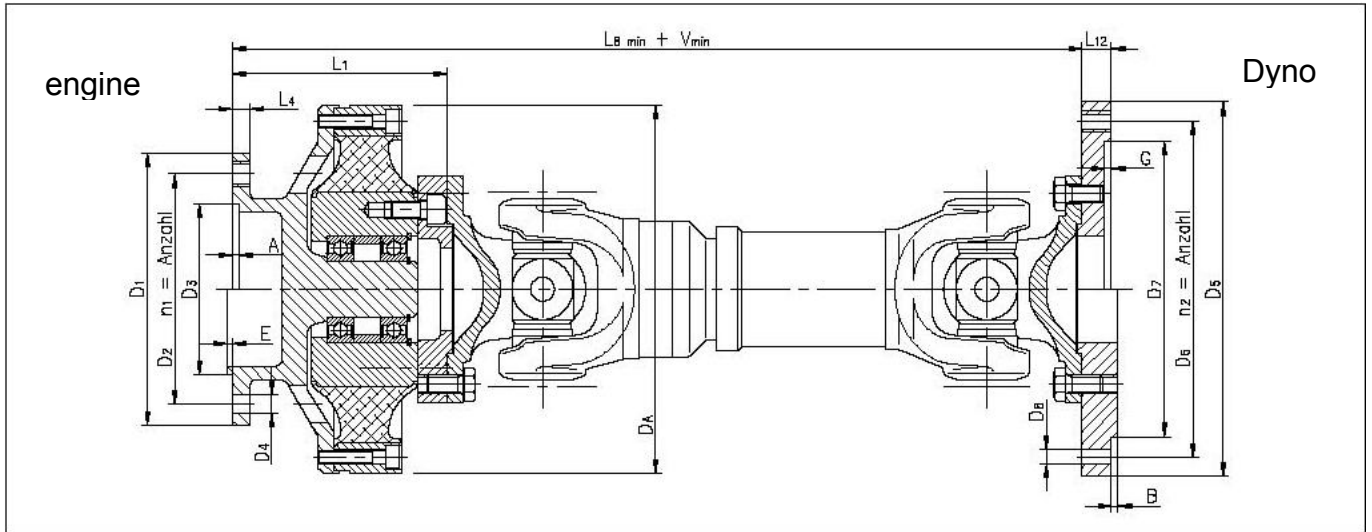


# Details for coupling selection and torsional vibration analysis (TVA)



Engine side				Connection dimensions (acc. to above sketch) in [mm]				
Type				Engine installed		Dynamometer installed		
Description	Symbol	Unit	Value	Symbol	Value	Symbol	Value	
Power	P	[kW]		D <sub>1</sub>		D <sub>5</sub>		
Max. speed	n <sub>max</sub>	[rpm]		D <sub>2</sub>		D <sub>6</sub>		
Idle speed	n <sub>idle</sub>	[rpm]		n <sub>1</sub>		n <sub>2</sub>		
Torque nominal	T	[Nm]		D <sub>3</sub>		D <sub>7</sub>		
Maximum from engine	T <sub>AN</sub>	[Nm]		D <sub>4</sub> / thread		D <sub>8</sub> / thread		
Maximum in service	T <sub>max</sub>	[Nm]		L <sub>1</sub>				
Inline / V (angle xx°)	R/Vxx°	-		L <sub>4</sub>		L <sub>12</sub>		
Number of cylinders	z	-		A		B		
Engine harmonic main order	i	-		E		G		
Firing order Z <sub>1</sub> , Z <sub>2</sub> , ... Z <sub>n</sub>				L <sub>8 min</sub>		V <sub>min</sub>		
Total displacement volume	V <sub>H</sub>	[ccm]		D <sub>A</sub>				
Moments of inertia (engine + flywheel)	J <sub>engine</sub>	[kgm <sup>2</sup> ]		Expected misalignments		Symbol	Unit	Value
<b>Dynamometer side</b>				Axial		K <sub>a</sub>	[mm]	
<b>Type</b>				Radial		K <sub>r</sub>	[mm]	
Moment of inertia reduced to dynamometer input shaft	J <sub>Dyno</sub>	[kgm <sup>2</sup> ]		Angular		K <sub>w</sub>	[°]	

Tab. 3 Details for coupling selection and torsional vibration analysis