

Area of application

The hydraulic positioning unit HFT or HFS is designed for smaller and medium-sized machines exerting a force of up to ca. 700 tonnes. Its purpose is to position hydraulic clamp units of the HEE type (see data sheet 1.100) or of the type HKZ (see data sheet 1.200) fully automatically at the clamping point of the die. In addition to a positioning unit for use on the ram (type HFS), a press bed version that can be lowered (type HFT) is available.

The positioning unit is fixed to the bed or to the ram, and requires dies that have straight clamping edges (HEE) or clamping edges with U-shaped recesses (HKZ).

Mode of operation

The positioning unit enables electrically operated sliding of the hydraulic clamp units into the machine T-slot. By means of an electrical drive, the clamp units are positioned at the clamping point where the clamping force is produced hydraulically. After its release, the clamp unit returns from the bed or ram area to the parking position.

For use on the press bed, the type HFT positioning unit moreover ensures that the clamp unit is lowered below the level of the bed by means of a hydraulic cylinder.

Movement sequence for applying the clamping force (type HFT):

- Raising the clamp unit to the level of the T-slot
- Presenting the clamp unit to the die to be clamped
- Clamping stroke of the clamp unit
(release the clamp unit in the reverse order)

Distinguishing features

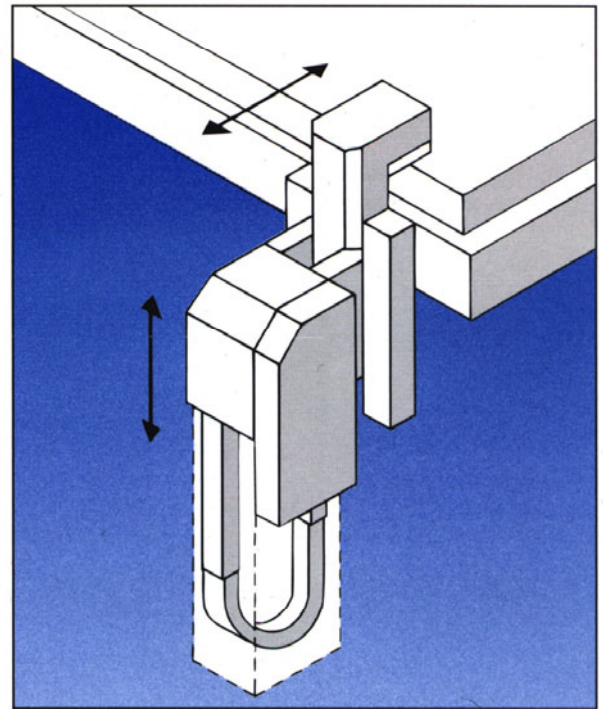
When a die is changed, the positioning unit returns the clamp units from the work area fully automatically, thus ensuring a free working area. In the case of type HFT, access to the work area is additionally simplified by the lowering of the drive and the clamp unit.

Technical data

Motor:	DC motor
supply voltage:	24 volt DC
Switches:	4 inductive proximity switches (HFT) 2 inductive proximity switches (HFS) p-n-p normally open contact: 10-30 V DC
Sliding distance:	up to 1000 mm (standard version)
Smallest T-slot:	22 mm (according to DIN 650)
Sliding speed:	150 mm/s
Operating pressure:	400 bar (clamp unit) 100 bar (lifting cylinder, HFT)
Wiring:	Harting plug connection HAN 25 D*

*Alternative plug connections available on request.

The company reserves the right to make technical changes.



In addition, a pressure switch is required in the hydraulic unit for controlling the clamping pressure.

