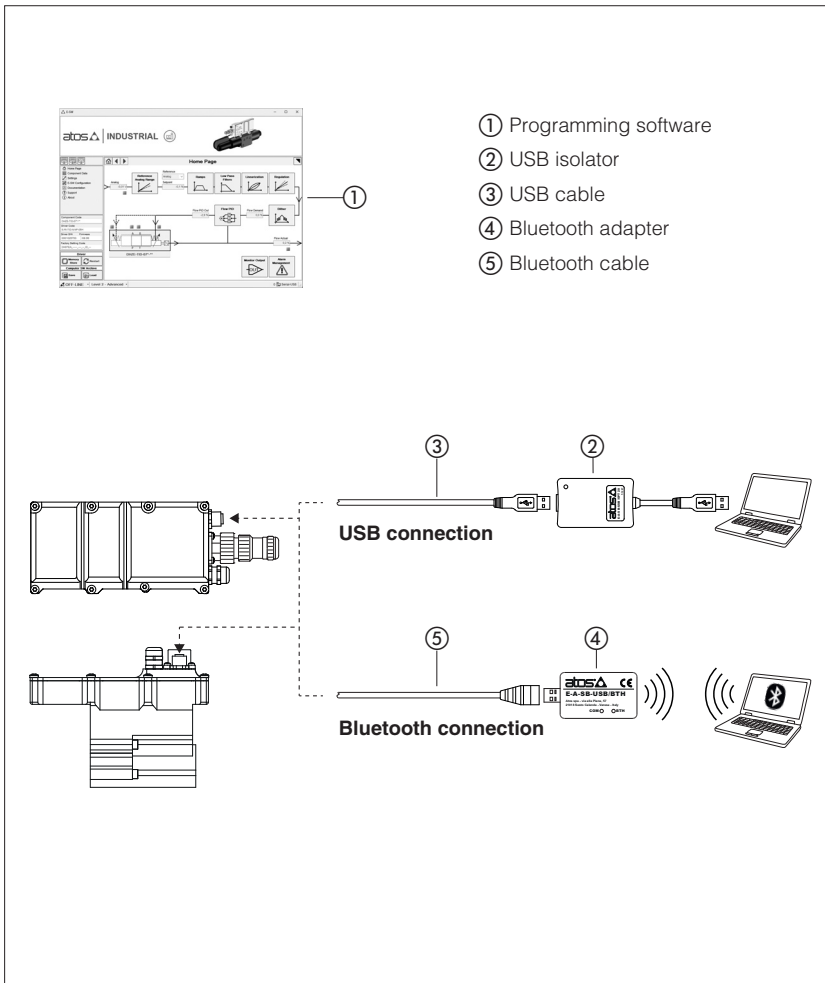


# Programming tools for TID valve drivers

Atos PC software, USB adapters and cables



The E-SW-BASIC programming software is supplied in USB memory stick format and can be easily installed on a desktop or a notebook computer.

The intuitive graphic interface allows:

- set up valve's functional parameters
- verify the actual working conditions
- identify and quickly solve fault conditions
- adapt the factory preset parameters to the application requirements
- store the customized setting into the valve driver
- archive the customized setting into the PC

The graphic interface is organized in pages related to different specific groups of functions and parameters.

The software automatically recognizes the connected valve model and adapts the displayed parameter groups, according to the selected access level.

**Features:**

- automatic valve recognition
- multilevel graphic interface
- numeric parameters settings (scale, bias, ramp, linearization, dither, etc.)
- real-time parameters modification
- diagnostic and monitor signals
- preset data storing into permanent memory
- internal oscilloscope function
- internal database of customized preset

**USB memory stick contents:**

- software installer
- user manuals
- IO-Link configuration files (not used for TID)

**1 PROGRAMMING SOFTWARE**

Valve driver functional parameters can be easily set up respectively with E-SW-BASIC programming software using proper connection to the digital electronics.

