

# PART No MATRIX

8 8 4 0 P 6 X X X M X X X X X

OPTIONS :

88 = M12x1  
DOUBLE ENDED

POLES:  
4 = 4 Poles

HEAD STYLE:  
OP6 = Female Straight PNP  
LED / Male Straight

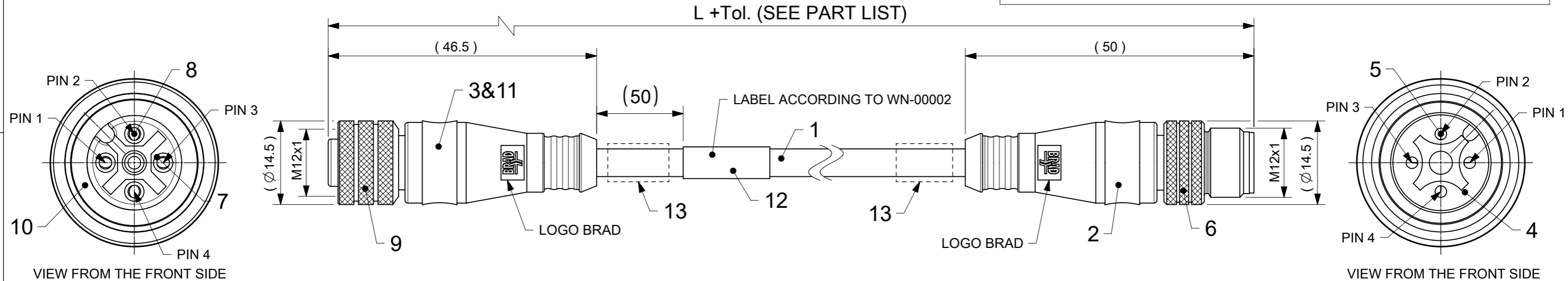
CABLE TYPE  
SEE TABLE 1

UNITS:  
M = Meter

LENGTH EXAMPLES:  
005 = 0.5 m  
010 = 1 m  
020 = 2 m  
050 = 5 m  
100 = 10 m  
150 = 15 m  
200 = 20 m

H = 2 PCS. OF I/D CARRIER  
FOR CABLE Ixx & P82  
COUPLIN NUT:  
BLANK = KNU  
& 3=Knurled Brass Ni Plated  
1 = Hexagonal Stainless steel  
5 = Knurled Derlin  
7 = Knurled Brass Ni Plated, Teflon Coated  
Blank =7  
for cables:  
I20, I26, K03, K05, P82, S26  
8=Type 316 stainless steel  
9 = Hexagonal Brass Ni Plated SW13

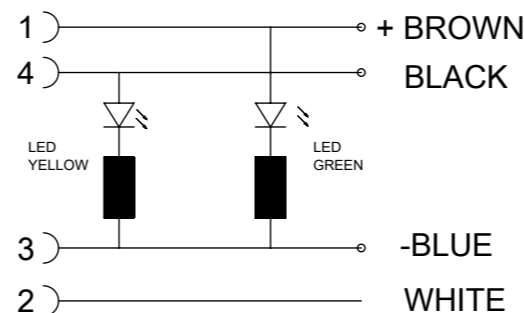
Overmold color:  
Blank (Standard)= TPU:  
FEMALE -CLEAR  
MALE - BLACK  
YELLOW FOR CABLES  
A09, S19, S20, S26, K03, K05  
A= GY  
G= BK  
Y= YE



## BOM

ITEM	QTY	DESCRIPTION	MATERIAL	FINISH/COLOR
13	SEE MATRIX	I/D CARRIER (SEE MATRIX)	PVC	TRANSPARENT
12	1	LABEL WRAP	VINYL	YELLOW
11	1	PNP LED PCB	-	-
10	1	GASKET	FPM	RED
9	1	M12 FEMALE COUPLING NUT	SEE MATRIX	SEE MATRIX
8	4	CONTACT 10 FE	BRONZE	GOLD OVER Ni-PLATED
7	1	INSERT M12 FE 4P	TPU	BLACK
6	1	M12 MALE COUPLING NUT	SEE PN MATRIX	SEE PN MATRIX
5	4	CONTACT 10 MA	BRONZE	GOLD OVER Ni-PLATED
4	1	INSERT M12 MA 4P	ELASTOLLAN	BLACK
3	-	MOULDING MATERIAL	TPU	TRANSPARENT
2	-	MOULDING MATERIAL	TPU	SEE PN MATRIX
1	-	CABLE	SEE CABLE LIST	

