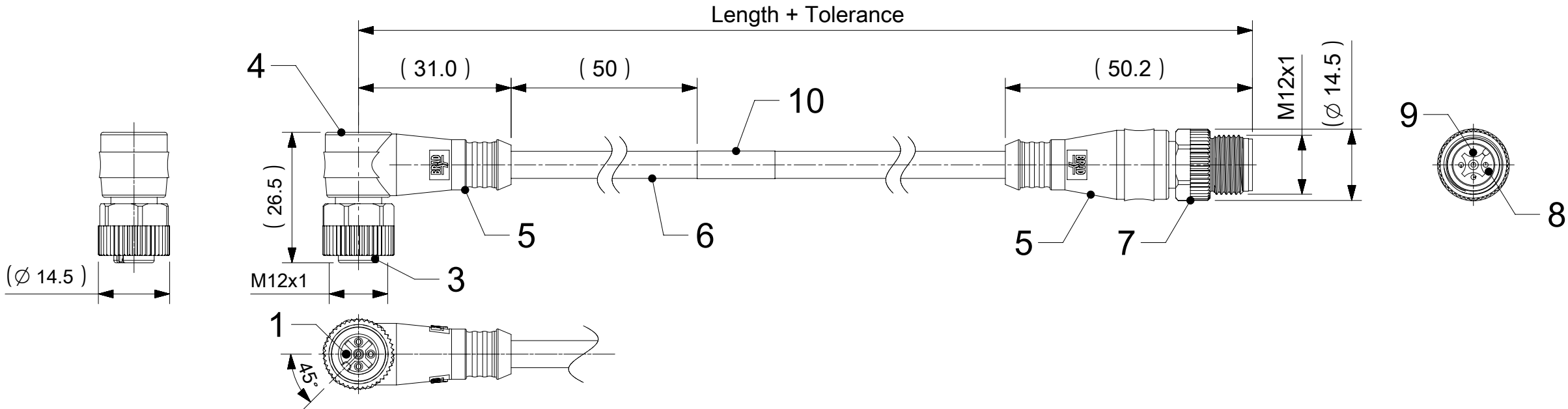


FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



NOTES:

CONTACT CURRENT RATING: 3-5 POLES 4A

8 POLES 2A

VOLTAGE RATING: 3-4 POLES 250V

5 POLES 60V

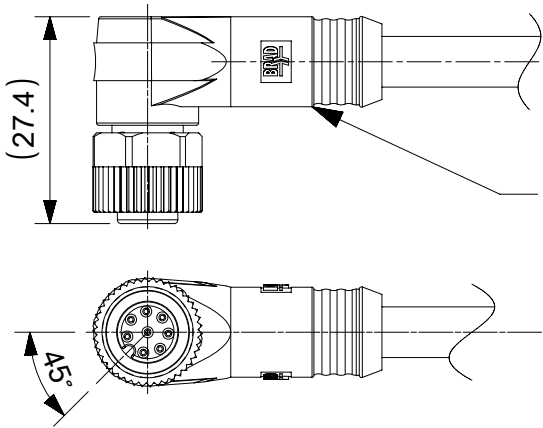
8 POLES 30V

PROTECTION CLASS: IP67 IN MATED &
LOCKED POSITION

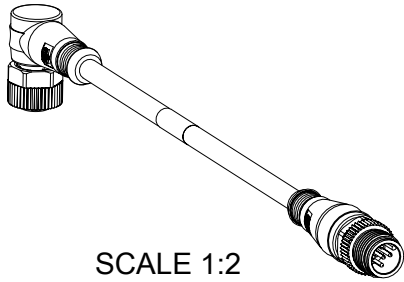
TEMPERATURE: -25°C / +85°C

INSULATION RESISTANCE: 10⁸ Ω MIN.

MATING CYCLES: MIN. 100



Thicker Overmold for Cables with
bigger Outer Diameter



SCALE 1:2

CONTACT POSITION FRONT VIEW:

CABLE	3 POLES		4 POLES		5 POLES		5 POLES		8 POLES	
	B30, B55		B30, B33, B36, B55		B30, B33, B36, B55		B42		B41, B49	
FEMALE										
MALE										
CONNECTIONS	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
	1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	WHITE
	2	---	2	WHITE	2	WHITE	2	WHITE	2	BROWN
	3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	GREEN
	4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	YELLOW
	5	---	5	---	5	GREY	5	GREEN/ YELLOW	5	GREY
							5		6	PINK
									7	BLUE
									8	RED

