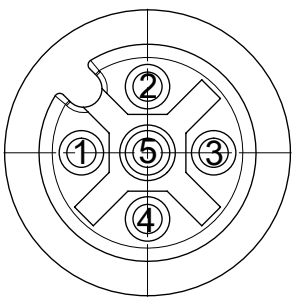


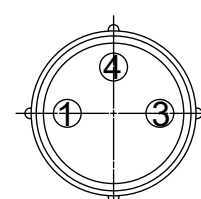
M12 FEMALE
FACE VIEW



Pin	Wire color
1	BROWN
2	WHITE
3	BLUE
4	BLACK
5	GREY

TEMPERATURE RANGE	-25°C /+80°C
RATED CURRENT	3A
RATED VOLTAGE	3 Poles 60V
	4 & 5 Poles 30V
PROTECTION CLASS	IP 67
INSULATION RESISTANCE:	10 ⁸ Ω MIN.
MATING CYCLES	MIN. 100

M8 MALE
FACE VIEW



Pin	Wire color
1	BROWN
3	BLUE
4	BLACK

Technical drawing of the BRAD 10000 cable assembly, showing side and front views with dimensions and callouts.

Dimensions:

- Overall length: SEE PART LIST
- Length of the left connector assembly: (46.2)
- Length of the cable section: 50 $\pm$ 5
- Length of the right connector assembly: (37.1)
- Outer diameter of the left connector: $\varnothing$ (14.5)
- Thread of the left connector: M12x1
- Thread of the right connector: M8x1

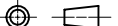
Callouts:

- 1: Cable jacket
- 2: Shielding braid
- 3: Left connector housing
- 7: Right connector housing
- 8: Grounding points
- 9: Signal contacts
- 10: Right connector plug
- 11: Cable braid
- 12: Cable insulation

VIEW FROM THE FRONT SIDE

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH/COLOR
1	-	CABLE Xx0.25mm ²	TPU	BLACK
2	-	MOULDING MATERIAL	TPU	BLACK
3	1	M12 HEX KNU FE NUT	BRASS	Ni-PLATED
4	X	CONTACT FEMALE	Cu ALLOY	GOLD OVER NICKEL
5	1	INSERT M12 FEMALE XP	ELASTOLLAN	BLACK
6	1	GASKET	FPM	RED
7	1	M8 HEX KNU MALE NUT	BRASS	Ni-PLATED
8	X	CONTACT MALE	BRASS	Ni-PLATED
9	1	INSERT M8 MALE XP	ELASTOLLAN	BLACK
10	1	M8 MALE SLEEVE	Cu ALLOY	GOLD OVER NICKEL
11	1	STANDARD WRAP LABEL	VINYL	YELLOW
12	2	ID CARRIER (SEE MATRIX)	PVC	-

1. LOGO BRAD- ONLY IN ONE SIDE ON THE OVERMOULD.
2. IF IN MATRIX IS "H" - ID CARRIER ON THE BOTH SIDES CONNECTOR.

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
	DIMENSION UNITS		SCALE		CURRENT REV DESC: AS PER THE PCN-513749 CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO "END TO END". ADDED INFO IN TECHNICAL DATA. SORTED PART LIST USING CABLE TYPES ON SHEET 2 AND ADDED TOL. TABLE				molex							
	mm		2:1													
	GENERAL TOLERANCES (UNLESS SPECIFIED)								CSE M12 M8 XP AC FE STR WSOR MA STR XM DE							
	ANGULAR TOL ± 1.0°															
	4 PLACES		±		EC NO: 789428				PRODUCT CUSTOMER DRAWING							
	3 PLACES		±		DRWN: AKABADI 2023/08/03											
	2 PLACES		± 0.05		CHK'D: RSILLER 2024/07/02											
	1 PLACE		± 0.3		APPR: RSILLER 2024/07/02				DOCUMENT NUMBER 1200669234				DOC TYPE PSD	DOC PART 000	REVISION B	
	0 PLACES		± 0.5		INITIAL REVISION: DRWN: SSM 2021/12/06 APPR: RSILLER 2022/02/28											
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION 		DRAWING A3-SIZE		SERIES 120066		MATERIAL NUMBER SEE PART LIST		CUSTOMER GENERAL MARKET		SHEET NUMBER 1 OF 2	

