

# tDock900

## AUTOMATIC DOCKING SYSTEM



### DESCRIPTION

The tDock900 is an automatic docking system for engines and transmission systems. This docking system combines the high alignment capability of CV joints with the reliable functionality provided by a splined docking mechanism. This unique docking system enables efficient docking and guarantees extremely smooth running of the test bed.

### OPERATING RANGE

Torque: up to 800 Nm  
Speed: up to 10000 rpm

### BENEFITS

- low maintenance
- compact and modular design
- long life
- fast and easy exchange of the unit under test
- reduced backlash ensures smooth running
- universal engine and transmission adapter

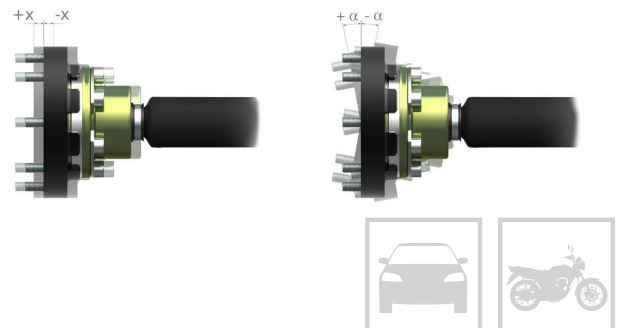
### FUNCTION

The female adapter is mounted onto the drive shaft and is fixed to the test bed, while the male adapter is fixed to the unit under test. To achieve optimal docking, the joint is automatically locked in this position and the male adapter is aligned with the drive shaft.

During docking, the male adapter engages into the female adapter. When the final operating position has been reached, the joint is unlocked and automatically opened. To achieve an ideal connection, the engine is pressed against the drive shaft.

During operation, the articulated assembly allows axial, radial and angular movement without interfering with the test bed.

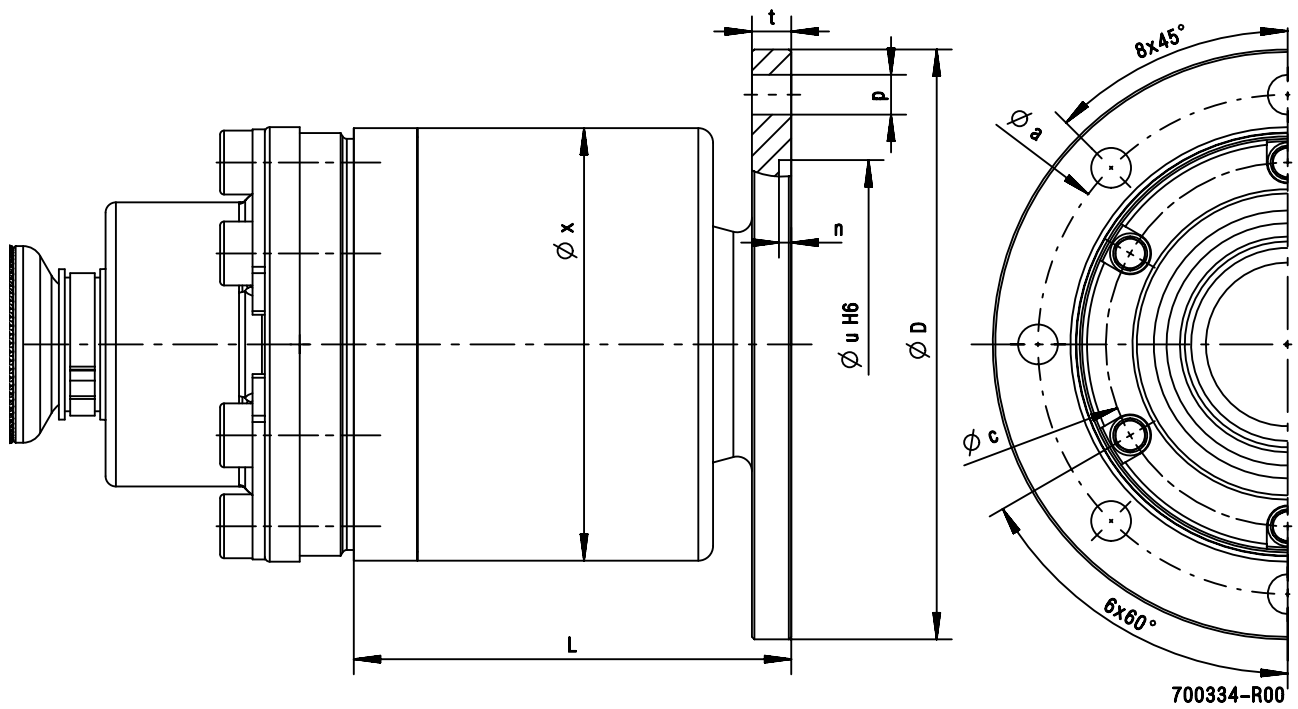
The CV joint takes up the longitudinal, angular and axial displacement without adding any higher order speed or torque fluctuations to the drive train.



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tDock900-CV05		
Maximum torque $T_{max}$	[Nm]	800
Maximum speed $n_{max}$	[rpm]	10000
Mass (only female adapter)	[kg]	1.31
Inertia (only female adapter)	[kgm <sup>2</sup> ]	1.84E-03
Total mass (without shaft)	[kg]	2.35
Total inertia (without shaft)	[kgm <sup>2</sup> ]	3.28E-03



Docking system	Joint	L	D	a	c	n	p	t	u (H7)	x
		[mm]	[mm]	[mm]	[mm]	[mm]	[-]	[mm]	[mm]	[mm]
tDock900	CV05	89	120	101.6	74	2.5	M8	8	75	88

Other dimensions available on request