<b>E - SW</b>	-	<b>BASIC</b>	-	<b>*</b>
<b>E-SW</b> = for valve drivers				Supplies: - = first supply N = next supply

Valve drivers supported communications:

**BASIC** = NP (USB) IL (IO-Link) PS (Serial) IR (Infrared)

## 1.1 Programming software versions

**Note:** the E-SW-BASIC software is supplied in USB memory stick format  
the E-SW-BASIC software can be free downloaded from the Atos website

**Web download**, free programming software:

**E-SW-BASIC** The software can be downloaded from MyAtos area upon web registration at [www.atos.com](http://www.atos.com):  
- technical assistance for the software not included  
- USB memory stick not included

**USB memory stick first supply** of programming software, to be ordered separately:

**E-SW-BASIC** The software can be activated from the MyAtos area after web registration on [www.atos.com](http://www.atos.com) using the serial number printed into the USB memory stick plastic box:  
- technical assistance for the software included for 1 year, starting from web registration;  
the access to the service may happen by telephone, e-mail, or at the Atos Headquarters  
Upon web registration user receives via email the Activation Code (purchased software license)  
The software remains active for 10 days from the installation date and then it stops until the user inputs the Activation Code.

**USB memory stick next supplies** of programming software, to be ordered separately:

**E-SW-BASIC-N** Available only for supplies after the first, these software cannot be activated from MyAtos area:  
- technical assistance for the software not included  
The software can be activated only with the Activation Code received upon **USB memory stick first supply** registration and it is recommended only for supplies that require additional USB memory stick physical copies of the software.

## 1.2 Atos Download Area

Direct access to latest releases of programming software, manuals, USB drivers and fieldbus configuration files in MyAtos area at [www.atos.com](http://www.atos.com)  
An automatic mailing message will inform all the registered users whenever a new software update is available.

## 1.3 E-SW-BASIC minimum PC requirements

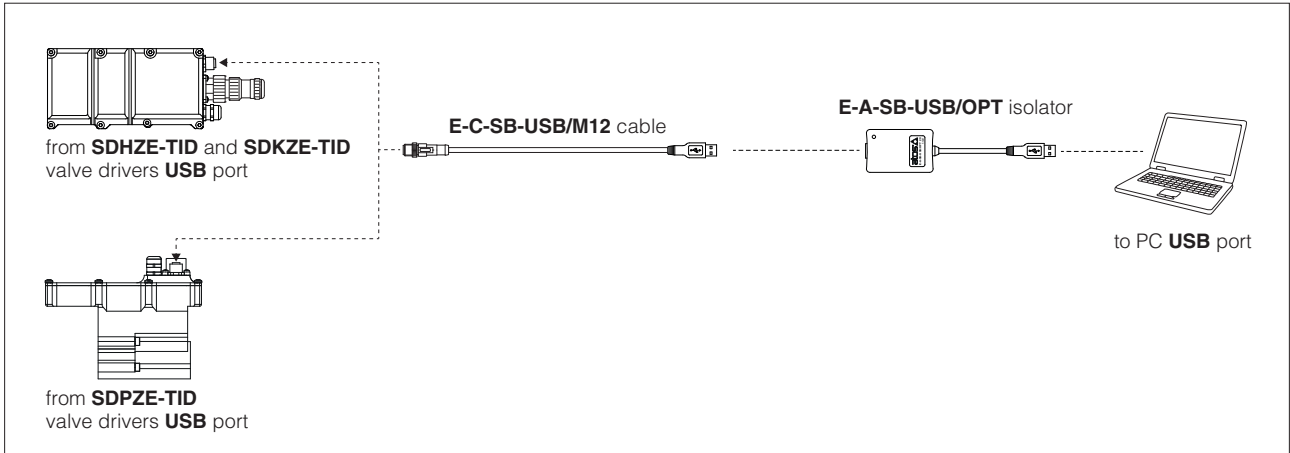
<b>Personal Computer</b>	Pentium® processor 1GHz or equivalent
<b>Operating System</b>	Windows XP SP3
<b>Monitor Resolution</b>	1024 x 768
<b>Memory</b>	512 MB RAM + Hard Disk with 250MB free space
<b>Interface</b>	USB port

## 2 USB connection - ISOLATOR AND CABLE

E-SW-BASIC software permit the functional parameters programming through USB port.

