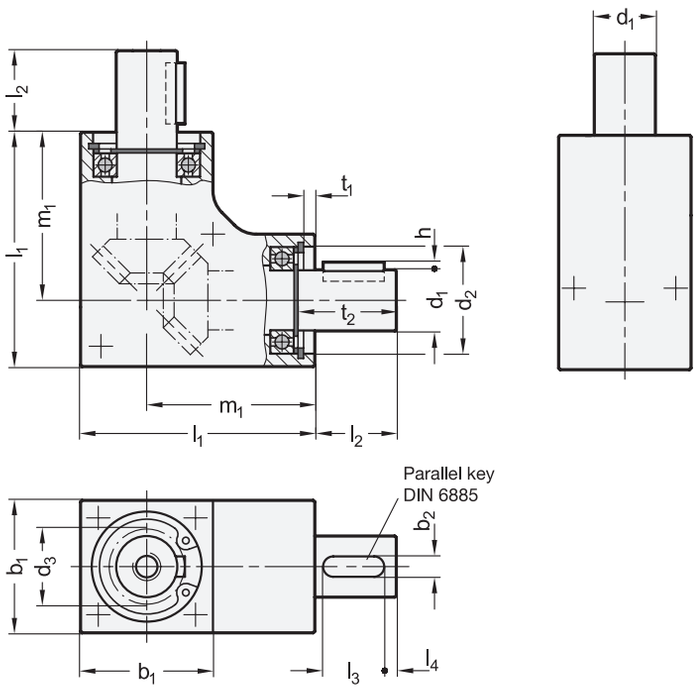


Metric

2 Type

L Angular gear 90°

Metric table

Dimensions in: millimeters - *inches*

1 b_1	3 d_1 j6	b_2	d_2	d_3**	h	l_1	l_2	l_3	l_4	m_1	t_1	t_2
18 *0.71*	6 *0.2362*	2 *0.08*	13 *0.51*	-	0.8 *0.03*	32 *1.26*	12 *0.47*	8 *0.31*	2 *0.08*	23 *0.91*	2.1 *0.08*	15.4 *0.61*
20 *0.79*	8 *0.3150*	2 *0.08*	16 *0.63*	9.2 *0.36*	0.8 *0.03*	35 *1.38*	12 *0.47*	8 *0.31*	2 *0.08*	25 *0.98*	1.95 *0.08*	15.3 *0.60*
24 *0.94*	10 *0.3937*	4* *0.16*	19 *0.75*	11.8 *0.46*	1.5 *0.06*	42 *1.65*	16 *0.63*	12 *0.47*	3 *0.12*	30 *1.18*	2 *0.08*	18 *0.71*
26 *1.02*	12 *0.4724*	4 *0.16*	21 *0.83*	13.6 *0.54*	1.5 *0.06*	46 *1.81*	16 *0.63*	12 *0.47*	3 *0.12*	33 *1.30*	2 *0.08*	19.5 *0.77*
30 *1.18*	12 *0.4724*	4 *0.16*	24 *0.94*	16.4 *0.65*	1.5 *0.06*	53 *2.09*	16 *0.63*	12 *0.47*	3 *0.12*	38 *1.50*	2.1 *0.08*	18.3 *0.72*
32 *1.26*	12 *0.4724*	4 *0.16*	28 *1.10*	19.8 *0.78*	1.5 *0.06*	56 *2.20*	16 *0.63*	12 *0.47*	3 *0.12*	40 *1.57*	2.1 *0.08*	18.3 *0.72*
35 *1.38*	12 *0.4724*	4 *0.16*	30 *1.18*	20.4 *0.80*	1.5 *0.06*	60 *2.36*	16 *0.63*	12 *0.47*	3 *0.12*	42.5 *1.67*	2.1 *0.08*	18.3 *0.72*

* Deviating from DIN 6885 ** Theoretically usable hub diameter

Specification

4

- Housing
  - Aluminum
  - Sealed to prevent dust entry
  - Anodized, natural color **AN**
- Bevel gear wheels
  Steel, case-hardened
- Ball bearing
  - Steel
  - Sealed (sealing disks 2RS)
- Temperature range:
  -4 °F to +140 °F (-20 °C to +60 °C)
- *Keyway WN / DIN 6885 → page QVX*
- *ISO Fundamental Tolerances → page QVX*
- RoHS compliant

Information

Bevel gear boxes GN 3971 can transmit high torque despite their very compact dimensions. They can readily be used for a multitude of applications, such as height adjustments or to change the direction of shaft rotation.

The numerous fastening holes allow for simple mounting in any orientation or position. The parallel keys can take any angular positions.

