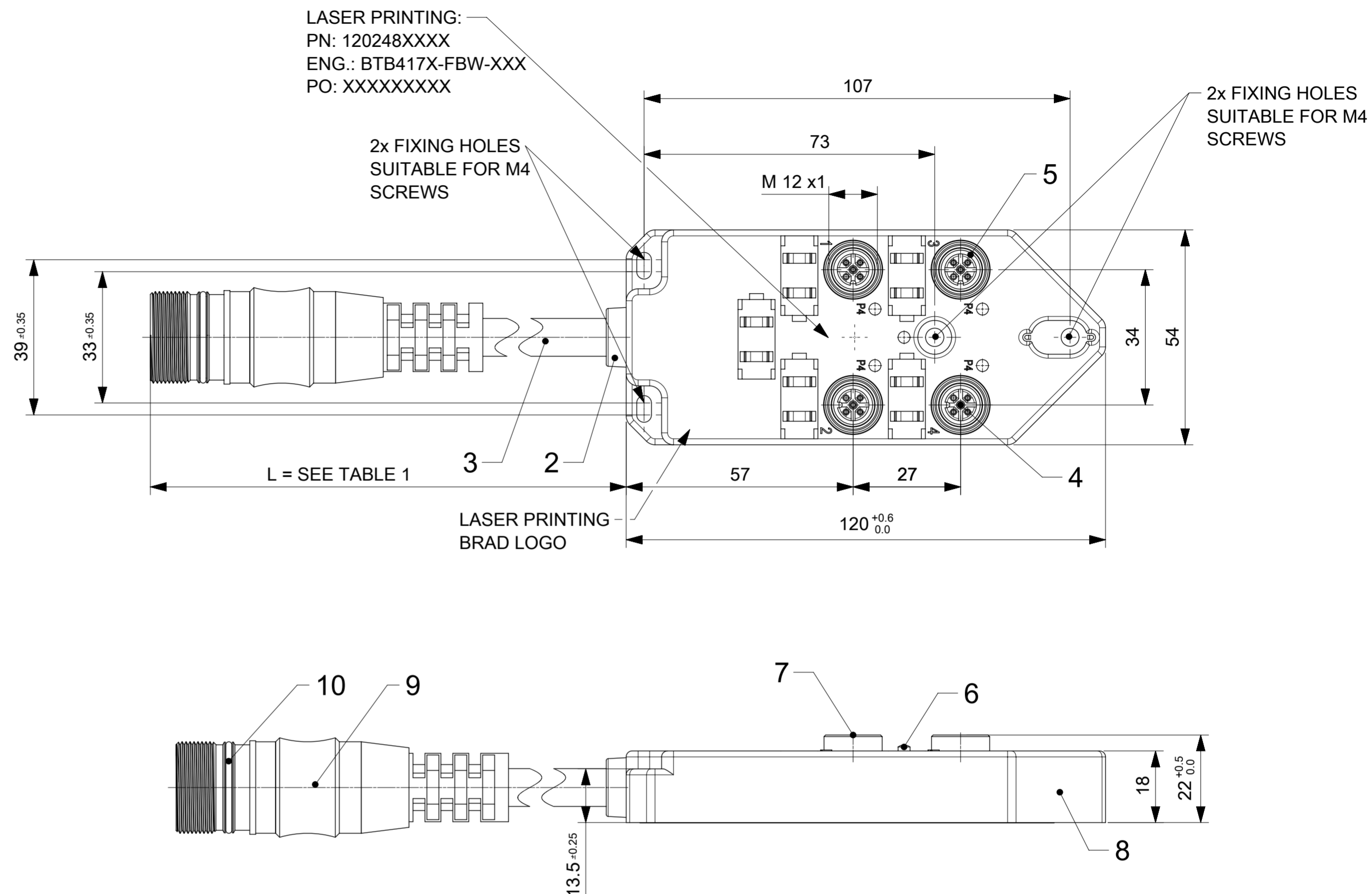


TABLE 1

MOLEX P/N	ENG. NO.	CABLE LENGTH (mm)	LED
1202480090	BTB417P-FBW-003	300	YES
