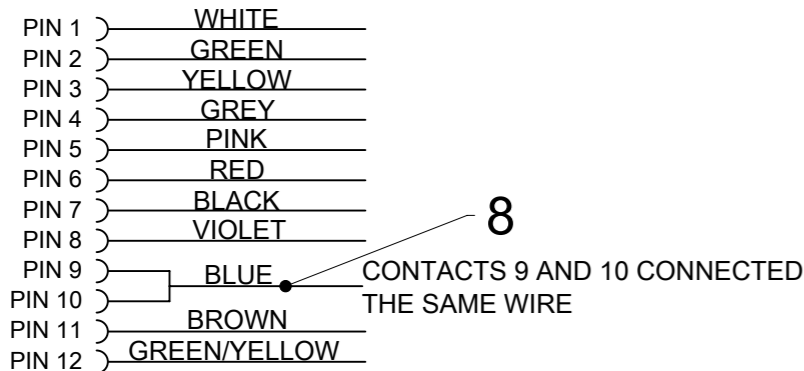
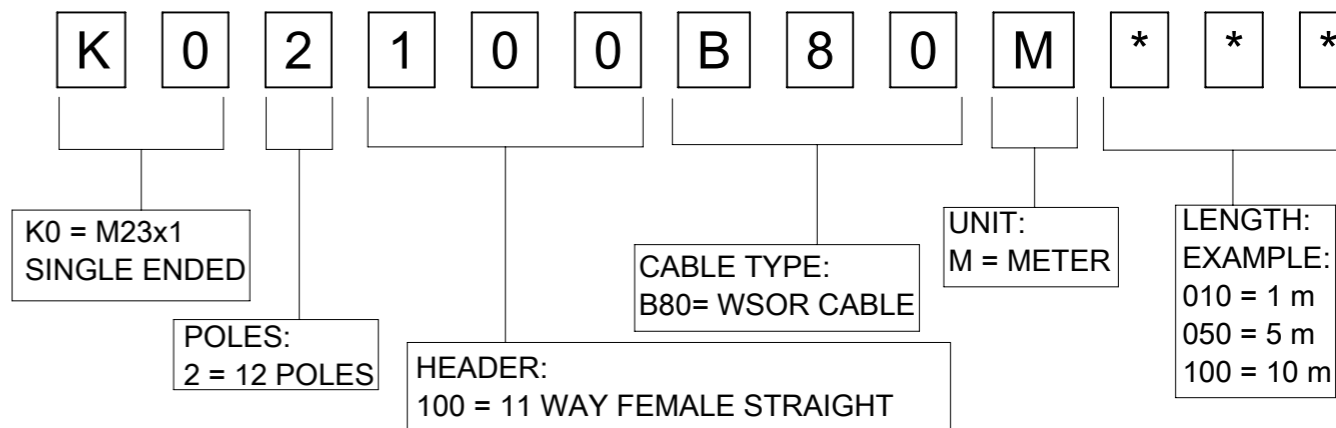


