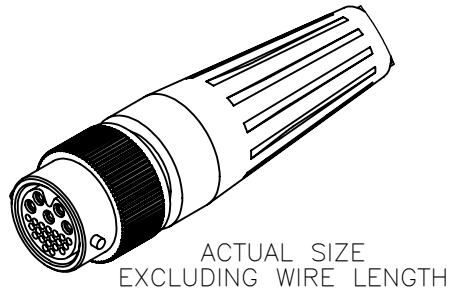
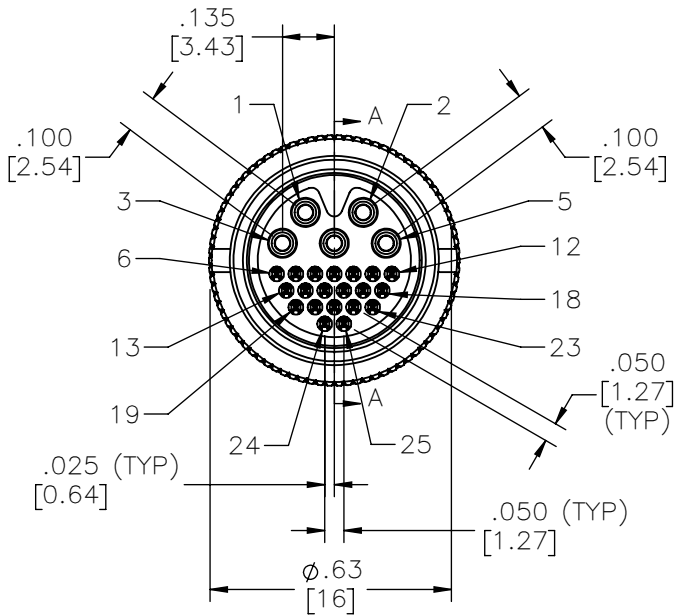
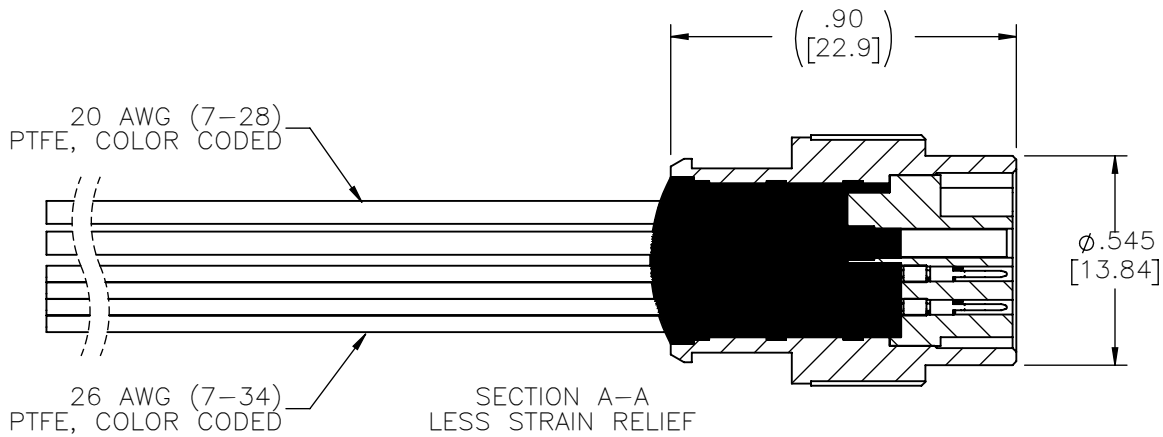
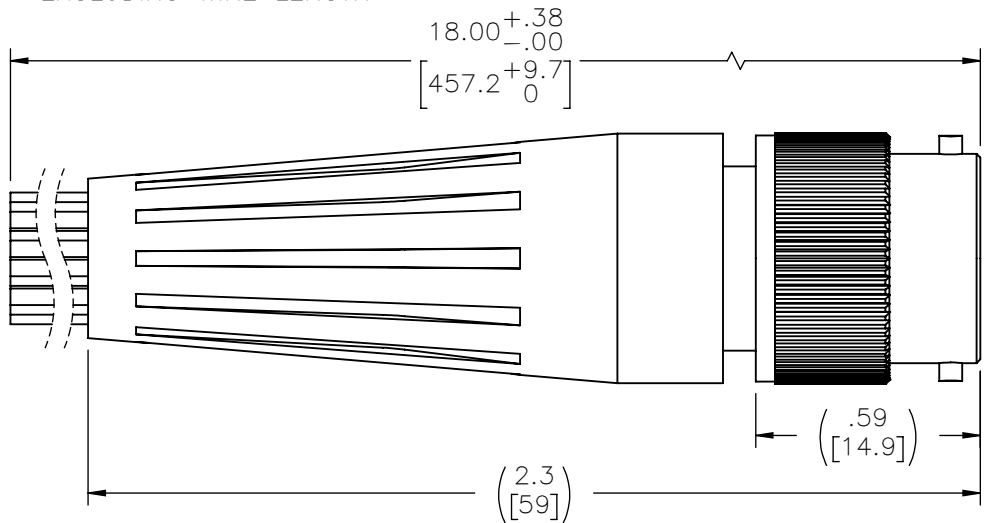


