

# TECHNICAL CATALOGUE



## PLANETARY GEARED MOTORS

STANDARD **IEC**

# THE INNOVATIVE PROJECT BY MOTOVARIO

**HPL:** A pioneering project that draws on Motovario's experience in the design and production of reducers to ensure performance and safety greater than any alternative currently on the market.

The HPL series is Motovario's range of **industrial planetary gear reducers** designed to meet the needs of power transmissions that require **high density torque and low rotational speed of the output shaft**. These reducers were designed to be compact and versatile to meet the needs of the main industrial sectors.

The HPL series also stands out for **exceptional modularity** and completes the range in Motovario's commercial offer with respect to the HBS reducers, with which it shares the same input units. The HPL series gear reducers offer **quality, strength and sturdiness**, aspects that make Motovario's planetary gear reducers the best and most reliable option for all types of plant and application.

The overall project involves a **total of 13 sizes**, with a nominal performance from **1.000 to 100.000 Nm**: the HPL series as a whole is designed not only to offer solutions for the world of light duty applications, but also to meet the torque requirements of heavy duty applications.

## PLUS



**Local production of components and supply chain**, to offer reducers of superior quality and of low environmental impact



**Faster delivery times**, thanks to a network of Premium MAC partners



**Exceptional nominal performance**, attributable to a pioneering project based on new generation production technologies



**Motovario sales network for distribution and technical assistance**, present throughout the world and comprising branches, MACs and distributors



**Modular and flexible range fully integrated with HBS series gear reducers** with which it shares the input modules

## APPLICATIONS

cranes and elevators



solar trackers



conveyor belts



thickeners



mixers



crushers





# CHARACTERISTICS

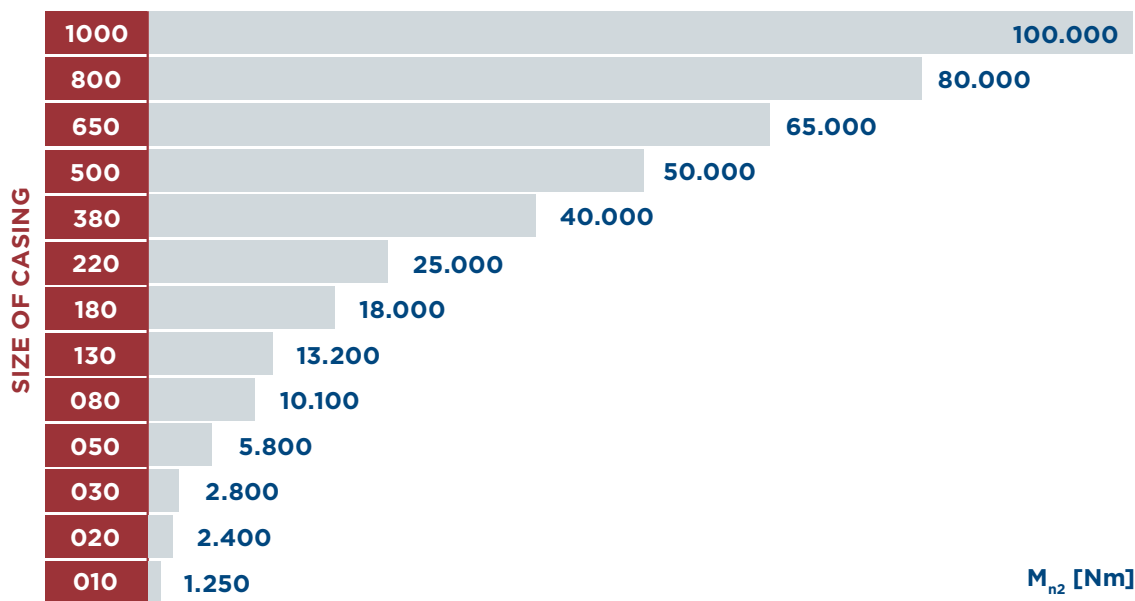
- Modular planetary gear reducers
- 1, 2, 3 and 4 reduction stages
- Coaxial and helical bevel planetary gear reducers
- Available for assembly in flanged version or with feet
- Output supports in high performing spheroidal cast iron, optimised with finite element analysis
- Case-hardened steel gears with optimised profiles
- Gear loading capacity calculated according to ISO 6336-2016 and bearings according to ISO 281
- High resistance to radial loads
- Availability of IEC motor input flange and compact motor coupling
- NBR output shaft seals
- Eyebolt setup for all sizes, for simple and safe handling
- Vertical assembly positions without need for forced lubrication by means of expansion tank





## RANGE

### COMPLETE HPL RANGE



### COAXIAL VERSION

SIZE	010	020	030	050	080
Nominal performance Mn2 [Nm] n1 = 1400 rpm	1.250	2.400	2.800	5.800	10.100
Reduction ratios [i] Coaxial version	3,4 ÷ 2723	3,4 ÷ 2723	3,4 ÷ 2723	11,8 ÷ 2723	7,5 ÷ 2723
Reduction stages Coaxial version	L1 L2 L3 L4				
Outer ring diameter [mm]	196	196	245	245	295
Cylindrical output shaft (CS) DxL [mm]	Ø50x82	Ø50x82	Ø60x105	Ø60x105	Ø80x130
Splined output shaft (SS) DIN 5482	B40X36	B40X36	B58X53	B58X53	B70X64
External diameter of flange / Flanged version [mm]	185	185	222	222	280
Height of output shaft / Version with feet [mm]	132	132	160	160	180

## ACCESSORIES

- Backstop device
- VRM reinforced seals
- Wheel flange
- Torque arm
- Cylindrical output shaft with key, splined output shaft, hollow shaft with shrink disc, splined hollow output shaft
- NMRV and NMRV-P coupling module

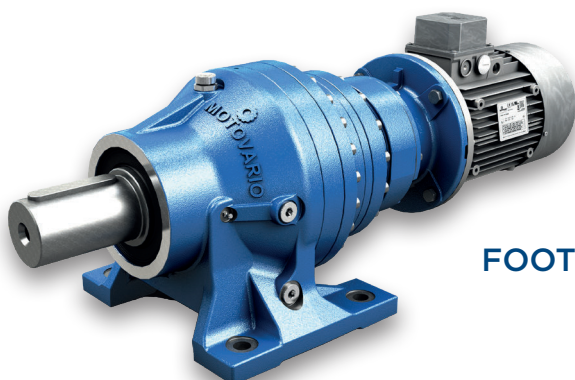
## VERSIONS



FLANGE



BEVEL HELICAL  
GEAR REDUCERS



FOOT



### AVAILABILITY OF PRODUCT AT MOTOVARIO ASSEMBLY CENTRES

Find your nearest MAC Premium on [motovario.com](http://motovario.com)

Premium MACs are approved centres for the assembly of Motovario HPL planetary gear products and related technical assistance.

