

# t750 SERIES

## TORSION BAR SHAFT WITH FRICTION DAMPING

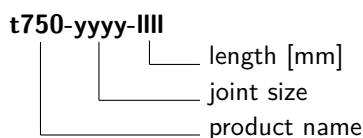


### DESCRIPTION

The t750 Torsion Bar Shaft with Frictional Damping was especially designed for use in test beds for mid-range and heavy duty engines. This type of design allows the drive train to be precisely adapted to different engine types. The torsion bar is tuned to the first eigenfrequency between idle and starter speed. The friction linings provide damping for the torques caused by large vibration amplitudes.

### NAMING

The product is named according to the following convention:



Example: t750-CV60-0947

### OPERATING RANGE

Torque: up to 40000 Nm

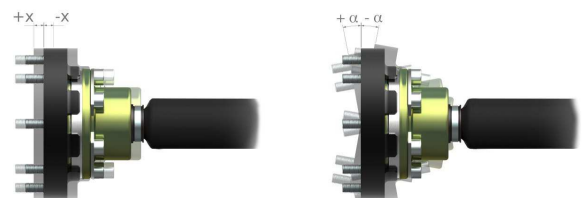
Speed: up to 2000 rpm

### BENEFITS

- compact and modular design
- precise running
- reduced stress on unit under test and dynamometer
- fine tuning of eigenfrequency
- outstanding damping characteristics
- low maintenance

### FUNCTION

The CV joint takes up the longitudinal, angular and axial displacement without adding any higher order speed or torque fluctuations to the drive train.



Exclusive Representative in Japan



515-5 Miyazawa-cho, Akishima city, Tokyo, Japan 196-0024  
TEL: +81-42-546-6500 FAX: +81-42-546-6600  
Email: sales@tokyo-plant.co.jp

# t750 SERIES

## TORSION BAR SHAFT WITH FRICTION DAMPING

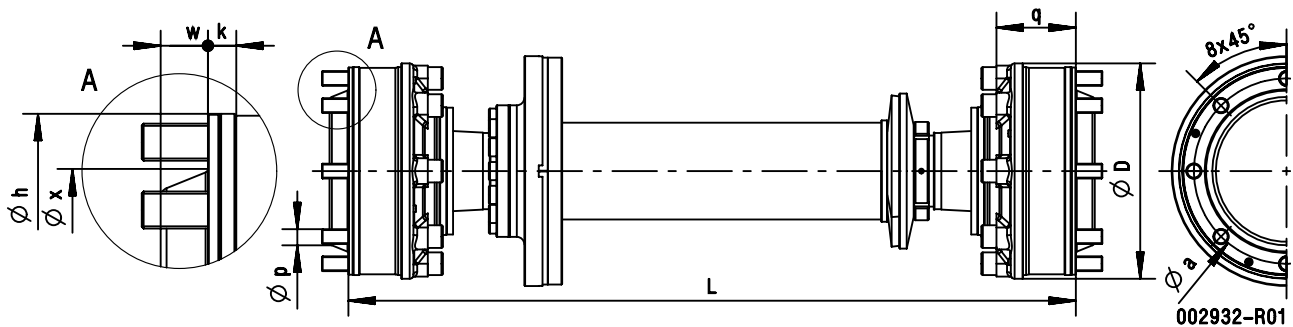


Shaft	Joint	$T_{max}$ [Nm]	$n_{max}$ [rpm]	X [mm]	$\alpha$ [°]	$\vartheta_{min}$ [°C]	$\vartheta_{max}$ [°C]
t750	CV42	19700	3000	±24	±10	-40	110
	CV60	40000	2000	±30	±3	-40	110

$T_{max}$  - Maximum torque  
 $n_{max}$  - Maximum speed

X - Maximum axial compensation  
 $\alpha$  - Maximum angular displacement

$\vartheta_{min}$  - Minimum operating temperature  
 $\vartheta_{max}$  - Maximum operating temperature



Shaft	Joint	D [mm]	a [mm]	$h^{+0.00}_{-0.05}$ [mm]	k [mm]	p [-]	q [mm]	w [mm]	x [mm]
t750	CV42	199.80	165.0	192.00	10.0	M16	79.35	29.7	142.35
	CV60	284.80	245.0	275.00	15.0	M20	105.00	25.0	214.50

The installed length L is dependent on the application and is limited by the type of design and maximum speed. Higher speeds are available on request.

2018-01-18 <a8fc2e33bbe6a113342141adad82b53a3b8ef9f6> DS EN 12