OVERVIEW

MOTOR SPECIFICATIONS

LINEAR SYSTEMS

CONNECTIVITY

PERIPHERALS

IP 65 MODELS & CONNECTIVITY

POWER SUPPLIES & SHUNTS
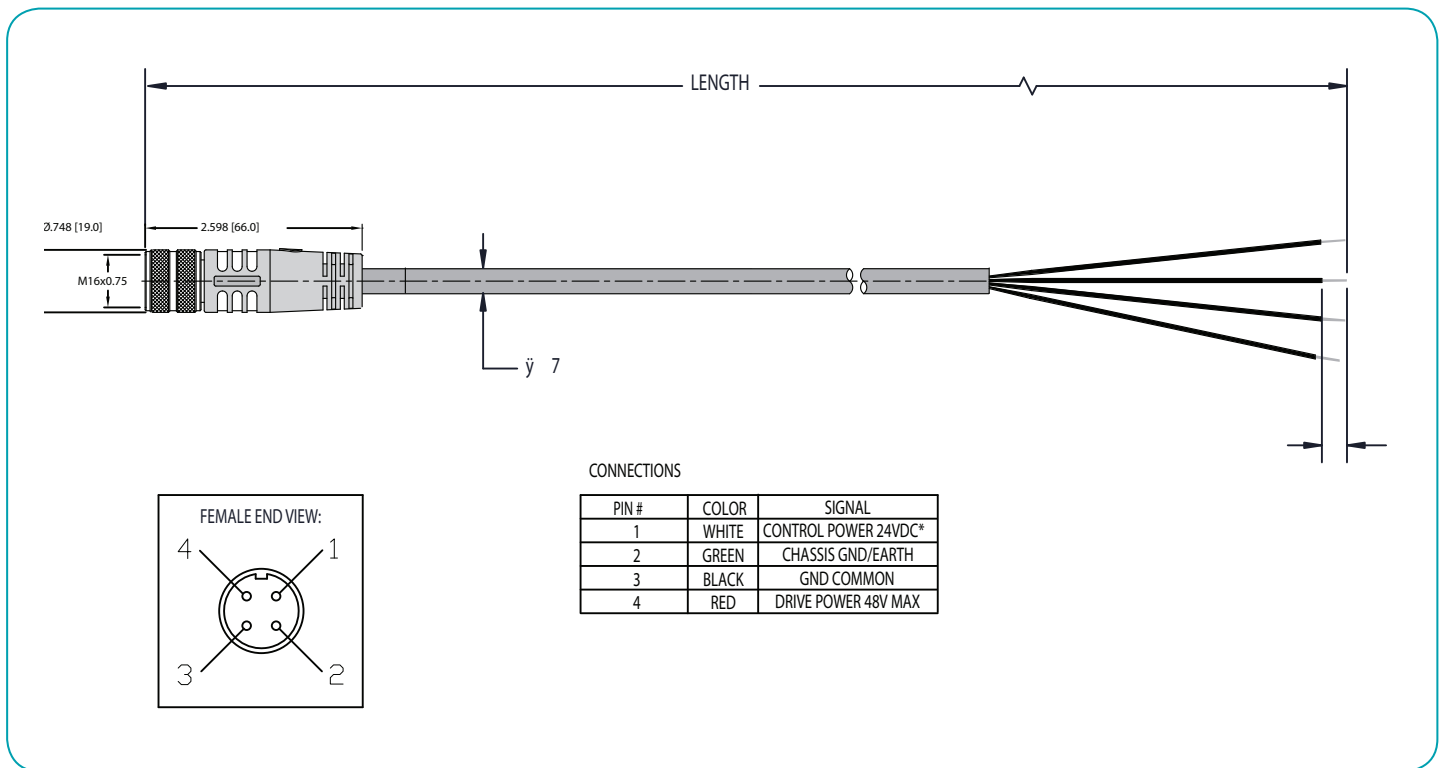
GEAR HEADS

SOFTWARE

APPENDIX

Drive and Control Power Cable

Main Power Input Cable supplies connection point to drive power and control power. This cable is required to power up all DC input sealed motors. Standard M16 threaded connector. Brass pins w/Gold Plating, Maximum 12.0A . Foil shield with Black PVC jacket ~7.4mm Dia.

Part Number	Description	Length
CBLIP-PWR-FL-1M	Flying Lead Strait Connector	1 meter
CBLIP-PWR-FL-3M	Flying Lead Strait Connector	3 meters
CBLIP-PWR-Y1-3MRA	Flying Lead Right Angle Connector	3 meters

FEMALE END VIEW:

CONNECTIONS

| PIN #	COLOR	SIGNAL
1	WHITE	CONTROL POWER 24VDC*
2	GREEN	CHASSIS GND/EARTH
3	BLACK	GND COMMON
4	RED	DRIVE POWER 48V MAX

NOTE: Drive Power and Control Power are Separate Inputs. Control power is rated to a maximum range of 18 to 32VDC. Drive Power is from 18 to 48VDC max.

