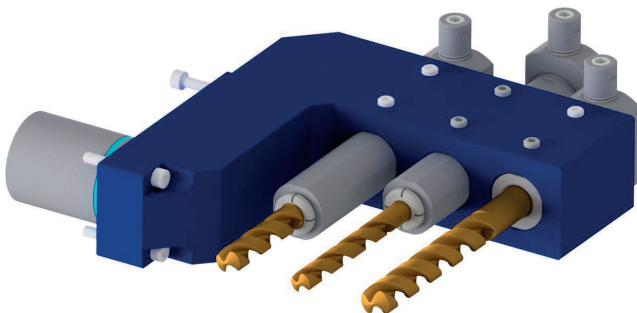
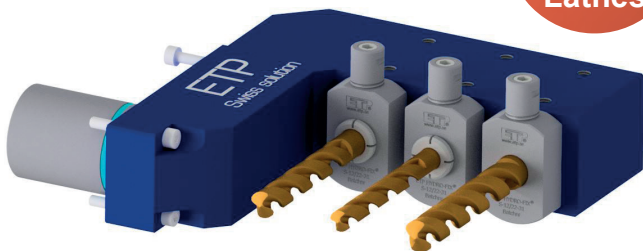


**Metalworking**

**ETP**  
HYDRO-GRIP

**For Swiss  
type  
Lathes**



# **ETP HYDRO-FIX S**

## **OPERATING INSTRUCTION**

## DESCRIPTION

**ETP HYDRO-FIX S** clamping units are excellent for static front and back operations such as drilling, reaming and boring. Precision hydraulic tool centering is achieved and therefore the tool life and setup time is improved. The clamping unit allows for larger/deeper drilling, quick tool changes, absorbs/reduces vibration, improves surface quality and best of all: increases your productivity!

## Designs:

### Cylindrical

HYDRO-FIX SFC clamps around the tool and simultaneously inside the static block/holder for a perfect centering. DO NOT use set screws - this will damage HYDRO-FIX SFC.

Perfect  
centering



### Flat

HYDRO-FIX SFF/SBF clamps around the tool. The static block's set screws are used to clamp on the milled flat of HYDRO-FIX SFF/SBF, after adjusting the length of the assembly.

Easy  
length  
adjustability



## Information:

### Tolerances

Tool shank tolerance of h6 or h7 can be used.

Recommended tolerance of the static block/holder - H7.

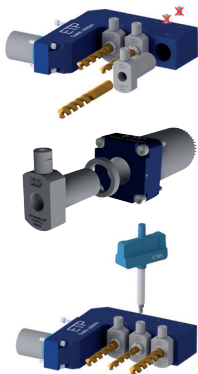
### Pressure screw

Max. recommended tightening torque is marked on the ETP HYDRO-FIX S. Use a fixed torque wrench.

## Assembly instructions - Cylindrical design



1. Clean all contact surfaces between the tool shank, reduction sleeve (if used), HYDRO-FIX SFC and static block /holder thoroughly with isopropyl alcohol. This is to remove any dirt, oil or rust preventative (from storage) and ensure a good contact surface.

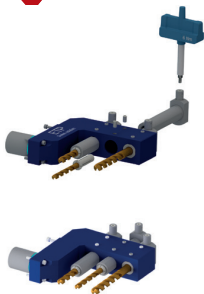


2. Slide HYDRO-FIX SFC into the static block. Always ensure HYDRO-FIX SFC is pushed flush against the face of the static block. Slide the tool shank into HYDRO-FIX SFC. Always ensure the tool shank is fully inserted. **DO NOT** use set screws - this will damage HYDRO-FIX SFC.

If live tool block is used – always use the appropriate spacer ring between flange of HYDRO-FIX SFC and the block to avoid interference with gears.

3. Mount the tool shank and HYDRO-FIX SFC by tightening the pressure screw to the recommended tightening torque, marked on the sleeve.  
Use a fixed torque wrench.

## Assembly instructions - Flat design



After cleaning per step 1 above:

2. Slide the tool shank into HYDRO-FIX SFF/SBF. Always ensure the tool shank is fully inserted. Mount the tool shank by tightening the pressure screw to the recommended tightening torque, marked on HYDRO-FIX SFF/SBF. Use a fixed torque wrench.

3. Slide the assembly into the static block. Establish the length that the assembly will stick out of the static block and use the set screws of the static block to locate/tighten on the milled flats of HYDRO-FIX SFF/SBF. Same fixed torque wrench can be used.

**ETP HYDRO-FIX S** is a hydraulic high precision clamping sleeve and should be handled with care for optimal performance.

- Before inserting a tool, check for damages on the tool and clamping sleeve. Never tighten the pressure screw of HYDRO-FIX S unless it is fully assembled according to instructions.
- Tools should be of correct dimension and tolerance (h6 or h7), and cleaned.
- Do not use force to insert tool or clamping sleeve, they should easily slide in position.
- All HYDRO-FIX S clamping sleeves can be used with reduction sleeves when needed.
- Mount tools and clamping sleeve by tightening the pressure screw to the recommended tightening torque, marked on the holder. Use a fixed torque wrench.
- When stored, lubricate HYDRO-FIX S with a thin oil for corrosion resistance.
- Do not use HYDRO-FIX S at working temperatures above 85 degrees C / 185 degrees F.  
(This may increase the pressure in the clamping sleeve and influence it negatively).



### ETP TRANSMISSION AB

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