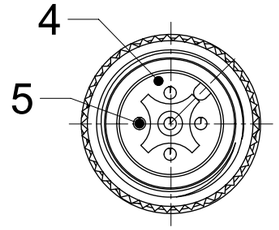
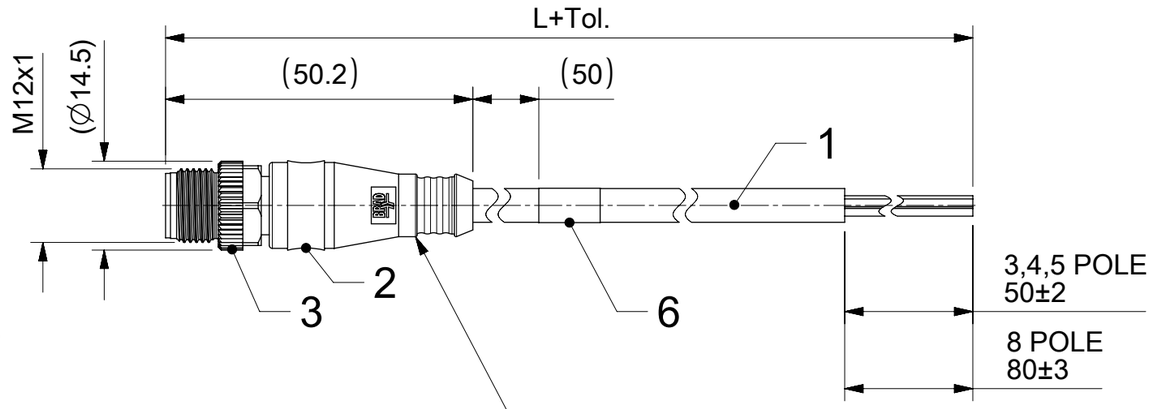
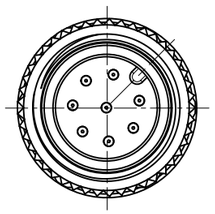
NOTES:
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A
TEMPERATURE: SEE CABLE INFORMATION
INSULATION RESISTANCE: 10^8 Ω MIN.
MATING CYCLES: MIN. 100
ENVIRONMENTAL:PROTECTION: IP67 IN MATED AND LOCKED POSITION



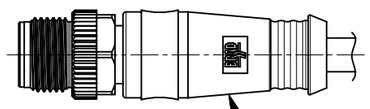
VIEW FROM THE FRONT SIDE
SCALE 2:1



OVERMOULD FOR CABLE DIA. MAX. 6.0 MM

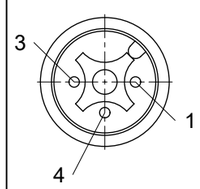
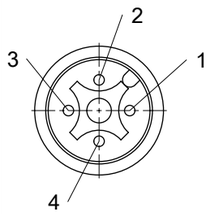
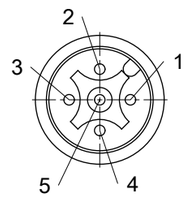
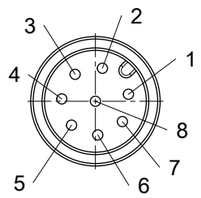


VIEW FROM THE FRONT SIDE
SCALE 2:1



OVERMOULD FOR CABLE DIA. BETWEEN ABOVE MIN. 6.0 TO BELOW MAX. 9.2 MM

CONTACTS POSITION FRONT VIEW:

	3 CONTACTS	4 CONTACTS	5 CONTACTS	8 CONTACTS
MALE				

CONNECTIONS

PIN	WIRE
1	BROWN
3	BLUE
4	BLACK

PIN	WIRE
1	BROWN
2	WHITE
3	BLUE
4	BLACK

PIN	WIRE
1	BROWN
2	WHITE
3	BLUE
4	BLACK
5	GREY OR GREEN/YELLOW

PIN	WIRE
1	WHITE
2	BROWN
3	GREEN
4	YELLOW
5	GREY
6	PINK
7	BLUE
8	RED

FOR OPTION SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
6	1	LABEL	VINYL	YELLOW
5	3/4/5	CONTACT MA	COPPER	GOLD OVER Ni-PLATED
	8	CONTACT MA	BRASS	GOLD OVER Ni-PLATED
4	1	INSERT M12 MA XP	PUR	BLACK
3	1	COUPLING NUT M12 MA	SEE SHEET 2	SEE SHEET 2
2	-	OVERMOULDING	TPU	SEE SHEET 2
1	-	CABLE	SEE SHEET 2	-