ANIMATICS®

CBLIP-PWR4-1-xM (Animatics™ "Add-A-Motor™" Cable)

CBLIP-PWR4-Y1-xM Add-A-Motor cable for IP65 series motor Drive and Control Power Daisy chain cable for power distribution to multiple motors.
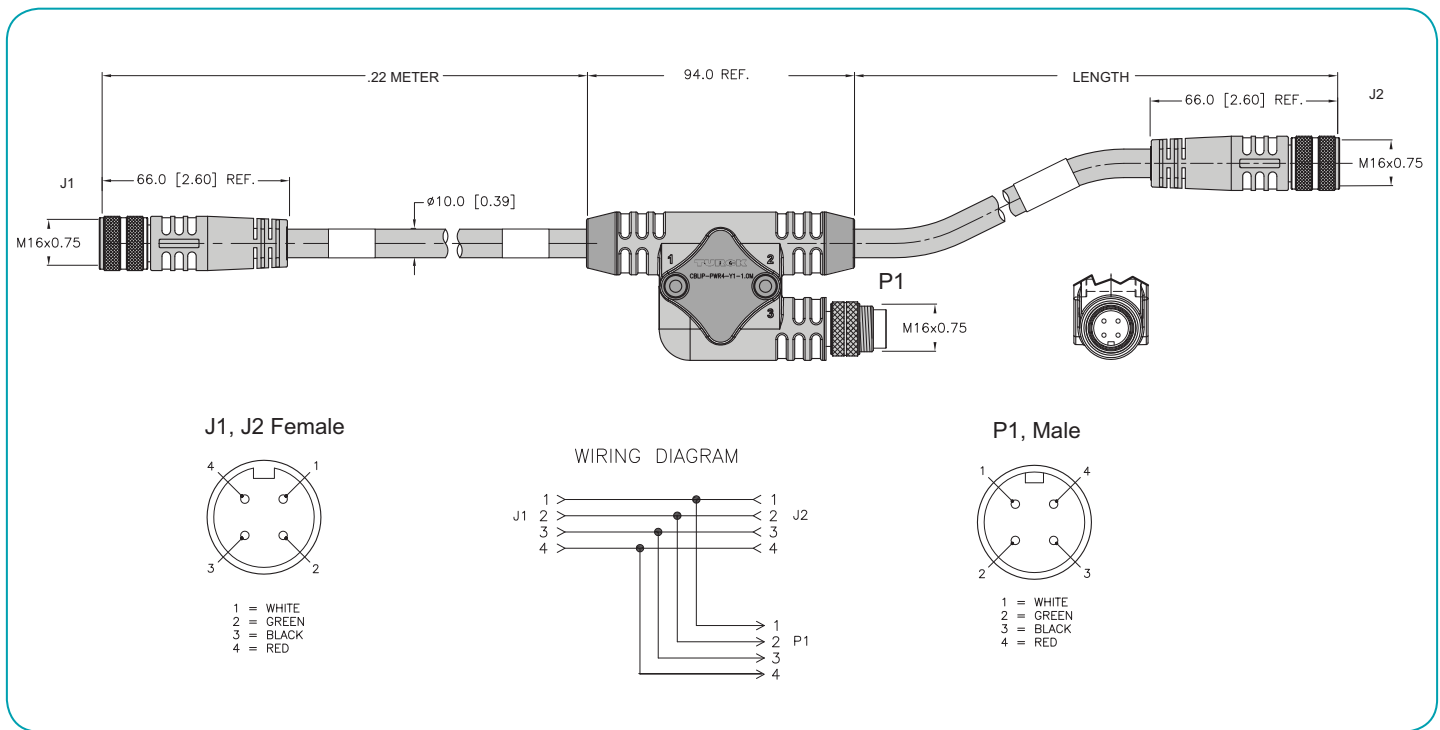
CBLIP-PWR4-Y1-xM series is the main power cable for IP65 motors featuing easy daisy chaining of both drive and control power to multiple motors.

This cable plugs into the M16 4 pin connector allowing split off to another cable and motor.

CBLIP-PWR4-FL-xM
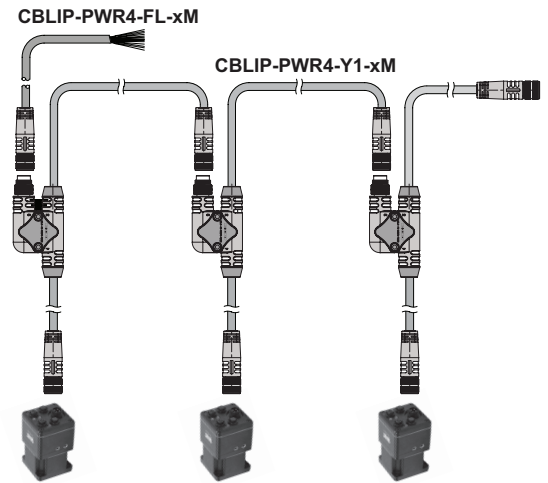
CBLIP-PWR4-Y1-xM

Part Number	Length
CBLIP-PWR4-Y1-0.5M	0.5 meters
CBLIP-PWR4-Y1-1.0M	1.0 meters
CBLIP-PWR4-Y1-3.0M	3.0 meters

Note: Maximum of 15 Amps continuous RMS load per total daisy chain transmission line.

