

# MACHINE VISION CABLES

## PART NUMBER REFERENCE (M) (V)















## Select Connector Type: End "1"

MDR Male Straight Exit = 1

MDR Female Straight Exit = 2

MDR Male Low Profile R/A Exit UP = 3

MDR Male Low Profile R/A Exit DWN = 4

HDR / SDR Male Straight Exit = 5

HDR / SDR Male R/A Exit UP

w/Recessed Screws = 6

HDR / SDR Male R/A Exit DOWN

w/Recessed Screws = 7

MDR Male Ext. Profile R/A Exit UP = 8

MDR Male Ext. Profile R/A Exit DWN = 9

MDR Male Exit RIGHT w/Recessed Screws = 10

MDR Male Exit LEFT w/Recessed Screws = 11

HDR / SDR Female Straight Exit = 12

MDR Male R/A UP 135° Exit LEFT = 13

MDR Male R/A DWN 135° Exit LEFT = 14

14P HDR / SDR PoCL Lite Straight Exit

w/Recessed Screws = 15

MDR Latch Type Straight Exit = 16

HDR / SDR Male Exit RIGHT

w/Recessed Screws = 17

HDR / SDR Male Exit LEFT w/Recessed Screws = 18

HDR / SDR Male R/A UP Ext. Profile

w/Recessed Screws = 19

HDR / SDR Male R/A DWN Ext. Profile

w/Recessed Screws = 20

## **Cable Type Options:**

HIFLEX (Robotic / C-Track) = 1 30 AWG (Robotic / C-Track) = 3 HIFLEX PoCL (Robotic / C-Track) = 2 30 AWG PoCL (Robotic / C-Track) = 4

# Select Connector Type: End "2"

MDR Male Straight Exit = 1

MDR Female Straight Exit = 2

MDR Male Low Profile R/A Exit UP = 3

MDR Male Low Profile R/A Exit DWN = 4

HDR / SDR Male Straight Exit = 5

HDR / SDR Male R/A Exit UP w/Recessed Screws = 6

HDR / SDR Male R/A Exit DOWN

w/Recessed Screws = 7

MDR Male Ext. Profile R/A Exit UP = 8

MDR Male Ext. Profile R/A Exit DWN = 9

MDR Male Exit RIGHT w/Recessed Screws = 10

MDR Male Exit LEFT w/Recessed Screws = 11

HDR / SDR Female Straight Exit = 12

MDR Male R/A UP 135° Exit LEFT = 13

MDR Male R/A DWN 135° Exit LEFT = 14

14P HDR / SDR PoCL Lite Straight Exit

w/Recessed Screws = 15

MDR Latch Type Straight Exit = 16

HDR / SDR Male Exit RIGHT

w/Recessed Screws = 17

HDR / SDR Male Exit LEFT w/Recessed Screws = 18

HDR / SDR Male R/A UP Ext. Profile

w/Recessed Screws = 19

HDR / SDR Male R/A DWN Ext. Profile

w/Recessed Screws = 20

# **Option: Length in Meters**

### Physical:

Cable Color:

Black

Shell Color:

Black

Shell Construction:

Pre-molded in Polyethelene, fully shielded and over-molded in black PVC.

Cable Construction: Meets Automated Imaging Association Camera Link

Standard. Skew-within pair: 35 ps/m max Skew-channel skew per chipset:

50 ps/m max. All cables are Camera Link approved.

