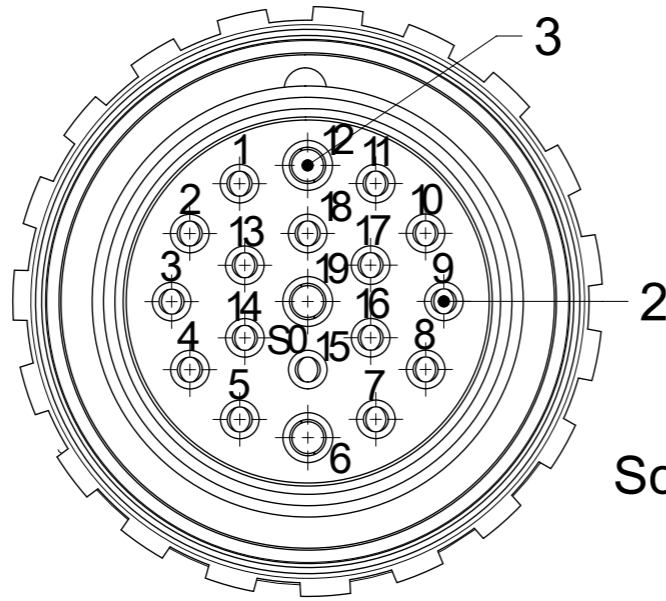


# Wiring Diagram

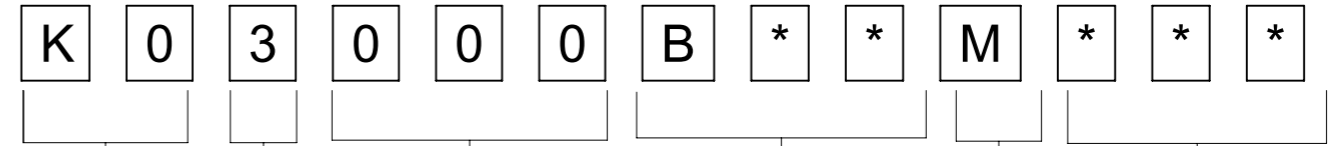
- 1 Violet
- 2 Red
- 3 Gray
- 4 Red/Blue
- 5 Green
- 6 Blue
- 7 Gray/Pink
- 8 White/Green
- 9 White/Yellow
- 10 White/Gray
- 11 Black
- 12 Green/Yellow
- 13 Yellow/Brown
- 14 Brown/Green
- 15 White
- 16 Yellow
- 17 Pink
- 18 Gray/Brown
- 19 Brown

## Connector Pin Assignment for M23 19 Pole Front Side View



Scale 3:1

## ENGINEERING NO. - MATRIX



K0 = M23x1  
SINGLE ENDED

POLES:  
3 = 19 POLES

CABLE TYPE:  
B80 = 3x19AWG+16x22AWG  
TPU BLACK WSOR  
B20 = 3x19AWG+16x22AWG  
PUR BLACK

UNIT:  
M = METER

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

HEADER:  
000 = FEMALE STRAIGHT

### CABLE SPECIFICATION FOR B80:

CONDUCTOR A:  
MATERIAL: BARE COPPER  
SECTION: 0.75mm<sup>2</sup>/19AWG  
DIAMETER: 1.75±0.10mm  
CONDUCTOR B:  
MATERIAL: BARE COPPER  
SECTION: 0.34mm<sup>2</sup>/22AWG  
DIAMETER: 1.30±0.10mm  
JACKET:  
COMPOUND: TPU  
COLOR: BLACK  
DIAMETER: 10.20±0.30mm

### CABLE SPECIFICATION FOR B20:

CONDUCTOR A:  
MATERIAL: BARE COPPER  
SECTION: 0.75mm<sup>2</sup>/19AWG  
DIAMETER: 1.80±0.10mm  
CONDUCTOR B:  
MATERIAL: BARE COPPER  
SECTION: 0.34mm<sup>2</sup>/22AWG  
DIAMETER: 1.40±0.10mm  
JACKET:  
COMPOUND: PUR  
COLOR: BLACK  
DIAMETER: 10.60±0.20mm

