

DOGATEC

Mit Sicherheit montiert

Positions-Steuerung und Werkerführung

SEQUENCING AND PROCESS MONITORING INTERFACE

DPC**Touch** V2



www.dogatec.de

SUMMARY

SEQUENCING AND PROCESS MONITORING INTERFACE DPC Touch V2

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ZERO FAULT PROCESS GUARANTEED

To ensure quality production, it is necessary to be able to count, control, sequence and visualize the assembly steps.

Simple and powerful, our Posi-Control interface, the DPC Touch V2, has been developed by DOGA to meet all your application needs.

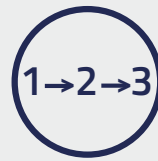
As a true conductor, it is the ideal tool for autonomous workstations or line production.



COUNTING



CONTROL



SEQUENCING



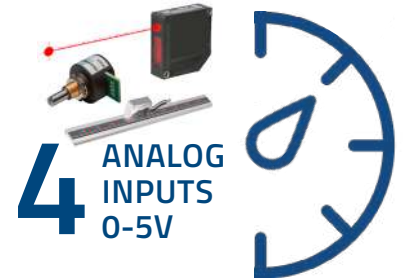
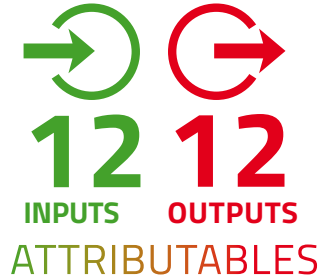
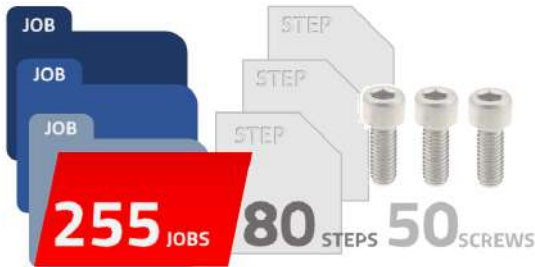
DISPLAY

TECHNICAL FEATURES

Model	DOGA POSI CONTROL DPC TOUCH V2
Power supply	AC 100 - 240 V ~50-60 Hz
Dimension	202 x 128 x 39,6 mm (7,952 x 5,039 x 1,568 in)
Weight	0,5 kg / 2,20 lbs
LCD Screen	Touch screen 7"
Languages	
Storage	SD 8 Gb (events recording)

BENEFITS

Capacity



Tools, network and accessories compatibilities

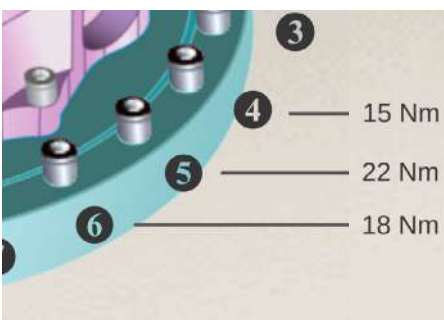


- ▶ Suitable with air and electric tools with mechanical clutch, with all-or-nothing information, motor rotation and torque reached signals.
- ▶ Torque and angle screwdrivers with sensor, or current control.



- ▶ Screw selection management (picking)
- ▶ Communication via discrete 24vdc I/O (PLC)
- ▶ Modbus TCP/IP field network
- ▶ Barcode reader (RS232 serial port)

Multi-strategy fastening



Ability to independently configure each fastening point and assign :