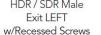
Temp: 8-14-19

## **CONNECTOR TYPE OPTIONS:**



HDR / SDR Male Exit RIGHT w/Recessed Screws

HDR / SDR Male Exit LEFT w/Recessed Screws







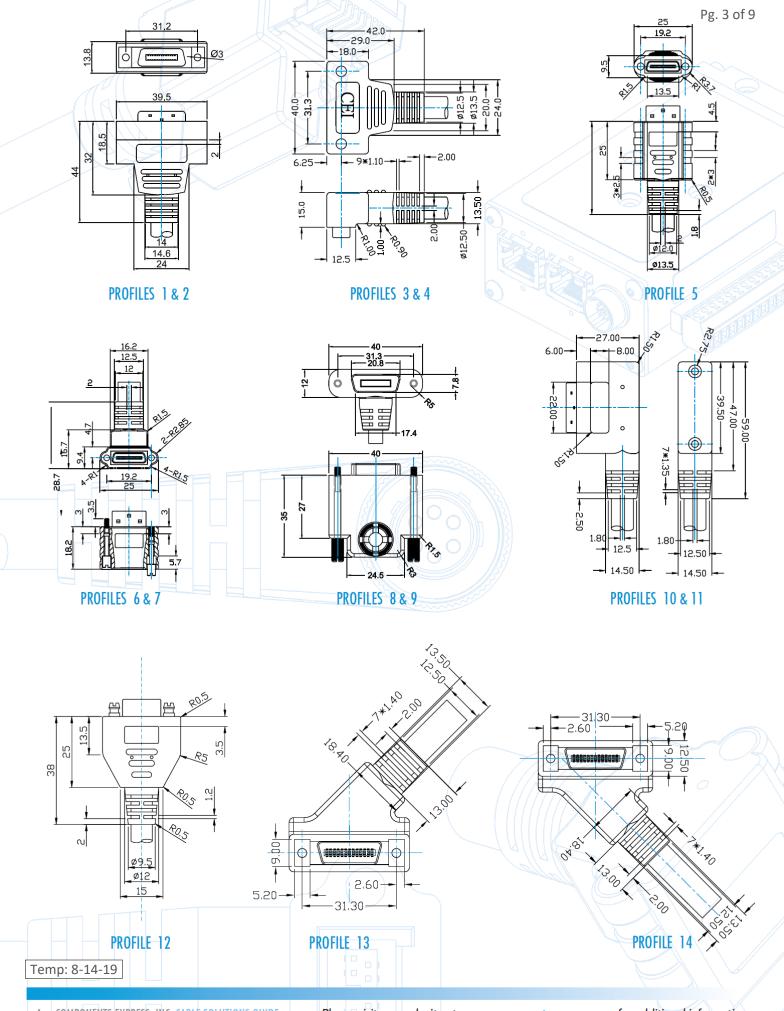


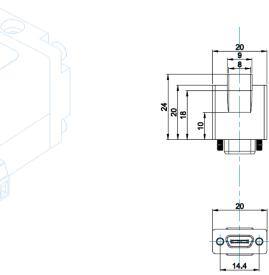
HDR / SDR Male R/A DOWN Ext. Profile w/Recessed Screws

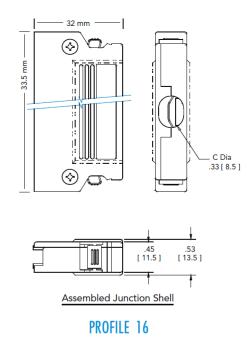
\* Connector #12 & 16 are ONLY compatible with cable types 3 & 4. \*\* Cable type 5 is ONLY compatible with connector #15.

See pages 4 - 5 for profile drawings.

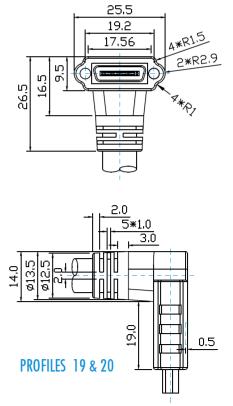
Temp: 8-14-19







PROFILE 15



Temp: 8-14-19

# Please Note that Cable Type #: 2 (pg. 2) may be substituted for Cable Type #: 1, For non-PoCL assemblies. MVC-Cable Type #: 1

