

**NOTES:**

RATED VOLTAGE: 3, 4, 5 contacts 250V / 300V  
 RATED CURRENT: 3, 4, 5 contacts 4A  
 PROTECTION CLASS: IP 68  
 TEMPERATURE: -30°C / +80°C

**CONTACTS POSITION FRONT VIEW:**

	3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
FEMALE								
MALE								
CONNECTIONS	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
	1	BROWN	1	BROWN	1	BROWN	1	WHITE
	2	---	2	WHITE	2	WHITE	2	BROWN
	3	BLUE	3	BLUE	3	BLUE	3	GREEN
	4	BLACK	4	BLACK	4	BLACK	4	YELLOW
			5	---	5	GREY OR	5	GREY
							6	PINK
							7	BLUE
							8	RED

**FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2**

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
7	1	LABEL YELLOW	VINYL	---
6	3 / 4 / 5	CONTACT MALE	COPPER	SELECTIVE Au OVER Ni
5	1	PLUG U12 MA XP AC STR	-	---
4	-	CABLE	SEE SHEET 2	---
3	-	OVERMOULDING BLACK	TPU	---
2	1	PLUG U12 FE XP AC STR	-	---
1	3 / 4 / 5	CONTACT FEMALE	BRONZE	SELECTIVE Au OVER Ni

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	CURRENT REV DESC:			
	DIMENSION UNITS: mm SCALE: 2:1 GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL ± 1.0°	4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5	EC NO: 698441 DRWN: SSM CHK'D: RSILLER APPR: RSILLER		
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	SERIES: 120080
DOCUMENT NUMBER: 1200808027			DOC TYPE: PSD	DOC PART: 000	REVISION: A1
MATERIAL NUMBER: SEE PART LIST			CUSTOMER: GENERAL MARKET	SHEET NUMBER: 1 OF 2	

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

OPTIONS

WWXX031XXXXXX

WW=U12x1  
Double ended

Contacts:  
3=3 Contacts  
4=4 Contacts  
5=5 Contacts  
8=8 Contacts

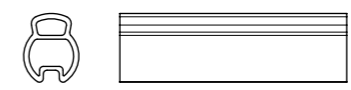
Heads style:  
031=Plug Female 90°  
to Plug Male Straight

Cable type: See Table

Units:  
M=Meter  
C=Centimeter

Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 units

Overmold color:  
Blank (Standard)=Black TPU  
A=Grey / G=Black / Y=Yellow  
H= 2 pcs. of I/D Carrier PVC Transparent



CABLE INFORMATION (for more information see Cable Data Sheet).

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
H09	3 / 4 / 5	0.34mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C 22.2 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, Temp max 60°C	-
H08	3 / 4 / 5 / 8	0.25mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C 22.2 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, Temp max 60°C	-
E03	3 / 4 / 5	0.34mm <sup>2</sup>	PVC BLACK	UL 2464/1729	C 22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
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.	-	-
P02	3 / 4 / 5 / 8	0.25mm <sup>2</sup>	PUR/PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-

