

Cranktrain Mass Elastic System

Data valid for SE 6 Cylinder Marine engines models as listed below, possible add on adapters to flywheel have to be added to the mass system

Model:

SE126
SE156
SE196
SE236
SE266
SE286
SE306

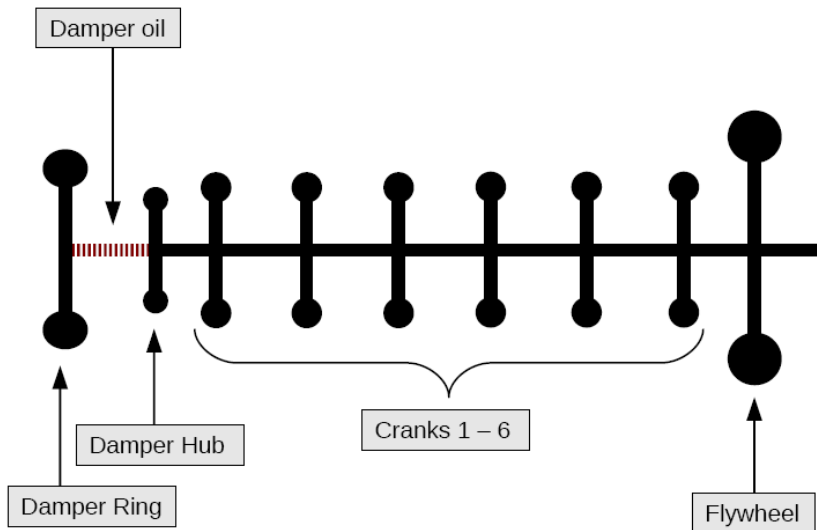
Engine data

Engine Type	M16TCAM		
Number of Cyl.	6		
Firing order	1 5 3 6 2 4		
Bore	85	mm	
Stroke	94	mm	
Displacement / cyl.	0,53	dm ³	
Total displacement	3,2	dm ³	
Conrod lenght	151	mm	
Main journal diameter	65	mm	
Crankpin diameter	52	mm	

Mass and inertia data

Piston mass	0,98	kg
Conrod oscillating mass	0,315	kg
Conrod rotating mass	0,665	kg
Total oscillating mass	1,289	kg
Damper mass	7,4	kg
Flywheel mass	9,986	kg

Name	Inertia [kgm ²]	Tors. stiffness [Nm/rad]	Damping [Nms/rad]
Ring	0,0445		
Oil		40000	22
Hub	0,0375		
		1354287,0	
Cylinder 1	0,01022		1,88
		721315,9	
Cylinder 2	0,01304		1,88
		726411,2	
Cylinder 3	0,01006		1,88
		678899,2	
Cylinder 4	0,01006		1,88
		726339,5	
Cylinder 5	0,01304		1,88
		721137,7	
Cylinder 6	0,01022		1,88
		1350297,0	
Flywheel SE 196 - 306	0,144		
Flywheel SE 126 and 156	0,332		



Equivalent piston inertia (Frahm approximation) per cylinder = 0.01598 kgm²

Engine inertia SE 196 – 306 (Damper, Crankshaft, equivalent piston inertia, flywheel) = 0.3882 kgm²

Engine inertia SE 126 and 156 only = 0.5765 kgm²