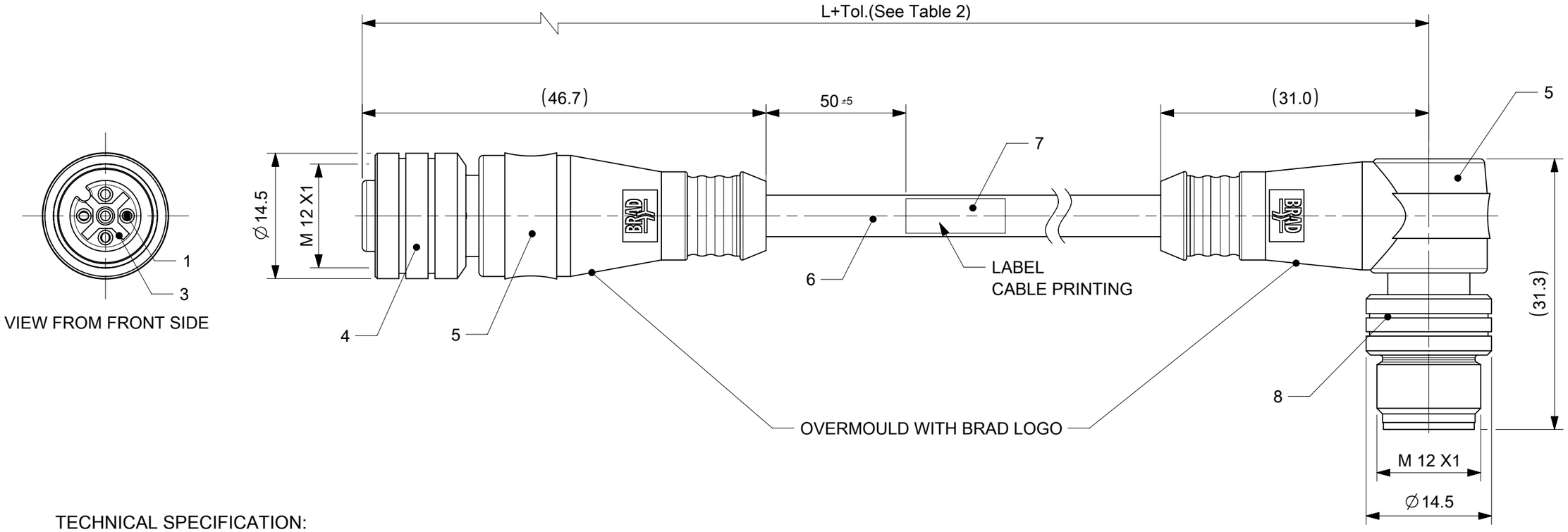
FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 90° ANGLED



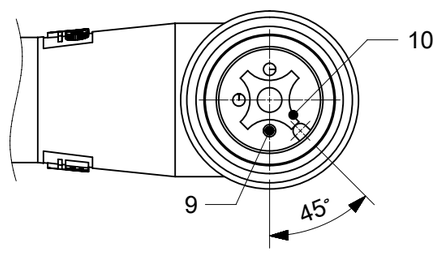
TECHNICAL SPECIFICATION:

CONTACT CURRENT RATING: 3-5 POLES 4A
8 POLES 2A

VOLTAGE RATING: 3-4 POLES 250V
5 POLES 60V DC
8 POLES 30V

PROTECTION CLASS: IP 67

TEMPERATURE: -25°C / +85°C



VIEW FROM FRONT SIDE

BILL OF MATERIALS

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH/COLOR
10	1	INSERT MALE	PUR	BLACK
9	3	CONTACT M12 MALE	BRASS	SELECTIVE GOLD OVER NICKEL
8	1	COUPLING NUT MALE	BRASS	NICKEL
7	1	LABEL	VINYL	YELLOW
6	-	CABLE	SEE MATRIX/ CABLE SPECIFICATION	---
5	1	OVERMOULD	TPU	SEE MATRIX
4	1	COUPLING NUT FEMALE	BRASS	NICKEL
3	1	INSERT FEMALE	PUR	BLACK
2	1	O-RING	FPM	RED
1	3	CONTACT M12 FEMALE	BRASS	SELECTIVE GOLD OVER NICKEL