CODING REQUIRED TO IEC 61076-2-101

DOCUMENT STATUS P1 RELEASE DATE 2024/07/02 09:17:56

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

10	1	LABEL OR PRINTING	VINYL / ---	---
9	3 / 4 / 5	CONTACT M12 MALE	COPPER	SELECTIVE GOLD OVER NICKEL
	8		BRASS	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	---
7	1	COUPLING NUT MALE	SEE SHEET 2	SEE SHEET 2
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING	TPU	SEE SHEET 2
4	1	COUPLING NUT FEMALE	SEE SHEET 2	SEE SHEET 2
3	1	INSERT FEMALE BLACK	PUR	---
2	1	ORING RED	FPM	---
1	3 / 4 / 5	CONTACT M12 FEMALE	BRONZE	SELECTIVE GOLD OVER NICKEL
	8		BRASS	SELECTIVE GOLD OVER NICKEL
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
FUNCTIONAL SYMBOLS	DIMENSION UNITS		SCALE		CURRENT REV DESC: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO END TO END. UPDATED NOTES AND PART LIST SORTED USING CABLE TYPES IN SHEET 3			molex				
	mm		1:1									
	GENERAL TOLERANCES (UNLESS SPECIFIED)											
	ANGULAR TOL ± 1.0 °											
	4 PLACES ±							EC NO: 789428			CSE M12 XP AC FE RA WSOR MA STR XM DE	
3 PLACES ±				DRWN: AKABADI 2023/03/10								
2 PLACES ± 0.05				CHK'D: RSILLER 2024/07/02								
DIVISIONAL SYMBOLS	1 PLACE ± 0.1				APPR: RSILLER 2024/07/02			PRODUCT CUSTOMER DRAWING				
	0 PLACES ± 0.2				INITIAL REVISION:							
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRWN: JMARSZALEK 2016/08/12			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
					APPR: RSILLER 2016/08/29			1200668999		PSD	000	B
					THIRD ANGLE PROJECTION			DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER
			A3-SIZE	120066	SEE SHEET 3		GENERAL MARKET		1 OF 3			

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

88X031XXXXXX

88=M12x1
Double ended

Poles:
3=3 Poles
4=4 Poles
5=5 Poles
8=8 Poles

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

Cable type: See Table

Units:
M=Meter
C=Centimeter
T=10x Meter

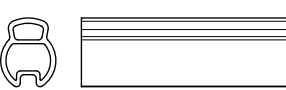
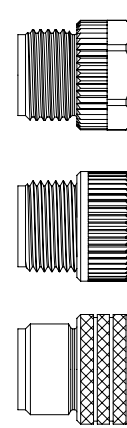
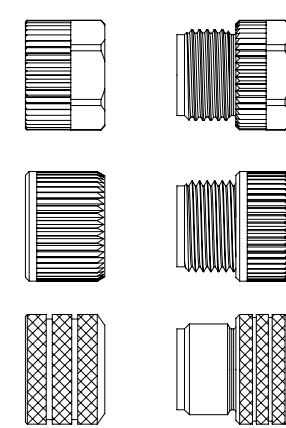
Length
Examples:
005=0.5 units
010=1 units
020=1 units
050=5 units
100=10 units
150=15 units
200=20 units

Overmold color:
Blank (Standard)=Black
A=Grey / G=Black / Y=Yellow / R=Red

Coupling Nut:
Blank (Standard)=Knurled/Hex Brass, Ni Plated
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated

H= 2 pcs. of I/D Carrier PVC Transparent
(Cable B36 always with
2 pcs. I/D Carrier)

FEMALEMALE



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: TEMP. / BENDING RADIUS	DRAG CHAIN	CABLE PRODUCT SPECIFICATION	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm²	TPU Black	UL 21215/758	C22.2 I/II A/B 80°/600V	-40°C to +90°C 5xO.D.	-25°C to +80°C 7.5xO.D.	-5°C to +60°C 7.5xO.D.	up to 5 000 000 cycles at temp 20°C	1552200001	SD-120209-001
B33	4 / 5	0.34mm²	TPU Gray								SD-120209-001
B36	4 / 5	0.34mm²	TPU Orange								SD-120209-001
B41	8	0.25mm²	TPU Black								SD-120209-006
B42	5	0.34mm²	TPU Black								SD-120209-001
B55	4 / 5	0.34mm²	TPU Yellow								n/a

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

FUNCTIONAL SYMBOLS

= 0

= 0

= 0

DIVISIONAL SYMBOLS

DIMENSION UNITS

mm

SCALE

1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL ± 1.0 °

4 PLACES ±

3 PLACES ±

2 PLACES ± 0.05

1 PLACE ± 0.1

0 PLACES ± 0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO END TO END. UPDATED NOTES AND PART LIST SORTED USING CABLE TYPES IN SHEET 3

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APPR: RSILLER 2024/07/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
APPR: RSILLER 2016/08/29

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

120066

MATERIAL NUMBER

SEE SHEET 3

CUSTOMER

GENERAL MARKET

SHEET NUMBER

2 OF 3



CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200668999

DOC TYPE

PSD

DOC PART

000

REVISION

B

DOCUMENT STATUS

P1

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