PART LIST

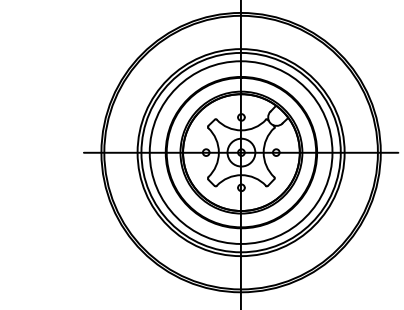
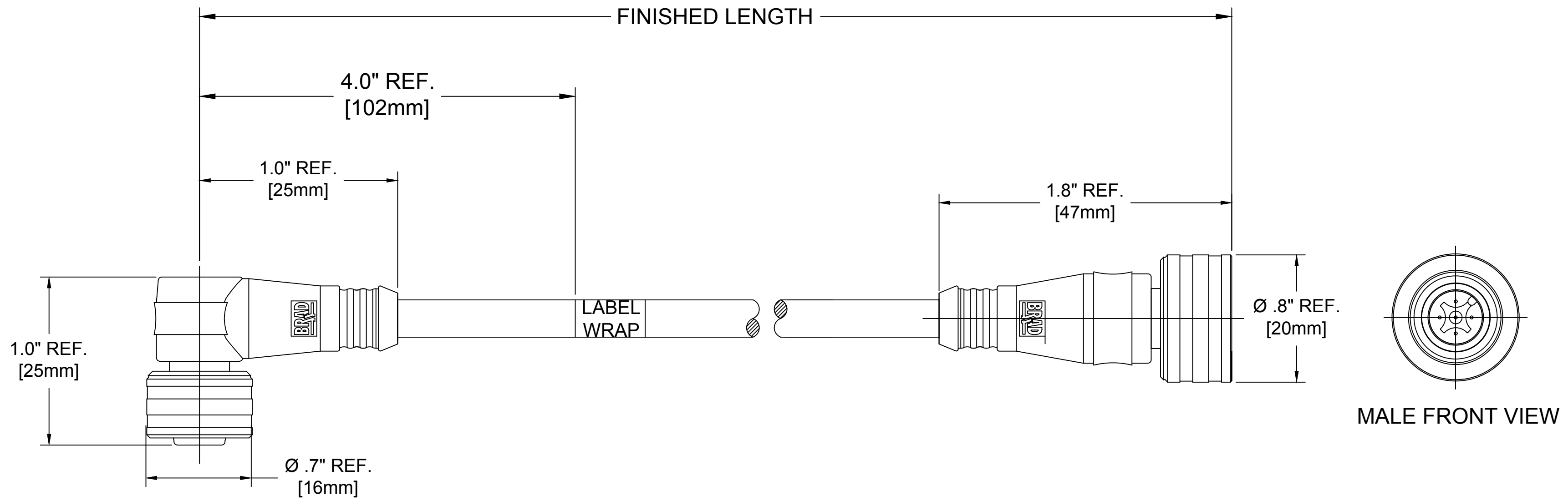
MOLEX PN	ENGINEERING No	L [mm]
1200808030	WW3031H09M010	1000
1200808027	WW4031H09M010	1000
1200808153	WW4031E03M010	1000
1200805078	WW5031P03M010	1000
1200808028	WW5031H09M010	1000
1200808056	WW5031P03M015	1500
1200808057	WW5031P03M020	2000
1200808058	WW5031P03M040	4000
1200808059	WW5031P03M045	4500
1200808060	WW5031P03M050	5000
1200808061	WW5031P03M100	10000
1200808074	WW5031P03M020A	2000
1200808075	WW5031P03M050A	5000
1200805084	WW8031P02M010	1000
1200808034	WW8031H08M010	1000

CABLE LENGTH TOLERANCES

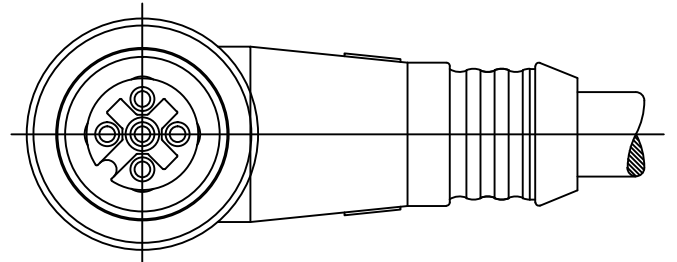
OVER	UP TO AND INCLUDING	TOLERANCES
0	305mm	+19mm
305mm	915mm	+45mm
915mm	1830mm	+56mm
1830mm	3660mm	+89mm
3660mm	7320mm	+165mm
7320mm	14640mm	+317mm
14640mm	30500mm	+610mm
30500mm	>	+2% of finished length

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	CURRENT REV DESC:	
$\nabla_A = 0$	DIMENSION UNITS: mm	SCALE: 1:1	
$\nabla_E = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		
$\nabla_V = 0$	ANGULAR TOL ± 1.0°		
DIVISIONAL SYMBOLS	4 PLACES ±	3 PLACES ±	EC NO: 698441
	2 PLACES ± 0.05	1 PLACE ± 0.3	DRWN: SSM 2021/12/22
	0 PLACES ± 0.5	0 PLACES ± 0.5	CHK'D: RSILLER 2022/03/08
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: RSILLER 2022/03/08
	THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	SERIES: 120080
		MATERIAL NUMBER: SEE PART LIST	CUSTOMER: GENERAL MARKET
		DOCUMENT NUMBER: 1200808027	DOC TYPE: PSD
		DOC PART: 000	REVISION: A1
		SHEET NUMBER: 2 OF 2	