OPTIONS

H

H = 2 PCS. OF I/D CARIERR

CABLE TYPE	WIRE GAUGE	CABLE JACKET	UL	CSA	STATIC	FLEXING	DRAW CHAIN TESTED	OTHER
B41	0.25mm ²	TPU BLACK	STYLE 21215	YES	-40°C TO +90°C 5xD	-25°C TO +80°C 7.5xD	5 mio cycles	WELD SLAG RESISTANCE

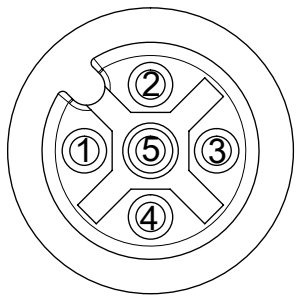
A

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B41		
1200669346	844030B41M020	2000
1200669347	844030B41M030	3000
1200669348	844030B41M040	4000

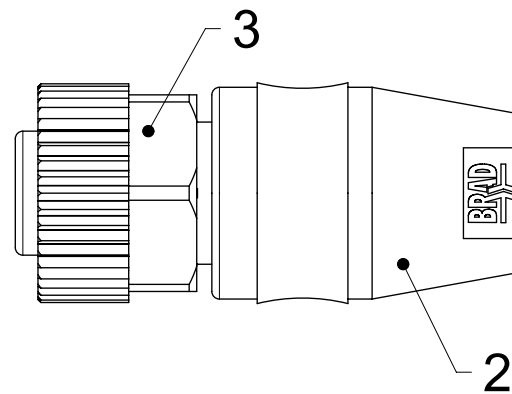
CABLE LENGTH TOLERANCES	
LENGTH	TOLERANCE
0m-1m	+40 mm
>1m-5m	+60 mm
>5m-10m	+80 mm
>10m-20m	+140 mm
>20m-30m	+160 mm
>30m	+1% length

FUNCTIONAL SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
= 0		DIMENSION UNITS mm		SCALE 1:1		CURRENT REV DESC: AS PER THE PCN-513749 CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO "END TO END". ADDED INFO IN TECHNICAL DATA, SORTED PART LIST USING CABLE TYPES ON SHEET 2 AND ADDED TOL. TABLE									
= 0		GENERAL TOLERANCES (UNLESS SPECIFIED)													
= 0		ANGULAR TOL ± 1.0°													
DIVISIONAL SYMBOLS		4 PLACES		±						CSE M12 M8 XP AC FE STR WSOR MA STR XM DE					
		3 PLACES		±		PRODUCT CUSTOMER DRAWING									
		2 PLACES		± 0.05											
		1 PLACE		± 0.3		EC NO: 789428 DRWN: AKABADI 2023/08/03 CHK'D: RSILLER 2024/07/02 APPR: RSILLER 2024/07/02				DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
		0 PLACES		± 0.5						INITIAL REVISION: DRWN: SSM 2021/12/06 APPR: RSILLER 2022/02/28		1200669234		PSD	000
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		120066		SEE PART LIST		GENERAL MARKET		2 OF 2	

