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Series of modules for gears

Modules for cylindrical worm gear transmissions

780

Modulreihe für Zahnräder; Moduln für Zylinderschneckengetriebe

This standard, together with DIN 780 Part 1, supersedes DIN 780

As it is current practice in standards published by the International Organization for Standardization (ISO), the comma has been used throughout as a decimal marker.

This standard applies to cylindrical worm gear transmissions of all kinds, e.g. to transmissions used in precision mechanics, in general mechanical engineering and in the heavy engineering industry.

The modules listed in the table shall prevail for the axial sections of the cylindrical worms as specified in DIN 3975 and for the reference circles of the associated worm wheels.

Module m in mm	Module <i>m</i> in mm
0,7	4
0,8	5
0,9	6,3
1	8
1,25	10
1,6	12,5
2	16
2,5	20
3,15	_
	in mm 0,7 0,8 0,9 1 1,25 1,6 2 2,5

Other relevant standards

DIN 780 Part 1 Series of modules for gears; modules for spur gears

DIN 3975 Definitions and parameters for cylindrical worm gears with 90° shaft angle

DIN 3976 Cylindrical worms; dimensions, correlation of shaft centre distances and gear ratios of worm gear drives

Explanatory notes

The modules listed in this standard correspond with the series 1 modules of DIN 780 Part 1 with the exception that, instead of the rounded preferred number values 1,5; 3; 6 and 12, the basic preferred number values 1,6; 3,15; 6,3 and 12,5 have been laid down in DIN 780 Part 2 now presented. This facilitates a more uniform gradation of the worm gear transmissions (see DIN 3976).

When comparing the values of DIN 780 Part 1 with those of DIN 780 Part 2 it shall be noted that for spur gears (cylindrical gears) complying with DIN 3960 it is the normal modules $m_{\rm n}$ which are standardized, whereas for cylindrical worms complying with DIN 3975 the axial modules $m_{\rm x}$ are standardized. Their relationship is given by the equation

$$m_{\rm x} = \frac{m_{\rm n}}{\sin|\beta|} = \frac{m_{\rm n}}{\cos\gamma}$$

For a comparison of the modules with the diametral pitch values still in use in the English-speaking countries, see DIN 780 Part 1, Explanatory notes.

DIN 780, February 1967 edition, has been split up into Part 1 (modules for spur gears) and Part 2 (modules for cylindrical worm gear transmissions). Included for the first time in DIN 780 Part 2 are the modules from m = 0.1 mm to m = 0.9 mm which are needed in precision mechanics.