.22 METER   94.0 REF.   LENGTH

J1   66.0 [2.60] REF.   66.0 [2.60] REF.   J2

M16x0.75   ø10.0 [0.39]   M16x0.75

CBLIP-PWR4-Y1-1.0M

P1

M16x0.75

J1, J2 Female

4   1
3   2

1 = WHITE
2 = GREEN
3 = BLACK
4 = RED

WIRING DIAGRAM

1 > < 1
J1 2 > < 2 J2
3 > < 3
4 > < 4

1 >
2 > P1
3 >
4 >

P1, Male

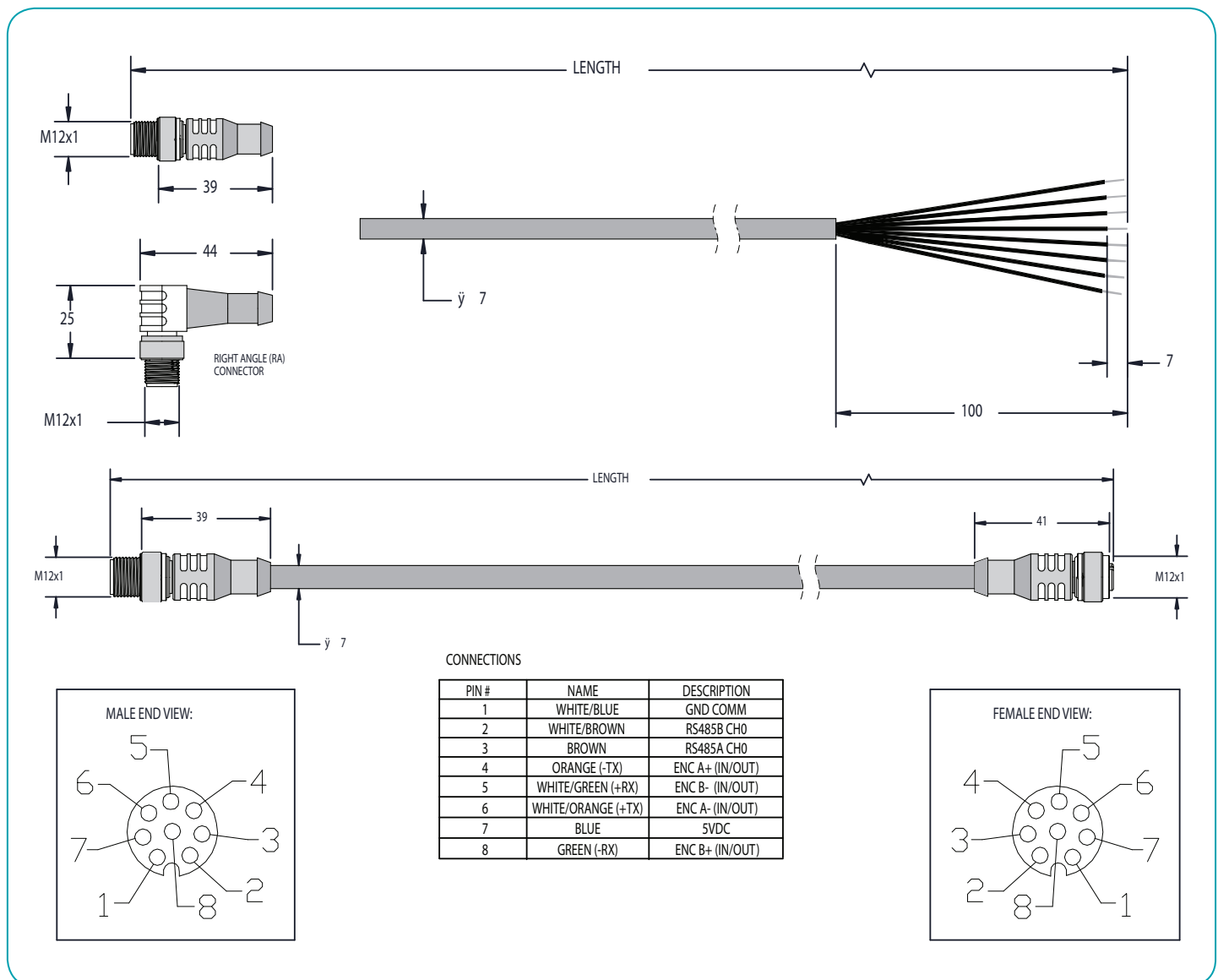1   4
2   3

1 = WHITE
2 = GREEN
3 = BLACK
4 = RED

NOTE: Drive Power and Control Power are Separate Inputs. Control power is rated to a maximum range of 18 to 32VDC. Drive Power is from 18 to 48VDC max.

Communications and Encoder Bus Flying Lead Cable

This cable is required for basic communications to the main RS485 Port. The communications port also contains pins for the bi-directional encoder bus. Data dates rated to>1MHz. CBLIP-COM series cables are sealed M12 threaded connector, brass pins w / gold plating, maximum 2.0A. foil shield with black PVC jacket ~7.4mm dia.

Part Number	Description	Length
CBLIP-COM-FL-1M	Flying Lead Strait Connector	1 meter
CBLIP-COM-FL-3M	Flying Lead Strait Connector	3 meters
CBLIP-COM-FL-1MRA	Flying Lead Right Angle Connector	1 meter
CBLIP-COM-FL-3MRA	Flying Lead Right Angle Connector	3 meters
CBLIP-COM-EXT-1M	Comm. Extension Cable	1 meters
CBLIP-COM-EXT-2M	Comm. Extension Cable	2 meters
CBLIP-COM-EXT-3M	Comm. Extension Cable	3 meters

CONNECTIONS

PIN #	NAME	DESCRIPTION
1	WHITE/BLUE	GND COMM
2	WHITE/BROWN	RS485B CH0
3	BROWN	RS485A CH0
4	ORANGE (-TX)	ENC A+ (IN/OUT)
5	WHITE/GREEN (+RX)	ENC B- (IN/OUT)
6	WHITE/ORANGE (+TX)	ENC A- (IN/OUT)
7	BLUE	5VDC
8	GREEN (-RX)	ENC B+ (IN/OUT)

MALE END VIEW:

