



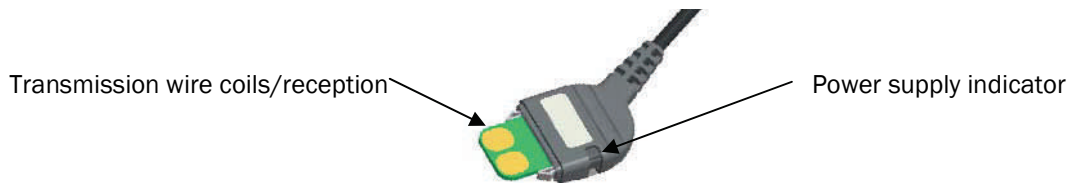
Data Transfer Cable

Instruction Manual



General

The cable enables the direct connection of the 798 caliper to a personal computer, a dedicated printer or to a display unit. The communication is accomplished via the inductive coupling between the instrument and the peripheral unit.



Inductive USB Cable

The power supply of the connector is supplied by the +5V DC line of the USB connection. The use of the USB cable requires the installation of a driver, supplied on a CD. Refer to the Quick Installation Guide.

USB connection

The USB connector allows communication with the instrument. A request for data in the form of an ASCII “?”, carriage return, or key stroke from the keyboard will initiate the transmission of data.

Connection

Terminal Function	Name	USB Connector	Cable Color	Line Status
Positive Supply	V+	4	White	V+
Negative Supply	GND	1	Brown	GND
Data Instrument	D+	2	Yellow	
	D-	3	Green	

Specifications:

Connection	compatible USB 1.0 & USB 2.0
Power supply	From peripheral unit, +5V DC
Cable length	3m
Data transmission format	[Sign ; E1-En ; «.» ; F1-Fn ; CR] [«ERR» ; Number ; CR]

Installation of Drivers:

Refer to the Quick Start Installation Sheet in the CD-ROM.

Compatibility:

Microsoft Windows 2000 / XP / Vista

Data Format

English Data Format:

[Sign, Dt, Du, "dp", Dtn, Dh, Dth, Dtt, "cr"]

Sign	« + », « - », or « blank »
Dt	tens digit
Du	units digit
Dp	decimal point
Dtn	tenths digit
Dh	hundredths digit
Dth	thousandths digit
Dtt	ten thousandths digit (0 or 5)
CR	Carriage Return

Metric Data Format:

[Sign, Dh, Dt, Du, Dp, Dtn, Dh, CR]

Sign	« + », « - », or « blank »
Dh	hundreds digit
Dt	tens digit
Du	units digit
Dp	decimal point
Dtn	tenths digit
Dh	hundredths digit
CR	Carriage Return (Line Feed (Hex 0D, 0A))

Errors

["ERR" | Number | Carriage Return, Line Feed (Hex 0D, 0A)]

ERR0	sensor signal amplitude error
ERR4	sensor over speed error

Program Samples

Visual Basic

The communication control (MsComm) of VisualBasic must be applied :

Port opening	'Use COM1.Comm1 CommPort = 1' '4800 baud, even parity, 7 data, and 2 stop bit. Comm1.Settings = «4800,E,7,2» ' Open the port. Comm1.PortOpen = True
Power supply setting	'Duplex Cable' Form1.MSComm1.DTREnable = True Form1.MSComm1.RTSEnable = False
Data request	'Duplex cable + duplex instrument' MSComm1.Output = «?» + Chr\$(13)
Data reading	InString\$ = Comm1.Input

For more information, refer to the help menu of MSComm in Visual Basic.

Application program

Hyperterminal

This program is available as standard for Windows versions 2000, XP and Vista. Hyperterminal will not respond to remote commands but it will display the serial data transmitted by the 798 caliper if any key-stroke is pressed or if data is sent by the tool. Refer to the Quick Start Manual for instructions on COM port settings via the Windows Control Panel.

Settings:

- Pop Up Window [Connect to]:

Connect using: COM Port {n}

- Pop Up Window [COMport properties]:

Bits per second	4800
Data bits	7
Parity	Even
Stop bits	2
Flow control	None

- Pop Up Window [File Properties]:

terminal keys	«DELETE» key
emulation	Auto detect
Telnet terminal ID	ANSI
Backscroll buffer lines	500

- Pop Up Window [ASCII Setup]:

ASCII Sending	Set as required
ASCII Receiving	Set as required