



# Low Backlash Planetary Gears PLE Series

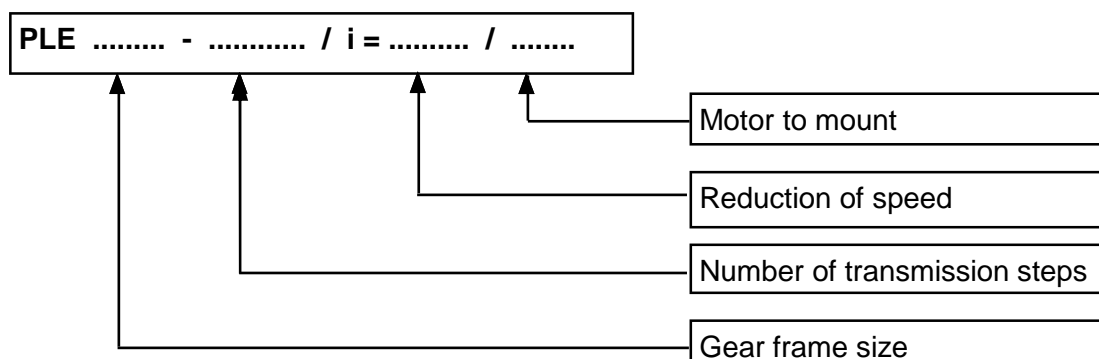
## Type Overview

Typ Type Type	Untersetzungen i = Transmission ratio i = Rapport de reduction i	Abtriebsmomente Permissible torque Couple admissible	Abmessungen Dimensions Cotes
PLE 40	3 - 512	5 - 20 Nm	40 mm
PLE 60	3 - 512	12 - 44 Nm	60 mm
PLE 80	3 - 512	40 - 130 Nm	80 mm
PLE 120	3 - 512	80 - 260 Nm	120 mm

## General Description

Our low backlash planetary gears of the PLE series are developed to the latest degree in tooth construction technology and are manufactured and assembled under a high quality standard (DIN ISO 9001). Due to minimisation, unitisation and standardisation a powerful low-cost gear is available.

## Order Description for PLE-Gears



### Order example:

Gear PLE 60 / Transmission steps 2 / Reduction of speed  $i=64:1$  /  
GM 68 L (Motor)  
==> PLE 60 - 2 /  $i=64:1$  / Motortyp GM 68 L



- high output torque
- high tensional rigidity
- low tensional backlash
- high axial and radial stress to the shaft allowed
- slight running noise
- easy mounting

## General technical data

Gear Type			PLE 40	PLE 60	PLE80	PLE 120
		Units				
Shaft load						
Output shaft	radial	N	200	500	950	2000
	axial	N	200	600	1200	2800
Weight	Single stage	Kg	0,25	0,65	1,60	6,5
	Double stage	Kg	0,35	0,82	2,20	9,0
	Triple stage	Kg	0,45	1,00	2,80	11,5
max. input speed		min <sup>-1</sup> # 1 #	6000	5000	5000	5000
Efficiency	Single stage	%	90	90	90	90
	Double stage	%	85	85	85	85
	Triple stage	%	80	80	80	80
Tensional backlash	Single stage	arcmin	<15	<15	<15	<15
	# 2 #	arcmin	<20	<20	<20	<20
	Triple stage	arcmin	<25	<25	<25	<25
Operating temperature # 3 #			+35 °C to +90 °C, short-time up to 120 °C			
Protection class # 4 #			IP 43			
Lubrication			grease (lifetime lubrication)			
Position of installation			arbitrary			
Lifetime			teeth permanent hardened bearings 10000 operating hours			

### Remark:

- # 1 # if higher input speed is required please contact us
- # 2 # if lower tensional backlash is required please contact us
- # 3 # operating temperatures up to 150 °C are possible with special modifications
- # 4 # protection class IP 65 is available upon request

Technical modifications reserved