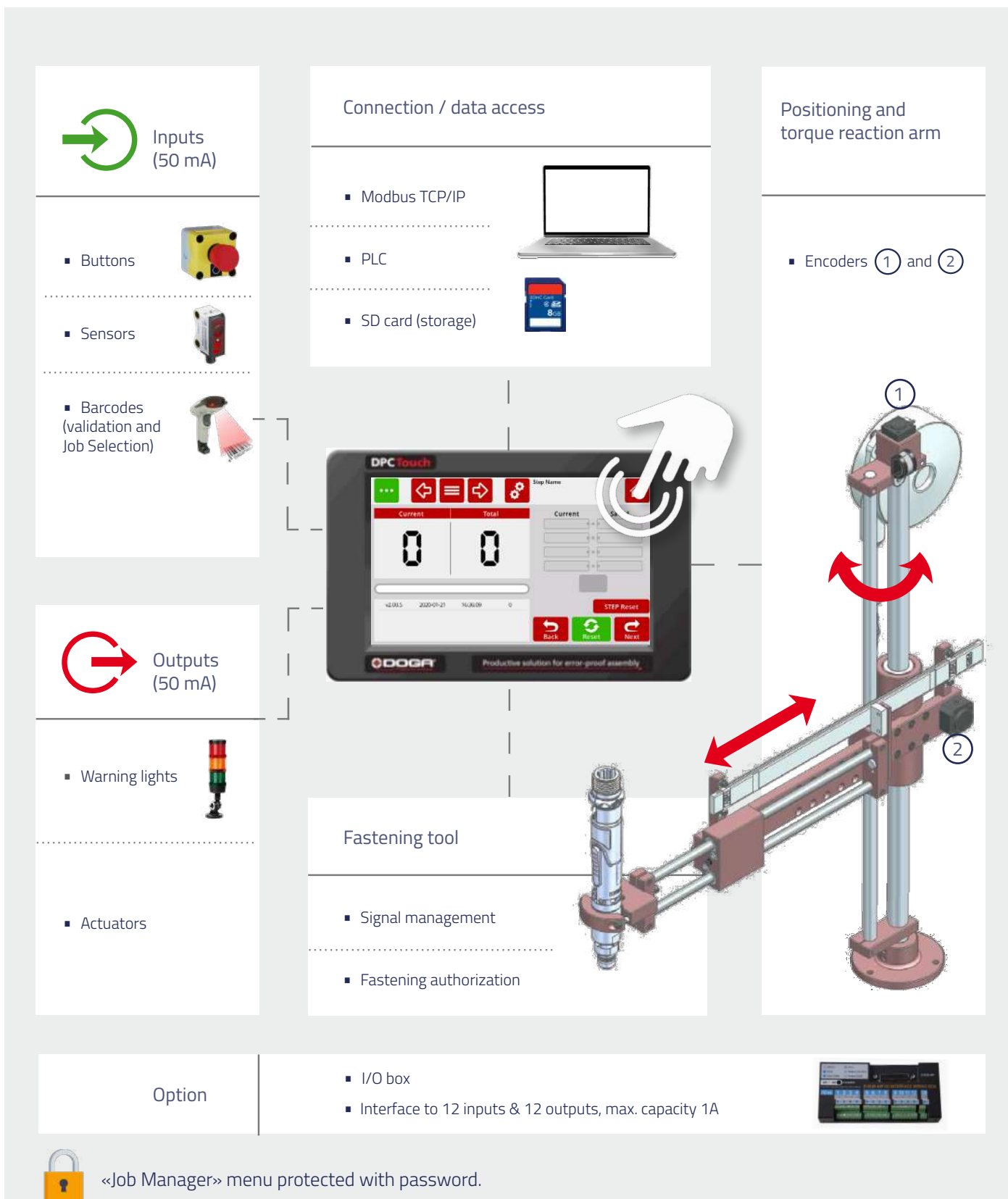
- ▶ a position
- ▶ a tolerance
- ▶ a picking zone
- ▶ a tool

Depending on the tool, an assembly program can automatically adapt :

- ▶ the angle
- ▶ the rotation speed
- ▶ the tightening torque
- ▶ the tightening time

COMPACT «ALL IN ONE» INTERFACE

- ▶ Easy to install in a workstation
- ▶ Simple and intuitive programming
- ▶ Able to replace a PLC, at a low price, for simple sequential automation



POSITIONING CONTROL

Improve your manufacturing quality with zero fault processes. A DPC Touch V2 connected to a torque reaction and positioning arm keeps your assembly processes under control.

Sequential or free mode

Screw fastening sequences can be restricted to a specific order or can be left free to the operator to decide.
In both cases, the tool is disabled when outside of the allowed fastening position.
A picking zone can also be associated (2 zones programmable).



Positioning tolerances

3 ways to define the tolerance :

- Generally for all positions
 - Manually position by position
 - In teach mode with a simple movement of the torque reaction arm to the desired OK zone
- The definition of each fastening position is done directly on the work station.
- To simplify the replacement of an arm's encoder, the definition of a «zero point» allows for the preservation of all fastening positions.
- A programmable «parking» position signals with I/O that the tool is in a safe position clear from the work piece.