**WIRING DIAGRAM**



**PART NO MATRIX**

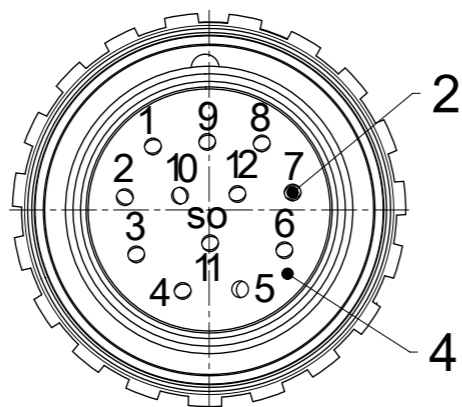


**CABLE SPECIFICATION**

**JACKET:**  
 COMPOUND: TPU  
 COLOR: BLACK  
 DIAMETER: 8.50±0.25mm  
 TEMPERATURE RATING: -40°C TO +90°C

**CONNECTOR PIN ASSIGNMENT**

M23 12 POLE  
 FRONT SIDE VIEW



SCALE 2:1

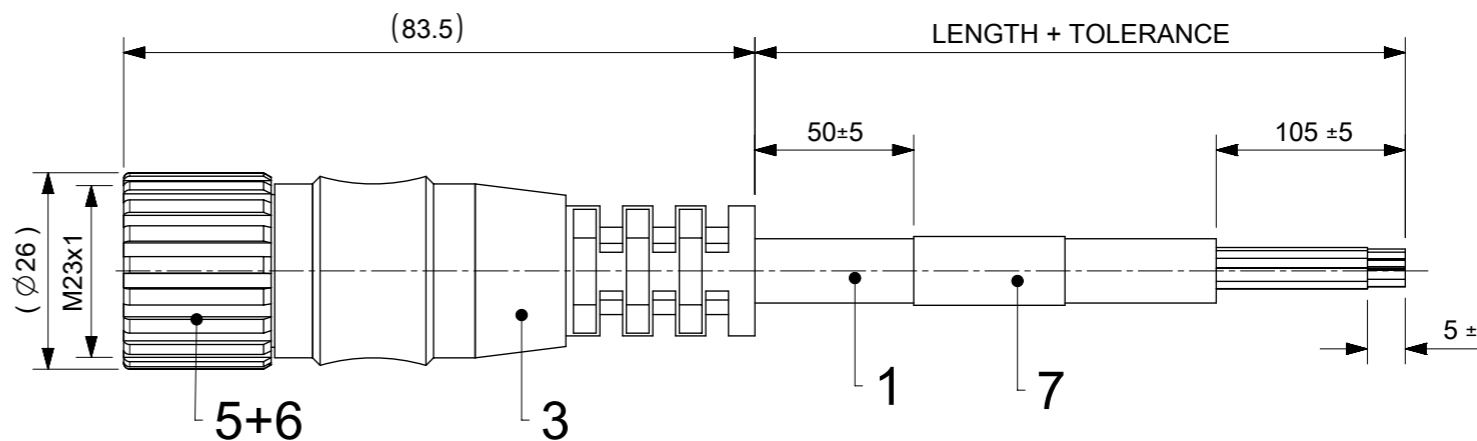
**ELECTRICAL DATA**

VOLTAGE RATING : 30V  
 AMPERAGE RATING : 1.5A  
 INSULATION RESISTANCE : 10<sup>8</sup>Ω MIN.  
 MATING CYCLES : MIN. 100

**ENVIRONMENTAL :**  
 PROTECTION : IP67 IN MATED  
 AND LOCKED POSITION

**NOTES**

SPECIFICATION (BOM - ITEM 9) PRINTED ON A5 SIZE SHEET

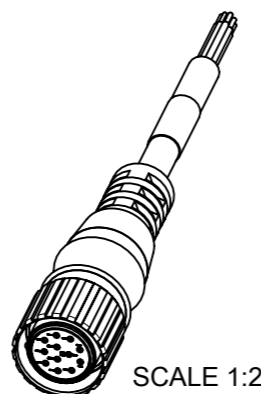


**PART LIST**

MOLEX P/N	ENGINEERING P/N	LENGTH [mm]
1200948142	K02100B80M010	1000
1200948143	K02100B80M050	5000
1200948144	K02100B80M100	10000
1200948145	K02100B80M150	15000
1200948146	K02100B80M200	20000
1200948147	K02100B80M300	30000

**BILL OF MATERIAL**

ITEM NO.	QTY	DESCRIPTION	MATERIAL	FINISH
9	-	INST.LEAFLET-K02100B20MXXX	-	-
8	-	WIRE;18AWG	BLUE	PVC
7	1	LABEL	VINYL	YELLOW
6	1	RETAINING RING	SPRING SS	-
5	1	M23 FEMALE COUPLING NUT	BRASS	Ni-PLATED
4	1	M23 FEMALE INSERT 12P	TPU	BLACK
3	1	OVERMOLD	TPU	BLACK
2	12	CONTACT 10 FE	BRONZE	Ni-PLATED
1	SEE PART LIST	Cable:3X19AWG+8X22AWG	TPU WSOR	BLACK



**CABLE LENGTH TOLERANCES**

LENGTH	TOLERANCE
0m-1m	+40 mm
>1m-5m	+60 mm
>5m-10m	+80 mm
>10m-20m	+140 mm
>20m-30m	+160 mm
>30m	+1% length