1202480091	BTB417N-FBW-003	300	YES

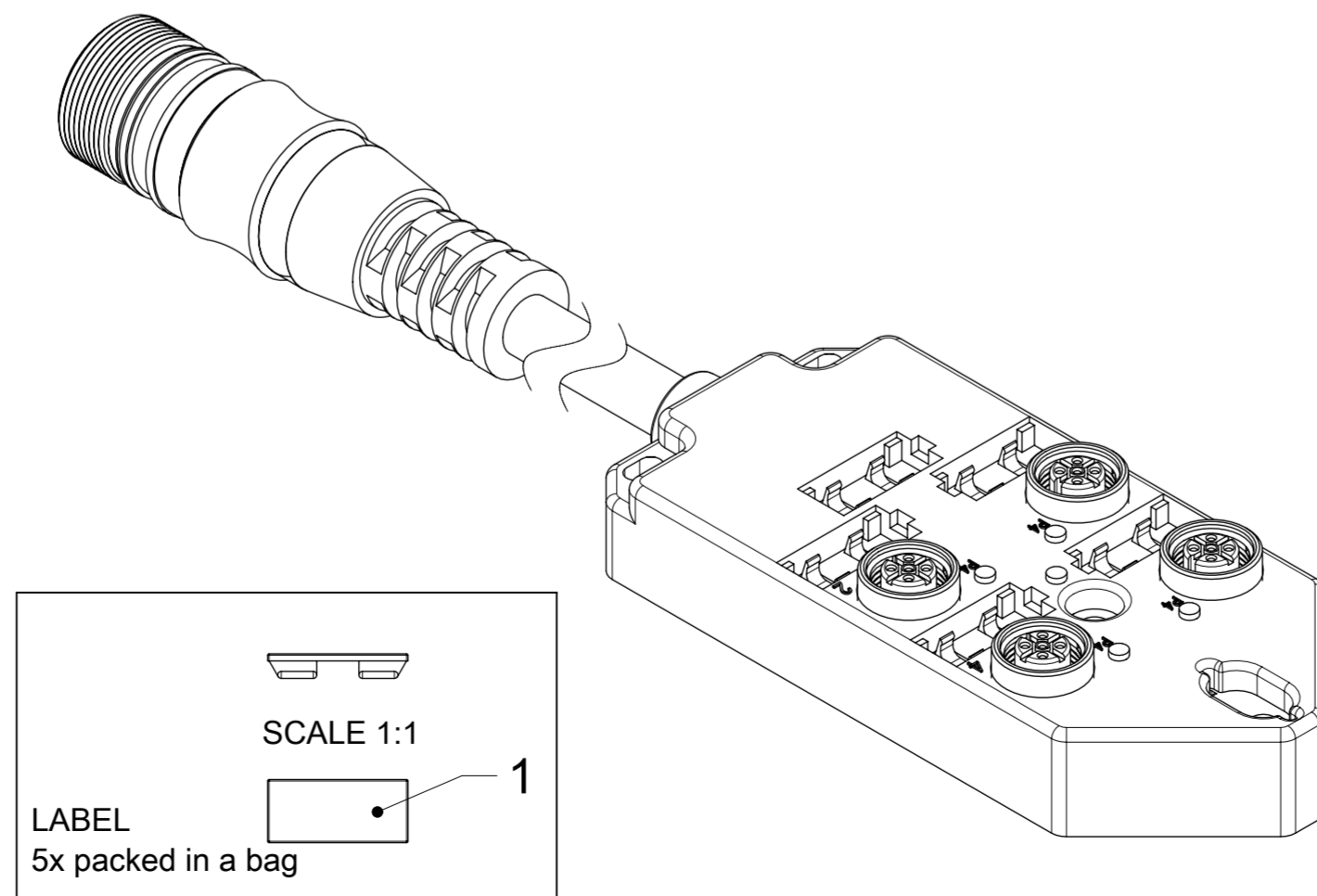
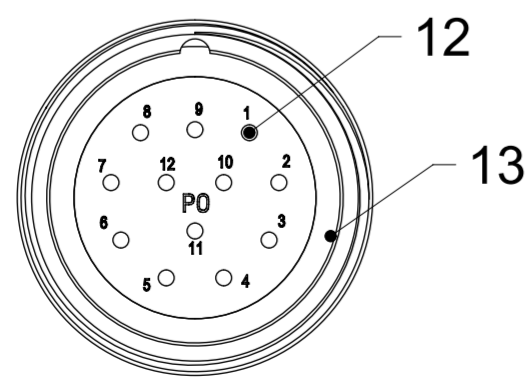
TABLE 2 BILL OF MATERIAL

