Focus	03M, 12M	W, M	50, 64, 81, 102, 133, 190, 300	None, Red, White	P, X
			12M	N	64, 400	None, Red, White	P, X
		Autofocus	03M	W, M	50 <-> 300 Autofocus	None, Red, White	P, X
			12M	W, M, N	50 <-> 300 (W, M) 40 <-> 150 (N) Autofocus	None, Red, White	P, X
	Color	Fixed Focus	50C	W, M	50, 64, 81, 102, 133, 190, 300	None, White	P, X
		Autofocus	50C	W, M	50 <-> 300 Autofocus	None, White	P, X
	Specialty	Ring Light Autofocus	12M	M, N	50 <-> 300 (M) 40 <-> 150 (N) Autofocus	Red, White (Ring)	X
		Long Range Autofocus	12M	L	75 <->1160 Autofocus	None, Red, White	P, X

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V430-F Ordering Information

Categories:

1. Fixed Focus Camera

    a.) V430-F Monochrome Fixed Focus Camera

    b.) V430-F Color Fixed Focus Camera

    c.) V430-F 1.2 MP Monochrome Fixed Focus Camera with Narrow Lens

2. Autofocus Camera

    a.) V430-F 0.3 MP Monochrome Autofocus Camera (50 - 300 mm)

    b.) V430-F 1.2 MP Monochrome Autofocus Camera (50 - 300 mm for Wide and Medium Lens, 40 - 150 mm for Narrow Lens)

    c.) V430-F Color Autofocus Camera (50 - 300 mm)

    d.) V430-F 1.2 MP Monochrome Autofocus Camera with Ring Light (50 – 300 mm for Medium Lens, 40 - 150 mm for Narrow Lens)

    e.) V430-F 1.2 MP Monochrome Long Range Autofocus Camera (75 - 1160 mm)

1a) V430-F Monochrome Fixed Focus Camera: Valid Combinations

V430-F[XXX][Y][ZZZ]-[L][C][P]

Key	Classification	Code	Meaning
XXX	Focus Distance (mm)	050	Fixed Focus at 50 mm
		064	Fixed Focus at 64 mm
		081	Fixed Focus at 81 mm
		102	Fixed Focus at 102 mm
		133	Fixed Focus at 133 mm
		190	Fixed Focus at 190 mm
		300	Fixed Focus at 300 mm
Y	Lens	W	Wide Field of View - 5.2 mm Focal Length Lens
		M	Medium Field of View – 7.7 mm Focal Length Lens
ZZZ	Sensor	03M	752 x 480 (0.3 MP) Pixel, Mono Sensor, Global Shutter
		12M	1280 x 960 (1.2 MP) Pixel, Mono Sensor, Global Shutter
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		R	Red
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

1b) V430-F 5.0 MP Color Fixed Focus Camera: Valid Combinations

Note: 5 MP Color cameras are available with No Outer Light or White Light options only.

V430-F[XXX][Y]**50C**-[L][C][P]

Key	Classification	Code	Meaning
XXX	Focus Distance (mm)	050	Fixed Focus at 50 mm
		064	Fixed Focus at 64 mm
		081	Fixed Focus at 81 mm
		102	Fixed Focus at 102 mm
		133	Fixed Focus at 133 mm
		190	Fixed Focus at 190 mm
		300	Fixed Focus at 300 mm
Y	Lens	W	Wide Field of View - 5.2 mm Focal Length Lens
		M	Medium Field of View – 7.7 mm Focal Length Lens
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

1c) V430-F 1.2 MP Monochrome Fixed Focus Camera with Narrow Lens: Valid Combinations

Note: Fixed Focus Narrow lens option available for 1.2 MP Mono camera only.

V430-F[XXX]**N12M**-[L][C][P]

Key	Classification	Code	Meaning
XXX	Focus Distance (mm)	064	Fixed Focus at 64 mm
		400	Fixed Focus at 400 mm
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		R	Red
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

2a) V430-F 0.3 MP Monochrome Autofocus Camera (50 - 300 mm): Valid Combinations

V430-F000[Y]**03M**-[L][C][P]

Key	Classification	Code	Meaning
Y	Lens	W	Wide Field of View - 5.2 mm Focal Length Lens
		M	Medium Field of View – 7.7 mm Focal Length Lens
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		R	Red
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

2b) V430-F 1.2 MP Monochrome Autofocus Camera (50 - 300 mm for Wide and Medium, 40 – 150 mm for Narrow): Valid Combinations

V430-F000[Y]**12M**-[L][C][P]

Key	Classification	Code	Meaning
Y	Lens	W	Wide Field of View - 5.2 mm Focal Length Lens
		M	Medium Field of View – 7.7 mm Focal Length Lens
		N	Narrow Field of View – 16 mm Focal Length Lens
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		R	Red
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

2c) V430-F 5.0 MP Color Autofocus Camera (50 - 300 mm): Valid Combinations

Note: Narrow Autofocus lens option not available for color camera.

V430-F000[Y]**50C**-[L][C][P]

Key	Classification	Code	Meaning
Y	Lens	W	Wide Field of View - 5.2 mm Focal Length Lens
		M	Medium Field of View – 7.7 mm Focal Length Lens
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

2d) V430-F 1.2 MP Monochrome Autofocus Camera with Ring Light (50 - 300 mm for Medium, 40 – 150 mm for Narrow): Valid Combinations

Note: Ring Light version is available for Autofocus, Medium, and Narrow lens, 1.2 MP Monochrome camera only.

V430-F000[Y]12M-R[C]X

Key	Classification	Code	Meaning
Y	Lens	M	Medium Field of View – 7.7 mm Focal Length Lens
		N	Narrow Field of View – 16 mm Focal Length Lens
C	Light Color	R	Red
		W	White

2e) V430-F 1.2 MP Monochrome Long Range Autofocus Camera (75 - 1160 mm): Valid Combinations

Note: Autofocus Long Range lens option available for 1.2 MP Monochrome camera only.

V430-F000L12M-[L][C][P]

Key	Classification	Code	Meaning
L	Light Type	N	No Outer Light
		S	Standard Outer Light
C	Light Color	N	No Outer Light
		R	Red
		W	White
P	Software License	P	High Speed, Plus Mode
		X	High Speed, X-Mode

V430-F

Read Ranges

Read range specifications are subject to change.
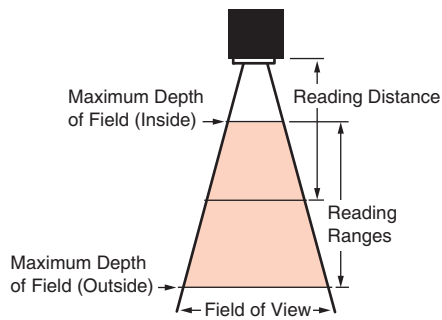
Fixed Focus Field of View (mm) - Wide Lens

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
50	49	32	53	39	50	38
64	62	39	66	49	63	47
81	76	49	81	61	78	58
102	95	60	101	75	96	72
133	121	78	129	97	124	92
190	171	109	182	136	174	130
300	266	170	283	213	271	202
400	353	225	376	282	359	268

Fixed Focus Field of View (mm) - Medium Lens

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
50	34	22	36	27	35	26
64	43	27	45	34	43	32
81	53	34	56	42	54	40
102	66	42	70	52	67	50
133	84	54	90	67	86	64
190	119	76	126	95	121	90
300	185	118	196	147	188	140
400	245	156	260	195	249	186

Fixed Focus Field of View (mm) - Narrow Lens

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
50	15	10	16	12	16	12
64	19	12	21	15	20	15
81	24	15	25	19	24	18
102	30	19	32	24	30	22
133	38	24	40	30	39	29
190	54	34	57	43	54	41
300	83	53	89	67	85	63
400	111	71	118	88	113	84

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Autofocus Field of View (mm) - Wide Lens

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
50	51	33	55	41	52	39
100	97	62	103	77	98	73
150	142	90	151	113	144	107
200	187	119	199	149	190	142
250	232	148	247	185	236	176
300	277	177	295	221	282	210

Autofocus Field of View (mm) - Medium Lens

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
50	33	21	36	27	34	25
100	63	40	67	50	64	48
150	92	59	98	73	94	70
200	121	77	129	97	123	92
250	151	96	160	120	153	114
300	180	115	191	144	183	136

Autofocus Field of View (mm) - Narrow Lens

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
50	15	10	16	12	16	12
100	29	19	31	23	30	22
150	43	27	45	34	43	32

Long Range Autofocus Field of View (mm)

Distance (mm)	0.3 MP		1.2 MP		5 MP	
	Width	Height	Width	Height	Width	Height
75	22	14	24	18	23	17
100	29	19	31	23	30	22
200	56	36	60	45	57	43
300	83	53	89	67	85	63
400	111	71	118	88	113	84
500	138	88	147	110	140	105
600	165	105	176	132	168	125
700	192	123	204	153	196	146
800	219	140	233	175	223	166
900	247	157	262	197	251	187
1000	274	175	291	218	279	208
1200	328	209	349	262	334	249
1300	355	227	378	283	362	270
1400	382	244	407	305	389	290
1500	410	261	436	327	417	311