FUNCTIONAL SYMBOLS FA = 0 FE = 0 FV = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	CURRENT REV DESC: WIRING DIAGRAM UPDATED		
	DIMENSION UNITS: mm	SCALE: 1:1	 CSE M23 12P SC FE ST WSOR XM SE PRODUCT CUSTOMER DRAWING	
	GENERAL TOLERANCES (UNLESS SPECIFIED)			EC NO: 703837
	ANGULAR TOL ± 1.0°			DRWN: MDHARMANTI 2022/04/14
4 PLACES ±		CHK'D: RSILLER 2022/04/21		
DIVISIONAL SYMBOLS	3 PLACES ±	APPR: RSILLER 2022/04/21	DOCUMENT NUMBER: 1200948142	
	2 PLACES ± 0.05	INITIAL REVISION:	DOC TYPE: PSD	
	1 PLACE ± 0.3	DRWN: MDHARMANTI 2021/12/14	DOC PART: 000	
	0 PLACES ± 0.5	APPR: RSILLER 2021/12/21	REVISION: A2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	
		SERIES: 120094	MATERIAL NUMBER: SEE PART LIST	
		CUSTOMER: GENERAL MARKET	SHEET NUMBER: 1 OF 1	

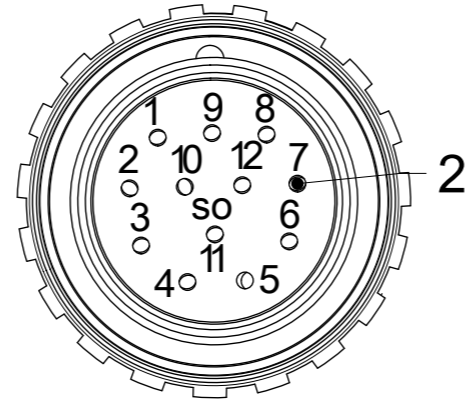
# Wiring Diagram

- 1 White
- 2 Green
- 3 Yellow
- 4 Grey
- 5 Grey/Pink
- 6 Red/Blue
- 7 White/Green
- 8 Brown/Green
- 9 Blue
- 10 Blue
- 11 Brown
- 12 Green/Yellow

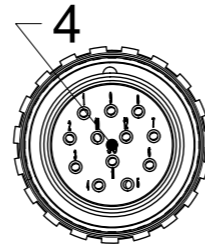
Contacts 9 and 10 connected the same wire.

