

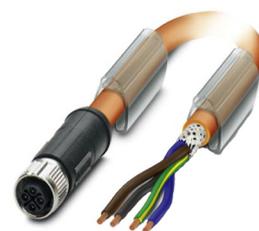
Inspiring Motion

Since 1988

Gold Duet

100VDC, 200VDC, Flange Sizes: 40, 60

Gold Duet Cable Kit



April 2018 (Ver. 3.001)

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Catalog Number

CBL-GDUETKIT02

Revision History

Version	Date	Details
Ver. 1.000	Dec 2013	Initial release
Ver. 1.001	Dec 2013	General document update
Ver. 2.000	July 2017	Upgrade
Ver. 3.000	Sep 2017	Updated power cable details
Ver. 3.001	Apr 2018	Updated to connect PE to Shield in Chapter 2 Power Cable



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1. Introduction

This document provides the wiring details for the cables used to connect Elmo's Gold Duet servo drive with the end-user application. The servo drive-front pinouts are provided in Chapter 3 of the *Gold Duet Digital Servo Drive Installation Guide*.

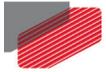
The cables come in one length: 1.5 meters (4.921 feet).

1.1. Cable Kit

The catalog number for the Gold Duet cable kit is CBL-GDUETKIT02.

The Gold Duet cable kit includes the following:

ELMO Part Number	Function
CBL-M88W1M5	I/O M8 & leads IO-STO-VL Cable
CBL-M8RJ452M	ETHERCAT M8 4PINS TO RJ45 In/Out Cables
CBL-M12P04P-1.5	Power cable M12 & leads



2. Power Cable (CBL- M12P04P-1.5)

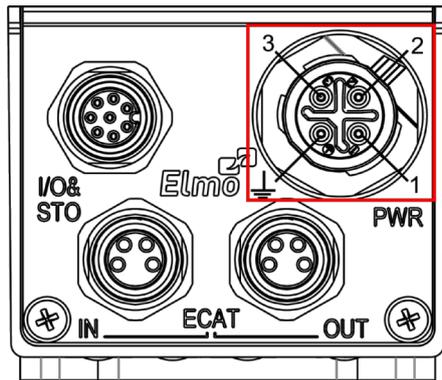
The part number (P/N) of the power cable is CBL-M12P04P-1.5.

The cable is open on the second side so that it can be connected to the power supply.

The general pinout of the power cable is as follows:

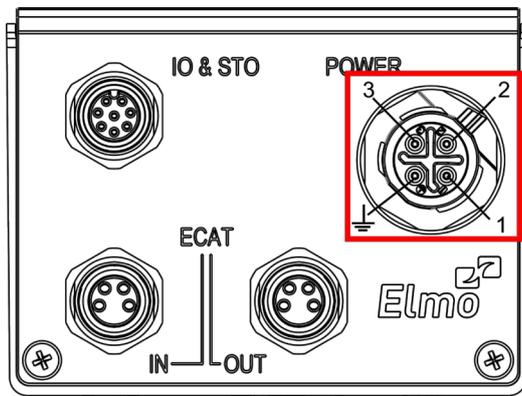
Pin	Signal	Color
1	Reserved	Brown
2	PR	Blue
3	VP+	Black
$\frac{1}{\equiv}$ (PE)	Cable between PE and Shield internally short	Yellow/Green
Shield		