## PNP WIRING DIAGRAM



THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: OBSOLETE PART NUMBER AS PER PCN#510807.			
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 726454			
ANGULAR TOL ± 1.0°		DRWN: LIKITV 2022/09/28		PRODUCT CUSTOMER DRAWING	
4 PLACES ±		CHK'D: GGA 2022/11/30		DOCUMENT NUMBER	
3 PLACES ±		APPR: GGA 2022/11/30		1200678091	
2 PLACES ± 0.05		INITIAL REVISION:		DOC TYPE DOC PART REVISION	
1 PLACE ± 0.3		DRWN: MDHARMANTI 2020/06/02		PSD 000 A2	
0 PLACES ± 0.5		APPR: RSILLER 2020/06/04		SHEET NUMBER	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		MATERIAL NUMBER	
		DRAWING		CUSTOMER	
		A3-SIZE		GENERAL MARKET	
		SERIES		1 OF 2	
		120067			

**TABLE 1**

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
E03	3 / 4 / 5	0.34mm <sup>2</sup>	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
H09	3 / 4 / 5	0.34mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
P03	3 / 4 / 5	0.34mm <sup>2</sup>	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P82	3 / 4 / 5	0.34mm <sup>2</sup>	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-

**NOTE:**


- IF IN MATRIX IS "H" - ADD ID-CARRIERS ON THE BOTH SIDES HARNESS.

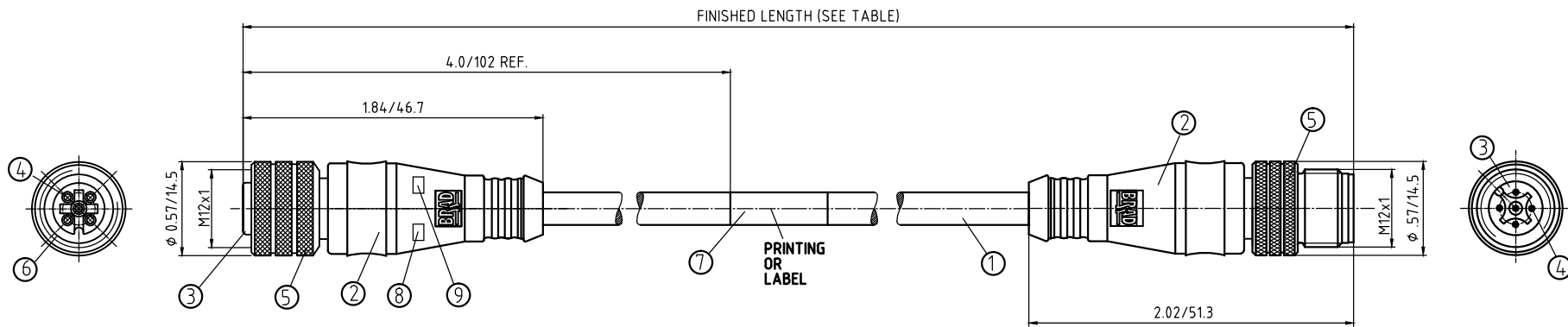
**PART LIST**

Lp.	MOLEX PN	ENGINEERING No	L+Tol. [mm]
1	1200675241	8840P6E03M010	1000
2	1200678090	8840P6E03M030	3000
3	1200678183	8840P6P03M006	600
4	1200678195	8840P6P03M020	2000
5	1200678255	8840P6P03M010	1000
6	1200678256	8840P6P03M030	3000
7	1200678257	8840P6P03M050	5000
8	1200678333	8840P6H09M010	1000
9	1200678447	8840P6E03M020	2000
10	1200678448	8840P6E03M050	5000
11	1200678449	8840P6E03M100	10000

**ELECTRICAL DATA :**  
**VOLTAGE RATING : 250V**  
**AMPERAGE RATING : 4A**  
**INSULATION RESISTANCE : 10<sup>8</sup>Ω MIN.**  
**MATING CYCLES : MIN. 100**  
**ENVIRONMENTAL :**  
**IP PROTECTION CLASS : IP67**  
**OPERATING TEMPERATURE : SEE TABLE 1**