ITEM	DESCRIPTION	MATERIAL	FINISH
1	LABEL	ABS	WHITE
2	CABLE PLATE	PBT	BLACK
3	CABLE	TPU BASED	BLACK
4	CONTACT	BRONZE	GOLD OVER NICKEL
5	O-RING	FPM	RED
6	LED	NON LED = PA	BLACK
		WITH LED = PA	TRANSPARENT
7	SHELL	BRASS	NICKEL PLATED
8	HOUSING	PBT	BLACK
9	OVERMOLD	PUR	BLACK
10	O-RING	NBR	BLACK
11	SHELL	BRASS	NICKEL PLATED
12	CONTACT	BRONZE	GOLD OVER NICKEL
13	O-RING	NBR	BLACK



PIN	COLOR
1	WHITE
2	GREEN
3	YELLOW
4	GREY
5	PINK
6	RED
7	BLACK
8	VIOLETT
9	BLUE
10	BLUE
11	BROWN
12	YELLOW/GREEN

M23 12PIN FRONT VIEW



GENERAL CHARACTERISTICS:

TABLE 1
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

ELECTRICAL AND MECHANICAL DATA ACC. TO IEC 61076-2-101

NOMINAL VOLTAGE: 10-30 V DC
 AMPERE RATING: 4 A PER PORT / 12 A MAX
 AMPERE RATING WITH UL REGISTRATION: 3 A PER PORT / 9 A MAX
 IP DEGREE OF PROTECTION: IP 67
 TEMPERATURE RANGE: -25°C to + 85°C

SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC:		molex			
∇ = 0	mm	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 639828		DRWN: MDHARMANTI 2020/06/17		MPIS M12 PNP NPN 4P 4PT AC FE XM M23 12P BK			
∇ = 0	ANGULAR TOL ± °	4 PLACES ±		CHK'D: RSILLER 2020/06/18		APPR: RSILLER 2020/06/18					
∇ = 0	4 PLACES ±	3 PLACES ±		INITIAL REVISION:		DRWN: ULETENMEIER 2016/09/14		DOCUMENT NUMBER		DOC TYPE DOC PART REVISION	
∇ = 0	3 PLACES ±	2 PLACES ±		DRWN: RSILLER 2016/11/16		APPR: RSILLER 2016/11/16		1202480090		PSD 000 B1	
∇ = 0	2 PLACES ±	1 PLACE ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		MATERIAL NUMBER		CUSTOMER	
∇ = 0	1 PLACE ±	0 PLACES ± 0.25		A2-SIZE		SERIES		SEE TABLE 1		GENERAL MARKET	
∇ = 0	0 PLACES ± 0.25	0 PLACES ± 0.25		A2-SIZE		SERIES		120248		SHEET NUMBER	
∇ = 0	0 PLACES ± 0.25	0 PLACES ± 0.25		A2-SIZE		SERIES		120248		1 OF 2	



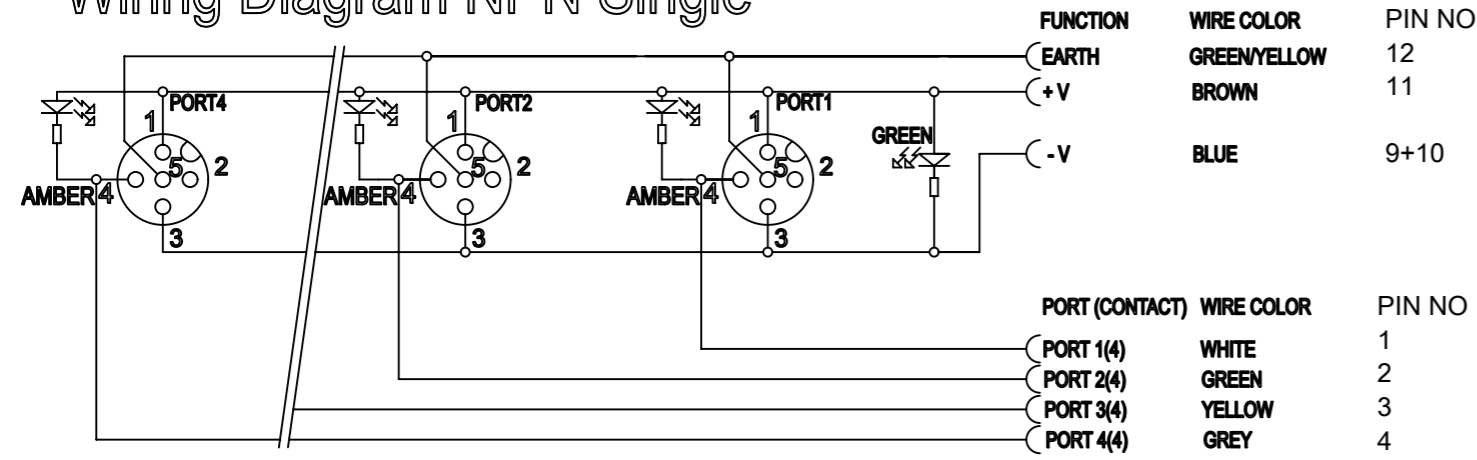
MPIS M12 PNP NPN 4P 4PT AC FE XM M23 12P BK