Ratings and Specifications

V430-F		V430-F□□□□03M-□□□	V430-F□□□□12M-□□□	V430-F□□□□50C-□□□
Symbologies *1	**1D Symbologies**	Code 39, Code 128, BC412, Interleaved 2 of 5, UPC/EAN, Codabar, Code 93, Pharmacode, PLANET, Postnet, Japanese Post, Australian Post, Royal Mail, Intelligent Mail, KIX		
	2D Symbologies	Data Matrix (ECC 0-200), QR Code, Micro QR Code, Aztec Code, DotCode		
	Stacked Symbologies	PDF417, MicroPDF417, GS1 Databar (Composite and Stacked)		
Reading Performance *2	**Number of Reading Digits**	No Upper Limit (depending on bar width and reading distance)		
	Aiming Light	Two Blue LEDs		
	Illumination	Inner LEDs: Four White and Four Red (Wavelength: 625 nm)		
		Outer LEDs: 8 Red or White	Outer LEDs: 8 Red or White; 24 Red or White for V430-F□□□□12M-R□□	Outer LEDs: 8 White
	Reading Distance / Field of View	Refer to *Read Ranges* section for detail.		
	Pitch Angle (α) *3	±30°		
	Skew Angle (β) *3	±30°		
	Tilt Angle (γ) *3	±180°		
Image Capture	**Focus**	Liquid Lens Autofocus or Fixed Focus (Wide = 5.2 mm, Medium = 7.7 mm, Narrow = 16 mm, L = 16 mm)		
	Resolution	752 (H) x 480 (V)	1280 (H) x 960 (V)	2592 (H) x 1944 (V)
	Color / Monochrome	Monochrome CMOS	Monochrome CMOS	Color CMOS
	Shutter	Global Shutter	Global Shutter	Rolling Shutter
	Frames per Second	60 fps	42 fps	5 fps
	Exposure	50 to 100,000 µs		
Image Logging		FTP		
Trigger		External Trigger (Edge or Level), Communication Trigger (Ethernet, RS-232C)		
I/O Specifications	**Input Signals**	Trigger Input; New Master: Bi-Directional, Optoisolated, 4.5-28 V rated (10 mA @ 28 VDC)		
	Output Signals	3 Signals : Bi-Directional, Optoisolated, 1-28V rated, (ICE < 100 mA at 24VDC, current limited by user)		
Communication	**Connectivity**	RS-232C, Ethernet TCP/IP, EtherNet/IP, PROFINET		
	Ethernet Specifications	100BASE-TX / 10BASE-T		
Indicator LEDs		PASS (Green), TRIG (Amber), MODE (Amber), LINK (Amber), FAIL (Red), PWR (Green)		
Power Supply Voltage		5 to 30.0 VDC, 200 mV p-p max ripple		
Current Consumption		0.18 A at 24 VDC (max.)		
Environmental Immunity*4	**Ambient Temperature Range**	Operating: 0 to 45° C Storage: -50 to 75°C (No Icing or Condensation)		
	Ambient Humidity Range	Operating and Storage: 5% to 95% (Non-Condensing)		
	Ambient Atmosphere	No Corrosive Gases		
	Vibration Resistance (Destructive)	Sine Vibration: 10 Hz to 55 Hz, 0.35 mm displacement, 20 cycles/axis. Random Vibration: 20 Hz to 2000 Hz, 6.295 Grms, 30 min/axis		
	Shock Resistance (Destructive)	50G, 11 ms, sawtooth profile. 3X in each X, Y, Z axis		
	Degree of Protection	IEC 60529 IP65 and IP67		
Weight	**Main Body Only**	Approx. 68 g		
	Packaging Weight	Approx. 174 g (including packing)		
Dimensions	**Main Body Dimensions**	44.5 (W) × 44.5 (D) × 25.4 (H) mm		
	Packaging Dimensions	170 (W) × 117 (D) × 86 (H) mm		
Accessories		ReadMeFirst, CE Compliance Sheet		
LED Safety Standard		IEC 62471-1: 2006 Risk-Exempt Group		
Safety Standards		EN 55024:2010, EN 55032:2015 + AC:2016 FCC Part 15, Subpart B (Class B) UL60950-1 BIS RCM, KC, EAC and BSMI Pending		
Materials	**Case**	Aluminum Diecast, Alumite (Black)		
	Reading Window	Acrylic		
Software		WebLink		

*1.   These symbologies are supported based on Omron's read capability validation standard. Omron recommends that validation be performed for each application.
*2.   Unless otherwise specified, reading performance is defined with center of field of view, angle R=∞.
*3.

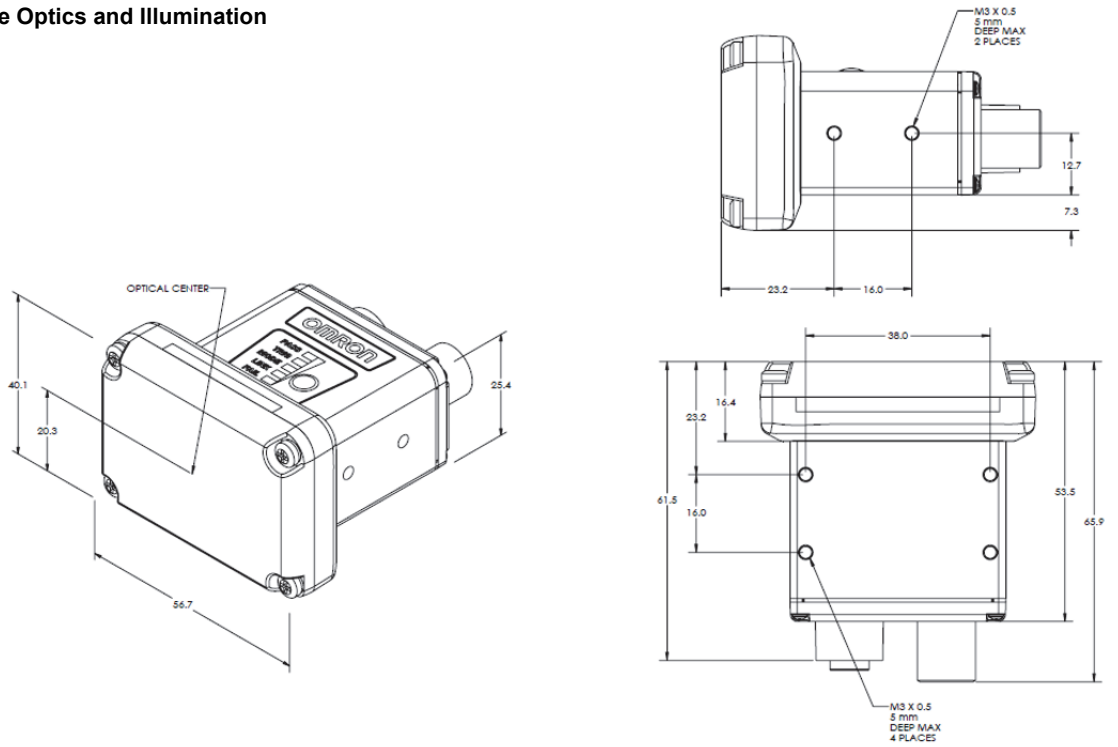Pitch angle   Skew angle   Tilt angle

*4.   In an electrically noisy environment, use only the V430-F in combination with a noise filter cable (V430-W□F-□M) to ensure proper operation.
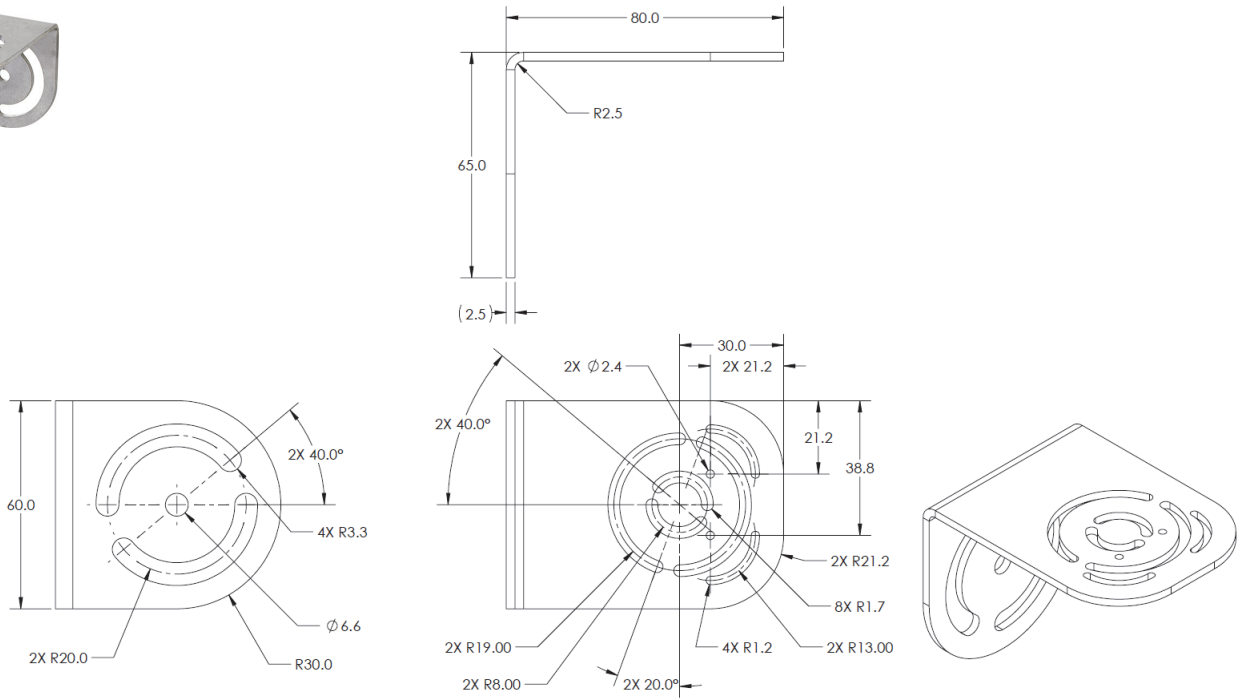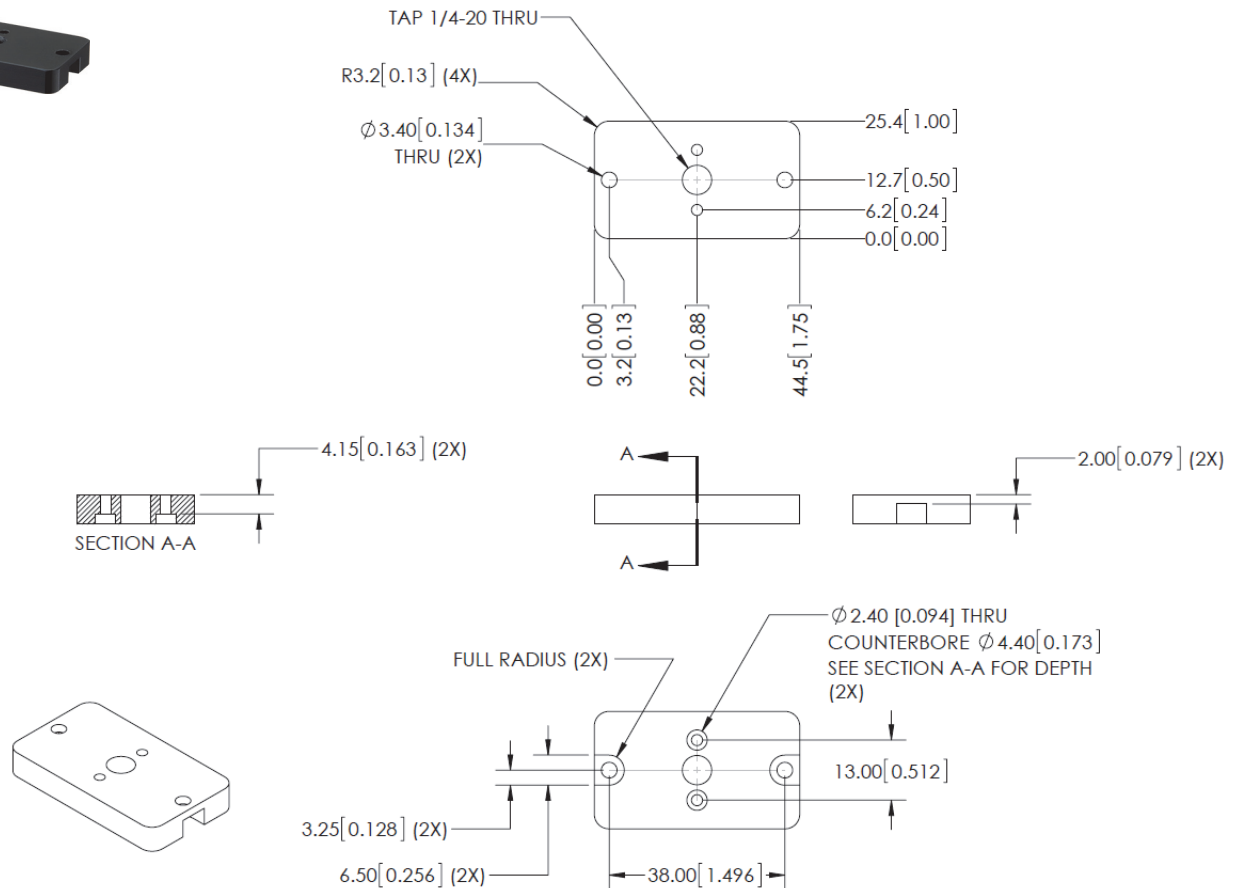
Dimensions