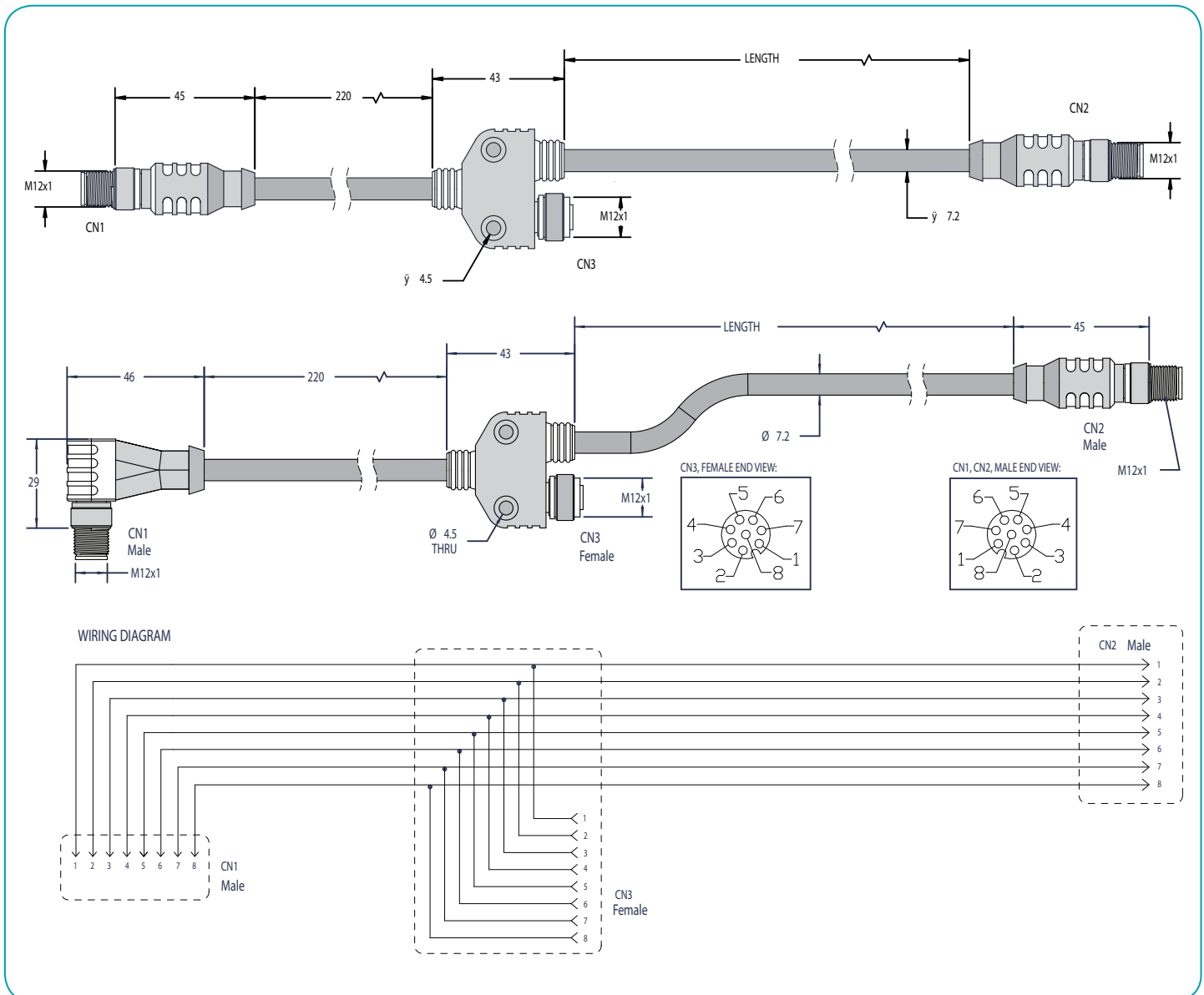FEMALE END VIEW:

Communications and Encoder Bus Y Cable

This cable is allows for daisy chain connection from one motor to the next. The communications port also contains pins for the bi-directional encoder bus. Data dates rated to>1MHz CBLIP-COM series cables are sealed M12 threaded connector brass pins w / gold plating, maximum 2.0A. foil shield with black PVC jacket ~7.4mm dia.

Strait Connector	
Part Number	Length
CBLIP-COM-Y1-0.5M	0.5 meters
CBLIP-COM-Y1-1M	1 meters
CBLIP-COM-Y1-3M	3 meters

Right Angle Connector	
Part Number	Length
CBLIP-COM-Y1-0.5MRA	0.5 meters
CBLIP-COM-Y1-1MRA	1 meters
CBLIP-COM-Y1-3MRA	3 meters

Animatics Corporation • All integrated motor products made by Animatics are covered by patent number 5,912,541
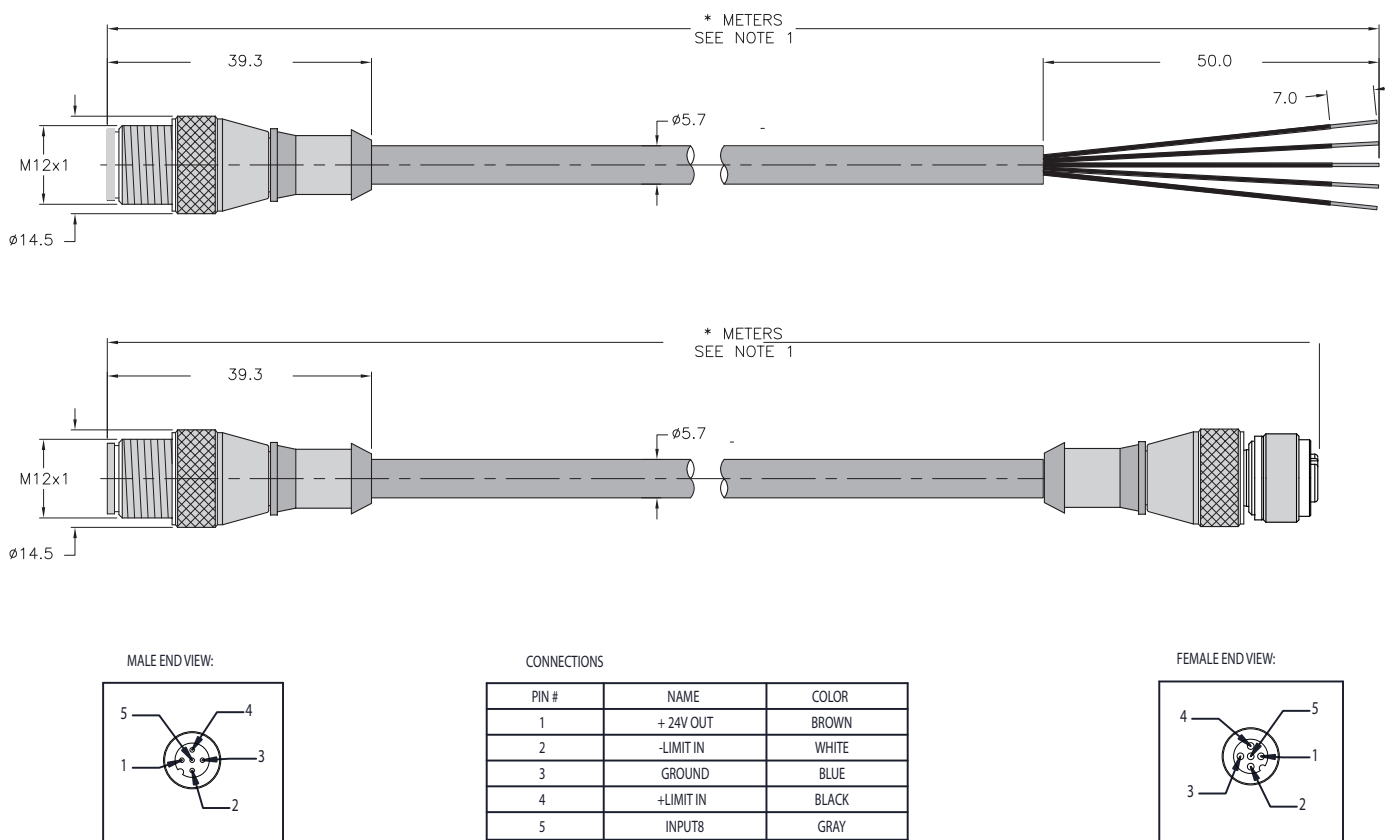tel: 408.748.8721 • fax: 408.748.8725 • www.animatics.com

