

## Product Information

### Torsion drives for floor testing machines



Figure: Floor testing machine with torsion drive



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#### Application range

Torsion drives are fitted to floor testing machines, to perform uni and multiaxial load tests (tensile or compression combined with torsion) in material and component testing.

In applications with no safety device, rotational speed must be limited to 20 revolutions per minute.

#### Components

- Floor testing machine Z050 to Z250
- Torsion drive mounted on the top crosshead
- Measurement and control electronics *testControl*

#### Advantages and features

- Due to the modular design principle the torsion units can be upgraded at anytime
- Operation with standard PC or laptop (no special interface card required) and *testXpert® II* application software
- High resolution of rotation angle and displacement measurement
- User friendly operation and ergonomics provides operators with maximum flexibility
- Synchronisation of both testing axis
- A CE-compliant safety device can optionally be used where hazardous specimens and/or higher rotational speeds are involved.

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#### Torsion drives

Mmax	Fmax (axial)	Rotational speed	Mounting stud Ø	Input power	Electrical connections	Item no.
[Nm]	[kN]	[U/min]	[mm]	[kVA]	[V]	
100	250	0.002 – 10	60	2,2	230VAC 50/60Hz 1Ph/ PE/ N	• <b>636968</b> (BXC-TD0100.A1K-002)
200	250	0.001 – 5	60	2,2	230VAC 50/60Hz 1Ph/ PE/ N	• <b>631282</b> (BXC-TD0200.A1K-001)
500	250	0.0002 – 2	60	2,2	230VAC 50/60Hz 1Ph/ PE/ N	• <b>636969</b> (BXC-TD0500.A1K-001)
500	250	0.001 – 10	60	5	400VAC 50/60Hz 3Ph/ PE/ N	• <b>636970</b> (BXC-TD0500.A4K-002)
1000	250	0.0005 – 5	60	5	400VAC 50/60Hz 3Ph/ PE/ N	• <b>636971</b> (BXC-TD1000.A4K-001)
2000	250	0.0002 – 2	60	5	400VAC 50/60Hz 3Ph/ PE/ N	• <b>636972</b> (BXC-TD2000.A4K-001)

#### Torque cells



#### Information:

The torque cells can be combined with a load cell. This load cell (tensile and compression) must allow the maximum torque.

Mmax	Fmax	Connection hole Ø	Mounting stud Ø	Accuracy grade 1 <sup>1</sup>	Item no.
[Nm]	[kN]	[mm]	[mm]	[Nm]	
100	± 50	60	60	≥ 0,2	• <b>011008</b> (BXC-TC100NM.G01-007)
200	± 100	60	60	≥ 2	• <b>636324</b> (BXC-TC200NM.G02-001)
500	± 100	60	60	≥ 10	• <b>636974</b> (BXC-TC500NM.G01-003)
1000	± 250	60	60	≥ 10	• <b>636975</b> (BXC-TC1000NM.G01-005)
2000	± 250	60	60	≥ 20	• <b>636976</b> (BXC-TC2000NM.G01-003)

<sup>1</sup> according to ISO 7500-1