V430-F
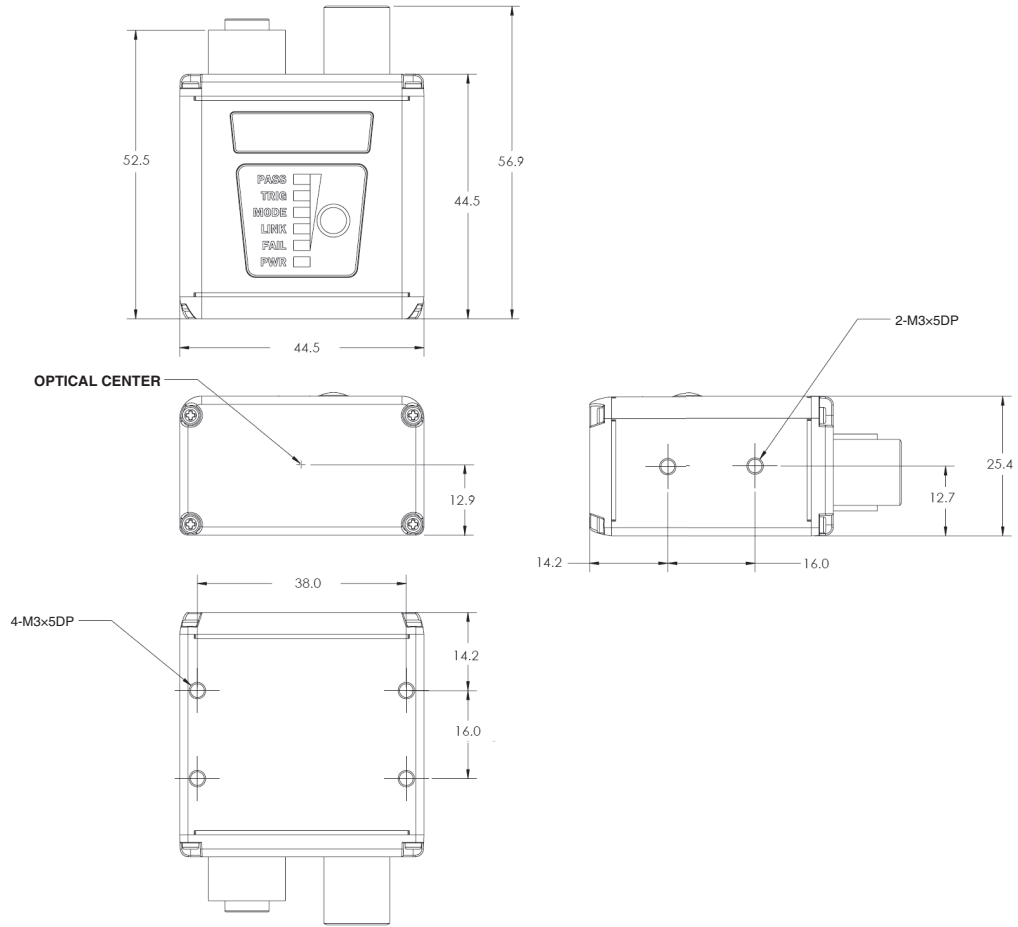
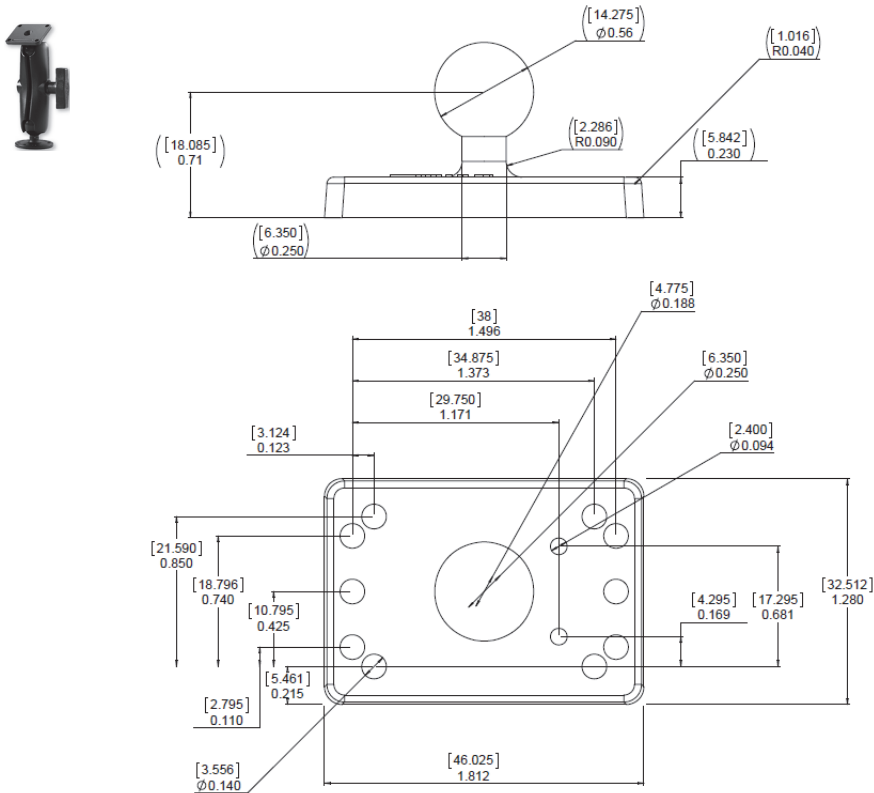**V430-F with Alternate Optics and Illumination**

V430-F

L Bracket Adjustable Angle Mounting Kit
V430-AM0

80.0

R2.5

65.0

(2.5)