DOCUMENT STATUS	P1	RELEASE DATE	2019/01/09 07:49:11

FORMAT: master-Sheet-A3
REVISION: H
DATE: 2018/01/16

SYMBOLS: E4 = 0; E6 = 0; E8 = 0; S = 0; ▼ = 0; C = 0; ☒ = 0; ■ = 0; ▽ = 0

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE
mm	2:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.3
0 PLACES	±	0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: DIM PLACEMNT UPDATED

EC NO: 610022
DRWN: SSM 2019/01/07
CHK'D: RSILLER 2019/01/09
APPR: RSILLER 2019/01/09

INITIAL REVISION:
DRWN: DSOPPIN 2018/09/27
APPR: RSILLER 2018/10/22

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120007

molex

CSE M12 XP AC FE STR MA RA XM

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200070026	PSD	000	A1

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	1 OF 3

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

8	8	X	0	3	2	X	X	X	X	X	X	X	X	X

SPECIAL TYPES

88 = M12x1
Double ended

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

Heads style:
032 = Plugs FE Straight & Male 90°

Cable types:
E02=0.25mm² PVC Black
E03=0.34mm² PVC Black
E13=0.75mm² PVC Yellow
E52=0.34mm² PVC Grey(RAL 7001)
E57=0.34mm² PVC Grey(RAL 7001)
H09=0.34mm² PUR Black
H69=0.34mm² PUR Grey LSOH SCR
I02=0.25mm² PVC Grey CEI
I03=0.34mm² PVC Grey CEI
I20=0.25mm² PVC Grey CEI SCR DC
I26=0.34mm² PVC Grey CEI SCR AC
P02=0.25mm² PUR/PVC Black
P03=0.34mm² PUR/PVC Black
P08=0.25mm² PUR Yellow HIFLEX
P20=0.34mm² PUR Grey LSOH braid
P82=0.34mm² PUR orange irradiated DC
S20=0.34mm² PVC Yellow SJTO braid

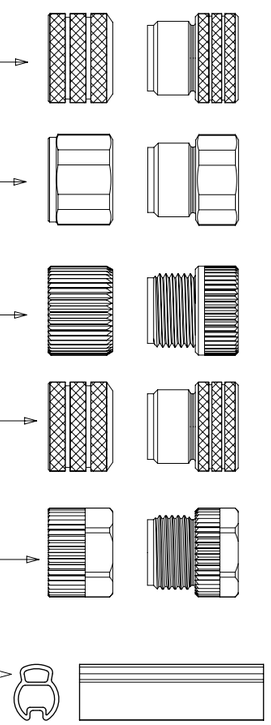
Units:
C = Centimeter
M = Meter
K = Killometer
F = Feet

Length
Examples:
020 = 2 M
060 = 6 M
100 = 10 M

Overmold color:
Blank (Standard)=Black TPU
Blank=Yellow PVC for cables
A09, S19, S20, S26
Blank=Yellow TPE-E for cables
K03, K05
A=Grey / G=Black / Y=Yellow
Coupling Nut:
Blank (Standard)=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
Blank=7 for cables I20, I26, K03, K05, P82, S26
9=Knurled / Hexagonal Brass Ni Plated SW13

H= 2 pcs. of I/D Carrier PVC Transparent
(Cables Ixx & P82 always with 2 pcs. of
I/D Carrier even if no H in Engineering No.)