100%   10%   10%
SOF JACKET  SOF JACKET  COLOUR CODE:  (1P-AL)*11C: 1.witte*white black 2. white*white green 4. white*white black 5. white*white green 10. white*white black white fourple 6. white*white brown 10. white*white green 11. white block-white brown 10. white*white green 11. white white white white white 10. white*white brown 10. white*white green 11. white white white white 10. white*white green 11. white white white white white 10. white*white green 11. white white white white 10. white*white green 11. white white white white 10. white*white green 12. white*white green 13. white white green 13. white green
MINIMUM BEND RADIUS: 10X O.D.
S OF JACKET S OF JACKET S OF JACKET Aged: 65% Aged: 65% APPROVED CHECKED
S OF JACKET    Samin Aged: 70% min Aged: 65%   Aged: 65%   APPROVED   CUSTOMER   CHECKED   CHECK
APPROVED CUSTOMER CHECKED REV

Please Note that Cable Type #: 2 (pg. 2) may be substituted for Cable Type #: 1, For non-PoCL assemblies.

SPECIFICA	<b>SPECIFICATION:</b> (1P*28#+AL)*11C+2C*24#+2D+ FEP tape	+AL)*11C+2C*24	#+2D+ FEP tap	e + Free-edge-AL-MYLAR +B	CONSTRUCTION	N D.W.G	
LI	ITEM		SPECIF	FICATION			5.8
	AWG	28AWG		24AWG		PVC JACKET	
CONDUCTOR	MATERIAL	TINNED COPPER		TINNED COPPER			
	COND.SIZE	19/0.08± 0.008 Ⅲ		19/0.127± 0.008 mm	₹ 30	BRAID	
	MIN.AVG.THICK	0.25 mm		0.25 mm	0	Free-edge-AL-MYLA	MYLAR
INSULATION	MATERIAL	FM-PE+SKIN		SR-PVC		FFD tana	
	0.D	1.02± 0.05 ₪		1.10± 0.05 mm		—— ILI tape	
Face Outside	COVERAGE	100%		<i>1</i>		CONDUCTOR	
AL.Mylar	OVERLAP	25% MIN		1		NOTTA TIENT ——	
	N O.	(1P+AL)*11C		2C		NOTIFICAL TOOM	
	AWG		24AWG			FILLER	
DRAIN	MATERIAL		TINNED	COPPER		DRAIN	9
	SIZE		19/0.12	19/0.127± 0.008 mmx2PCS	COLOUR CODE	ODE:	20
FEP tape	COVERAGE		100%		(1P+AL)*11C: 1.white*whte/black 2. white*whte/red	/red 3, white*whfe/green	
	OVERLAP		25% MIN	Z	4. white*whte/blue 5. white*whte/purple	purple 6. white white gray	
Free-edge-AL	COVERAGE		100%		7. white*white/yellow 8. white*w	8. white*whte/orange 9. white*whte/brown	72
-MYLAR	OVERLAP		25% MIN	N	10. white/blue*white/green 11. w	11. white/black*white/red	
	AWG		/		2C*24#:12.red 13.black		
DRAIN	MATERIAL		/			74771 /	
	SIZE		/		机(憋)器人 / 拖链	/ 拖锤	
BRAID	MATERIAL		TINNED	COPPER			
COPPER	SIZE		24*10/0.1	12± 0.008 mm 90% MIN	MINIMUM BEND RADIUS: 10X O.D	DIUS: 10X O.D.	
	MIN.AVG.THICK		0.51				
JACKET	MATERIAL		HALF	HALF MATT PVC -20°C~80°C			
	COLOUR		UL813				
	0.D		$9.50 \pm 0.20$ mm	.20 mm	NOGINOS .	INI GOLDON OTIVI	
					10330 Argonne Woo Woodridge, IL 60517	OUNITONEN IS EXPRESS, INC 10330 Argonne Woods Drive, Ste100 Woodridge, IL 60517	<u>ي</u> و
ELECTRICAL		CHARACTERISTICS	PHYSICAL	PROPERTIES OF JACKET			ž.
1. Rating: TEMP 80°C 2. Conductor Resistance:	80°C; VOLTAGE 30V lance: at 20°C MAX	Λ	1.Tensile Strength:	1. Tensile Strength: Unaged: 1500PSI min Aged: 70% min	206594006900	0 8/8/19	
28.4 3. Insulation Resistan	28AWG; 237.25Ω/km; 24AWG; 93.25Ω/km 3. Insulation Resistance: 28AWG 100MΩ-km min at 20°C	7G: 93.25Ω/km min at 20°C	2. Elongation: Unaged: 100% min	ged: 100% min Aged: 65%			
		in at 20°C	3. Heat shock test: NO CRACKING	NO CRACKING			
4. Dielectric Strength:	<ul><li>h: AC 500V/1minute no breakdown.</li></ul>	breakdown.	4. Cold bend test: NO CRACKING	TO CRACKING	APPROVED	CUSTOMER	
6.Time Delay Skew:	6.Time Delay Skew: within a pair(max) 50ps/M;	ď:	5. Deformation test:	2	CHECKED	REV A	_
/.Delay Max 5.20ns/m	ш		6. Flame test: PASS	s vw-1	DRAWING	DATE. 16/11/03	1/03
					1	1 DUC 1113	