2X Ø2.4

30.0

2X 21.2

2X 40.0°

2X 40.0°

21.2

38.8

60.0

2X R21.2

2X 40.0°
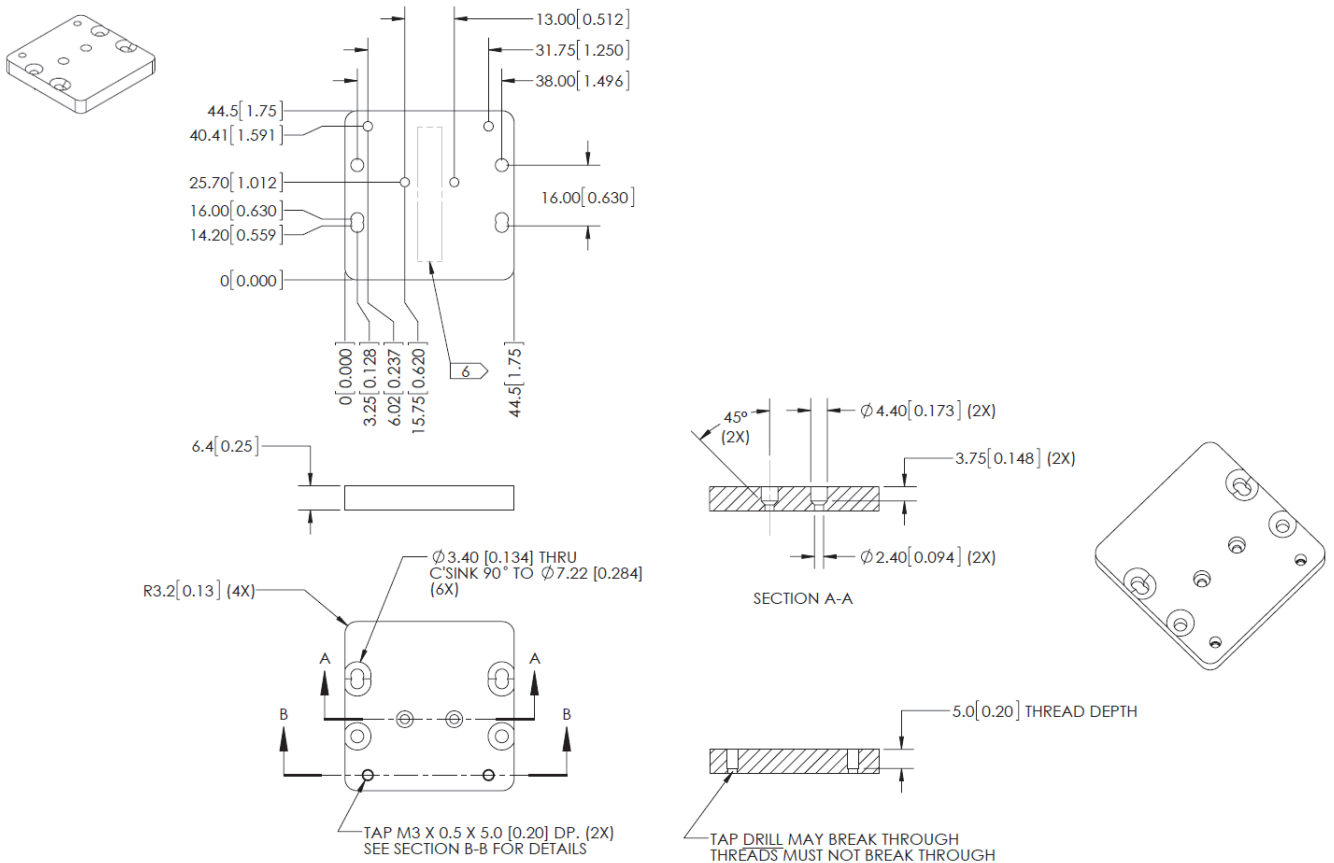
4X R3.3

8X R1.7

Ø6.6

2X R20.0

2X R19.00

4X R1.2

2X R13.00

R30.0

2X R8.00

2X 20.0°

¼-20 Camera Mounting Block Kit
V430-AM1

TAP 1/4-20 THRU

R3.2[0.13] (4X)

25.4[1.00]

Ø3.40[0.134]
THRU (2X)

12.7[0.50]

6.2[0.24]

0.0[0.00]

0.0[0.00]

3.2[0.13]

22.2[0.88]

44.5[1.75]

4.15[0.163] (2X)

2.00[0.079] (2X)

SECTION A-A

A

A

FULL RADIUS (2X)

Ø2.40 [0.094] THRU
COUNTERBORE Ø4.40[0.173]
SEE SECTION A-A FOR DEPTH
(2X)

13.00[0.512]

3.25[0.128] (2X)

6.50[0.256] (2X)

38.00[1.496]

OMRON

4" (102 mm) Ram Mount Stand
V430-AM2

[14.275] / Ø0.56

[1.016] / R0.040

[18.085] / 0.71

[2.286] / R0.090

[5.842] / 0.230

[6.350] / Ø0.250

[4.775] / Ø0.188

[38] / 1.496

[34.875] / 1.373

[29.750] / 1.171

[6.350] / Ø0.250

[2.400] / Ø0.094

[3.124] / 0.123

[21.590] / 0.850

[18.796] / 0.740

[10.795] / 0.425

[32.512] / 1.280

[4.295] / 0.169

[17.295] / 0.681

[2.795] / 0.110

[5.461] / 0.215

[3.556] / Ø0.140

[46.025] / 1.812

MS-4 / MINI to V/F4XX-F Adapter Plate
V430-AM5

13.00 [0.512]

31.75 [1.250]

38.00 [1.496]

44.5 [1.75]

40.41 [1.591]

25.70 [1.012]

16.00 [0.630]

14.20 [0.559]

0 [0.000]

16.00 [0.630]

0 [0.000]
3.25 [0.128]
6.02 [0.237]
15.75 [0.620]

6

44.5 [1.75]

6.4 [0.25]

45° (2X)

Ø 4.40 [0.173] (2X)

3.75 [0.148] (2X)

Ø 2.40 [0.094] (2X)

SECTION A-A

Ø 3.40 [0.134] THRU
C'SINK 90° TO Ø 7.22 [0.284]
(6X)

R3.2 [0.13] (4X)

A — A

B — B

TAP M3 X 0.5 X 5.0 [0.20] DP. (2X)
SEE SECTION B-B FOR DETAILS

5.0 [0.20] THREAD DEPTH

TAP DRILL MAY BREAK THROUGH
THREADS MUST NOT BREAK THROUGH

V430-F

Smart Ring Light to V/F4XX-F Mounting Bracket
V430-AM6

QX / Vision HAWK to V/F4XX-F Adapter Plate
V430-AM7

Front Window Installation Kit
V430-AF10

Diffuser Installation Kit
V430-AF11

Polarizer Installation Kit
V430-AF12

YAG Filter Installation Kit
V430-AF4

ESD-Safe Window Installation Kit
V430-AF5
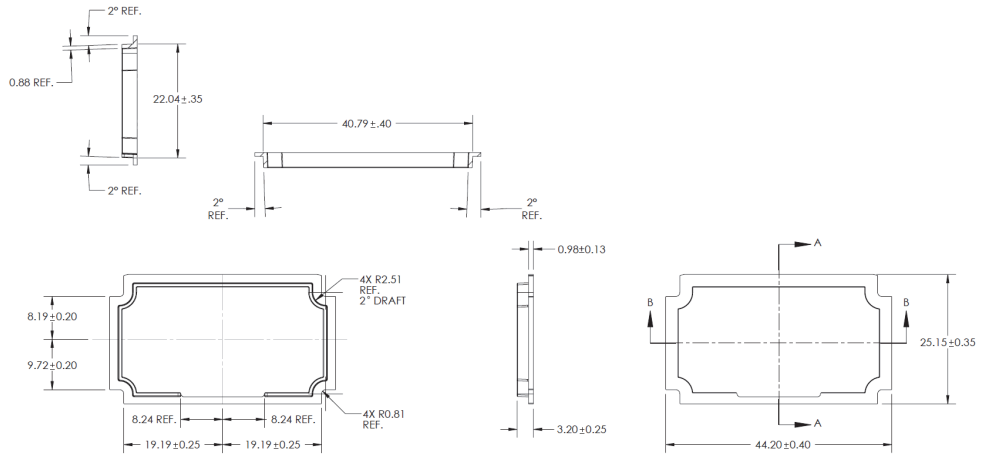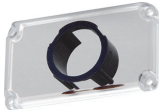
Right Angle Mirror Installation Kit
V430-AF3
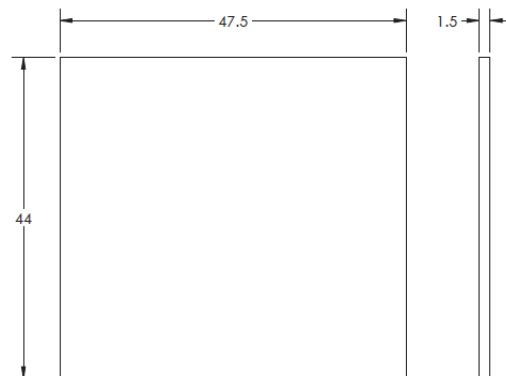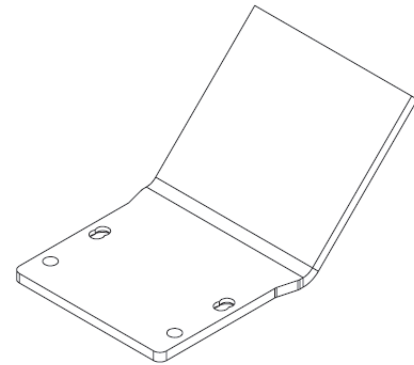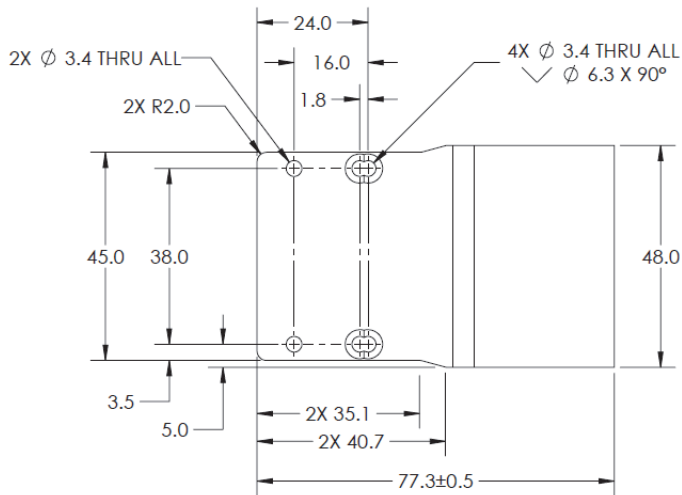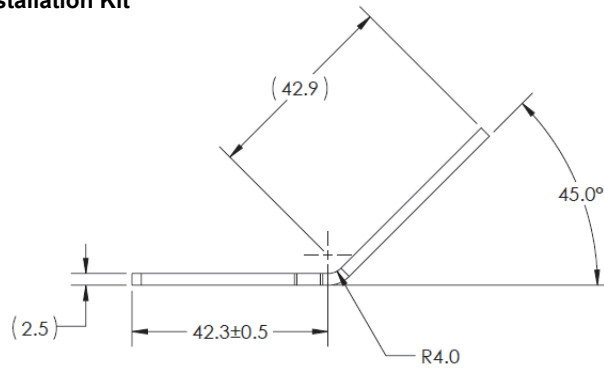
V430-F