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Travel Limit Input Cables

The Limit FL1 cables are standard unshielded cables intended for use with I/O signals only.

CBLIP series cables are sealed M12 threaded connector Brass pins w/Gold plating, Maximum 4.0A 250V
Foil shield with Black PVC jacket ~7.4mm Dia.

Part Number	Description	Length
CBLIP-LIM-FL-1M	Flying Lead Strait Connector	1 meter
CBLIP-LIM-FL-3M	Flying Lead Strait Connector	3 meters
CBLIP-LIM-EXT-1M	Limit Bus Extension Cable	1 meter
CBLIP-LIM-EXT-2M	Limit Bus Extension Cable	2 meters
CBLIP-LIM-EXT-3M	Limit Bus Extension Cable	3 meters

MALE END VIEW:

CONNECTIONS

PIN #	NAME	COLOR
1	+ 24V OUT	BROWN
2	-LIMIT IN	WHITE
3	GROUND	BLUE
4	+LIMIT IN	BLACK
5	INPUT8	GRAY

FEMALE END VIEW:

CBLIP-LIM-Y1-xM-xm (Animatics™ "Add-A-Motor™" Cable)

CBLIP-LIM-Y1 series cables are intended as a break out cable for the travel limit input connectors of the IP65 sealed SmartMotors. As seen below, this cable terminates to two PicoFast standard sensor connectors allowing direct field connection to various proximity sensors on the market.

Length options are based on connector 1 and 2 where the first length is for cable length to connector 1 and the second is for length to connector 2.

Part Number	Length
CBLIP-LIM-Y1-0.5M-1M	IP Limit Y Cable, 0.5 X 1.0 Meter
CBLIP-LIM-Y1-0.5M-2M	IP Limit Y Cable, 0.5 X 2.0 Meter
CBLIP-LIM-Y1-3M-3M	IP Limit Y Cable, 3.0 M X 3.0 Meter