Pin Positions



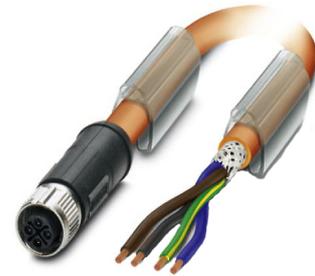
GDUET-40_032Nm_B-F

G-DUET-40 Connectors Interface



GDUET-60_127Nm_C-F

G-DUET-60 Connectors Interface



4-Pin M12 (Power) Female Connector

Figure 1: M12 socket 4-pos S-encoded Power Male Connector

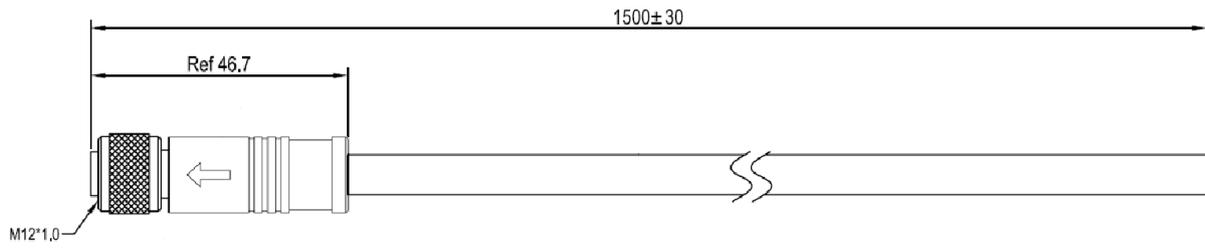


Figure 2: Power Cable (CBL- M12P04P-1.5)



3. IO-STO-VL Cable (CBL-M88W1M5)

The feedback port I/O cable is an 8 pin 26-AWG cable of overall length 1.5 m. It is connected using an 8-pin male connector of diameter 10.5 mm and length 40.4 mm with an M8 x 1.0 mm screw thread. The part number (P/N) of this cable is CBL-M88W1M5. The cable is open on the motor side so that it can be connected to customer-specific connectors/motor encoder.

The Gold Duet has up to four digital inputs and 1 digital outputs, which can be configured to the following options:

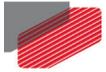
- Source mode – PLC voltage level
- Sink mode – PLC voltage level

Gold Duet versions S, H - with STO, has two digital inputs

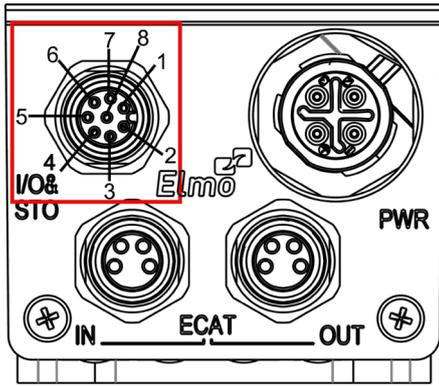
Gold Duet versions V, W - without STO, have four digital inputs

The general pinout of the Gold Duet port I/O feedback cable is therefore as follows:

Cat No.	S or H		V or W	
Pin	Signal	Cable Color	Signal	Cable Color
1	STO1	White	IN3	White
2	STO2	Brown	IN4	Brown
3	STO_RET	Green	IN_RET3, 4	Green
4	IN2	Yellow		
5	IN1	Grey		
6	COMRET	Pink		
7	OUT1	Blue		
8	VL+	Red		