Red Filter Installation Kit
V430-AF6
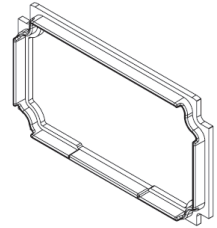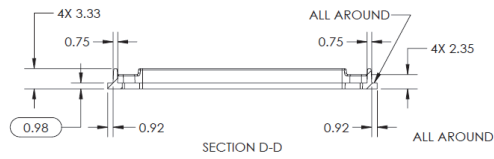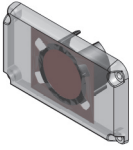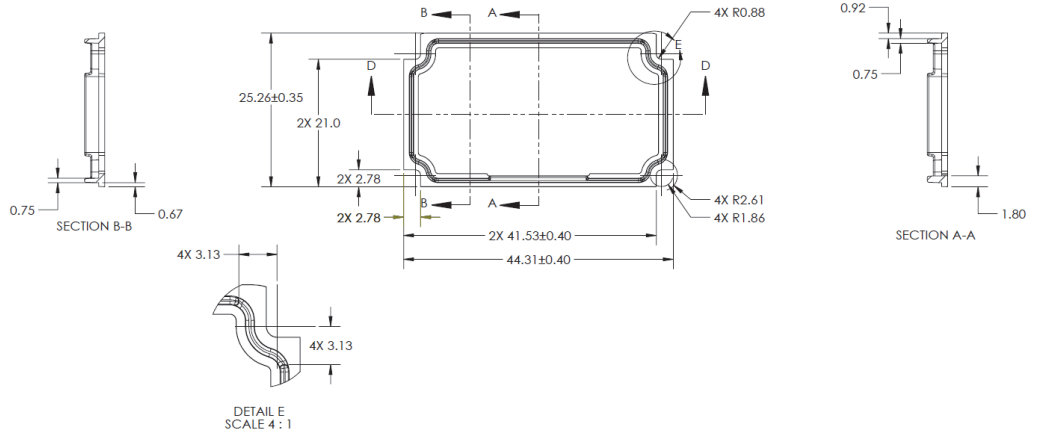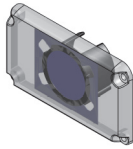
Blue Filter Installation Kit
V430-AF7

Red Light Installation Kit
V430-ALR

White Light Installation Kit
V430-ALW

Blue Light Installation Kit
V430-ALB

IR Light Installation Kit
V430-ALI
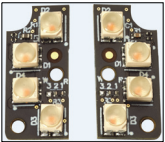
Front Window Installation Kit
V430-AF0R

Diffuser Installation Kit
V430-AF1R

Polarizer Installation Kit
V430-AF2R

Red Ring Light Installation Kit
V430-ALRR

White Ring Light Installation Kit
V430-ALWR

Blue Ring Light Installation Kit
V430-ALBR

IR Ring Light Installation Kit
V430-ALIR

OMRON
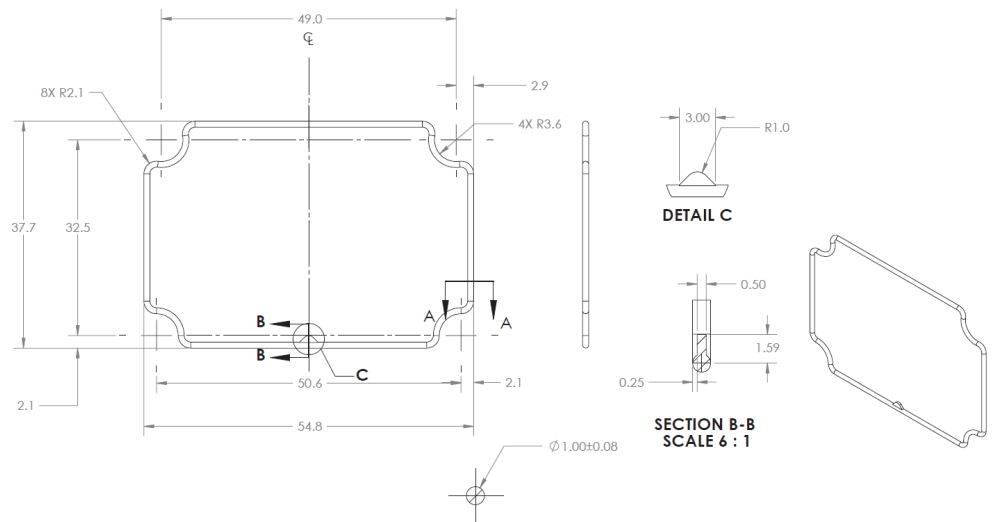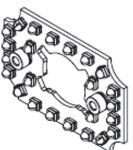
QX-1 Interconnect Module – Power, Trigger, Smart Light Control Breakout
98-000103-02

QX-1 Photo Sensor, M12 4-Pin Plug, NPN – 2 Meters – Light ON / Dark ON
99-9000016-01
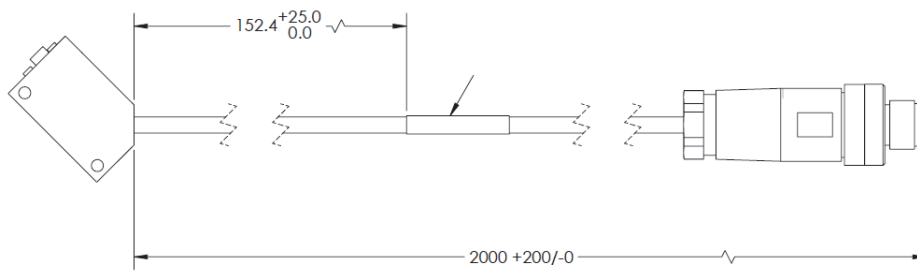
QX-1 Field-Wireable M12 4-Pin Plug for Any Trigger Source or Photo Sensor – Screw Terminals
98-9000239-01

V430-F
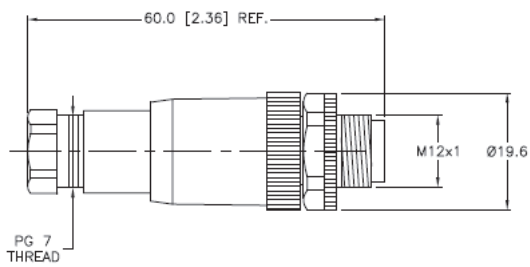
Power Supply, 100-240VAC, +24VDC, M12 12-Pin Socket – 1 Meter – U.S. / Euro Plug
97-000012-01
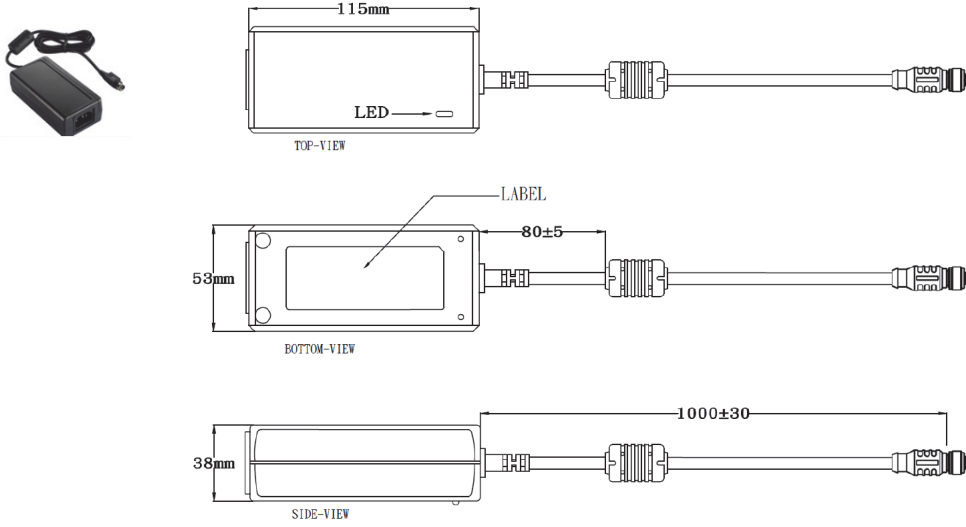
Omron Microscan Smart Light Series – Integrated Power and Strobe Control Module
See Omron Microscan Smart Light Offering – Ring, DOAL, Large Area Lighting

OMRON
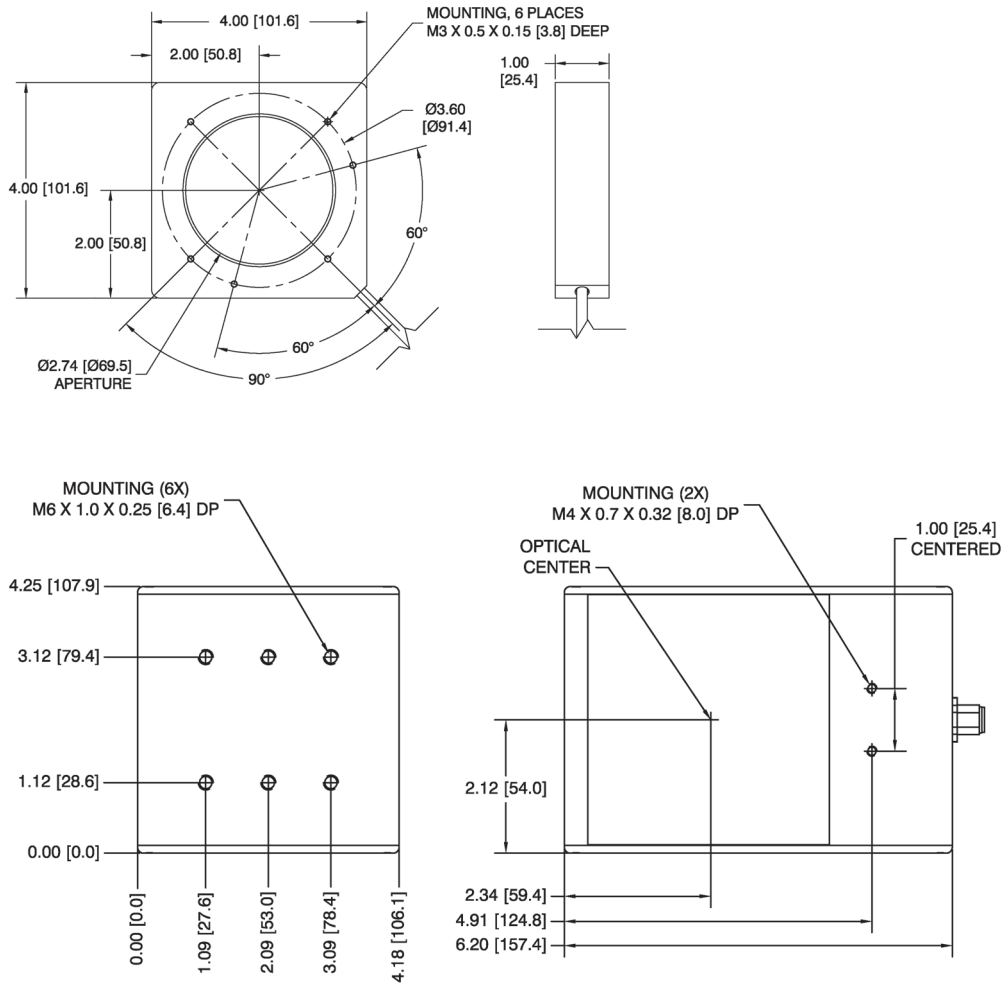
Ethernet Communication Cables – Straight Connectors – 1 Meter, 3 Meters, or 5 Meters
M12 Plug on Camera to RJ45 Connector
V430-WE-1M
V430-WE-3M
V430-WE-5M