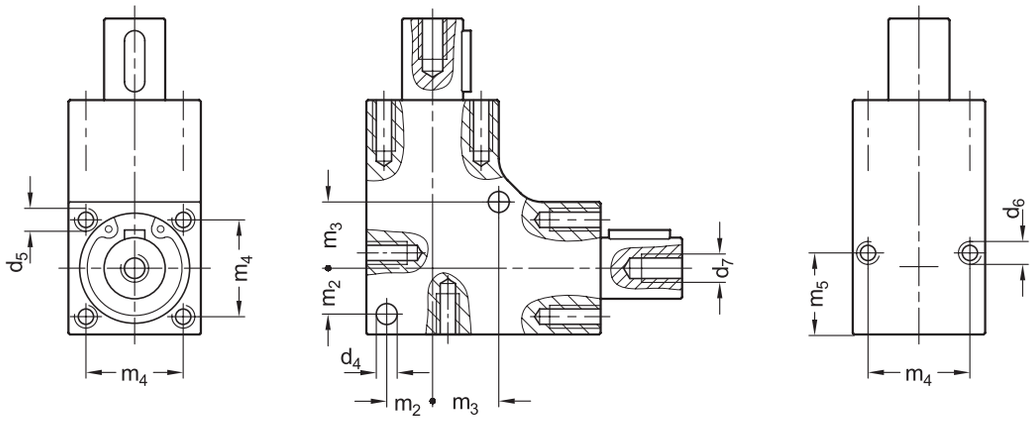
see also...

- *Worm Gear Reducers GN 3975 → page QVX*

How to order

1 2 3 4
GN 3971-26-L-12-AN

1	Width b_1
2	Type
3	Diameter d_1
4	Finish



Dimensions in: millimeters - *inches*

b_1	d_4	d_5***	d_6***	d_7****	m_2	m_3	m_4	m_5
18 *0.71*	3.1 *0.12*	M 3	M 3	M 3	6 *0.24*	8.5 *0.33*	13 *0.51*	11 *0.43*
20 *0.79*	3.1 *0.12*	M 3	M 3	M 3	7 *0.28*	10 *0.39*	15 *0.59*	10 *0.39*
24 *0.94*	4.1 *0.16*	M 4	M 4	M 4	8 *0.31*	12 *0.47*	18 *0.71*	16 *0.63*
26 *1.02*	4.1 *0.16*	M 4	M 4	M 5	9 *0.35*	13 *0.51*	20 *0.79*	16 *0.63*
30 *1.18*	4.1 *0.16*	M 4	M 4	M 5	11 *0.43*	15 *0.59*	22 *0.87*	16 *0.63*
32 *1.26*	4.1 *0.16*	M 4	M 4	M 5	12 *0.47*	17 *0.67*	24 *0.94*	16 *0.63*
35 *1.38*	4.1 *0.16*	M 4	M 4	M 5	13.5 *0.53*	17.5 *0.69*	26 *1.02*	16 *0.63*

*** Usable thread depth: min. 2 x d_5 / d_6 **** Usable thread depth: min. 1.6 x d_7

Mechanical features

Gear ratio i	1 : 1
Circumferential backlash at the drive shaft	3° ± 0.5°
Shaft direction of rotation	Any
Life expectancy (guideline)	1,000 hours under full load at a rotational speed of 500 rpm, assuming the gear box is operating for 20% of every 5 minutes (1 minute of operation + 4 minutes break) at an ambient temperature of 68 °F (20 °C)
Maintenance	Permanent lubrication with grease, maintenance-free

Dimensions in: millimeters - *inches*

b_1	Max. torque in Nm			Max. radial force*	Max. axial force**
	at 100 min^{-1}	at 500 min^{-1}	at 1000 min^{-1}		
18 *0.71*	0.35	0.1	0.05	60 N *13.49 lbf*	60 N *13.49 lbf*
20 *0.79*	0.75	0.3	0.15	100 N *22.48 lbf*	100 N *22.48 lbf*
24 *0.94*	2.5	1	0.5	120 N *26.98 lbf*	120 N *26.98 lbf*
26 *1.02*	4	1.5	0.75	140 N *31.47 lbf*	140 N *31.47 lbf*
30 *1.18*	5	2	1	240 N *53.95 lbf*	240 N *53.95 lbf*
32 *1.26*	8	3	1.5	550 N *124 lbf*	550 N *124 lbf*
35 *1.38*	10	4	2	550 N *124 lbf*	550 N *124 lbf*

* At axial force = 0, ** At radial force = 0

Assembly instructions

Do not exert any forces onto the housing or into the bearings during assembly. Use of the threaded holes d_6 in the shaft is recommended. The use of a corresponding coupling is recommended to compensate for manufacturing-related shaft offsets and runout tolerances as well as for damping vibrations and shocks.