PART NO.	A90171-001	REV	ECO	DATE	APP
		B	104158	01-10-18	HV



INTERNAL USE ONLY  
SHEET 4 OF 4 IS  
MANUFACTURING  
LOADING DIAGRAM

CONTACT #	COLOR	AWG
1	BLACK	20 AWG
2	BROWN	
3	RED	
4	ORANGE	
5	YELLOW	
6	BLACK	26 AWG
7	BROWN	
8	RED	
9	ORANGE	
10	YELLOW	
11	GREEN	
12	BLUE	
13	VIOLET	
14	GRAY	
15	WHITE	
16	BLACK	
17	BROWN	
18	RED	
19	ORANGE	
20	YELLOW	
21	GREEN	
22	BLUE	
23	VIOLET	
24	GRAY	
25	WHITE	



NOTE:  
DIMENSIONS IN [ ] ARE IN  
MILLIMETERS UNLESS  
OTHERWISE NOTED AND ARE  
FOR REFERENCE ONLY

TMCP SLDW	THIRD ANGLE
	-TOLERANCES-
	UNLESS OTHERWISE NOTED
	DIMENSIONS IN INCHES
2	PL DEC ± .01
3	PL DEC ± .005
4	PL DEC ± .0005
	ANGLES ± 1°

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DFTM. ACW DATE 05-13-15 TITLE: (5-20) PIN MALE TWIST LOCK CONNECTOR

CHK'D. DATE

APP'D. DATE

**OMNETICS**  
CONNECTOR CORPORATION  
7260 COMMERCE CIRCLE EAST  
MINNEAPOLIS, MN 55432  
WWW.OMNETICS.COM

CAGE CODE	61873
DWG NO.	A90171-001
SHEET 1 OF 4	REV B
SCALE:	2:1

PART NO.	A90171-001	REV	ECO	DATE	APP
		B	104158	01-10-18	HV

MATERIALS & SPECIFICATIONS

INSULATOR  
POLYETHERIMIDE


CONTACT MATERIAL  
SIGNAL - COPPER ALLOY PER MIL-DTL-83513  
  
POWER - COPPER ALLOY PER SAE-AS39029

CONTACT FINISH  
SIGNAL - GOLD PLATE PER ASTM B488, TYPE II, CLASS 1.27,  
CODE C OVER NICKEL UNDERPLATE  
  
POWER - GOLD PLATE PER ASTM B488, TYPE II, CLASS 1.27  
CODE C OVER NICKEL UNDERPLATE

TERMINATION  
SIGNAL - 26 AWG, (7-34) SILVER COATED COPPER, PTFE,  
COLOR CODED  
  
POWER - 20 AWG, (7-28) SILVER COATED COPPER, PTFE,  
COLOR CODED

SHELLS  
BRASS ALLOY 360

SHELL FINISH  
ELECTROLESS NICKEL (200 MICROINCHES MINIMUM) PER SAE-  
AMS-2404

TMCP	THIRD ANGLE 
	-TOLERANCES-
SLDW	UNLESS OTHERWISE NOTED
	DIMENSIONS IN INCHES
	2 PL DEC ± .01
	3 PL DEC ± .005
	4 PL DEC ± .0005
	ANGLES ± 1°