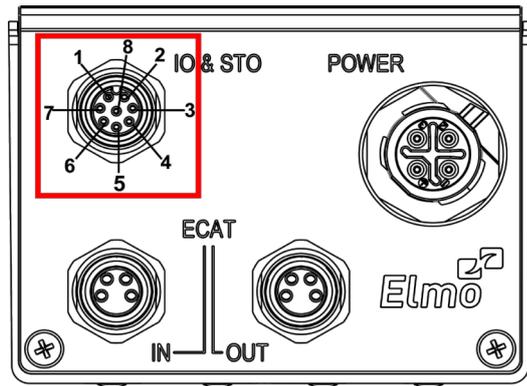


Connectors



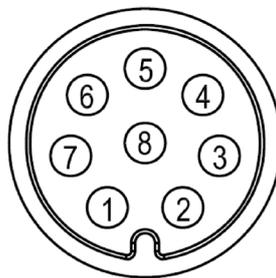
GDUET-40_016Nm_WB_B-G

G-DUET-40 Connectors Interface



GDUET-60_127Nm_C-G

G-DUET-60 Connectors Interface



Pin assignment

M8 8-pin Female Connector



Figure 3: M8 Male Cable Connector

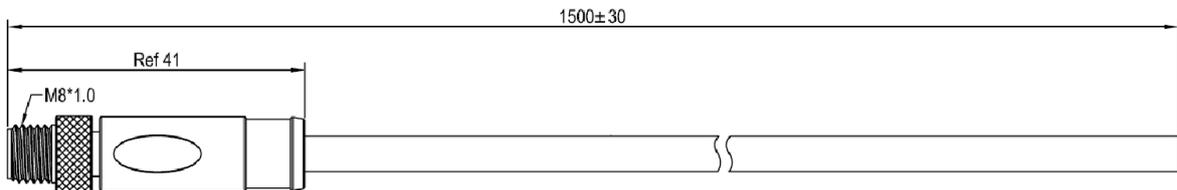


Figure 4: IO-STO-VL Cable (CBL-M88W1M5)



4. EtherCAT IN Cable (CBL-M8RJ452M)

The part number (P/N) of the EtherCAT In cable is CBL-M8RJ452M. The cable is an RJ 45 plug straight to an M8 straight 4-pin (P2) male PVC cable connector.

The general pinout of the EtherCAT In cable is as per Figure 5:

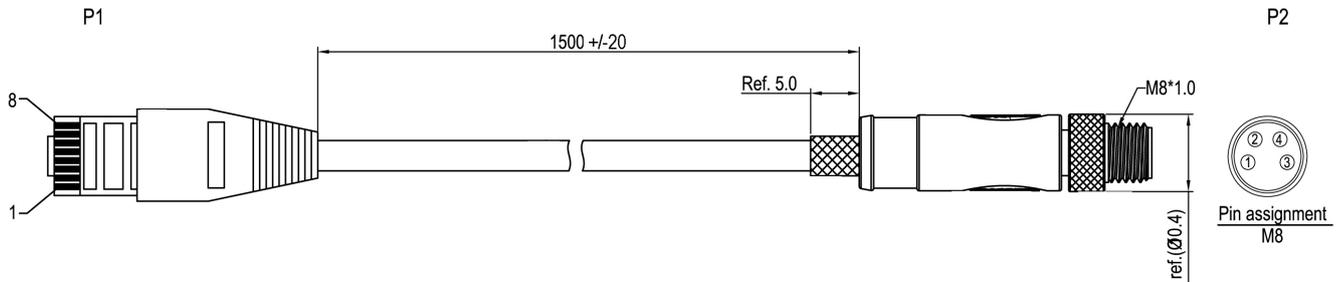
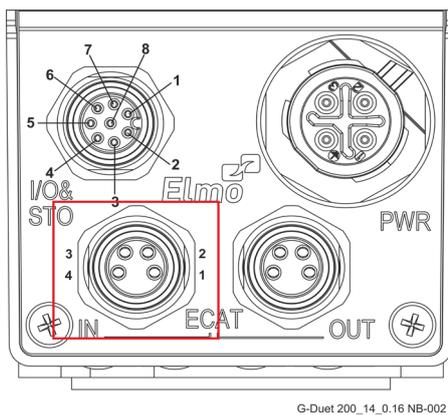


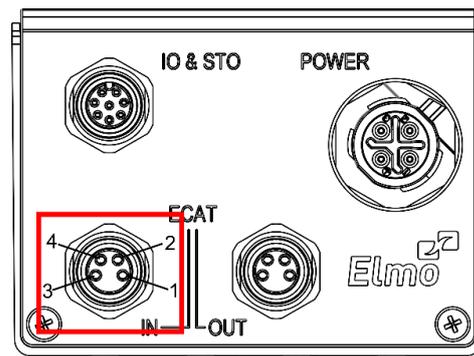
Figure 5: EtherCAT In Cable

Signal	Pin P2 M8 4-pin Male	Color	Pin P1 RJ-45	Twisted & Shielded Wire
EtherCAT_IN_TX+/Ethernet_TX+	1	White-Orange	1	Pair
EtherCAT_IN_TX-/Ethernet_TX-	4	Orange	2	
EtherCAT_IN_RX+/Ethernet_RX+	2	White-Blue	3	Pair
EtherCAT_IN_RX-/Ethernet_RX-	3	Blue	6	
	shell	Braid	shell	