### 2.1 Connection tools

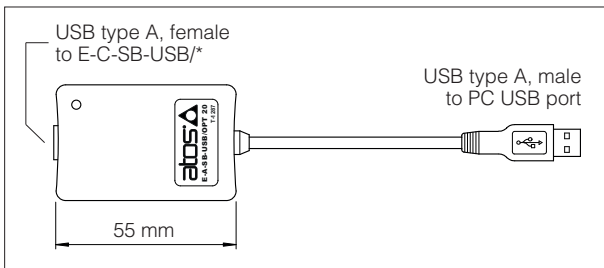
Isolator and cables shown in the image below can be ordered individually or in a single solution purchasing a dedicated kit: **E-KIT-USB**



### WARNING: the USB port of valve drivers is not isolated and use of USB isolator adapter is highly recommended!

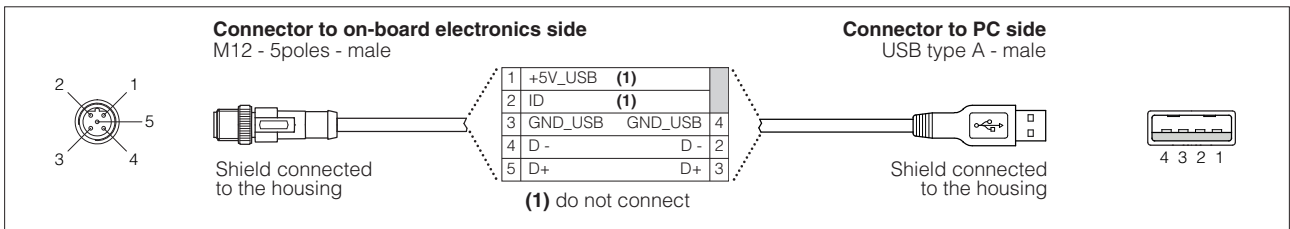
Wrong earthing connections may cause high potential difference between GNDs, generating high currents that could damage valve drivers or the connected PC.

### 2.2 E-A-SB-USB/OPT - 0,10 m cable - isolator adapter



- USB 2.0 Full speed (12 MBps)
- electrical isolation 3 kV
- temperature range, -40°C ÷ +80°C
- external power supply not required
- PC driver not required
- status LED

### 2.3 E-C-SB-USB/M12 - 4 m cable - only for on-board electronics

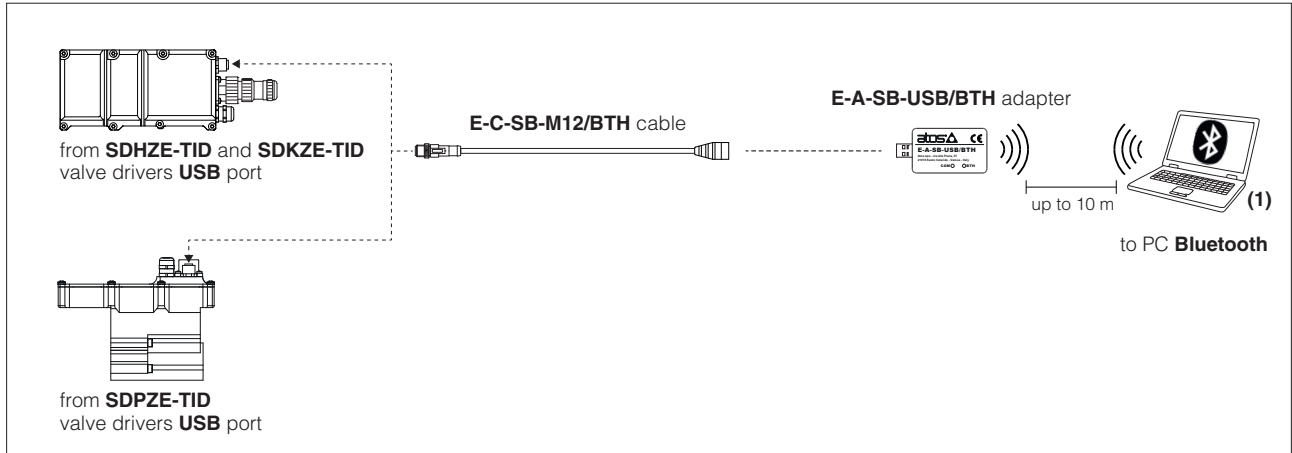


### 3 BLUETOOTH connection - ADAPTER AND CABLE

E-SW-BASIC software permit the functional parameters programming through Bluetooth.