PRODUCT CUSTOMER DRAWING

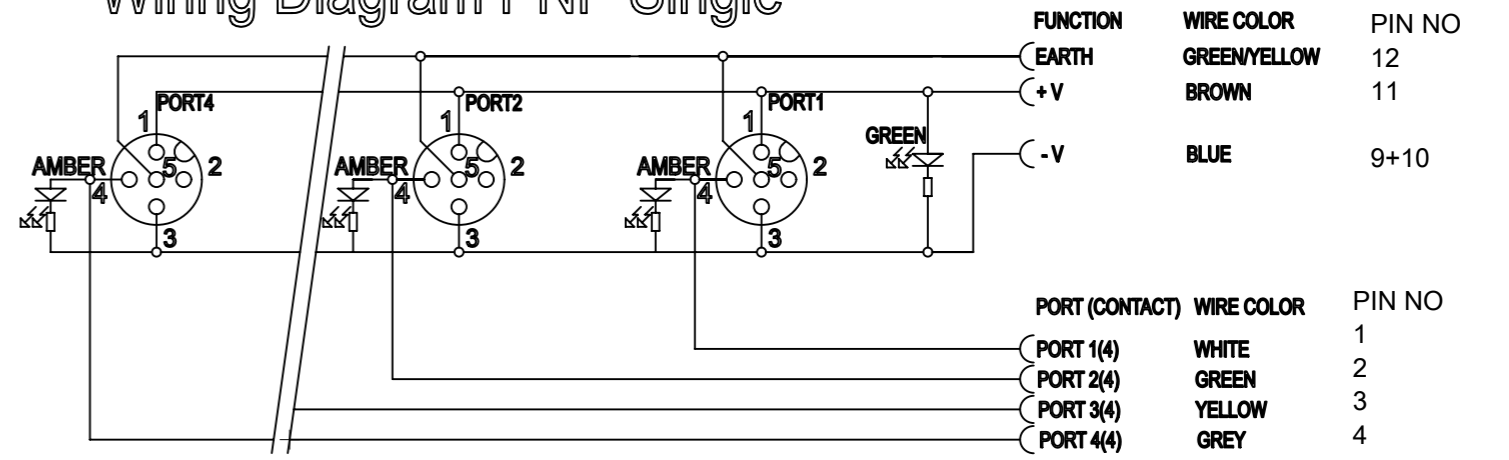
DOCUMENT NUMBER: 1202480090 | DOC TYPE: PSD | DOC PART: 000 | REVISION: B1

MATERIAL NUMBER: SEE TABLE 1 | CUSTOMER: GENERAL MARKET | SHEET NUMBER: 1 OF 2

Wiring Diagram NPN Single



Wiring Diagram PNP Single



SYMBOLS DIMENSION UNITS: mm SCALE: 1:1 GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL: ± 0° 4 PLACES: ± 0.1 3 PLACES: ± 0.2 2 PLACES: ± 0.3 1 PLACE: ± 0.4 0 PLACES: ± 0.5 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: EC NO: 639828 DRWN: MDHARMANTI 2020/06/17 CHK'D: RSILLER 2020/06/18 APPR: RSILLER 2020/06/18		 MPIS M12 PNP NPN 4P 4PT AC FE XM M23 12P BK PRODUCT CUSTOMER DRAWING		
	INITIAL REVISION: DRWN: ULETTENMEIER 2016/09/14 APPR: RSILLER 2016/11/16		DOCUMENT NUMBER: 1202480090	DOC TYPE: PSD DOC PART: 000 REVISION: B1			
	THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	SERIES: 120248	MATERIAL NUMBER: SEE TABLE 1		CUSTOMER: GENERAL MARKET	SHEET NUMBER: 2 OF 2
	DATE: 2018/01/18						