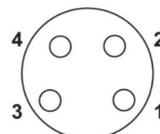
Pin Positions



G-DUET-40 Connectors Interface

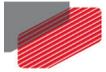


G-DUET-60 Connectors Interface



M8 4 pins Female

Table 1: EtherCAT IN - Pin Assignments



5. EtherCAT OUT Cable (CBL-M8RJ452M)

The part number (P/N) of the EtherCAT Out cable is CBL-M8RJ452M. The cable is an RJ 45 plug straight to an M8 straight 4-pin (P2) male PVC cable connector.

The general pinout of the EtherCAT Out cable is as per Figure 5:

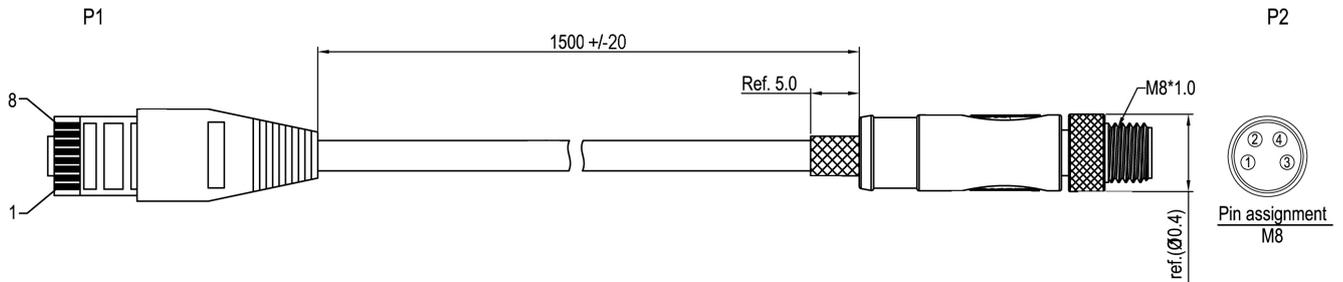
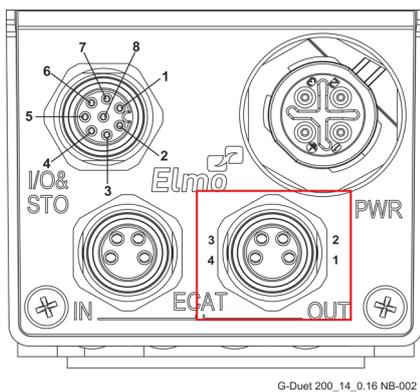


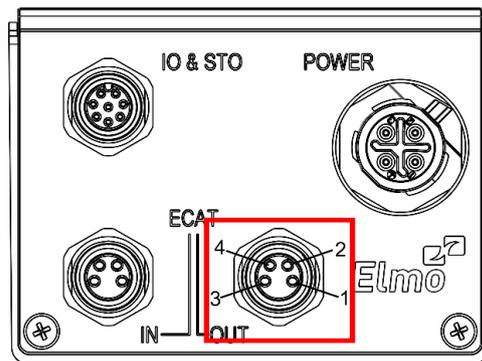
Figure 6: EtherCAT Out Cable

Signal	Pin P2 M8 4-pin Male	Color	Pin P1 RJ-45	Twisted & Shielded Wire
EtherCAT_OUT_TX+	1	White-Orange	1	Pair
EtherCAT_OUT_TX-	4	Orange	2	
EtherCAT_OUT_RX+	2	White-Blue	3	Pair
EtherCAT_OUT_RX-	3	Blue	6	
	shell	Braid	shell	

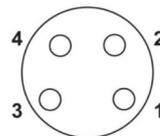
Pin Positions



G-DUET-40 Connectors Interface



G-DUET-60 Connectors Interface



M8 4 pins Female

Table 2: EtherCAT OUT - Pin Assignments



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