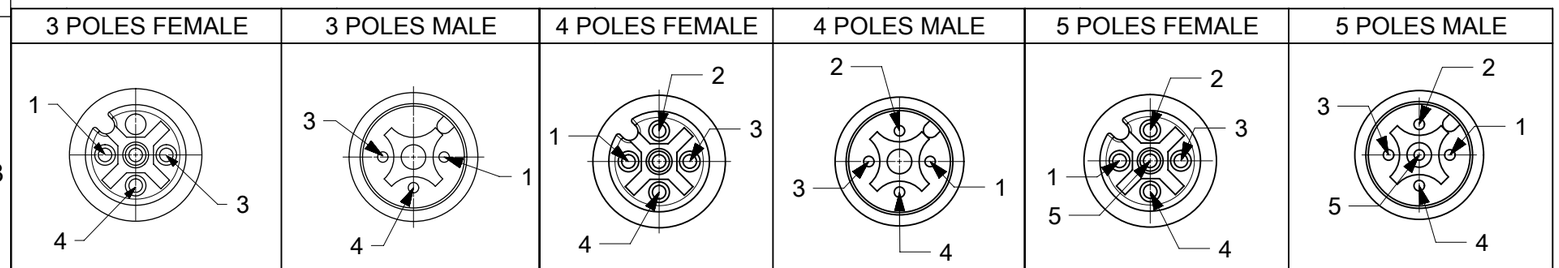
COUPLING NUT
FEMALE MALE



CABLE SPECIFICATION

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
E02	3 / 4 / 5 / 8	0.25mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
E03	3 / 4 / 5	0.34mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
E52	4	0.34mm²	PVC GRAY	-	-	- 30 to + 70°C	- 5 to + 70°C	-	-
H09	3 / 4 / 5	0.34mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
H69	4	0.2mm²	PUR LSOH	-	-	-	-40°C to +80°C	-	-
P02	3 / 4 / 5 / 8	0.25mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-
P82	4	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C,	-50°C to +105°C,	-	-
I03	4	0.34mm²	PVC GRAY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
K03	4	AWG18	TPE YELLOW	ITC E195601 OR PLTC	AWM I/II A/B FT4 LL54185	-	-40°C to +105°C	-	-
K05	4	0.34mm²	TPE YELLOW	ITC E195601 OR PLTC	AWM I/II A/B FT4 LL54185	-	-40°C to +105°C	-	-
S20	4	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 AWM II	-30°C to +105°C	-40°C to +105°C	-	-

CONTACT POSITION FRONT VIEW:



3 POLES FEMALE		3 POLES MALE		4 POLES FEMALE		4 POLES MALE		5 POLES FEMALE		5 POLES MALE	
PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	BROWN
2	-	2	-	2	WHITE	2	WHITE	2	WHITE	2	WHITE
3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	BLUE
4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	BLACK
5	-	5	-	5	-	5	-	5	GREY OR GREEN/YELLOW	5	GREY OR GREEN/YELLOW
CODING REQUIRED TO IEC 61076-2-101				CODING REQUIRED TO IEC 61076-2-101				CODING REQUIRED TO IEC 61076-2-101			

TABLE OF LENGTH TOLERANCE		
OVER	UPTO AND INCULDING	TOLERANCE
0	305	+19
305	915	+45
915	1830	+56
8130	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF LENGTH

SYMBOLS: E = 0, F = 0, G = 0, S = 0, ▼ = 0, C = 0, ☒ = 0, ■ = 0, ▽ = 0

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DIMENSION UNITS: mm
SCALE: 1:1
GENERAL TOLERANCES (UNLESS SPECIFIED)
ANGULAR TOL ± 1.0 °
4 PLACES ±
3 PLACES ±
2 PLACES ± 0.05
1 PLACE ± 0.3
0 PLACES ± 0.5
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: DIM PLACEMNT UPDATED
EC NO: 610022
DRWN: SSM 2019/01/07
CHK'D: RSILLER 2019/01/09
APPR: RSILLER 2019/01/09
INITIAL REVISION:
DRWN: DSOPPIN 2018/09/27
APPR: RSILLER 2018/10/22

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120007

molex

CSE M12 XP AC FE STR MA RA XM

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200070026	PSD	000	A1

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	2 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2019/01/09 07:49:11