0 Zero point encoders

1 2 Picking

3 OK zone

4 Tolerance zone

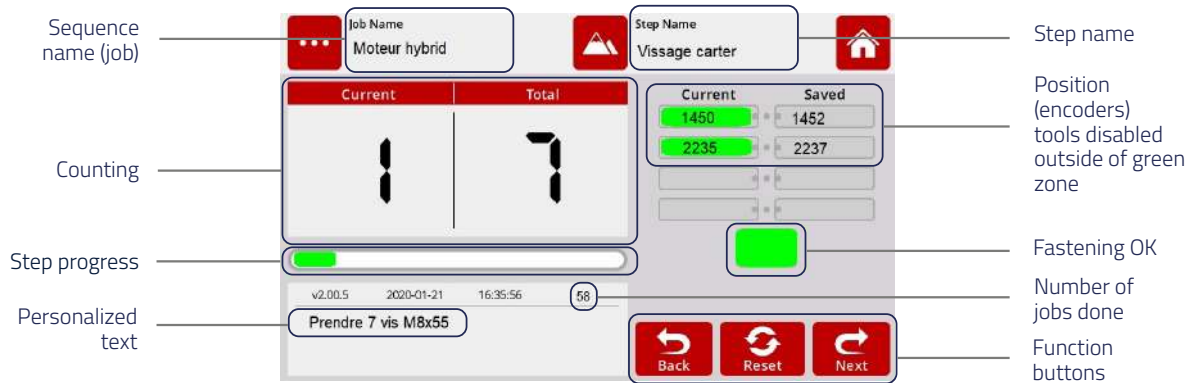
5 Parking

SEQUENCING AND PROCESS MONITORING

DPC Touch V2 guides the operator throughout the complete assembly process. Once a sequence is selected (job), the operator views the process step by step, screw by screw and is led by the instructions on the screen.

- ▶ Eliminate the risk of missed screws or incorrect torque values
- ▶ Different kinds of displays : operation, image, or evolving image with fastening positions
- ▶ Easy to use regardless of an operator's qualifications

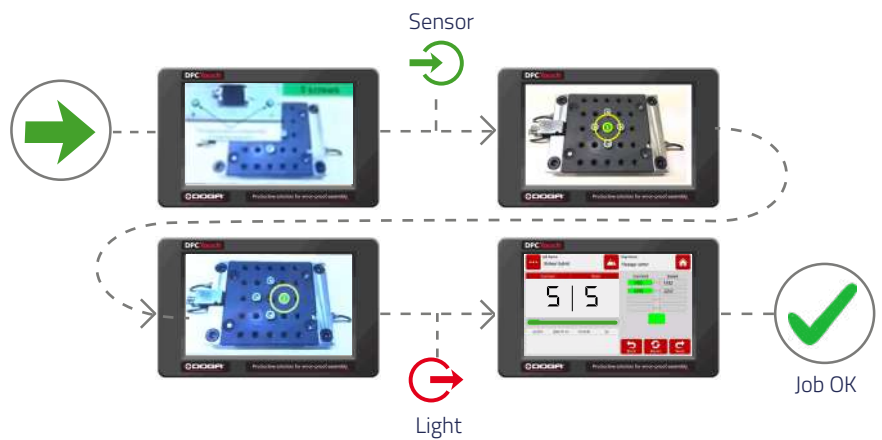
Process monitoring in operation mode



Process monitoring in customized mode

Illustration of fastening point via DPC Touch V2 directly on the touch screen.

- ▶ Dynamic display of instructions with color changes according to the position
- ▶ Image format: jpg, 800x480 pixels



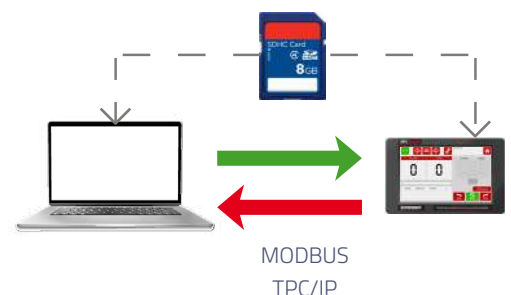
Fastening time control

Fastening time control (min/max) is possible for tools without angle sensors, but with motor run signals.