OVER	UP TO AND INCLUDING	TOLERANCE
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF LENGTH

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DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NUMBER AS PER PCN#510807.								
mm	1:1	 CSE M12 LED PNP 4P AC FE STR PUR MA STR XM PRODUCT CUSTOMER DRAWING								
GENERAL TOLERANCES (UNLESS SPECIFIED)										
ANGULAR TOL	± 1.0 °	EC NO: 726454		2022/09/28		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
4 PLACES	±	DRWN: LIKITV		2022/11/30		1200678091		PSD	000	A2
3 PLACES	±	CHK'D: GGA		2022/11/30		MATERIAL NUMBER		CUSTOMER		
2 PLACES	± 0.05	APPR: GGA		2022/11/30		120067		GENERAL MARKET		
1 PLACE	± 0.3	INITIAL REVISION:		2020/06/02		SERIES		SHEET NUMBER		
0 PLACES	± 0.5	DRWN: MDHARMANTI		2020/06/04		DRAWING		2 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		A3-SIZE		SEE PART LIST				

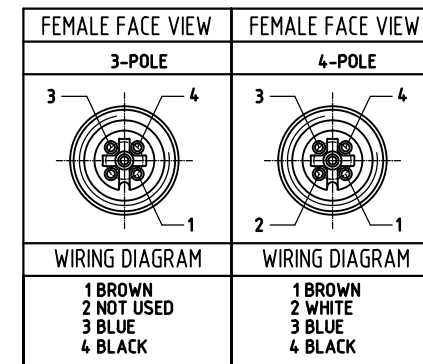
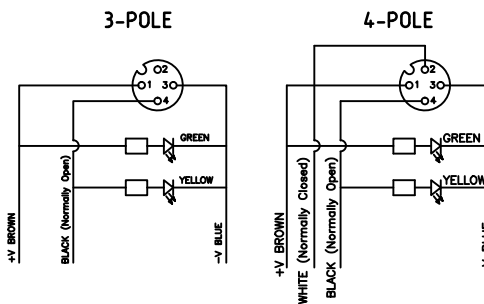


POL	MATERIAL NUMBER	ENGINEERING NUMBER	FINISHED LENGTH
3	1200678064	8830P6E03M010	3.28' +2.19" -0 [1.0M +55.6 -0]

POL	MATERIAL NUMBER	ENGINEERING NUMBER	FINISHED LENGTH
4	1200675241	8840P6E03M010	3.28' +2.19" -0 [1.0M +55.6 -0]
4	1200678090	8840P6E03M030	9.84' +3.50" -0 [3.0M +88.9 -0]

**CONNECTOR SPECIFICATION:**

VOLTAGE RATING	10 TO 30VDC
AMPERAGE RATING	max. 4 AMPS
PROTECTION	IP67
OPERATING TEMPERATURE	FLEXING: -5°C TO +80°C STATIC: -30°C TO +80°C



ITEM	COMPONENT	MATERIAL	FINISH
9	LED		GREEN
8	LED		YELLOW
7	LABLE	MYLAR	BLACK/YELLOW
6	O-RING	VITON	RED
5	COUPLER	BRASS	NICKEL PLATED
4	PIN CONTACT	COPPER ALLOY	GOLD OVER NICKEL
3	INSERT	PUR	BLACK
2	OVERMOLD	POLYURETHANE (PUR)	TRANSP.
1	CABLE- 22/3-4 (COPPER STRANDING) 3/4 CONDUCT. 300V	JACKET: PUR	BLACK

DESCRIPTION EC NO: IPG2018-0097 DRWN: BBRAUCH 2017/08/09 CHKD: MSCHERER 2017/08/10 APPR: BBRAUCH 2018/02/25	QUALITY SYMBOLS ▽ = 0 ▽/C = 0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± 0.1 1 PLACE ± 0.3 ± --- ANGULAR ± --- °	DIMENSION STYLE IN/MM DRAWN BY DATE BBRAUCH 2010/02/03 CHECKED BY DATE FP 2010/02/24 APPROVED BY DATE NSTAUDIG 2010/02/25	SCALE 2:1 DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO. SD-120067-019	SHEET NO. 1 OF 1	

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