

tEVA200 – STANDARD GEARBOX DUMMY



Description

The tEVA200 is a gearbox dummy with changeable quill shaft, used in test beds for engines with original vehicle clutch or clutch dummies.

The modular design with replaceable quill shaft allows quick adaptation to different engines and couplings. The gearbox dummy comprises a solid housing with sensors for bearing temperature monitoring, an integrated bearing and a quill shaft. The relatively long torsion bar provides the same affect as a rotational spring.

Operating Range

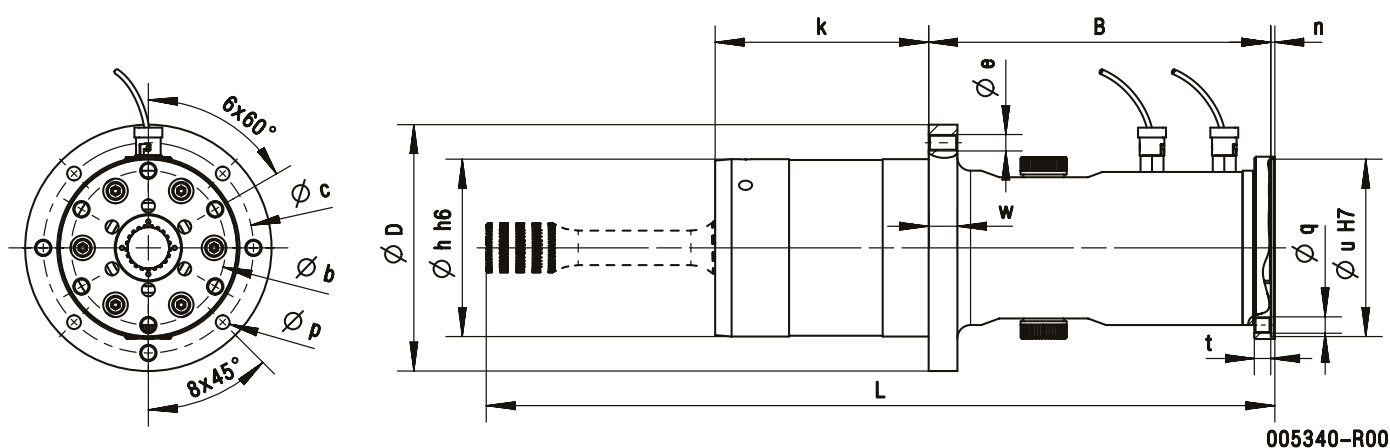
Torque: up to 1000 Nm
Speed: up to 10000 rpm

Benefits

- increased vibration isolation
- modular design
- fast exchange of quill shaft
- direct interface to the coupling
- adaptable use of coupling
- integrated temperature monitoring
- integrated pilot bearing

tEVA200

Mass	[kg]	15.21
Maximum speed	[rpm]	10000
Maximum torque ⁵⁶	[Nm]	1000
Minimal torsional stiffness c_T ⁷	[Nm/rad]	3000
Engine-side inertia J_1	[kgm ²]	Customer-specific
Gearbox-side inertia J_2	[kgm ²]	Customer-specific
Minimum operating temperature	[°C]	-30
Maximum operating temperature	[°C]	100



The quill shaft geometry and composition is dependent on customer requirements and the engine type.

The quill shaft (drawn with dashed lines) is only shown for clarity.

Gearbox dummy	D	B	b	c	e	h (h6)	k	n	p	q	t	u (H7)	w
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[-]	[-]	[mm]	[mm]	[mm]
tEVA200	150	208.3	94	128	8.4	108	130	2.5	M10	M10	10	108	17.5

The installed length L is dependent on the application and is limited by the type of design and maximum speed.

⁵The nominal torque must be equal to or greater than the maximum combustion engine torque

⁶The maximum torque is dependent on the geometry and the material of the quill shaft

⁷The stiffness is dependent on the geometry and the material of the quill shaft