Product Information

HR 550 FS
Electronic Handwheel with Wireless Transmission
User-friendly setup with HEIDENHAIN handwheels

Delicate manual traverse
For setup, you can use the axis-direction keys of the machine operating panel to move the machine axes manually or in incremental jog. A simpler and more reliable way, however, is to use the electronic handwheels from HEIDENHAIN. With the portable handwheels you are always close to the action, enjoy a close-up view of the setup process, and can control the infeed responsively and precisely.

The HR 550 FS with wireless transmission is exceedingly simple to use: since it communicates with the handwheel holder via radio transmission, your movements are not restricted in any manner, and you can fully concentrate on the action in the machine’s working space. The practical HRA 551 FS handwheel holder is not just a docking station for the handwheel: it also features an integrated charger for the handwheel’s battery, so that your HR 550 FS is always ready for the next job.

The transmission range is amply dimensioned. If you should nevertheless happen to come near the edge of the transmission area, which is possible with very large machines, the HR 550 FS warns you in time with a plainly noticeable vibration alarm.

When the handwheel is in the docking station, contacts on its back ensure uninterrupted operation in the event of unexpected disturbances in the radio field.

System requirements
The HR 550 FS can be connected to the following controls:

- TNC 640
- TNC 620
- TNC 320
- TNC 128
- iTNC 530
- CNC PILOT 640
- MANUALplus 620

As of NC software

- 34059.x.02
- 81760.x.01
- 771851.x.01
- 771841.x.06
- 60642x.x.01
- 68894x.x.06
- 548431-06

The connecting and adapter cables are identical with those of the HR 420 and HR 520.

The radio operating conditions of the Technical Manual for your control apply during operation of the HR 550 FS/HRA 551 FS in the appropriate locations.
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**Design**
- Handwheel with wireless transmission

**Functional safety**
- For applications up to category 3, PL d according to EN ISO 13849-1: 2015

**Display**
- Monochrome 6-line display (128 x 64 pixels)

**Handwheel**
- HR 550FS without mechanical detent: ID 1200495-xx
- HR 550FS with mechanical detent: ID 1183021-xx

**Operating elements**
- 6 keys for axis selection (symbols can be exchanged)
- 6 keys with permanent NC functions
- 6 keys with LEDs for free assignment via the PLC (symbols can be exchanged)
- 2 override potentiometers for feed rate and spindle speed
- 5 soft keys for menu-guided operation

**Safety buttons**
- Emergency stop button (dual-channel)
- 2 permissive buttons (dual-channel)

**Handwheel holder**
- HRA 551 FS: ID 1119052-xx
  - For docking the HR 550FS on the machine
  - Integrated battery charger for HR 550FS
  - Connections to the control and the machine
  - Integrated transmitter/receiver unit

**Radio transmission**
- According to EN 300328 V2.1.1; EN 301489-1; EN 301489-17;
  - FCC ID HR 550FS: YJKHR0GACZ4; FCC ID HRA 551 FS: YJKHRAGACZ4
- 16 channels (ISM; 2.4 GHz)
- Transmission range up to 20 m (depending on environment)
- Radio power of 11 dBm (EIRP)

**Functions**
- Display of field strength
- Vibrating alarm upon leaving the transmission area
- Battery warning/battery charge indicator

**Voltage supply**
- HR 550FS: via battery pack (included in delivery; replacement ID 623166-xx)
- HRA 551 FS: by standard connection from the control

**Operating time**
- Continuous duty typically 6 h

**Charging process**
- Automatic when handwheel is in the HRA docking station, duration approx. 200 min

**Mass**
- HR 550FS: approx. 1 kg
- HRA 551 FS: approx. 1 kg

* Please select when ordering
For more information:
To ensure the correct operation of the handwheel, comply with the requirements described in the Technical Manual and User’s Manual of the respective control.

For brochures and product information sheets, visit us on the Internet at www.heidenhain.de ➤ Documentation