MATERIAL NUMBER	OLD PART NUMBER	FINISHED LENGTH
1200808027	WW4031H09M010	1M +55.6mm -0 [3.3 FT. +2.2IN -0]

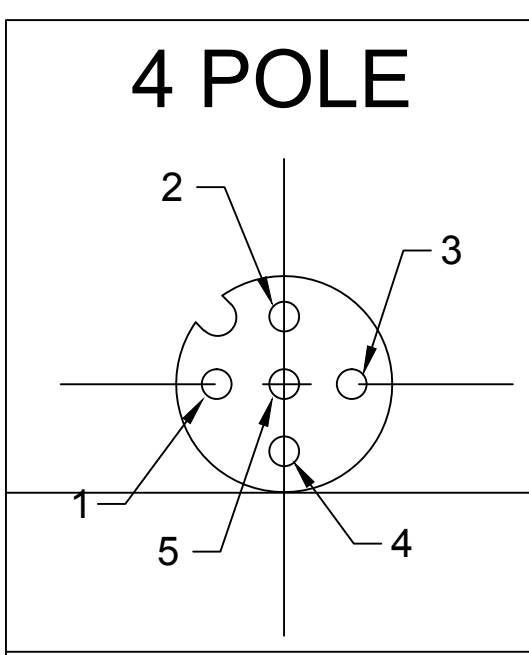


MALE FRONT VIEW



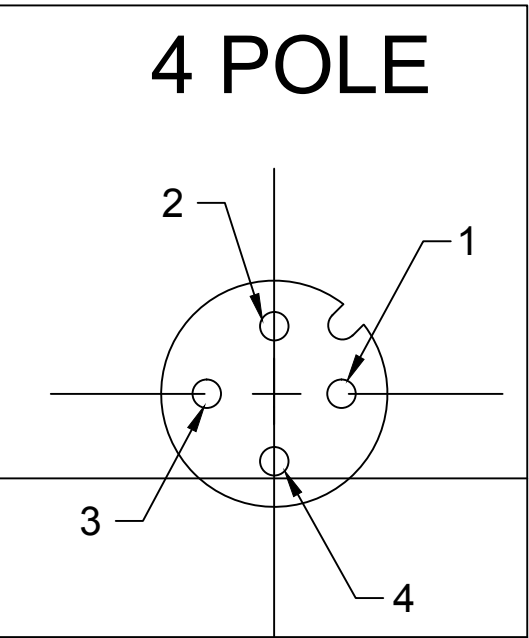
FEMALE FRONT VIEW

FRONT VIEW FEMALE



- 1 BROWN
- 2 WHITE
- 3 BLUE
- 4 BLACK
- 5 NOT USED

FRONT VIEW MALE



- 1 BROWN
- 2 WHITE
- 3 BLUE
- 4 BLACK

**WW4031H09M010**

CABLE TYPE  
PUR BLACK

cable length  
010----1 Meters

**SPECIFICATION DATA**

DESCRIPTION	MATERIAL	FINISH
LABEL	MYLAR	BLACK/YELLOW
O-RING	VITON	GREEN
CONTACTS	COPPER ALLOY	GOLD PLATED
INSERTS	PUR	BLACK
OVERMOLD	PUR	BLACK
FEMALE COUPLING NUT	BRASS	NICKEL PLATED
CABLE, #22/4	PUR	BLACK
RATED VOLTAGE	250V	
AMPERAGE RATING	4A	
PROTECTION	IP 68	
OPERATING TEMPERATURE	-30°C / +80 °C	

KEYWAY ROTATION EC NO.: IFC2013-0449 DRWN: VOU 10/21/13 CH'KD: GGUSTAFS APPR: BWOODMAN2013/10/18 DESCRIPTION	QUALITY SYMBOL	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\sphericalangle=0$	mm INCH 4 PLACES ±--- ±--- 3 PLACES ±--- ±.005 2 PLACES ±0.13 ±.010 1 PLACE ±0.25 ±.020	IN/MM	NTS	INCH	
		ANGULAR ±.5°	DRAWN BY DATE	TITLE		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GGUSTAFS 2013/09/20	M12 ULTRA-LOCK 4P FEMALE/MALE 90D/ST #22/4 BLACK PUR		
		APPROVED BY DATE	MOLEX INCORPORATED			
		BWOODMAN 2013/10/18	SD-120080-065			
		MATERIAL NO.	SHEET NO.			
		SEE CHART	1 OF 1			
		SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			