1000^{+50}_{0}

63 ± 25

3000^{+120}_{0}

63 ± 25

5000^{+200}_{0}

63 ± 25
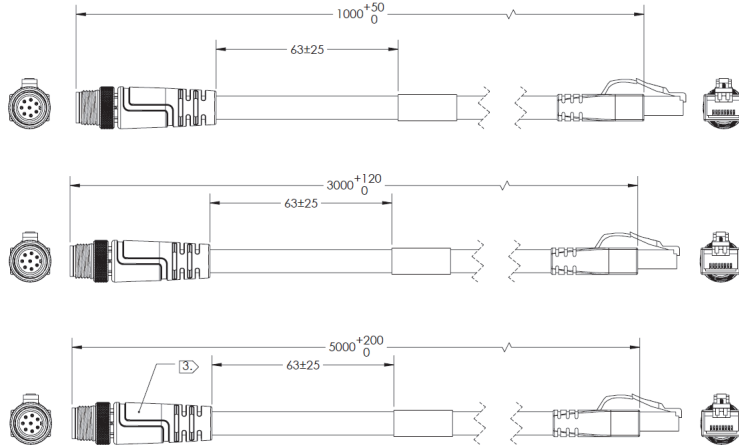
Ethernet Communication Cables – Right Angle M12 Connectors – 3 Meters
M12 Plug on Camera to RJ45 Connector
V430-WELU-3M (Right Angle Up)*
V430-WELD-3M (Right Angle Down)*

*Right angle up

*Right angle down

3000^{+120}_{0}

63 ± 25

90.00°

DETAIL A
SCALE 2 : 1

3000^{+120}_{0}

63 ± 25

DETAIL A
SCALE 2 : 1

90.00°
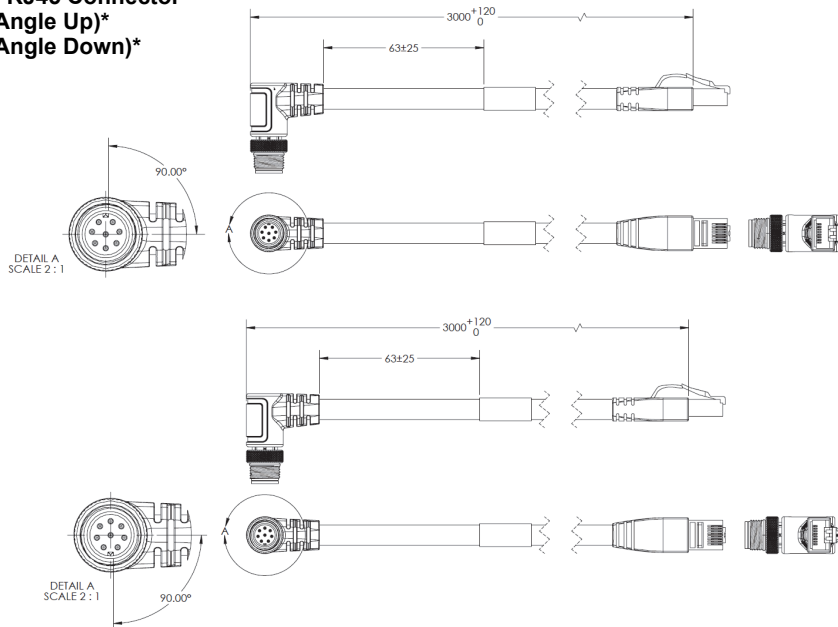
Camera to QX-1 Interconnect Cables – 1 Meter, 3 Meters, or 5 Meters
M12 Socket to M12 Plug
QX-1 is used as breakout module for common IO signals and power.
V430-WQ-1M
V430-WQ-3M
V430-WQ-5M

M12 Socket to M12 Plug, with Power Filter – 300 mm
V430-WQF-1M

1000^{+50}_{0}

63 ± 25

$3000.0^{+120.0}_{0.0}$

63.0 ± 25.0

5000^{+200}_{0}

63 ± 25

310^{+50}_{0}

125 ± 25

63 ± 25
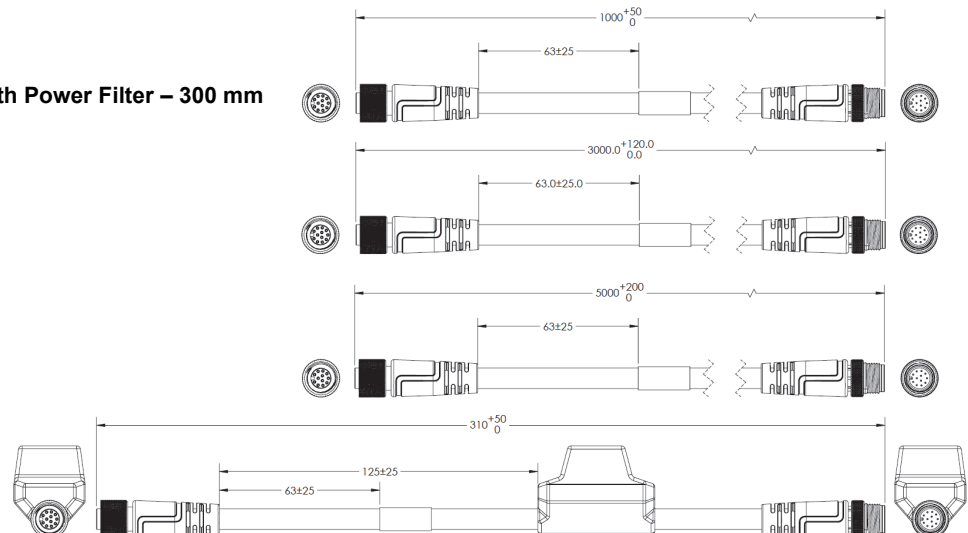
V430-F

QX-1 M12 to Smart Light Power and Strobe Control Cables – 3 Meters
M12 Plug on QX-1 to 5 Pin Socket on Light
61-000204-01 (Continuous Power)
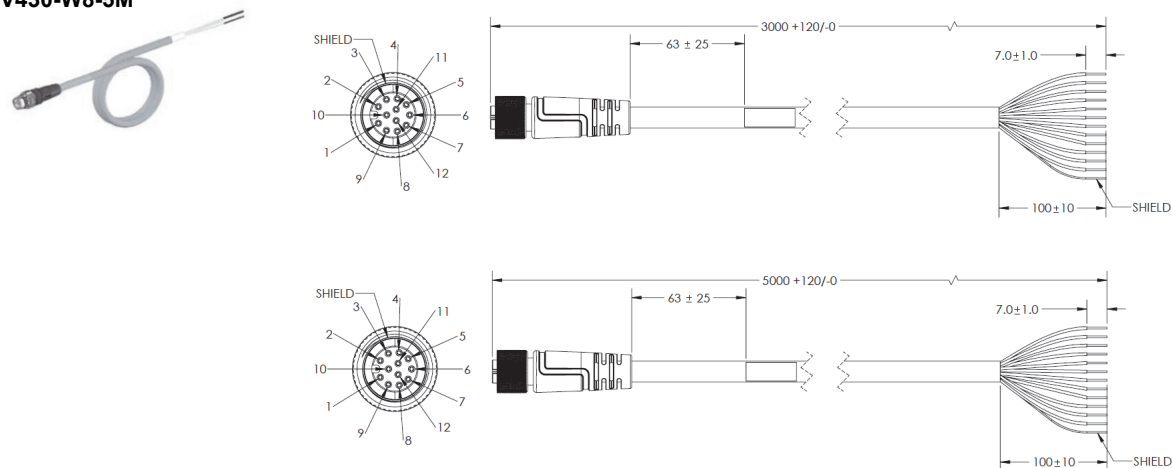**61-000218-01 (Strobe Control)**
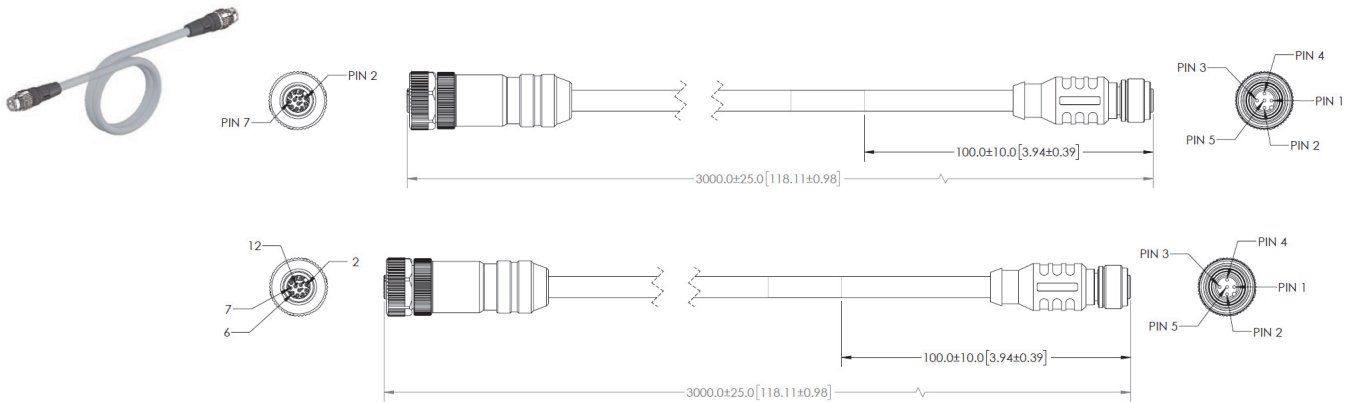
Y Cable, Camera/Power and Smart Light Power (Continuous On) – 1 Meter
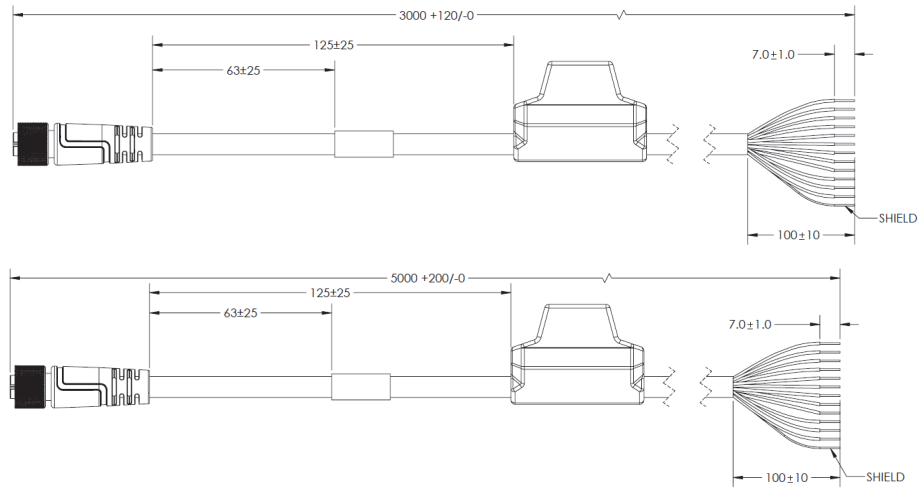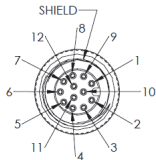**61-9000135-01**

