

# Hydraulic Wedge Grips for the use in Environmental Chambers

## Series WG-100 or 250-AT

These grips are designed to be used over a wide range of temperatures inside an environmental chamber and are available for tensile forces of 100 kN or 250 kN.

These grips are available for temperatures of -70°C to +350°C or -170°C to +350°C. Customer versions with increased temperature ranges of 500°C and 700°C can also be supplied.

The wedge design provides productive tensile testing and quick and easy interchanging between different jaw faces.

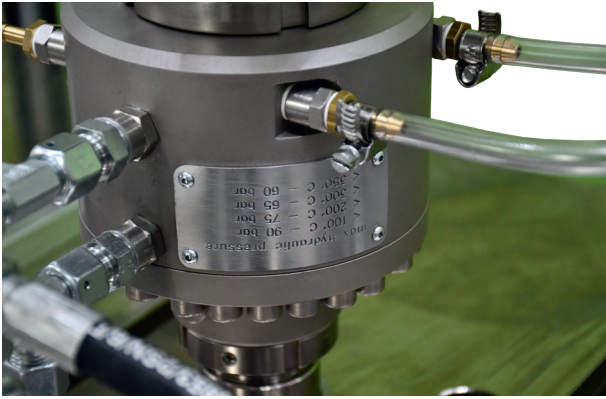
The wedge inserts move when applying initial gripping force to sample.



The chamber should have the removable wedge option (U-plugs) in order the chamber can be installed after the grips are installed.

These all-temperature grips have an extension piston and cylinder that extends together with the wedge body into the environmental chamber while the hydraulic chamber with its hydraulic connection fittings and hoses remains outside of the chamber. The hydraulic chamber has water cooling connections.

The length of the extension piston and cylinder are supplied in accordance with the requirements of the minimum and maximum grip separation and used environmental chamber.



The upper and lower connecting detail (flange) are water-cooled to isolate the grips from the machine (load cell)

The specimen protect function offered by your electronics / software helps to prevent your specimen from being damaged during setup and gripping by reducing the introduced compression force considerable.

When these grips are installed at servohydraulic testing machines, then another advantage of this grips is, that the hydraulic power is provided by the machine's main power pack via a grip sub-manifold that reduce the cost and floor space associated with a secondary grip pumping unit. The grips wedge effect does further not require that high pressure is needed, this makes them very reliable.

## Technical Data

Model		WG-100-AT	WG-100-AT1	WG-250-AT	WG-250-AT1
Max. Tensile Force	kN	100	100	250	250
Temperature Range	°C	-70 to +350	-170 to +350	-70 to +350	-170 to 350
Max. Diameter of Round Specimen	mm	25	25		
Max. Thickness of Flat Specimen	mm	25	25	40	40
Max. Width of Flat Specimen	mm	60	60	80	80
Insert Clamping Length	mm	75	75	130	130
Body Diameter	mm	200	200	300	300
Body Height	mm	150	150	225	225
Weight per Grip	Kg	50	50	120	120

Alternative see our Hydraulic Non-Shift, Parallel Closing Grips WGR-AT Series