## Connector Pin Assignment for M23 12 Pole

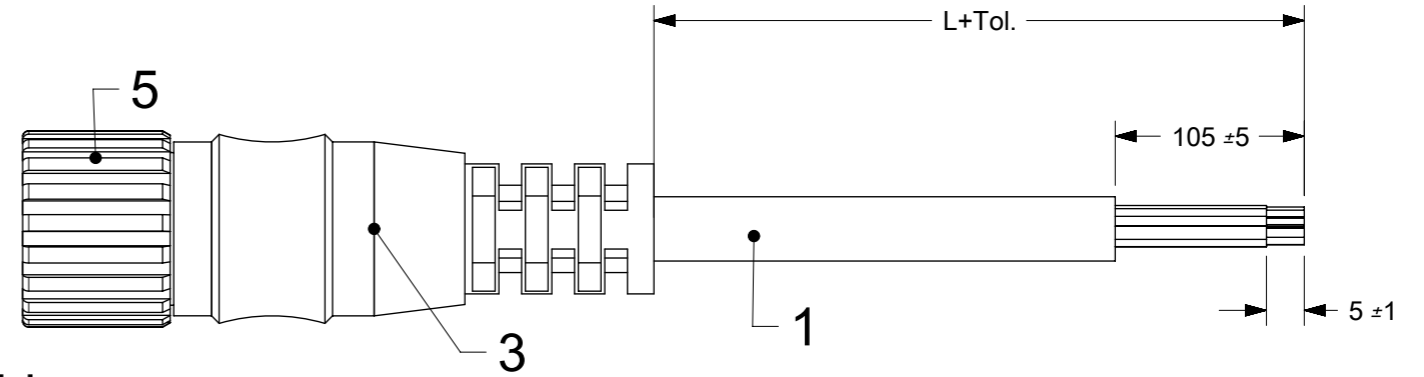
### Front Side View



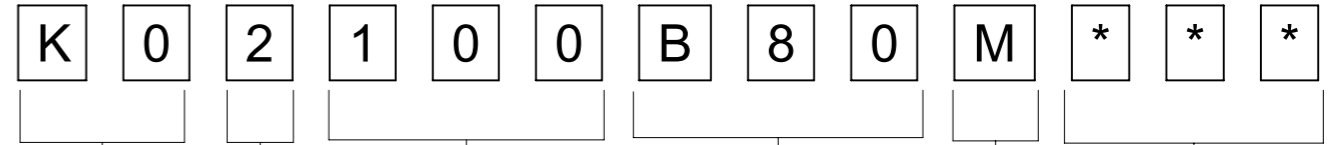
Scale: 2:1



### View From The Front Side



### PART NO MATRIX



K0 = M23x1 SINGLE ENDED

POLES: 2 = 12 POLES

CABLE TYPE: B80= WSOR CABLE

UNIT: M = METER

LENGTH: EXAMPLE: 010 = 1 m 050 = 5 m 100 = 10 m

HEADER: 100 = 11 WAY FEMALE STRAIGHT

### CABLE SPECIFICATION:

#### CONDUCTOR A:

MATERIAL: BARE COPPER  
SECTION: 0.75mm<sup>2</sup>/19AWG  
STRANDING: 42X0.15mm

#### INSULATION A:

COMPOUND: TPE  
DIAMETER: 1.75±0.10mm

#### CONDUCTOR B:

MATERIAL: BARE COPPER  
SECTION: 0.34mm<sup>2</sup>/22AWG  
STRANDING: 42X0.10mm

#### INSULATION B:

COMPOUND: TPE  
DIAMETER: 1.30±0.10mm

#### JACKET:

COMPOUND: TPU  
COLOR: BLACK  
DIAMETER: 8.50±0.25mm  
TEMPERATURE RATING: -40°C TO +90°C  
VOLTAGE RATING: 600V

### BILL OF MATERIALS

QTY	DESCRIPTION	MATERIAL	FINISH
5 1	M23 Female coupling nut	Brass	Nickel Plated
4 1	M23 Female insert 12P	TPU	Black
3 1	Overmould	TPU	Black
2 12	Contacts	Bronze	Nickel Plated
1 L	Cable:3X19AWG+8X22AWG	TPU WSOR	Black

### Table 1

Molex P/N	Engineering P/N	Length L[mm]	Tol.[mm]
1200948142	K02100B80M010	1000	+40
1200948143	K02100B80M050	5000	+60
1200948144	K02100B80M100	10000	+80
1200948145	K02100B80M150	15000	+140
1200948146	K02100B80M200	20000	+140
1200948147	K02100B80M300	30000	+160

<b>QUALITY SYMBOLS</b> FA = 0 FE = 0 FP = 0 FV = 0 FC = 0 FX = 0 FS = 0 FT = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS: MM SCALE: 1:1		 CSE M23 12P SC FE ST WSOR XM SE PRODUCT CUSTOMER DRAWING	
	EC NO: 107291 DRWN: MMAJGAT CHK'D: MIWASIECZKO APPR: MIWASIECZKO	2016/08/06 2016/08/08	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± °	DRWN BY: MMAJGAT DATE: 2016/04/13		SERIES: 120094 MATERIAL NUMBER: SEE TABLE 1 CUSTOMER:
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		4 PLACES ± 3 PLACES ± 2 PLACES ± 1 PLACE ± 0 PLACES ±	APPR BY: MIWASIECZKO DATE: 2016/08/02		DOCUMENT NUMBER: 1200948142 DOC TYPE: PSD DOC PART: 00P SHEET NUMBER: 1 OF 1
	RELEASE STATUS: P1 RELEASE DATE: 08.08.2016 06:30:39	DRAWING SIZE: A3 THIRD ANGLE PROJECTION		DATE: 2015/12/14		