Electrical control of the following functions (switches):

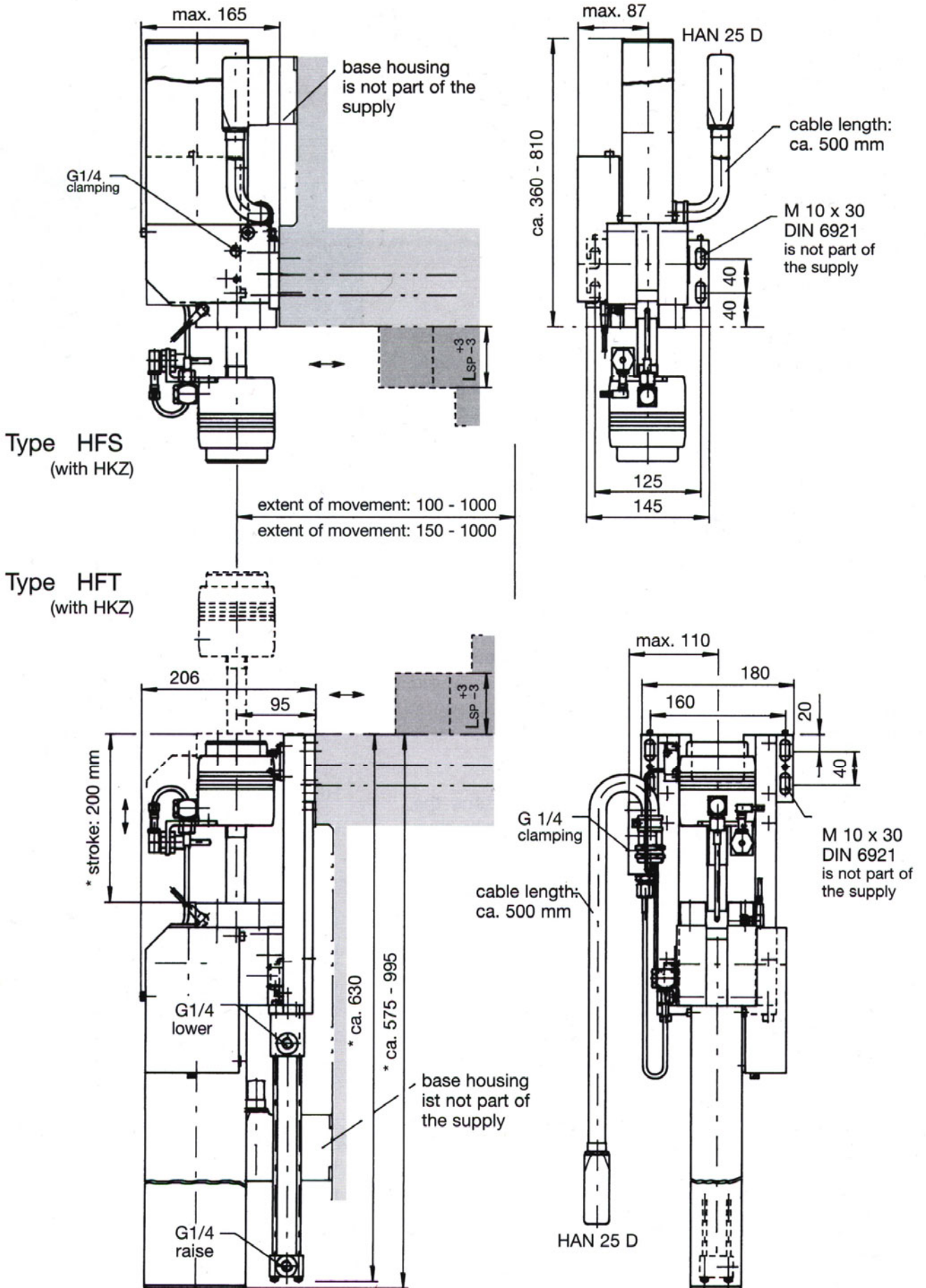
- HFT: Clamp unit in parked position (S1)
Clamp unit positioned at the die (S2)
Lifting cylinder retracted (S3)
Lifting cylinder extended (S4)
- HFS: Clamp unit in parked position (S1)
Clamp unit positioned at the die (S2)

Advantages

- Infinitely variable adjustment to differing die sizes
- Large clamping thickness tolerance
- Electrical control of all important functions
- Central control
- Automatic positioning at die

Construction

The positioning unit has a gunmetal-finish housing; the electrical cables are run in a flexible trailing chain which is protected by an aluminium chain box.



* Dimensions stated are valid for clamping thickness up to 80 mm. Higher clamping thickness on request.