

## Stepper Motor Test System

**Load-Sensor & Pulley Specifications:**

Model	Load-Sensor	Directly mounted on the shaft's	Pulley Ballbar load				mm
			25N/mm	50N/mm	100N/mm	200N/mm	
P-Poly	254	-	25N/mm	50N/mm	100N/mm	200N/mm	300
P-Poly	24	-	25N/mm	50N/mm	100N/mm	200N/mm	300
P-Poly	24	-	50N/mm	100N/mm	200N/mm	400N/mm	400
P-Poly	24	-	25N/mm	50N/mm	100N/mm	200N/mm	300
P-Poly	204	-	25N/mm	50N/mm	100N/mm	200N/mm	300
P-Poly	204	-	50N/mm	100N/mm	200N/mm	400N/mm	400

Picture - Load-Sensor Testing Kit + Pulley Rackbar  
 ↑ Torque will be reduced to motor shaft radius



### Profile:

With the unique application of Poly® technology:  
 A automatically rotates the full pulley and pull-out torque curves with high accuracy.

- Pull-in torque:**  
 The maximum torque at which the motor can start from the holding state without using steps for a slow start.
- Pull-out torque:**  
 The maximum torque at which the motor can operate without using steps for a slow loading.

### Advantages:

- Minimal moment of inertia of the test:**  
 By using the Poly® method, the measurement is not affected by the inertia and the coupling loss of the test system. Especially if the Poly®-test, make to ensure that the test profile.
- Wide Measuring Range:**  
 By means of sensor to select the appropriate test pulley.  
 The measuring range is from 0 to 400 N/mm.
- Monitoring and analysis easier:**  
 Real-time display of testing results on the screen.  
 Data+Run can be exported to Excel format.

### Measured Example:

**Pull-in & Pull-out Curve**

● Load Frequency: 1000 Hz

**Specifications:**

NAME	Poly® Working
LOAD-MOTOR	Servo motor 100W 100VDC 1000Hz
SENSOR SENSITIVITY	DC 2.5V/angle
TORQUE PRECISION	±0.1% of torque range
HIGH-RESOLUTION LOAD	10000 counts (1°)
TORQUE RANGE	T-Grey Rating 0.1 N/mm Drehmoment 0.1
FRAM FREQUENCY RANGE	0.5-5000 Hz
UNITS SIGNAL	Relative value (0-100%) TTL output (open-collector or open-emitter type)
COMMUNICATIONS	Modbus interface
POWER SURFACE	Single-phase AC 230V/50-60Hz/1000W
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