CC-EW-206A Pg. 2 /2

(1P*30#+AL)*11C+4D+ FEP tape SPECII 30AWG TINNED	4D+ FEP tape + Free-edge-AL-MYLAR +B  SPECIFICATION 30AWG TINNED COPPER 19/0 06+ 0 008 mm	CTION D.W.G  PVC JACKET  AL.MYLAR  BRAID
MIN.AVG.THICK MATERIAL O. D COVERAGE		Free-edge-AL-MYLAR  FEP tape  CONDUCTOR  NSULATION
	(1P+AL)*11C 28AWG TINNED COPPER 19/0.08± 0.008 mimx4PCS COLOUR	CODE:
	100%   (1P+AL)*11C: 1.white*whte/black   2. x   25% MIN   4. white*whte/blue   5. wi   7. white*whte/yellow   8. x   25% MIN   100, white*white/yellow   10. white*blue*white/green	1.white*whte/black 2. white*whte/red 3. white*whte/green 4. white*whte/blue 5. white*whte/puple 6. white*whte/gray 7. white*whte/cange 9. white*whte/brown 10. white/blue*white/green 11. white/black*white/red
MATERIAL SIZE MATERIAL SIZE MIN.AVG.THICK	/ TINNED COPPER 16*11/0.12±0.008 mm MINIMUM BEN 0.51 mm	机(機)器人 / 拖链 MINIMUM BEND RADIUS: 10X O.D.
N	MATT PVC UL813 8.00 ± 0.30 mm Wooc	COMPONENTS EXPRESS, INC. 10330 Argonne Woods Drive, Ste100 Woodridge, IL 60517
1. Conductor Resistance: at 20°C MAX 3.0AWG: 376.96Ωkm; 2. Insulation Resistance: 10MΩ-km min at 20°C dc 500V (EIA-364-21) 3. Dielectric Strength: AC 500V/Iminute no breakdown. (EIA-364-20) 3. Heat sho	PHYSICAL PROPERTIES OF JACKET  1. Tensile Strength: Unaged: 1500PSI min Aged: 70% min 2. Elongation: Unaged: 100% min Aged: 65% 3. Heat shock test: NO CRACKING	004 8/8/19
	4. Cold bend test: NO CRACKING 5. Deformation test: MAX 50% 6. Flame test: PASS VW-1	CUSTOMER A
	DRAWING CWJ	DATE-EW-206A 16.12.10

