

Hydraulic Wedge Grips

BISS AC-05-11TX Series hydraulic wedge grips are intended for both static and dynamic testing in tension, compression as well as tension-compression. Hydraulically activated wedge action ensures uniform and axially aligned gripping of both flat and round test coupons as well as to hold test fixtures.

Required equal pressure to both grips is set by means of pressure regulating valve on the service manifold. Gripping is activated from the operator touch screen panel. These grips are suitable for use on electro mechanical machines when configured along with a dedicated pump and service manifold unit. Pressure line accumulators and nonreturn valve ensure retention of gripping force in the event of power outage.

Grips are rated from -150°C to 300°C. Side mounting design allows safe handling and easy insertion of specimen. A wide variety of wedges are available to suit practically every standard specimen geometry. Custom wedge designs can be ordered to suit specific specimens and materials. Removable screw-on/screw-off handles are provided for easy mounting and dismounting. In addition, special provision is made for other gripping assemblies to be threaded directly onto the grip axis to avoid grip removal.

Standard features

- Side mounting design for easy specimen insertion
- Rated for static and fatigue operation
- Improved repeatability of test results attributed to uniform gripping at adjustable pre-set wedge pressure
- Slide able sample stoppers to ensure sample center
- Choice of wedges to suit different specimen thickness
- Adjustable pressure to suit variety of materials
- Parallel action wedge grips
- Nonmoving wedges while mounting sample for positive force
- Excellent repeatability
- Grip control is disabled during test run to protect from opening





Specifications

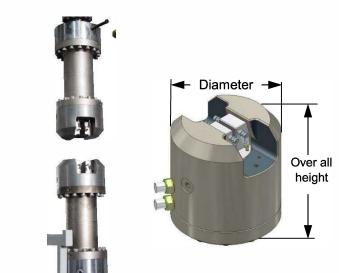
Model no	Dynamic/ Static Capacity kN	Weight kg	Wedge width mm	Model no for wedges	Wedge shape	Specim	en dimens mm	sions*,
AC-05-1111	25/32.5	12	25	1111-01, 1111-02	Flat thickness	0 – 5	5 – 10	
, le 00 mm	20,02.0	12	20	1111-11, 1111-12	Vee Dia	3 – 5	5 – 10	
AC-05-11T2	50/62.5	20	50	11T2-01, 11T2-02	Flat thickness	0 – 9	9 – 16	
				1112-11, 1112-12	Vee Dia	3 – 9	9 – 16	
AC-05-11T3	100/125		75	1113-01, 1113-02	Flat thickness	0 – 9	9 – 16	16 – 20
	&150/175	55		1113-11, 1113-12	Vee Dia	3 - 9	9 – 16	16 – 25
	250/312	100	75	1114-01, 1114-02	Flat thickness	0 – 9	9 – 16	16 – 25
AC-05-11T4	&300/325	100	75	11174-11, 11174-12	Vee Dia	5 – 9	9 – 16	16 – 30
AC-05-1115	500/525 & 600/625	250	125	1115-01, 1115-02	Flat thickness	0 – 9	9 – 16	16 – 25
				1115-03	Flat thickness			25 – 35
				1115-11, 1115-12	Vee Dia	5 – 12	12-19	19 – 26
				11T5-13, 11T5-14	Vee Dia	26 - 35	35 - 45	
*Dimensions are subjected to minor variations based on specific ratings								

Dimensions

Load capacity (kN)	25 - 50	100 – 150	250 – 300	500 – 600
Max operating pressure (bar)	210	210	210	210
Diameter (Ø) (mm)	160	220	280	340
Over all height (mm)	175	200	240	270
Stud size	M27x2, RH	M27x2, RH	M32x2, RH	M50x2, RH

Wedges

Load	Flat wea	V - wedges		
capacity (kN)	Thickness (mm)	Width (mm)	diameter (mm)	
25	0 - 10	35	Ø3- Ø10	
50	0 - 16	35	Ø3- Ø16	
100 – 150	0 - 20	75	Ø3- Ø25	
200 – 300	0 - 25	75	Ø5- Ø30	
500 – 600	0 - 35	125	Ø5- Ø45	



Note: Specification might change without prior notification