Y Cable, Camera/Power and Smart Light Strobe Control – 1 Meter
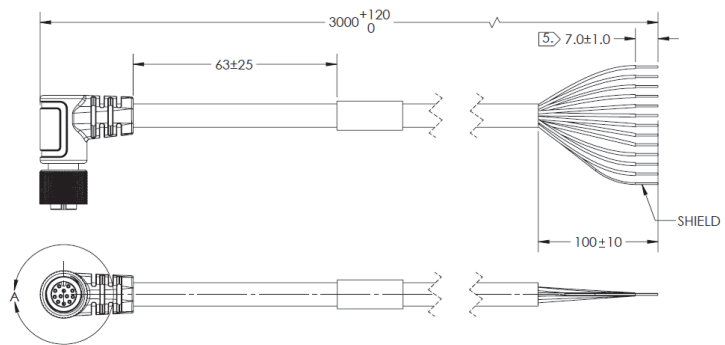**61-9000137-01**
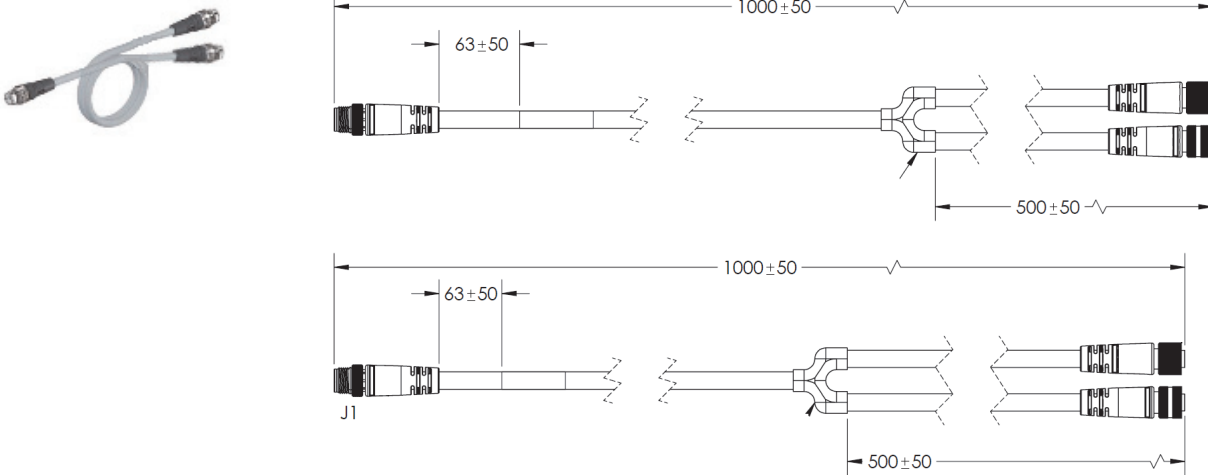
M12 to Flying Leads Cable, Straight Power, IO, RS-232, USB – 3 Meters or 5 Meters
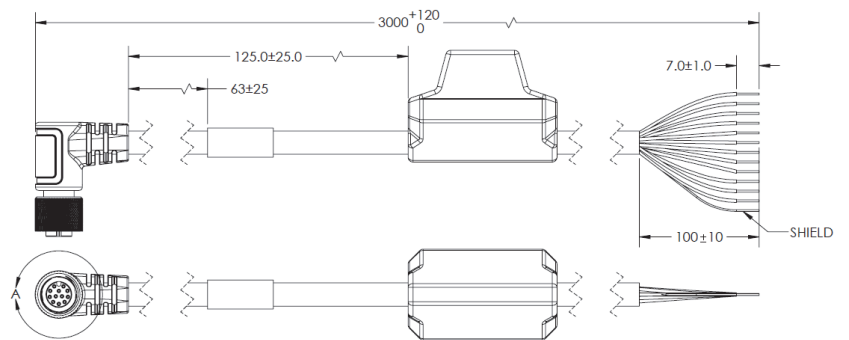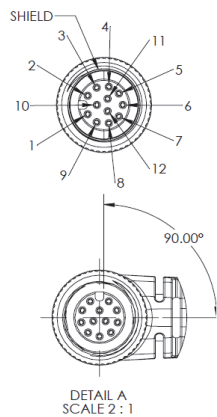**V430-W8-3M**
V430-W8-5M

OMRON

M12 to Flying Leads Cable, with Power Filter – 3 Meters or 5 Meters
V430-W8F-3M
V430-W8F-5M