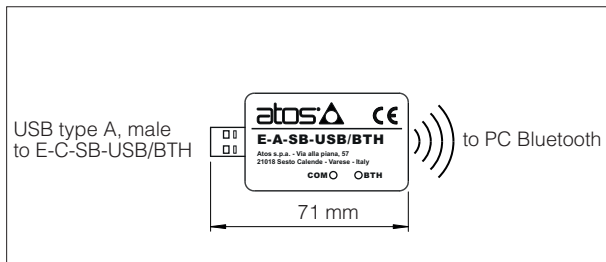
#### 3.1 Connection tools

Adapter and cables shown in the image below can be ordered individually or in a single solution purchasing a dedicated kit: **E-KIT-BTH**



(1) If PC has not built-in Bluetooth, use standard USB to Bluetooth dongle compatible with E-A-SB-USB/BTH specification (please refer to STARTUP-BLUETOOTH guide)

#### 3.2 E-A-SB-USB/BTH - Bluetooth adapter

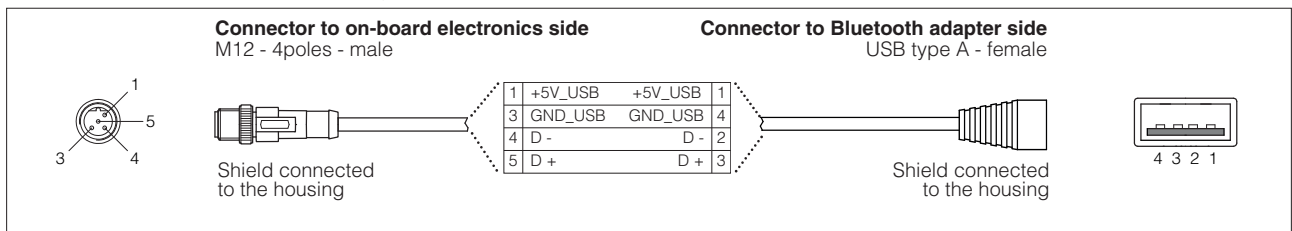


- USB male connector, type A
- type of radio interface: Bluetooth Class 2
- temperature range,  $-20 \div +70$  °C (storage  $-40 \div +70$  °C)
- external power supply not required (from Atos digital electronics only)
- protocol: Bluetooth Classic Version 2.x , 3.x supporting Serial Port Profile
- max RF transmission power: Class 2 Output Power (+1.5 dBm typical)
- frequency: 2.402 GHz to 2.480 GHz
- LEDs indicate the actual working condition
- IP20 protection degree

**WARNING: Bluetooth adapter is available only for Europe, USA, Canada, China, Japan, India, Korea markets!**

Bluetooth adapter is certified according to RED (Europe), FCC (USA), ISED (Canada), SRRC (China), MIC (Japan), BIS (India), KC (Korea) directives

#### 3.3 E-C-SB-M12/BTH - 0,4 m cable - only for on-board electronics



### 4 FIRMWARE UPDATE

It is possible to update the firmware of the valve drivers starting from electronics E-RI-TID series10 or higher, using proper USB communication port.

### 5 RECCOMENDED TOOLS SELECTION

#### 5.1 USB connection tools

Model Code	Software	Cable	USB Adapter
TID-NP	E-SW-BASIC	E-C-SB-USB/M12	E-A-SB-USB/OPT

#### 5.2 Bluetooth connection tools

Model Code	Software	Cable	Bluetooth Adapter
TID-NP	E-SW-BASIC	E-C-SB-M12/BTH	E-A-SB-USB/BTH