Animatics Corporation • All integrated motor products made by Animatics are covered by patent number 5,912,541
tel: 408.748.8721 • fax: 408.748.8725 • www.animatics.com
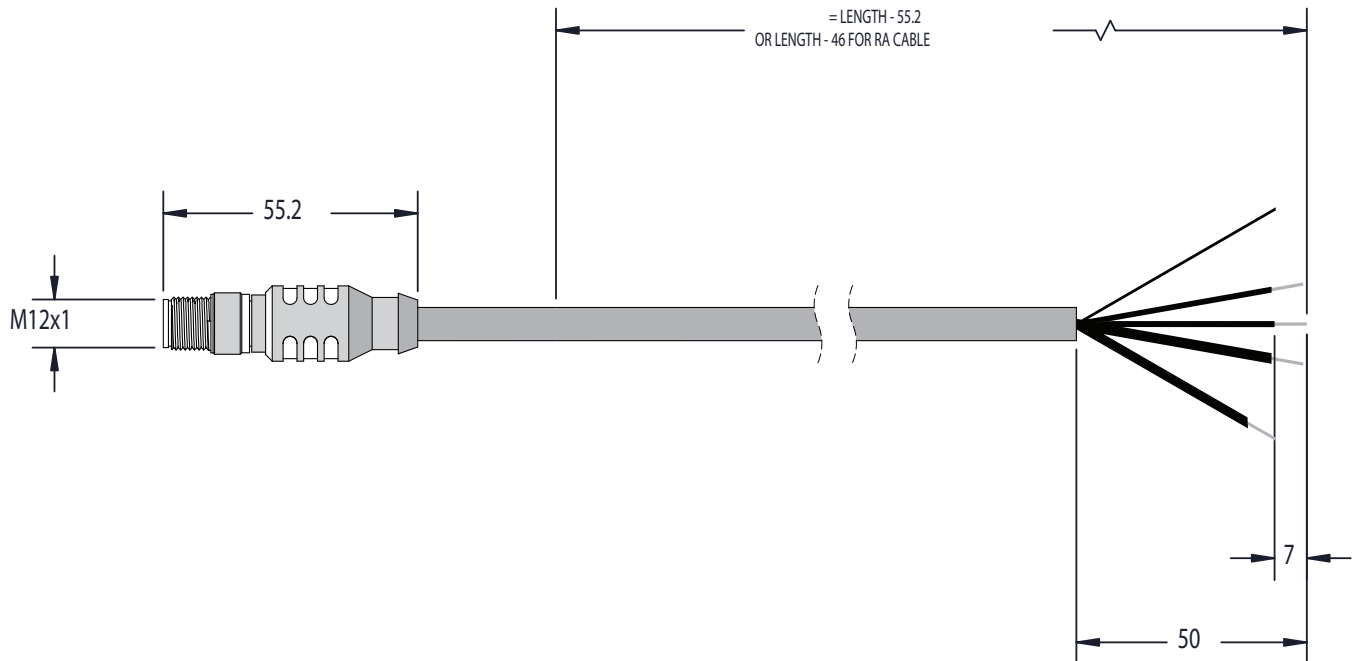
165
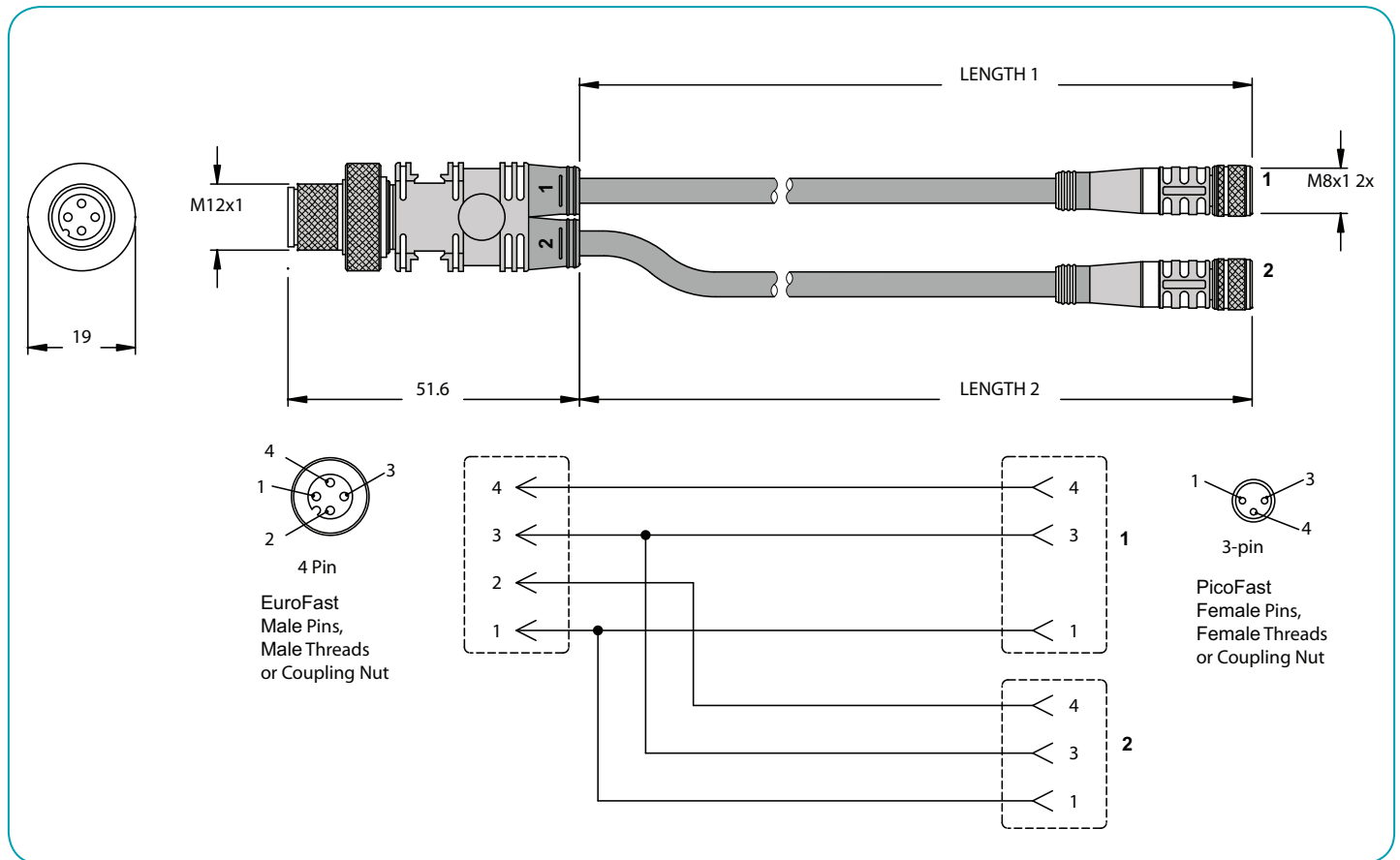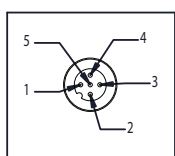
CAN Bus Flying Lead Cables, Straight

The CAN FL1 cables are standard CAN bus communications cables rated to >1MB data transmission rates.