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DFTM. ACW	DATE 05-13-15
CHK'D.	DATE
APP'D.	DATE

TITLE:  
**(5-20) PIN MALE  
TWIST LOCK  
CONNECTOR**

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7260 COMMERCE CIRCLE EAST  
MINNEAPOLIS, MN 55432  
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CAGE CODE <b>61873</b>
DWG NO. <b>A90171-001</b>
SHEET 2 OF 4
SCALE: 6:1
REV B

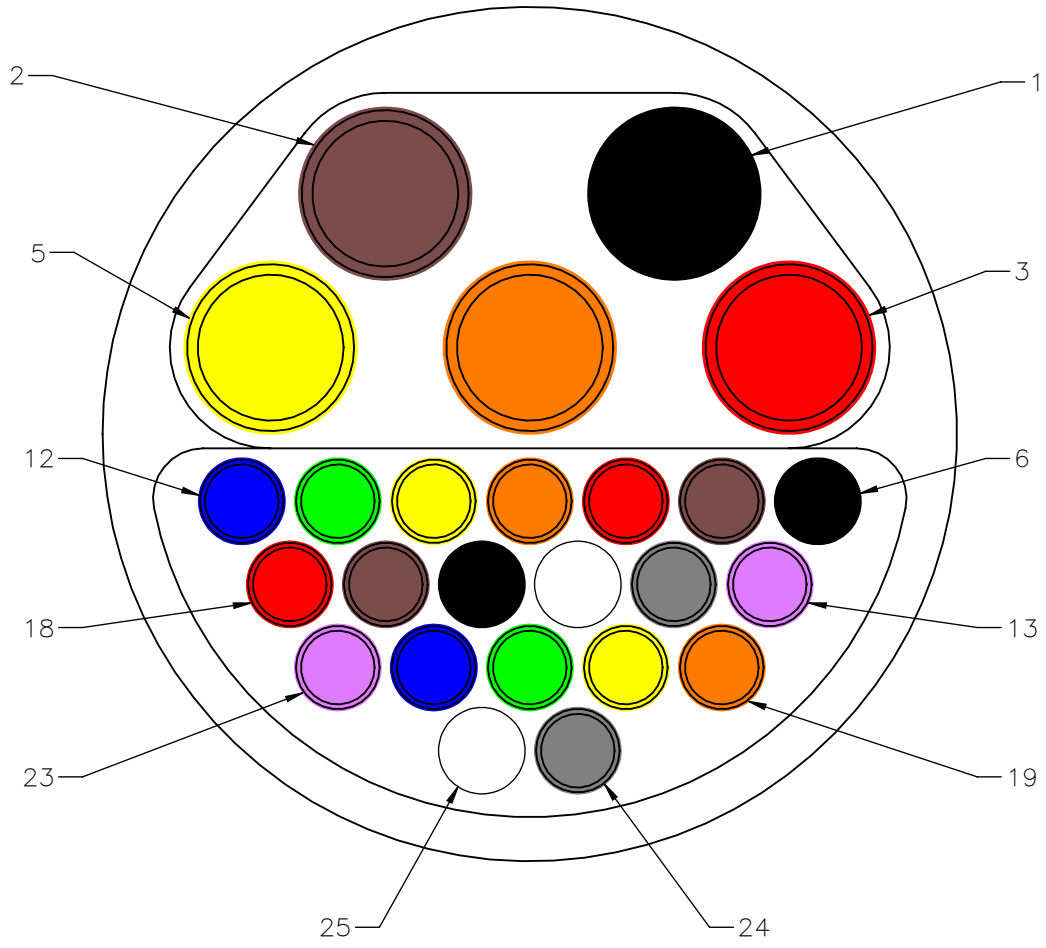
PART NO.	A90171-001	REV	ECO	DATE	APP
		B	104158	01-10-18	HV