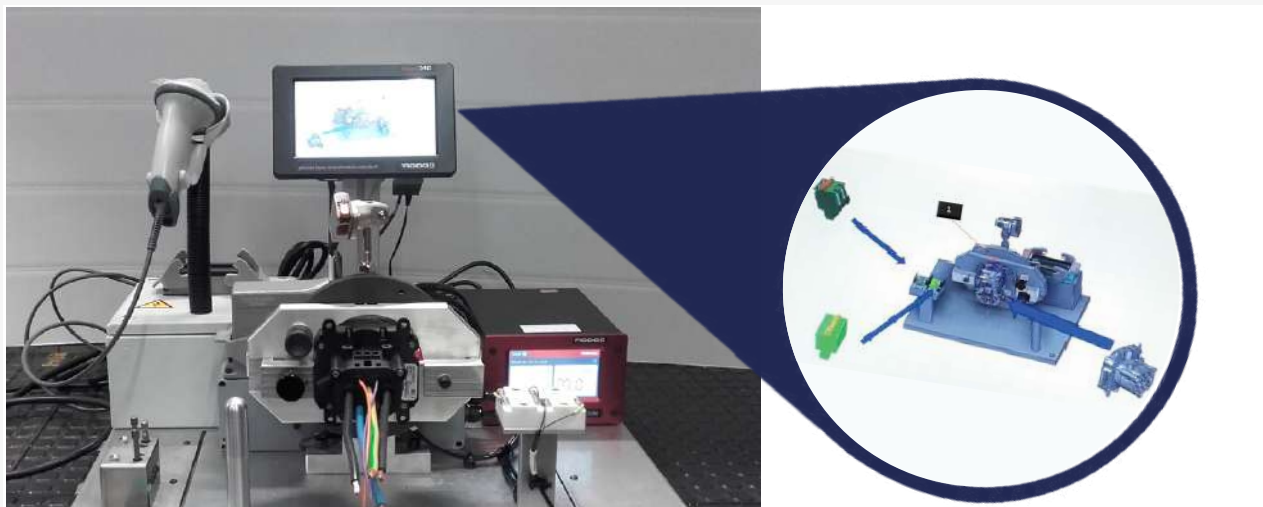


Offline and remotely programming

- ▶ Live Access to events in progress and management of settings directly from your computer via Modbus TCP/IP or « DPC Touch Remote » software.
- ▶ Offline creation and modification of the jobs. Recorded on SD card.
- ▶ Traceability guaranteed by complete monitoring via table on SD card : timestamping, fastening results, barcodes, etc.



APPLICATIONS



HOW TO BE SURE THAT ALL COMPONENTS HAVE BEEN CORRECTLY INSTALLED ?

Assembly workstation for an electrical component intended to be part of an electrical vehicle load box.

- ▶ Operator guide
- ▶ Workpiece detection



SEQUENCE MONITORING WITH A DPC TOUCH V2

DPC TOUCH V2 can manage the complete workstation with different automation features.

> see the video



REFERENCES AND ACCESSORIES



Standard equipment

Designation	Code
DOGA POSI-CONTROL - DPC Touch V2	P100008

Spare parts (included with standard equipment)

Designation	Code
Fixing plate	P106842
Main socket adapter EU-UK	P166810
Main socket adapter EU-US	P108833
Cable I/O adapter, DB44 >> DB25 + DB9	P103165
SD card protector	P137479

Accessories

Designation	Code
Cable DB44, 3m/free wire (12 inputs/12 outputs)	P100096
Cable DPC Touch / DOGA GX, GY, DO, GA	P100434
Cable Y DPC Touch 3 m (DB44 M, DB25 M vers MDC/MDTC, DB 25 F vers PLC)	P100097
Cable BST/BS 5C to câble Y PLC DPC Touch 3 m	P103804
Cable DPC Touch / Stanley Alpha V (16 jobs)	P101445
Cable DPC Touch / DOGA HD, SD (DB9)	P108930
Cable DB9, 3 m / free wire (3 inputs/4 outputs)	P101507
Cable DB25, 3 m / free wire (12 inputs/9 outputs)	P100278
Pressure switch box for DPC Touch	P173786
I/O wiring box for DPC Touch, DB44, 3 m cable	P100755
Scanner kit type DS2208 for 1D and 2D barcode reading, holder, reading distance from 1 to 35 cm, optical sensor resolution 640 pixels, reading on paper or screen, IP 42, color black, 2 m USB straight cable	P181864
2 m DB19 RS232 straight cable	P181866
5,2 V power supply for RS232 cable	P181868
DPC TOUCH RS232 adapter for scanner*	P101114

* The 4 codes have to be ordered simultaneously for a complete package.

RELATED PRODUCTS



Assembly tools

By combining the wide range of DOGA industrial screwdrivers and the choices we make together, we will meet your production and quality requirements.

- Torque and angle current control tools
- Torque and angle transduced control tools - STANLEY®
- Brushless electric tools



Torque reaction arms and tool positioning system

Our arms contribute to the improvement of your operator's comfort, the quality of your assemblies and your productivity.

- BA - Linear / articulated / travelling torque reaction arms
- DMF - Carbon fiber telescopic arms
- SLIDER - Suspended torque reaction arms
- Special torque reaction arms



Screw feeding

Reduce operator cycles times and maintain their comfort.

- DMA - Auto advanced automatic screwfeeding system
- DMS - Telescopic automatic screwfeeding system
- Semi-automatic screwfeeder with fixed / interchangeable rails

DOGA**TEC**

Mit Sicherheit montiert

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