### CONNECTOR SPECIFICATION

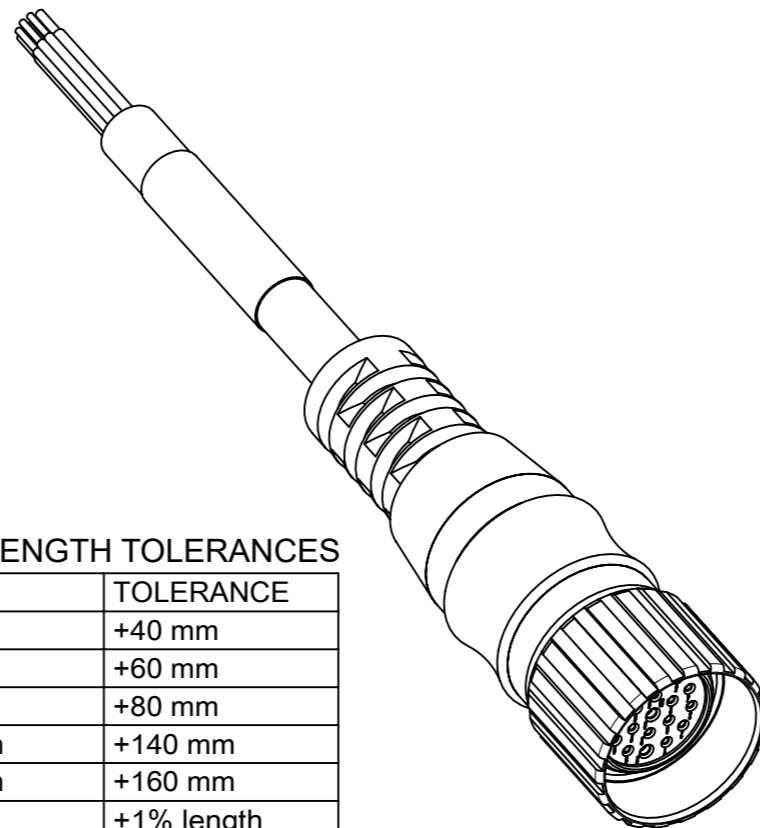
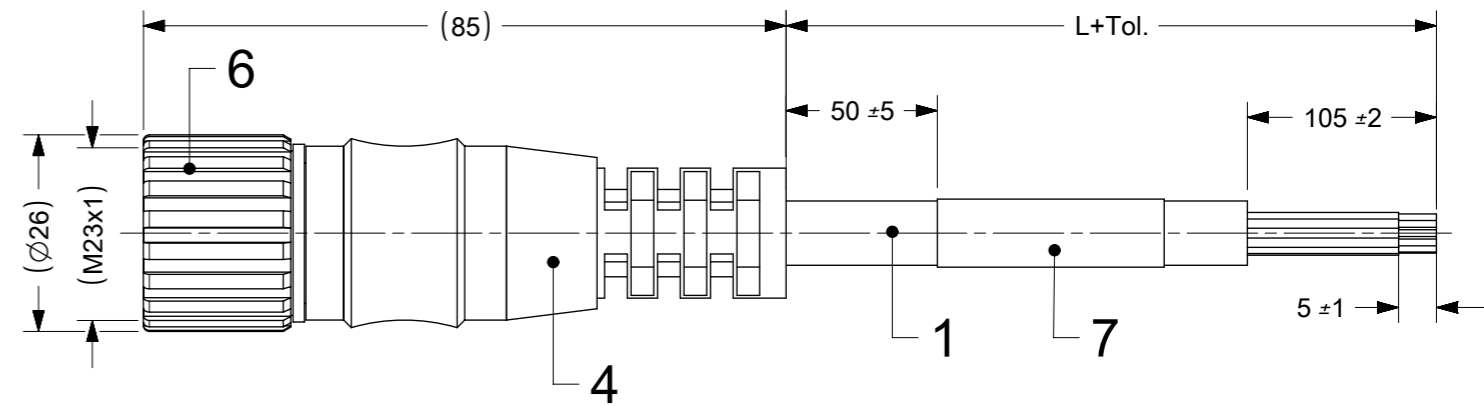
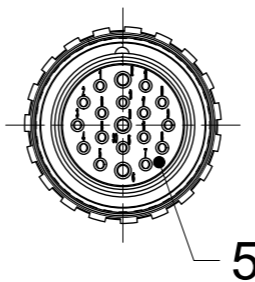
VOLTAGE RATING	63 V AC/DC
AMPERAGE RATING	6 AMPS
PROTECTION CLASS	IP67
OPERATING TEMPERATURE	-25°C to 90°C

### TABLE

Molex P/N	Engineering P/N	Length L[mm]
1200945015	K03000B20M100	10000
1200945016	K03000B20M200	20000
1200945024	K03000B20M050	5000
1200948154	K03000B80M010	1000

### 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



### BILL OF MATERIALS

ITEM	QTY	DESCRIPTION	MATERIAL	FINISH
7	1	Standard Wrap Label	Vinyl	Yellow
6	1	M23 Female coupling nut	Brass	Nickel Plated
5	1	M23 Female insert 19P	TPU	Black
4	1	Overmold	TPU	Black
3	3	Contacts	Brass	Nickel Plated
2	16	Contacts	Bronze	Nickel Plated
1	L	CABLE: SEE MATRIX	-	Black