FORMAT: master_molex_A3
REVISION: H
DATE: 2018/01/16

PART LIST

MOLEX PN	ENGINEERING PN	LENGTH (mm)
1200070158	883032E03M003	300
1200070159	883032E03M006	600
1200070160	883032E03M010	1000
1200070161	883032E03M020	2000
1200668205	883032E03M050	5000
1200072378	883032E03M060	6000
1200668053	883032E03M100	10000
1200668206	883032E03M150	15000
1200668268	883032E03M200	20000
1200072879	883032H09M010	1000
1200070166	883032I03M006	600
1200668007	883032I03M010	1000
1200668054	883032P03M005	500
1200070171	883032P03M006	600
1200070172	883032P03M010	1000
1200070173	883032P03M020	2000
1200070174	883032P03M030	3000
1200072294	883032P03M0305	3000
1200668341	883032P03M050	5000
1200668763	883032P03M0501	5000
1200072705	883032P03M060	6000
1200070184	883032S20M010	1000
1200070185	883032S20M020	2000
1200668663	884032E02M050	5000
1200668072	884032E03M006	600
1200668073	884032E03M010	1000
1200668755	884032E03M012	1200
1200668756	884032E03M014	1400
1200665032	884032E03M020	2000
1200071014	884032E03M030	3000
1200668074	884032E03M050	5000
1200072163	884032E03M0501	5000
1200668075	884032E03M100	10000
1200668200	884032E03M1001	10000
1200668307	884032E03M1005	10000
1200668309	884032E03M1205	12000
1200668173	884032E03M1501	15000
1200668223	884032E03M200	20000
1200668308	884032E03M2005	20000
1200071277	884032E52M010A	1000
1200070841	884032E52M020A	2000
1200668494	884032H09M010	1000
1200668290	884032H09M020	2000
1200668311	884032H69M010	1000
1200668076	884032H69M030	3000
1200668312	884032H69M050	5000
1200665040	884032H69M100	10000
1200072424	884032I03M003	300
1200668522	884032I03M020	2000
1200661012	884032K03M006	600
1200661013	884032K03M010	1000
1200661014	884032K03M020	2000
1200661015	884032K03M030	3000
1200661598	884032K03M036	3600

MOLEX PN	ENGINEERING PN	LENGTH (mm)
1200661017	884032K03M050	5000
1200661018	884032K03M060	6000
1200661021	884032K03M090	9000
1200661022	884032K03M100	10000
1200661023	884032K03M120	12000
1200661480	884032K03M200	20000
1200660398	884032K05M005	500
1200660400	884032K05M010	1000
1200660401	884032K05M015	1500
1200660402	884032K05M020	2000
1200660403	884032K05M030	3000
1200073045	884032K05M035	3500
1200660404	884032K05M040	4000
1200660405	884032K05M050	5000
1200660406	884032K05M060	6000
1200073042	884032K05M070	7000
1200661540	884032K05M080	8000
1200668345	884032P03M002G	200
1200072838	884032P03M003	300
1200071519	884032P03M006	600
1200071407	884032P03M010	1000
1200070547	884032P03M0105	1000
1200669261	884032P03M015	1500
1200070026	884032P03M020	2000
1200071520	884032P03M030	3000
1200070914	884032P03M050	5000
1200072213	884032P03M1005	10000
1200668077	884032P82M0037	300
1200668343	884032P82M0067	600
1200668267	884032P82M0107	1000
1200668282	884032P82M0157	1500
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1200668161	884032S20M030	3000
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1200668974	885032E03M003	300
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1200668977	885032E03M050	5000
1200668978	885032E03M100	10000
1200668493	885032H09M010	1000
1200072577	885032P03M003	300
1200668603	885032P03M020G	2000
1200668093	885032P03M030	3000
1200661925	885032P03M080	8000
1200661926	885032P03M100	10000
1200669119	885032P03M190	19000

DOCUMENT STATUS	P1	RELEASE DATE	2019/01/09 07:49:11

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SYMBOLS: = 0

DIMENSION UNITS: mm
SCALE: 1:1
GENERAL TOLERANCES (UNLESS SPECIFIED)
ANGULAR TOL ± 1.0 °
4 PLACES ±
3 PLACES ±
2 PLACES ± 0.05
1 PLACE ± 0.3
0 PLACES ± 0.5
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: DIM PLACEMNT UPDATED

EC NO: 610022
DRWN: SSM 2019/01/07
CHK'D: RSILLER 2019/01/09
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INITIAL REVISION:
DRWN: DSOPPIN 2018/09/27
APPR: RSILLER 2018/10/22