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

FUNCTIONAL SYMBOLS: FA = 0, FC = 0, FP = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
mm	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: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO END TO END. UPDATED INSERT TO OVERMOLD DIM. AND NOTES

EC NO: 789428
DRWN: FDAFERNER 2023/01/31
CHK'D: RSILLER 2024/07/02
APPR: RSILLER 2024/07/02
INITIAL REVISION:
DRWN: MDHARMANTI 2021/10/01
APPR: RSILLER 2021/10/06

molex

CSE M12 XP AC MA STR WSOR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200659964	PSD	000	B

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120065	SEE SHEET 3	GENERAL MARKET	1 OF 3

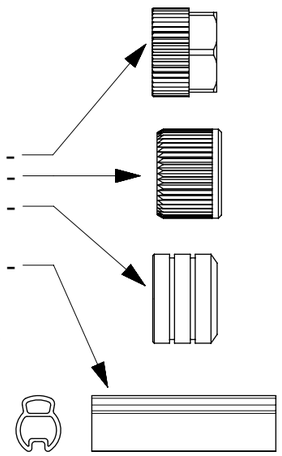
DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:38

Downloaded from Arrow.com.

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

8	0	X	0	0	6	B	X	X	M	X	X	X	X (OPTIONS)

- **88** = 88 = M12x1 SINGLE ENDED
- **X** (POLES):
  - 3 = 3 POLES
  - 4 = 4 POLES
  - 5 = 5 POLES
  - 8 = 8 POLES
- **006** (HEADER): 006 = PLUG MALE STRARIGHT
- **BXX** (CABLE TYPE): SEE TABLE
- **M** (UNIT): M = METER
- **XXX** (LENGTH): EXAMPLE:
  - 010 = 1 m
  - 050 = 5 m
  - 100 = 10 m
- **X** (OPTIONS):
  - 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)



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
B49	8	0.25mm²	TPU Orange								SD-120209-006
B55	3 / 4 / 5	0.34mm²	TPU Yellow								n/a

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

FUNCTIONAL SYMBOLS: F/A = 0, F/C = 0, F/P = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
mm	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: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO END TO END. UPDATED INSERT TO OVERMOLD DIM. AND NOTES

EC NO: 789428
DRWN: FDAFERNER 2023/01/31
CHK'D: RSILLER 2024/07/02
APPR: RSILLER 2024/07/02

INITIAL REVISION:
DRWN: MDHARMANTI 2021/10/01
APPR: RSILLER 2021/10/06

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC MA STR WSOR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200659964	PSD	000	B

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

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:38

Downloaded from Arrow.com.

PART LIST

MOLEX P/N	ENGINEERING No.	LENGTH [mm]
3P CABLE B30		
1200652271	803006B30M010	1000
1200652272	803006B30M020	2000
1200652273	803006B30M050	5000
1200652274	803006B30M100	10000
4P CABLE B30		
1200656066	804006B30M005	500
1200652275	804006B30M010	1000
1200652378	804006B30M010R	1000
1200652276	804006B30M020	2000
1200652379	804006B30M020R	2000
1200656001	804006B30M030	3000
1200652380	804006B30M030R	3000
1200659638	804006B30M030R	3000
1200656002	804006B30M040	4000
1200652381	804006B30M040R	4000
1200652277	804006B30M050	5000
1200652382	804006B30M050R	5000
1200656296	804006B30M080	8000
1200652278	804006B30M100	10000
1200659440	804006B30M150	15000
1200657234	804006B30M200	20000
5P CABLE B30		
1200659964	805006B30M006	600
1200659526	805006B30M010	1000
1200659527	805006B30M020	2000
1200656679	805006B30M030	3000
1200659528	805006B30M050	5000
1200659529	805006B30M100	10000
1200656398	805006B30M150	15000
1200656399	805006B30M200	20000
1200656400	805006B30M300	30000
1200656401	805006B30M500	50000

