Zwick / Roell

Zwick
Materialprüfung

Product Information

Torsion drives for zwicki

Figure: zwicki-Line with torsion drive

Application range

Torsion drives are fitted to zwicki-Line materials 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

- Materials testing machine zwicki-Line Z2.5 TX or Z5.0 TX
- Torsion drive mounted on the moving crosshead
- Measurement and control electronics *testControl*

Advantages and features

- Due to the modular design principle the torsion drives 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 for mounting on moving crosshead

Mmax [Nm]	Fmax (axial) [kN]	Rotational speed [U/min]	Pitch circle connections flange[3] Ø [mm]	Imput power [kVA]	Electrical connection [V]	Item no.
2	2,5	0,01 – 80[1] (0,01 – 20[2])	75/40	0,44	230V AC 50/60Hz 1Ph/PE/N	• **646008** (BXC-TD0002.D14-001)
5	2,5	0,01 – 40[1] (0,01 – 20[2])	75/40	0,44	230V AC 50/60Hz 1Ph/PE/N	• **642598** (BXC-TD0005.D14-001)
10	2,5	0,01 – 20[1] (0,01 – 20[2])	75/40	0,44	230V AC 50/60Hz 1Ph/PE/N	• **643934** (BXC-TD0010.D09-001
20	5	0,01 – 20[1] (0,01 – 20[2])	75/40	0,8	230V AC 50/60Hz 1Ph/PE/N	• **053845** (BXC-TD0020.D30-001)

[1] with safety device and with increasing of the torsion drive speed (063785)
[2] without safety device

Additional top crosshead (optional)

For applications where the torsion drive should be mounted on the fixed crosshead instead on the moving crosshead, an additional top crosshead is required.

Artikel	Item no.
Additional top crosshead	• **645710** (BXC-FRADCRH.001-001)

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 [Nm]	Fmax [kN]	Connection hole Ø [mm]	Mounting stud Ø [mm]	Accuracy grade 1[1] [Nm]	Item no.
2	± 10	20	20	≥ 0.04[2]	• **011012** (BXC-TC002NM.G01-007)
5	± 10	20	20	≥ 0.1	• **639753** (BXC-TC005NM.G01-002)
10	± 10	20	20	≥ 0.2	• **011015** (BXC-TC010NM.G01-001)
20	± 10	20	20	≥ 0.2	• **631313** (BXC-TC020NM.G01-004)

[1] according to ISO 7500-1
[2] also required: 1x ACSCC module