THIRD ANGLE PROJECTION
DRAWING: A3-SIZE
SERIES: 120007

molex

CSE M12 XP AC FE STR MA RA XM

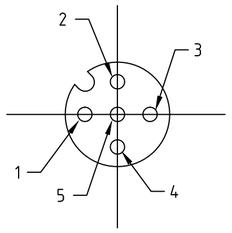
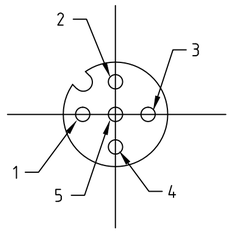
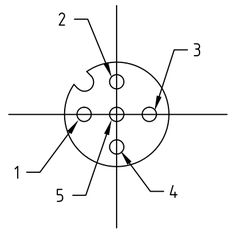
PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200070026	PSD	000	A1

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	3 OF 3

FORMAT: master_size-A3
REVISION: H
DATE: 2018/01/18

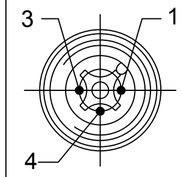
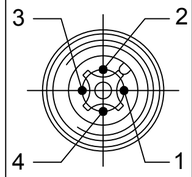
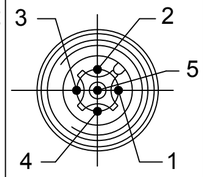
FEMALE FACE VIEW

3 POLE	4 POLE	5 POLE
		
1 BROWN 2 NOT USED 3 BLUE 4 BLACK 5 NOT USED	1 BROWN 2 WHITE 3 BLUE 4 BLACK 5 NOT USED	1 BROWN 2 WHITE 3 BLUE 4 BLACK 5 GRAY

D

PART NO.	ENGINEERING NO.	FINISHED LENGTH	POLES	CABLE DIA.
1200660232	883032K05M020	2.0M [6'7"]	3	.20/5.1
1200660404	884032K05M040	4.0M [13'1"]	4	.21/5.3
1200662157	885032K05M100	10.0M [32'10"]	5	.23/5.8