FUNCTIONAL SYMBOLS ▽A = 0 ▽E = 0 ▽V = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE 1:1	CURRENT REV DESC: FIRST RELEASE		
	DIMENSION UNITS mm	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0°	EC NO: 649839 DRWN: RSCHEIBER 2020/11/23 CHK'D: RSILLER 2020/11/25 APPR: RSILLER 2020/11/25		
DIVISIONAL SYMBOLS	4 PLACES ±	INITIAL REVISION:	PRODUCT CUSTOMER DRAWING		
	3 PLACES ±	DRWN: RSCHEIBER 2020/11/23	DOCUMENT NUMBER: 1200945016		
2 PLACES ± 0.05	APPR: RSILLER 2020/11/25	DOC TYPE: PSD			
1 PLACE ± 0.3	0 PLACES ± 0.5	DOC PART: 000			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	SERIES: 120094	REVISION: A
		MATERIAL NUMBER: SEE TABLE	CUSTOMER: GENERAL MARKET	SHEET NUMBER: 1 OF 1	

**molex**

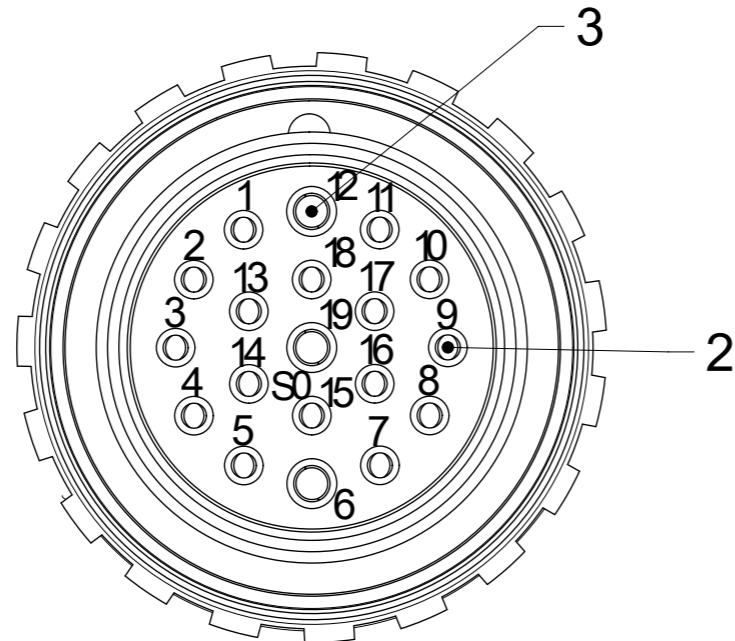
CSE M23 19P FE ST XM SE

# Wiring Diagram

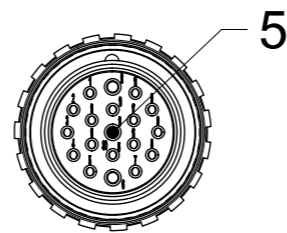
CHANGES SEE REVISION MARKING B WIRING DIAGRAM

- 1 Violet
- 2 Red
- 3 Gray
- 4 Red/Blue
- 5 Green
- 6 Blue
- 7 Gray/Pink
- 8 White/Green
- 9 White/Yellow
- 10 White/Gray
- 11 Black
- 12 Green/Yellow
- 13 Yellow/Brown
- 14 Brown/Green
- 15 White
- 16 Yellow
- 17 Pink
- 18 Gray/Brown
- 19 Brown