CBLIP series cables are sealed M12 threaded connector brass pins w / gold plating, maximum 4.0A. 250V foil shield with black PVC jacket ~7.4mm dia.

| Part Number	Description	Length
CBLIP-CAN-FL-1M	Flying Lead Strait Connector	1 meter
CBLIP-CAN-FL-3M	Flying Lead Strait Connector	3 meters
CBLIP-CAN-EXT-1M	CAN Bus Extension Cable	1 meter
CBLIP-CAN-EXT-2M	CAN Bus Extension Cable	2 meters
CBLIP-CAN-EXT-3M	CAN Bus Extension Cable	3 meters
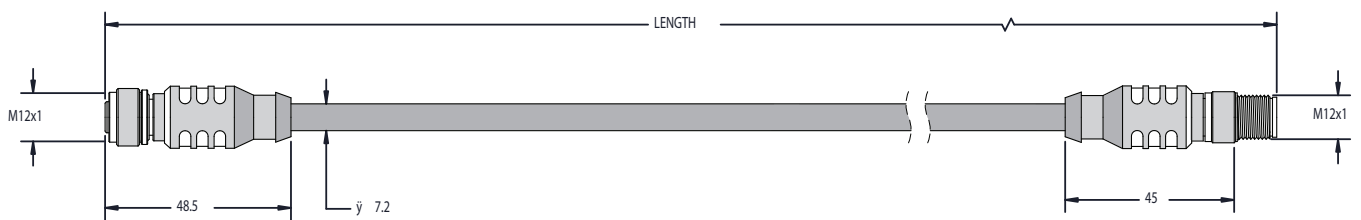
CONNECTIONS

| PIN #	NAME	COLOR
1	SHIELD	BARE
2	+ VOLTAGE	RED
3	- VOLTAGE	BLACK
4	CAN_H	WHITE
5	CAN_L	BLUE

ANIMATICS®
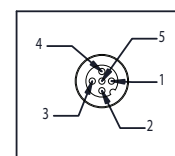
CAN Bus Y Cables, Straight Connector

The CAN Y1 series is meant for CAN Bus communications connectivity between two motors with the addition of a T-connector in line. Rated to >1MB data transmission rates.
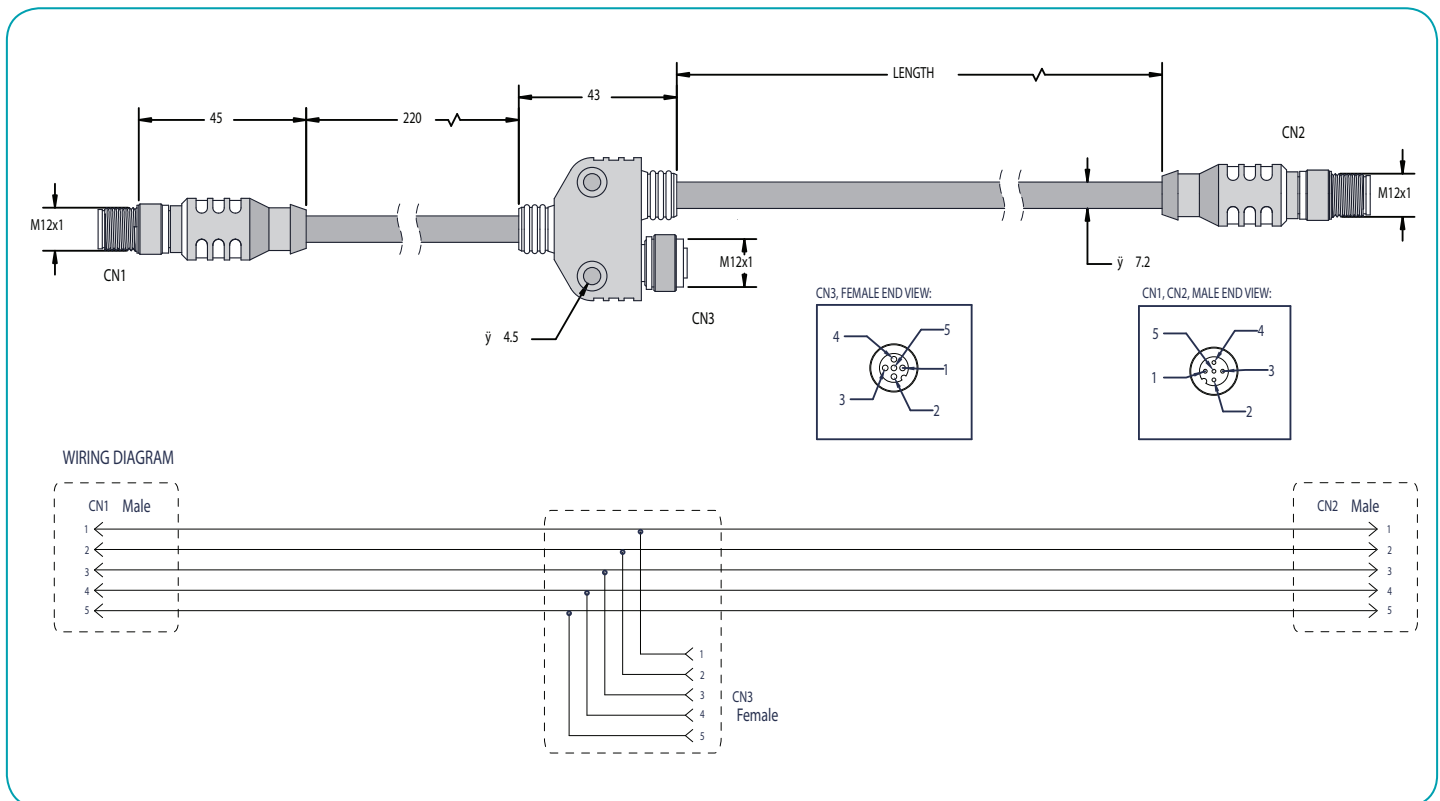
This allows for cascading of multiple SmartMotor servos and the addition of a shunt resistor when required.

CBLIP series cables are sealed M12 threaded connector brass pins w / gold plating, maximum 4.0A. 250V foil shield with black PVC jacket ~7.4mm dia.