SPECIFICATION:		(IP*30#+AL)*11C+2C*28#+2D+		FEP tape +M +AL+B	CONSTRUCTION	N D.W.G	
II	ITEM		SPECI	FICATION		PVC JACKET	
	AWG	30AWG		28AWG		TED tens	
CONDUCTOR	_	TINNED COPPER		TINNED COPPER	12	rer tape	
	COND.SIZE	19/0.06± 0.008		19/0.08± 0.008 mm	(%)(%)(%)	BRAID	
	MIN.AVG.THICK 0.20 IIII	₹ 0.20 ₪		0.10 mm		AL.MYLAR	
INSULATION	MATERIAL	FM-PE+SKIN		SR-PVC	9		
	O.D	0.78± 0.05 ₪₪		0.65± 0.05 ₪		MYLAK	
Face Outside	COVERAGE	100%				CONDUCTOR	R
AL.Mylar	OVERLAP	25% MIN		/		NOTTA TI2NI ———	5
	NO.	(1P+AL)*11C		2C		CITOTOGNI	4
	AWG		28AWG			FILLER	
DRAIN	MATERIAL		TINNEL	O COPPER		DRAIN	
	SIZE		19/0.08	19/0.08± 0.008 mmx2PCS	COLOUR C	CODE:	
FEP tape	COVERAGE		100%				
Mylar	COVERAGE		100%		(1P+AL)*11C: 1.white*whte/black 2. white*whte/red	ie/red 3. white#whte/green	
,	OVERLAP		25% MI	Z	4. white*whte/blue 5. white*whte/purple	/purple 6. white white/gray	
Face Outside	COVERAGE		100%		7. white*whtc/yellow 8. white*whte/orange	hte/orange 9. white#whte/brown	w
AL.Mylar	OVERLAP		25% MIN	Z	reen	11. white/black*white/red	
DRAIN	MATERIAL		1				
	SIZE		1				
BRAID	MATERIAL		TINNEI	O COPPER		/ 祐駐	
COPPER	SIZE		16*11/0	.12± 0.008 mm	\ . нн. (жд. \ n д.	المات /	
	MIN.AVG.THICK	<b>Y</b>	0.51 mm		O CIVIL O PALIBULATIVE	G O X07 O IIIG	
JACKET	MATERIAL		MATT PVC	pVC	MINIMUM BEND RADIOS: 10A O.D.	DIOS: 10A O.D.	
	COLOUR		UL813 BLACK	3LACK			
	O.D		$7.60 \pm 0$	.20 mm			
					COMPONENTS E 10330 Argonne Woo Woodridge, IL 60517	COMPONENTS EXPRESS, INC. 10330 Argonne Woods Drive, Ste100 Woodridge, IL 60517	100 E
ELECTRICAL	ICAL CHARACTERISTICS	TERISTICS	PHYSICAL	PROPERTIES OF JACKET			
Conductor Resistance: at 30AWG: 376.96Cl/km;     Insulation Resistance: 30A/28AI	28 3 28 3 28 3 3 3 3 3 3 3 3 3 3 3 3 3 3	25Ω/km; 1 min at 20°C de 500V min at 20°C de 500	1. Tensile Strength: Unaged: 1500PS 2. Elongation: Unaged: 100% min 3. Heat shock test: NO CRACKING	1. Tensile Strength: Unaged: 1500PSI min Aged: 70% min 2. Elongation: Unaged: 100% min Aged: 65% 3. Heat shock test: NO CRACKING	96599261002	2 8/8/19	
Detectine Strength:     Impedance: 100±10Ω     Time Delay Cleans with	5. Detection Strength: AC 2007/1mmute no dreakdown. 4. Impedance: 1004:100. 5. True Dalaw (American mitting conforms) School.	o breakdown.	4. Cold bend test: NO CRACKING	O CRACKING	APPROVED	CUSTOMER	
outility Delay Shew.	within a pan (max) Joya	/IVI,	5. Deformation test: 6. Flame test: PASS	MAX 50% VW-1	CHECKED	REV	A
					DRAWING CWJ	DATE 201	2017.02.15
						CC-EW-206A	