## Connector Pin Assignment for M23 19 Pole Front Side View

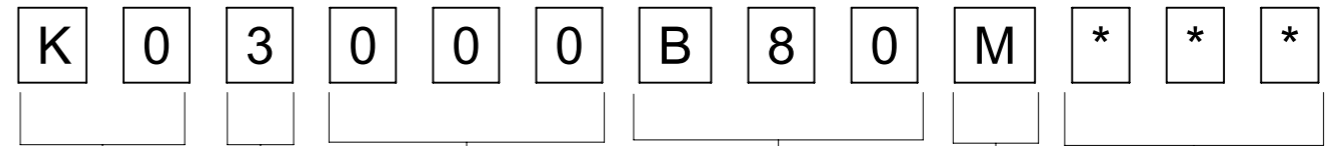


Scale : 3:1



## View From The Front Side

## PART NO MATRIX



K0 = M23x1 SINGLE ENDED

POLES: 3 = 19 POLES

HEADER: 000 = FEMALE STRAIGHT

CABLE TYPE: B80= WSOR CABLE

UNIT: M = METER

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

## 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:

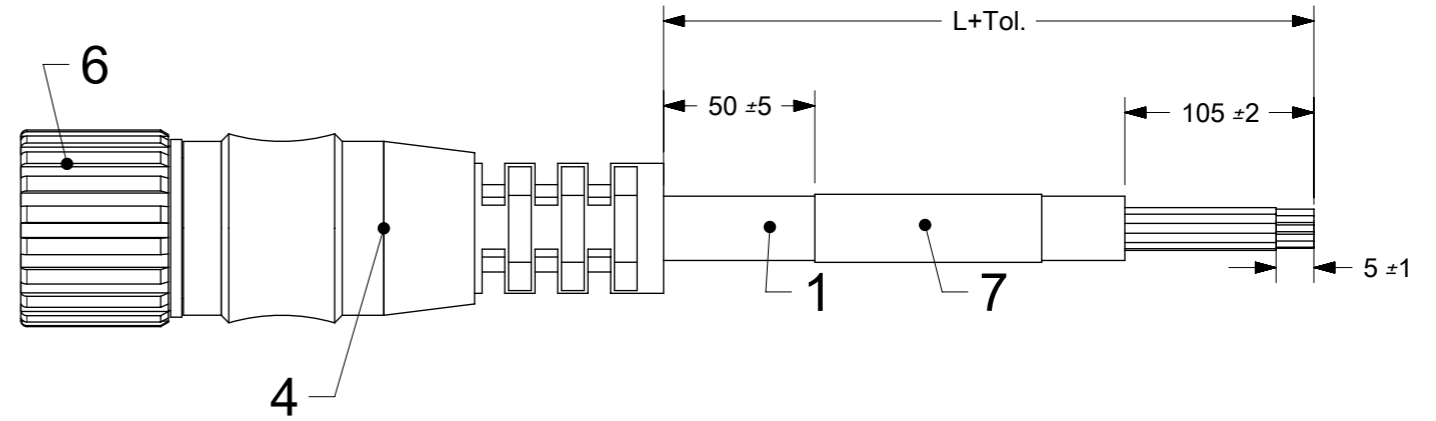
COMPOUND: TPE  
DIAMETER: 1.30±0.10mm

### JACKET:

COMPOUND: TPU  
COLOR: BLACK  
DIAMETER: 10.50±0.30mm

TEMPERATURE RATING: -40°C TO +90°C

VOLTAGE RATING: 600V



## BILL OF MATERIALS

QTY	DESCRIPTION	MATERIAL	FINISH
7 1	STANDARD WRAP LABEL	VINYL	YELLOW
6 1	M23 Female coupling nut	Brass	Nickel Plated
5 1	M23 Female insert 19P	TPU	Black
4 1	Overmould	TPU	Black
3 3	Contacts	Brass	Nickel Plated
2 16	Contacts	Bronze	Nickel Plated
1 L	CABLE:3X19AWG+16X22AWG	TPU WSOR	Black
QTY	DESCRIPTION	MATERIAL	FINISH

Table 1

Molex P/N	Engineering P/N	Length L[mm]	Tol.[mm]
1200948154	K03000B80M010	1000	+40
1200948155	K03000B80M050	5000	+60
1200948156	K03000B80M100	10000	+80
1200948157	K03000B80M150	15000	+140
1200948158	K03000B80M200	20000	+140
1200948159	K03000B80M250	25000	+160
1200948160	K03000B80M300	30000	+160

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	CURRENT REV DESC:		<b>molex</b>
	DIMENSION UNITS: mm	SCALE: 1:1	EC NO: 177844	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DRWN: MCELEJEWSKI	2018/06/08	CSE M23 19P FE ST WSOR XM SE
▽ = 0	ANGULAR TOL ± °	CHK'D: MIWASIECZKO	2018/06/08	
▽ = 0	4 PLACES ±	APPR: MIWASIECZKO	2018/06/08	PRODUCT CUSTOMER DRAWING
▽ = 0	3 PLACES ±	INITIAL REVISION:		DOCUMENT NUMBER
▽ = 0	2 PLACES ±	DRWN: MMAJGAT	2016/04/15	1200948154
▽ = 0	1 PLACE ±	APPR: MIWASIECZKO	2016/08/02	DOC TYPE
▽ = 0	0 PLACES ±	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		PSD
▽ = 0	THIRD ANGLE PROJECTION	DRAWING	SERIES	DOC PART
▽ = 0		A3-SIZE	120094	REVISION
				B1
				MATERIAL NUMBER
				CUSTOMER
				SHEET NUMBER
				1 OF 1