CANopen DeviceNet (5-Pin)

CBLIP-CAN-FL (5 Pin)

CBLIP-CAN-Y1-xM

CBLIP-TRF120
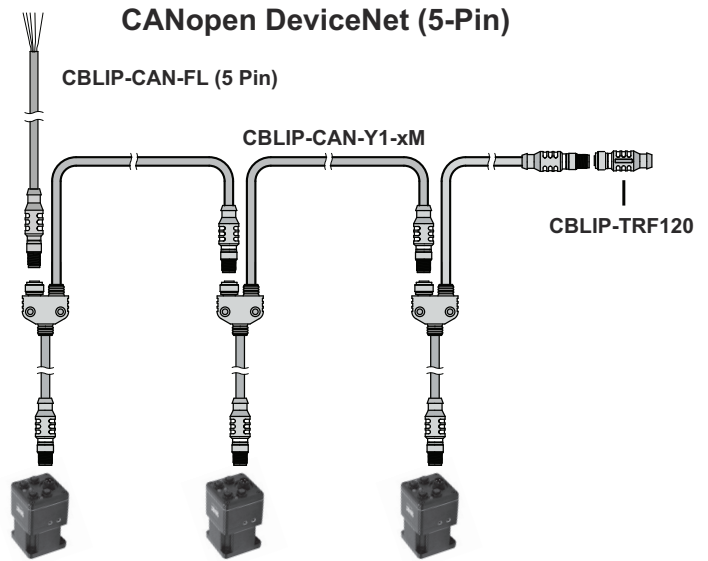
Strait Connector

Part Number	Length
CBLIP-CAN-Y1-0.5M	0.5 meters
CBLIP-CAN-Y1-1M	1 meters
CBLIP-CAN-Y1-3M	3 meters

Note: At least one shunt resistor is required on ALL CAN bus networks. Please consult the factory for additional information.

CBLIO-IO   24VDC TTL I/O Cable

The expanded I/O cables are for use with the -AD1 expanded I/O option on all Class 5 IP65 sealed SmartMotor servos. Each cable is a 12 conductor shielded cable. 2 conductors are for +24VDC I/O power. The other 10 are for 10 channels of I/O.

CBLIP series cables are sealed M12 threaded connector brass pins w / gold plating, maximum 4.0A. 250V foil shield with black PVC jacket ~7.4mm dia.

Part Number	Description	Length
CBLIP-IO-FL-1M	Flying Lead Strait Connector	1 meter
CBLIP-IO-FL-3M	Flying Lead Strait Connector	3 meters
CBLIP-IO-EXT-1M	I/O Extension Cable	1 meters
CBLIP-IO-EXT-2M	I/O Extension Cable	2 meters
CBLIP-IO-EXT-3M	I/O Extension Cable	3 meters
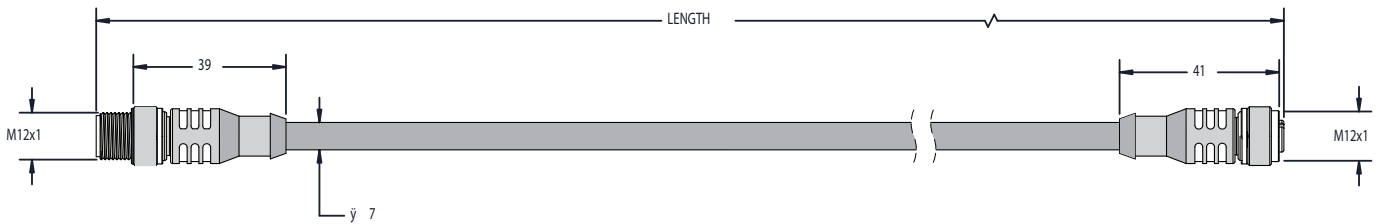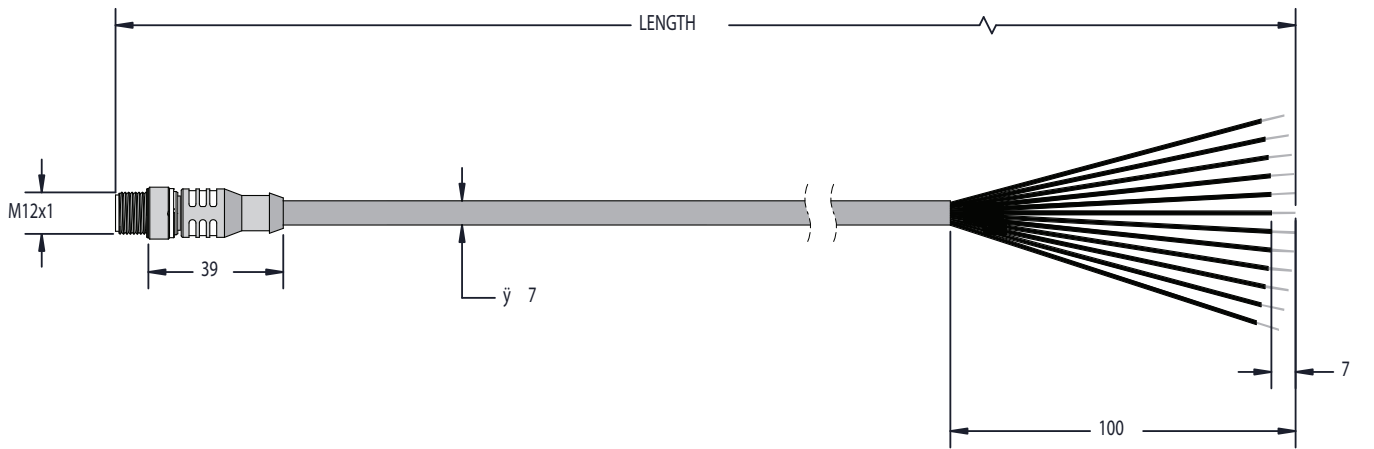
CONNECTIONS

PIN #	NAME
1	GREEN
2	VIOLET
3	PINK
4	WHITE
5	TAN
6	GRAY
7	BLACK
8	ORANGE
9	RED
10	YELLOW
11	BROWN
12	BLUE

MALE END VIEW:

FEMALE END VIEW: