42P | PLANETARY GEARHEAD

COMPACT | 42 mm

PRECISION PLANETARY GEARHEAD / GEARHEAD ONLY

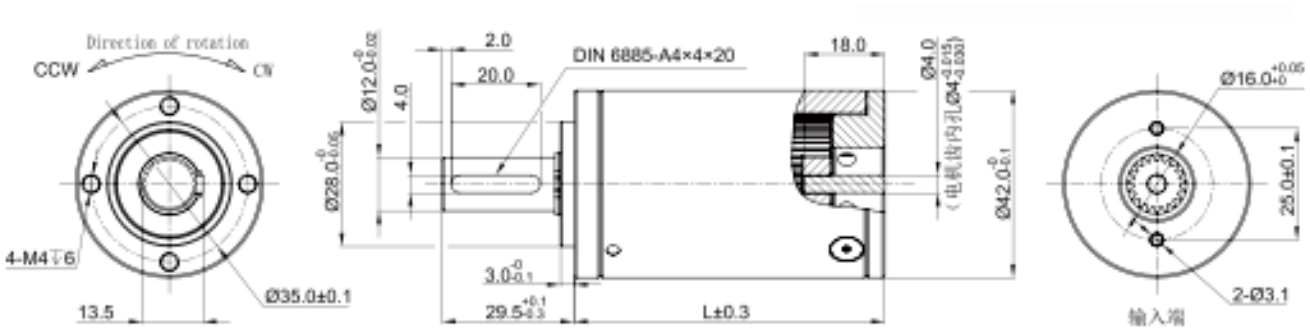
GENERAL SPECIFICATIONS

Housing material	**Steel**
Gear material	**Steel**
Output bearing	**Ball Bearing**
Radial load, 10 mm from flange	**<= 156.9 N**
Shaft axial load	**<= 78.5 N**
Radial play of shaft	**<= 0.04 mm**
Axial / thrust play of shaft	**<= 0.30 mm**
Backlash, no load	**<= 1.2 deg**
Operating temperature	**-40 to +120 C**
Motor input speed	**Application-specific***



Photo: source reference image

TECHNICAL ILLUSTRATION / DIMENSIONS IN mm



PERFORMANCE BY REDUCTION STAGE

Stage	L (mm)	Source torque (mN·m)	Max. momentary torque (mN·m)	Efficiency
1	35.6	**7,845.3**	**15,690.6**	90%
2	46.9	**9,806.7**	**19,613.3**	80%
3	58.2	**11,768.0**	**23,536.0**	73%
4	69.5	**14,710.0**	**29,420.0**	66%

* Input speed is evaluated for the selected motor/gearhead assembly; no generic limit is published.

Torque values follow the factory source; allowable duty depends on operating conditions.

Conversion: 1 kgf·cm = 98.0665 mN·m. Values shown are source specifications, not independently tested.

42P | RATIOS & INTERFACE

COMPACT | 42 mm

PRECISION PLANETARY GEARHEAD / GEARHEAD ONLY

AVAILABLE REDUCTION RATIOS

Reduction ratio (input turns per output revolution) / ratios transcribed from factory source sheet

Stage 1

Length 35.6 mm | Efficiency 90%

3.8 / 4.3 / 5.1

Stage 2

Length 46.9 mm | Efficiency 80%

14.4 / 16.3 / 18.6 / 19.2 / 21.8 / 25.7

Stage 3

Length 58.2 mm | Efficiency 73%

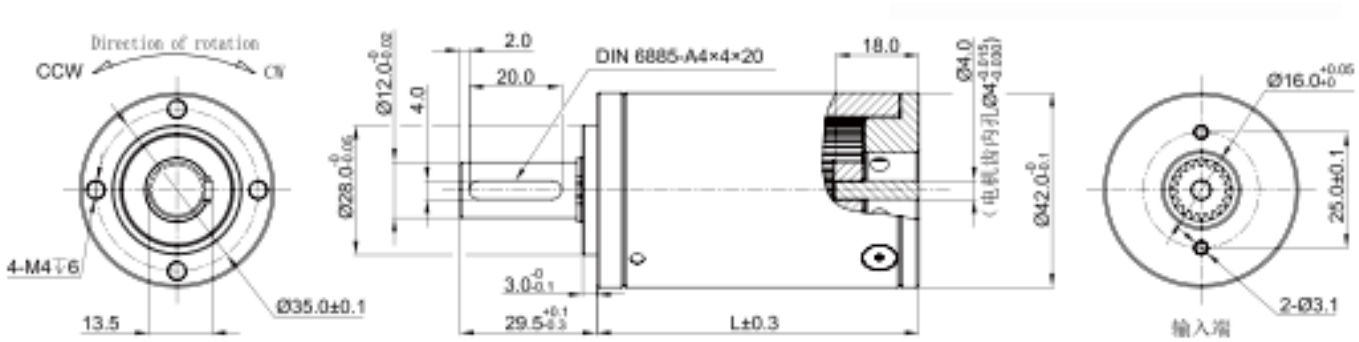
54.4 / 61.9 / 70.4 / 72.8 / 80.1 / 82.8 / 94.2 / 97.4 / 110.8
130.3

Stage 4

Length 69.5 mm | Efficiency 66%

206.4 / 234.6 / 266.8 / 276 / 303.5 / 313.9 / 345 / 357 / 369.2
406 / 419.9 / 477.5 / 493.93 / 551.70 / 660.7

MECHANICAL INTERFACE / SOURCE DIMENSIONED DRAWING



Factory drawing is retained at its original geometry; image clarity is limited by the uploaded raster file.
Use a verified vector 2D drawing / CAD model for manufacturing tolerances and fit checks.

SOURCE NOTES / ENGINEERING REVIEW

Source motor reference: 3-48 VDC, DC motor power below 200 W. This is not a validated motor pairing.

Original speed-limit line intentionally omitted from this document; confirm actual duty, heating and life by application.

Torque values follow the factory source; confirm continuous-duty conditions for the application.