MOLEX P/N	ENGINEERING No.	LENGTH [mm]
4P CABLE B33		
1200656489	804006B33M003A	300
1200656521	804006B33M005A	500
1200656487	804006B33M010A	1000
1200659451	804006B33M020	2000
1200659596	804006B33M020A	2000
1200656522	804006B33M030A	3000
1200659597	804006B33M050A	5000
1200657152	804006B33M070A	7000
1200656488	804006B33M100A	10000
1200656614	804006B33M150A	15000
1200657156	804006B33M200A	20000
1200657154	804006B33M300A	30000
5P CABLE B33		
1200657186	805006B33M005A	500
1200656673	805006B33M010A	1000
1200659452	805006B33M020	2000
1200656674	805006B33M020A	2000
1200656675	805006B33M030A	3000
1200656676	805006B33M050A	5000
1200656677	805006B33M100A	10000
1200656678	805006B33M150A	15000
1200657187	805006B33M200A	20000
1200657188	805006B33M300A	30000
1200657189	805006B33M400A	40000
1200657190	805006B33M500A	50000
4P CABLE B36		
1200656855	804006B36M0207Y	2000
1200657220	804006B36M0507Y	5000
1200657221	804006B36M0807Y	8000
1200657222	804006B36M1007Y	10000
1200657223	804006B36M1507Y	15000
1200657224	804006B36M2007Y	20000
5P CABLE B36		
1200656552	805006B36M1007Y	10000

MOLEX P/N	ENGINEERING No.	LENGTH [mm]
8P CABLE B41		
1200659680	808006B41M003	300
1200652302	808006B41M010	1000
1200652383	808006B41M010R	1000
1200659453	808006B41M020	2000
1200652384	808006B41M020R	2000
1200659776	808006B41M030	3000
1200652385	808006B41M030R	3000
1200656003	808006B41M040	4000
1200652386	808006B41M040R	4000
1200652304	808006B41M050	5000
1200652387	808006B41M050R	5000
1200652305	808006B41M100	10000
5P CABLE B42		
1200652279	805006B42M010	1000
1200652280	805006B42M020	2000
1200652281	805006B42M050	5000
1200652282	805006B42M100	10000
1200659546	805006B42M200	20000
1200659547	805006B42M300	30000
4P CABLE B55		
1200656634	804006B55M010Y	1000
1200656635	804006B55M020Y	2000
1200656636	804006B55M030Y	3000
1200657244	804006B55M040Y	4000
1200659943	804006B55M050Y	5000
1200657245	804006B55M060Y	6000
1200657246	804006B55M070Y	7000
1200657247	804006B55M080Y	8000
1200657248	804006B55M090Y	9000
1200659944	804006B55M100Y	10000
1200657249	804006B55M120Y	12000
1200656637	804006B55M150Y	15000
1200657250	804006B55M200Y	20000

MOLEX P/N	ENGINEERING No.	LENGTH [mm]
5P CABLE B55		
1200656680	805006B55M010Y	1000
1200656681	805006B55M020Y	2000
1200656682	805006B55M030Y	3000
1200659945	805006B55M050Y	5000
1200659946	805006B55M100Y	10000
1200659947	805006B55M150Y	15000

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

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:38

FUNCTIONAL SYMBOLS: EA = 0, EC = 0, ED = 0

DIVISIONAL SYMBOLS

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

DIMENSION UNITS	SCALE
mm	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: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO END TO END. UPDATED INSERT TO OVERMOLD DIM. AND NOTES

EC NO: 789428
DRWN: FDAFERNER 2023/01/31
CHK'D: RSILLER 2024/07/02
APPR: RSILLER 2024/07/02

INITIAL REVISION:
DRWN: MDHARMANTI 2021/10/01
APPR: RSILLER 2021/10/06

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC MA STR WSOR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200659964	PSD	000	B

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

Downloaded from Arrow.com.