

Calculations

Calculating transmission ratios "i"

Transmission ratio

Transmission ratio = No. of teeth driven gear : No. of teeth drive gear

Ratios			Formula
iG	=	gear ratio	ZG2 :ZG1
iA	=	axle ratio	ZA2 :ZA1
iov	=	overall ratio	iG x iA

Example:			
	5th gear	Final drive	
Drive gear	ZG1 = 37	ZA1 = 10	
Driven gear	ZG2 = 31	ZA2 = 37	

Calculating:			
iG	=	31 : 37 = 0.838	
iA	=	37 : 10 = 3.700	
iov	=	(31 : 37) x (37 : 10) = 0.838 x 3.700 = 3.100	