SPECIFICATION:		(1P*30# +AL )*5C+2C*30# +2D+M+AL +B	2C*30# +2D+]	M+AL +B	CONSTRUCTION	ON D.W.G	
II	ITEM		SPECIFI	SPECIFICATION		—— PVC JACKET	ET
	AWG	-		30 AWG			
CONDUCTOR	_	TINNED CO	COPPER	TINNED COPPER		BRAID	
	COND.SIZE	7/0.10± 0.008 mm	8 mm	$7/0.10\pm0.008$ mm	000	AL.MYLAR	~
	MIN.AVG.THICK	区 0.18 回回		0.10 mm			
INSULATION	MATERIAL	FM-PE+SKIN	NI	SR-PVC		MYLAR	
	O.D	0.72±0.06 ₪₪	mm	0.60± 0.05 mm		EHIED	
	NO.	1P*5C		2C	( C C C C C C C C C C C C C C C C C C C	- FILLER	
	AWG	/		/		CONDUCTOR	TOR
DRAIN	MATERIAL	/		/	5	TA HISTORY	
	SIZE	/		/		INSULATION	NO
FACE INSIDE	COVERAGE	100%		/		DRAIN	
AL.Mylar	OVERLAP	25%MIN	1	/	COLOUR CODE:	CODE:	
MYLAR	COVERAGE	/		/	5P*30AWG: 1.WHITE*WHITE/BLACK 2.WHITE*WHITE/RED	CK 2.WHITE*WHI	re/red
	OVERLAP	/		/	3. WHITE*WHITE/GREEN 4. WHITE*WHITE/BLUE	EEN 4. WHITE*WH	ITE/BLUE
DRAIN	MATERIAL		TINNED	COPPER	5. WHITE*WHITE/PURPLE	VPLE	
	SIZE		7/0.127± 0	7/0.127± 0.008 mm*2PCS	2C*30AWG: 6.BLACK 7.RED		
MYLAR	COVERAGE		100%				
	OVERLAP		25%MIN				
Face outside	COVERAGE		100%				
AL.Mylar	OVERLAP		25%MIN				
BRAID	MATERIAL		TINNED	COPPER			
	SIZE		16*10/0.10	16*10/0.10± 0.008 mm 7PICH 90%MIN	G GINLG MI MINIM	G 0 70V 0 P	
	MIN.AVG.THICK	K	0.51 mm		MINIMUM BEND KADIOS: 10A O.D.	ADIUS: 10A O.D.	
JACKET	MATERIAL		MATT PVC	C			
	COLOUR		UL813 B	BLACK			
	O.D		5.50± 0.20 ₪	mm ,	COMPO	COMPONENTS EXPRESS, INC.	SS, INC.
ELECTRICAL	CHARACTERISTICS	USTICS	PHYSICAL	PHYSICAL PROPERTIES OF JACKET	10330 Arg	10330 Argonne Woods Drive, Ste100	Ste 100
1. Rating: TEMP 80°C	: VOLTAGE	30V 30AUG: 376 960 /lm:	1.Tensile Strength:	.Tensile Strength: Unaged: 1500PSI min Aged: 70% min	Woodridge	Woodridge, IL 60517	
3. Insulation Resistance: 3	Insulation Resistance: 30# SR 10MO-km min at 20°C dc 500V (EIA-364-21)	(A-364-21)	2. Elongation: Unaged: 100% min	lged: 100% min Aged: 65%			
30# FM-PE+SKIN 100N- 4. Dielectric Strength: AC	30# FM. PE+SKIN 100MΩ-km mm at 20°C dc 500V (EIA-364-21) Delectric Strength. AC 500V/Immute no breakdown. (EIA-364-20)		3. Heat shock test: NO CRACKING	Heat shock test; NO CRACKING			
5. Impedance: Pairs(differ 6. Delay Skew: 50ps/m	Impedance: Pairs(differential mode) 100±10 \( \triangle{1} \) Delay Skew: 50ps/m		5. Deformation test: MAX 50% Elements and 180 MAX 50%	t: MAX 50%	96595230002 8/8/19	2 8/8/19	
			o. Fialle test: FASS V W-1		-		
					APPROVED	CUSTOMER	-
					CHECKED	REV	A
					DRAWING	DATE	2017.02.16