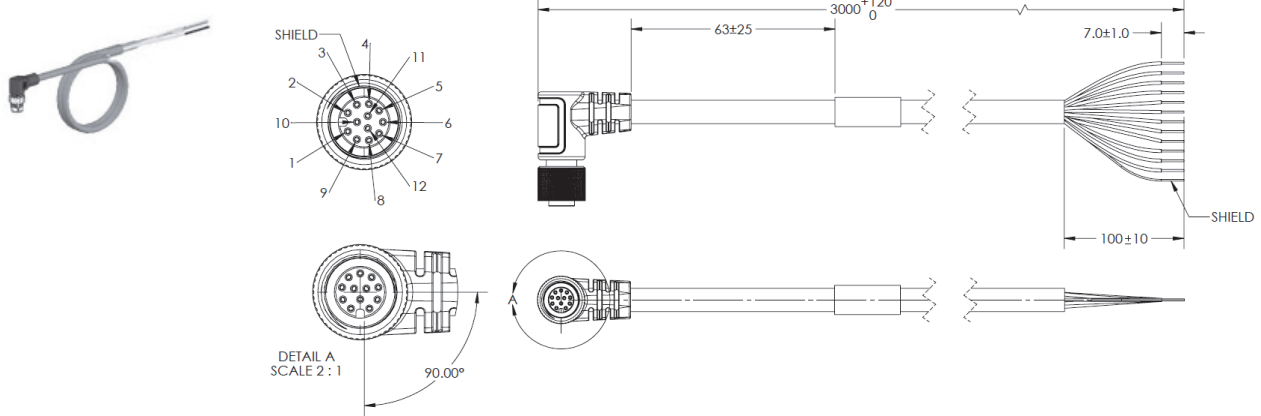**M12 to Flying Leads Cable Right Angle Up Power, IO, RS232, USB – 3 Meters**
V430-W8LU-3M
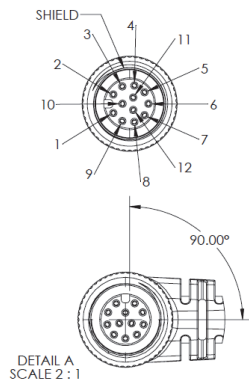
M12 to Flying Leads Cable Right Angle Up, with Power Filter – 3 Meters
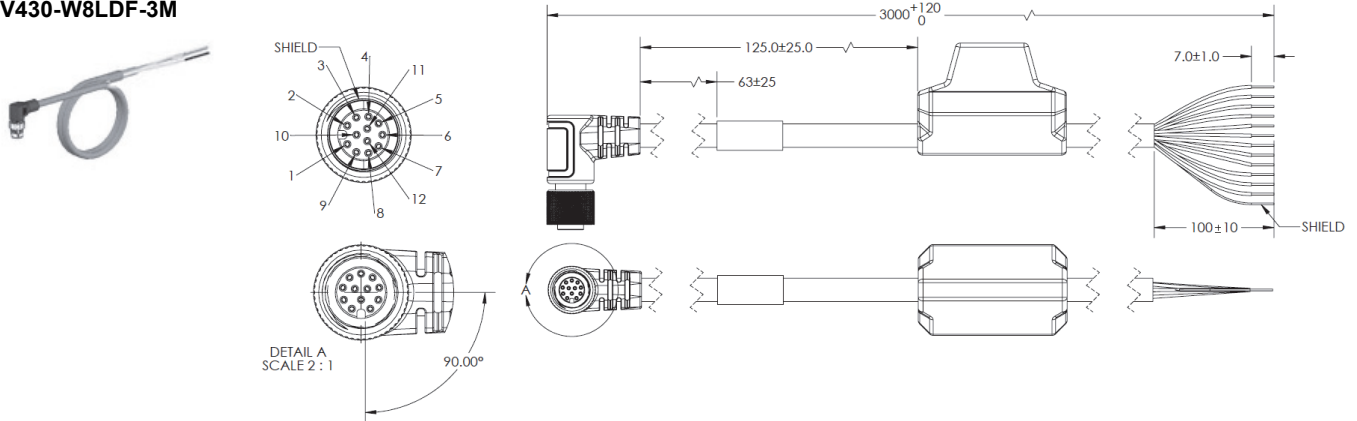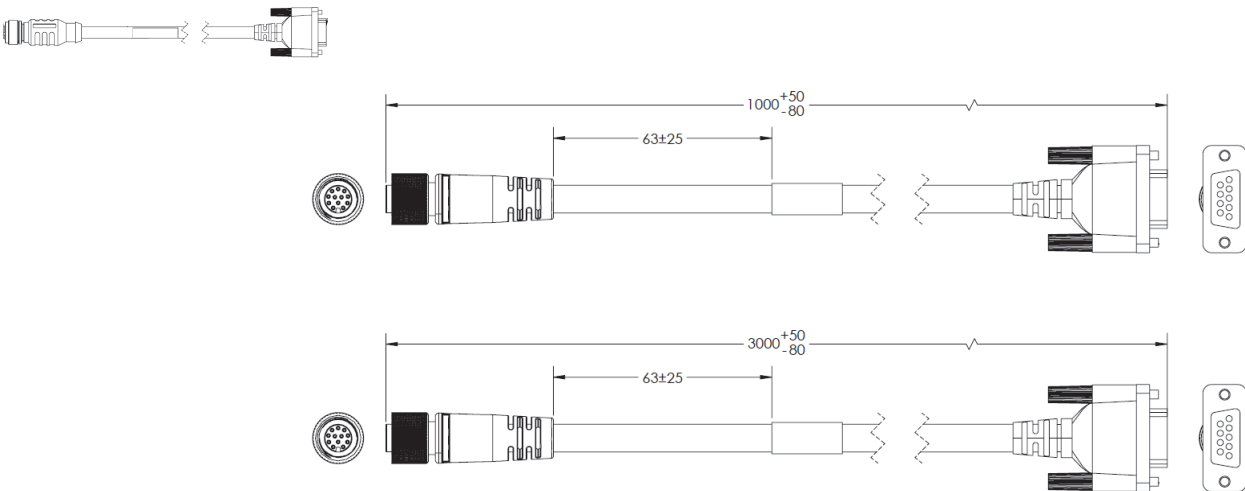**V430-W8LUF-3M**

M12 to Flying Leads Cable Right Angle Down Power, IO, RS232, USB – 3 Meters
V430-W8LD-3M

SHIELD

DETAIL A
SCALE 2 : 1
90.00°

3000^{+120}_{0}
63±25
7.0±1.0
SHIELD
100±10

M12 to Flying Leads Cable Right Angle Down, with Power Filter – 3 Meters
V430-W8LDF-3M

SHIELD

DETAIL A
SCALE 2 : 1
90.00°

3000^{+120}_{0}
125.0±25.0
63±25
7.0±1.0
100±10
SHIELD

M12 to RS-232 Breakout – 1 Meter or 3 Meters
V430-WR-1M
V430-WR-3M

1000^{+50}_{-80}
63±25

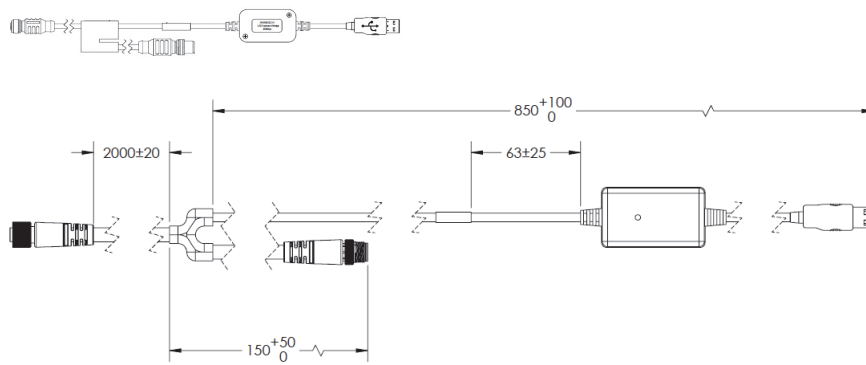3000^{+50}_{-80}
63±25

Camera to QX-1 Interconnect Cables with RS-232 Breakout – 2.7 Meters
V430-WQR-3M
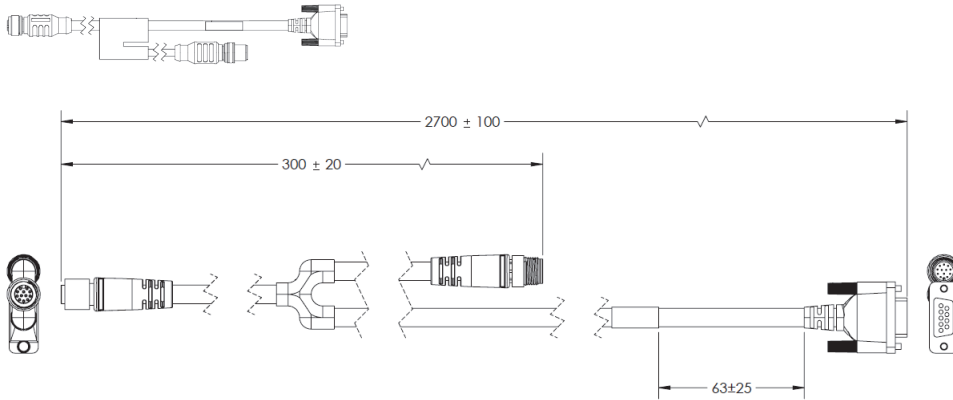
Camera to QX-1 Interconnect Cables with USB Keyboard Wedge Breakout – 2.7 Meters
V430-WQK-3M

Related Manuals

Man. No.	Model	Manual
Z432 (84-9000400-02)	V320-F, V330-F, V420-F, V430-F	MicroHAWK V320-F / V330-F / V420-F / V430-F User Manual

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Mouser Electronics

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Omron:

V430-F000M03M-SWP   V430-F000N12M-SRX   V430-F190M12M-SRP   V430-F190M12M-SRX   V430-F190W12M-SRX   V430-F300M12M-SWP   V430-F300W12M-SRX   V430-F300W12M-SWX   V430-F081W03M-SWP   V430-F081W03M-SWX   V430-F102M03M-SRX   V430-F102W03M-SWP   V430-F102W03M-SWX   V430-F133M12M-NNX   V430-F050W12M-NNP   V430-F064M12M-SRP   V430-F064W03M-SWP   V430-F081M03M-SRP   V430-F081M03M-SRX   V430-F081M03M-SWP   V430-F300W12M-SWP   V430-F300W50C-NNP   V430-F000L12M-SRP   V430-F000M50C-NNP   V430-F050M12M-NNX   V430-F050M12M-SRP   V430-F133W03M-SWX   V430-F133W12M-NNP   V430-F133W12M-NNX   V430-F190M12M-NNX   V430-F300M12M-SWX   V430-F300W12M-SRP   V430-F064M12M-SWP   V430-F064W03M-SRP   V430-F064W03M-SRX   V430-F081M03M-SWX   V430-F102M12M-NNP   V430-F102M12M-NNX   V430-F000M12M-SWX   V430-F000W03M-SWX   V430-F000W12M-NNX   V430-F050W12M-NNX   V430-F050W12M-SRX   V430-F064M12M-NNX   V430-F300M50C-NNP   V430-F300W03M-SWX   V430-F300W50C-SWP   V430-F400N12M-SWX   V430-F000L12M-SRX   V430-F000L12M-SWP   V430-F133W03M-NNX   V430-F133W03M-SRX   V430-F133W50C-NNP   V430-F190M50C-SWP   V430-F190W03M-SWX   V430-F300M03M-SWX   V430-F081M12M-NNP   V430-F081W03M-NNX   V430-F102W03M-NNX   V430-F102W03M-SRX   V430-F133M03M-SRX   V430-F133M12M-SWP   V430-F300W50C-NNX   V430-F050W03M-SRX   V430-F064M03M-SRX   V430-F064N12M-SWX   V430-F064W50C-SWX   V430-F081M03M-NNX   V430-F133W50C-NNX   V430-F190M12M-SWX   V430-F190W12M-SWX   V430-F300M12M-NNP   V430-F300M50C-NNX   V430-F300W12M-NNP   V430-F081M12M-SRX   V430-F081W03M-NNP   V430-F102M03M-NNP   V430-F102W03M-NNP   V430-F133M12M-SWX   V430-F133W03M-SWP   V430-F000W03M-SRP   V430-F000W12M-SWX   V430-F050M12M-SWX   V430-F050W03M-SRP   V430-F064M12M-SWX   V430-F064W03M-NNP   V430-F300W03M-SRP   V430-F300W03M-SRX   V430-F000L12M-NNP   V430-F000L12M-SWX   V430-F000M12M-RRX   V430-F102W50C-SWP   V430-F190M03M-NNP   V430-F190M03M-NNX   V430-F190W03M-NNX   V430-F190W03M-SRP   V430-F300W03M-NNP   V430-F064M03M-NNX   V430-F064W12M-SWP   V430-F064W50C-NNP