MALE FACE VIEW

3-POLE	4-POLE	5-POLE
		
1 BROWN 3 BLUE 4 BLACK	1 BROWN 2 WHITE 3 BLUE 4 BLACK	1 BROWN 2 WHITE 3 BLUE 4 BLACK 5 GRAY

D

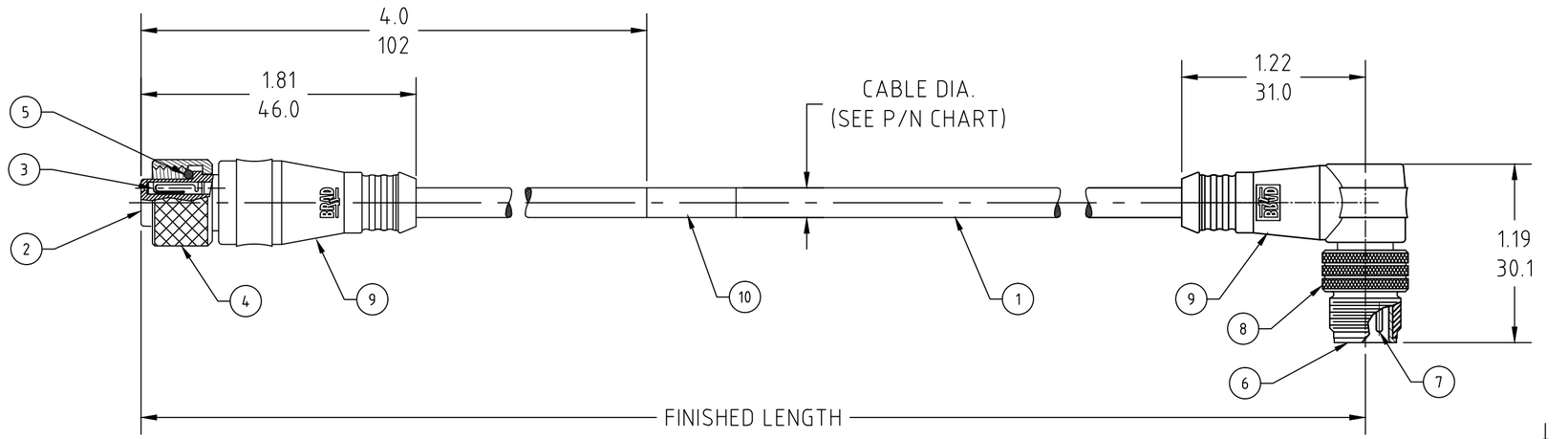
PART NO. LEGEND

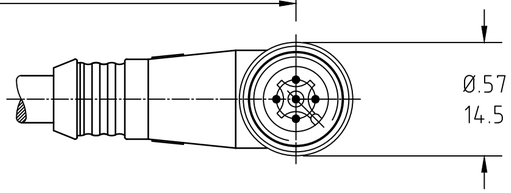
883032K05M020

POLES: 3,4 & 5

CABLE TYPE
22AWG
TPE YELLOW

FINISHED LENGTH
M005 = 0.5 Meters
M010 = .0 Meter
M100 = 10 Meters





D

NOTES:
1. MATERIAL: AS NOTED
2. FINISH: AS NOTED
3. ELECTRICAL:
   VOLTAGE: 250V
   CURRENT: 4A
4. TEMP RATING: -25°TO +105°C
5. PROTECTION: IP67 (WHEN MATED)
6. COUPLING THREAD: M12 X 1
7. UL RECOGNIZED FILE: E152210
   CSA CERTIFIED FILE: LR6837
8. ALL DIMS ARE FOR REFERENCE
   UNLESS NOTED OTHERWISE

D

CABLE FLEX CHARACTERISTICS

TORSIONAL FLEX TEST	*10 MILLION CYCLES PER MIL-C-13777G*
BEND FLEX TEST	*10 MILLION CYCLES PER MIL-C-13777G*
WELD SLAG RESISTANCE	*WOODHEAD STANDARD S-300*

D

CABLE LENGTH TOLERANCES
>.3M [1FT]: +19mm-0 [+.75in-0]
.3 - .9M [1 - 3FT]: +44.5mm-0 [+1.75in-0]
.9 - 1.8M [3 - 6FT]: +55.6mm-0 [+2.19in-0]
1.8 - 3.7M [6 - 12FT: +88.9mm-0 [+3.50in-0]
3.7 - 7.3M [12 - 24FT]: +165.1mm-0 [+6.50in-0]
7.3-14.6M [24 - 48FT]: +317.5mm-0 [+12.50in-0]
14.6 - 30.5M [48-100FT]: +622.3mm-0 [+24.50in-0]
OVER 30M [100FT] +2% OF FINISHED LENGTH

D

ITEM	DESCRIPTION	MATERIAL	FINISH
10	WRAP LABEL	VINYL	BLACK/YELLOW
9	OVERMOLD	TPE	YELLOW
8	COUPLING NUT	BRASS	NICKEL PLATED
7	CONTACT PIN	COPPER ALLOY	GOLD PLATED
6	MALE INSERT	PUR	BLACK
5	O-RING	VITON	RED
4	COUPLING NUT	BRASS	NICKEL PLATED
3	CONTACT SOCKET	COPPER ALLOY	GOLD PLATED
2	FEMALE INSERT	PUR	BLACK
1	CABLE, 22AWG, 300V, 105°	TPE JACKET	YELLOW

REV	DESCRIPTION
D	UPDATE TO LATEST DOC STD. EC NO: IPG2019-0231 11/26/18 DRWN: RSTONE ---- CH'KD: M ZIELIN APPR: BWOODMAN2010/02/03

QUALITY SYMBOL
▼=0
C=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	mm	INCH
4 PLACES	±---	±---
3 PLACES	±---	±---
2 PLACES	±---	±---
1 PLACE	±---	±---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: IN/MM
SCALE: ---
DESIGN UNITS: INCH
THIRD ANGLE PROJECTION

DRAWN BY: LSTEMMLE DATE: 2010/02/01
CHECKED BY: REISSNER DATE: 2010/02/02
APPROVED BY: FPACHER DATE: 2010/02/03

TITLE: MICRO-CHANGE CORDSET 3/4/5 P. FE STR/ MA 90 22/3-5 YELLOW TPE CABLE

molex MOLEX INCORPORATED

MATERIAL NO.: SEE P/N CHART
DOCUMENT NO.: SD-120066-025
SHEET NO.: 1 0F 1
SIZE: C

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Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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