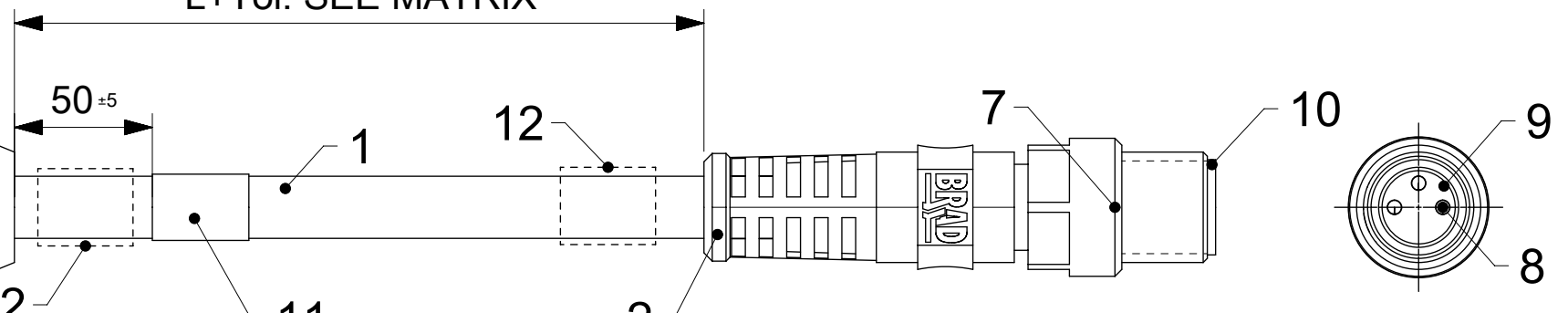
M12 FEMALE
FACE VIEW



Pin	Wire color
1	BROWN
2	WHITE
3	BLUE
4	BLACK
5	GREY

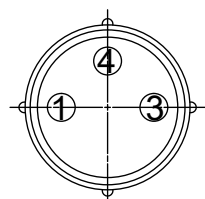


L+Tol. SEE MATRIX



VIEW FROM
THE FRONT SIDE

M8 MALE
FACE VIEW



Pin	Wire color
1	BROWN
3	BLUE
4	BLACK

BOM				
12	2	ID CARRIER (SEE MATRIX)	PVC	-
11	1	STANDARD WRAP LABEL YE	VINYL	-
10	1	M8 MALE SLEEVE	BRASS	Ni-PLATED
9	1	INSERT M8 MALE XP BK	ELASTOLLAN	-
8	X	CONTACT MALE	BRASS	Ni-PLATED
7	1	M8 HEX KNU MALE NUT	BRASS	Ni-PLATED
6	1	GASKET RD	FPM	-
5	1	INSERT M12 FEMALE XP BK	ELASTOLLAN	-
4	X	CONTACT FEMALE	BRASS	Ni-PLATED
3	1	M12 HEX KNU FE NUT	BRASS	Ni-PLATED
2	-	MOULDING MATERIAL BK	TPU	-
1	-	CABLE Xx0.25mm ² BK	TPU	-
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

1. LOGO BRAD- ONLY IN ONE SIDE ON THE OVERMOULD.
2. IF IN MATRIX IS "H" - ID CARRIER ON THE BOTH SIDES CONNECTOR.

FORMAT: master-tb-prod-A3
REVISION: J
DATE: 2020/01/14

OPTIONS

H

H = 2 PCS. OF I/D CARIERR

CABLE TYPE	WIRE GAUGE	CABLE JACKET	UL	CSA	STATIC	FLEXING	DRAW CHAIN TESTED	OTHER
B41	0.25mm ²	TPU BLACK	STYLE 21215	YES	-40°C TO +90°C 5xD	-25°C TO +80°C 7.5xD	5 mio cycles	WELD SLAG RESISTANCE

For Raw Cable Specification see SD-120209-006

Table of length tolerances		
Over	Up to and including	Tolerance
0	1000	+40 0
1000	5000	+60 0
5000	10000	+80 0
10000	20000	+140 0
20000	30000	+160 0
30000	>	+1% of length

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
	DIMENSION UNITS		SCALE		CURRENT REV DESC: PART LIST DELETED		molex					
	mm		1:1									
	F A = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)				CSE M12 3P AC FE STR WSOR MA STR XM						
F C = 0	ANGULAR TOL ± °											
F E = 0	4 PLACES		±		EC NO: 683109		PRODUCT CUSTOMER DRAWING					
DIVISIONAL SYMBOLS	3 PLACES		±		DRWN: MKOWALCZYK01 2021/10/19							
	2 PLACES		±		CHK'D: ALEKSP3 2021/10/28							
	1 PLACE		±		APPR: KMARCINIAK01 2021/11/02							
	0 PLACES		±		INITIAL REVISION:							
						DRWN: AKONDRACIUK 2016/06/06		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
						APPR: MIWASIECZUK 2016/06/21		1200669234		PSD	00P	A4
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
				A3-SIZE	120066	SEE MATRIX		GENERAL MARKET		2 OF 2		