PRODUCT FAMILY TESTED TO AND PASSED THE FOLLOWING PERFORMANCE SPECIFICATIONS

CURRENT RATING:	3 AMPS MAX (SIGNAL CONTACTS)
	10 AMPS MAX (POWER CONTACTS)
DIELECTRIC WITHSTANDING VOLTAGE:	600 VAC RMS (SIGNAL CONTACTS)
	1000 VAC RMS (POWER CONTACTS)
INSULATION RESISTANCE:	5000 MEGAOHMS MIN @ 500 VDC
CONTACT RESISTANCE:	26 MILLIOHMS (65 mV) MAX @ 2.5 AMPS (SIGNAL CONTACTS)
	7 MILLIOHMS (55 mV) MAX @ 7.5 AMPS (POWER CONTACTS)
CONTACT ENGAGEMENT & SEPARATION FORCES:	6 OZ MAX/CONTACT (ENGAGEMENT SIGNAL)
	.5 OZ MIN/CONTACT (SEPARATION SIGNAL)
	18 OZ MAX/CONTACT (ENGAGEMENT POWER)
	.7 OZ MIN/CONTACT (SEPARATION POWER)
TEMPERATURE CYCLING:	-55°C TO +125°C, 5 CYCLES
VIBRATION*:	EIA-364-28, TEST CONDITION IV, 20 g's
MECHANICAL SHOCK*:	EIA-364-27, TEST CONDITION D, 300 g's
DURABILITY:	500 CYCLES

\*PENDING COMPLETION OF TESTING

TMCP SLDW	THIRD ANGLE	THIS DRAWING CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION WHICH IS THE PROPERTY OF OMNETICS CONNECTOR CORP. THIS DOCUMENT MAY NOT, IN WHOLE OR IN PART, BE DUPLICATED, OR DISCLOSED FOR ANY PURPOSE, WITHOUT WRITTEN PERMISSION FROM OMNETICS CONNECTOR CORP.	<b>OMNETICS</b> CONNECTOR CORPORATION 7260 COMMERCE CIRCLE EAST MINNEAPOLIS, MN 55432 WWW.OMNETICS.COM	CAGE CODE <b>61873</b>
	-TOLERANCES- <small>UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES</small>			DWG NO. <b>A90171-001</b>
	2 PL DEC ± .01 3 PL DEC ± .005 4 PL DEC ± .0005 ANGLES ± 1°	DFTM. ACW DATE 05-13-15 CHK'D. DATE APP'D. DATE	TITLE: <b>(5-20) PIN MALE TWIST LOCK CONNECTOR</b>	SHEET 3 OF 4 SCALE: 2:1
				REV B



CONTACT #	COLOR	AWG
1	BLACK	20 AWG
2	BROWN	
3	RED	
4	ORANGE	
5	YELLOW	
6	BLACK	26 AWG
7	BROWN	
8	RED	
9	ORANGE	
10	YELLOW	
11	GREEN	
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16	BLACK	
17	BROWN	
18	RED	
19	ORANGE	
20	YELLOW	
21	GREEN	
22	BLUE	
23	VIOLET	
24	GRAY	
25	WHITE	

THIRD ANGLE

—TOLERANCES—  
UNLESS OTHERWISE NOTED  
DIMENSIONS IN INCHES

2 PL DEC ± .01  
3 PL DEC ± .005  
4 PL DEC ± .0005  
ANGLES ± 1°

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DFTM. ACW DATE 05-13-15  
CHK'D. DATE  
APP'D. DATE

TITLE: (5-20) PIN MALE TWIST LOCK CONNECTOR

**OMNETICS**  
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7260 COMMERCE CIRCLE EAST  
MINNEAPOLIS, MN 55432  
WWW.OMNETICS.COM

CAGE CODE **61873**  
DWG NO. **A90171-001**  
SHEET 4 OF 4  
SCALE: 1:1

REV B