



SPECIFICATION

Type L: angular gear 90°

Housing

- Aluminium
- Sealed to prevent dust entry
- Anodized, natural color **AN**

Bevel gear wheels

- Steel, case-hardened

Ball bearing

- Steel
- Sealed (sealing disks 2RS)

Working temperature: from -20°C to +60°C.

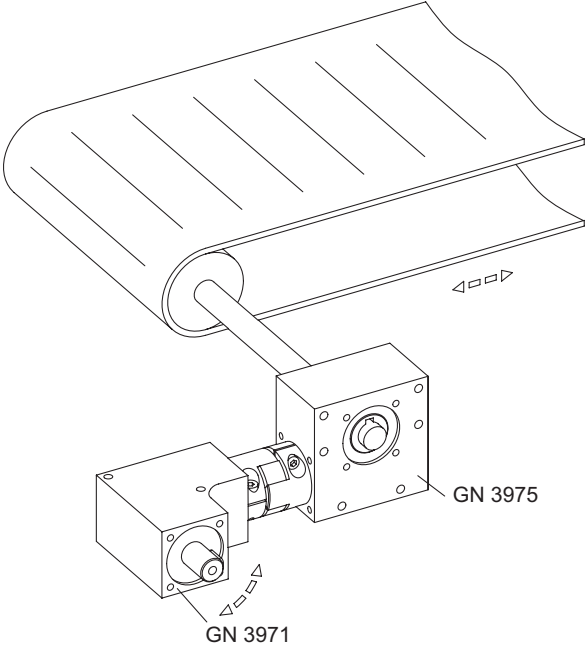
FEATURES AND APPLICATIONS

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

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ASSEMBLY INSTRUCTIONS

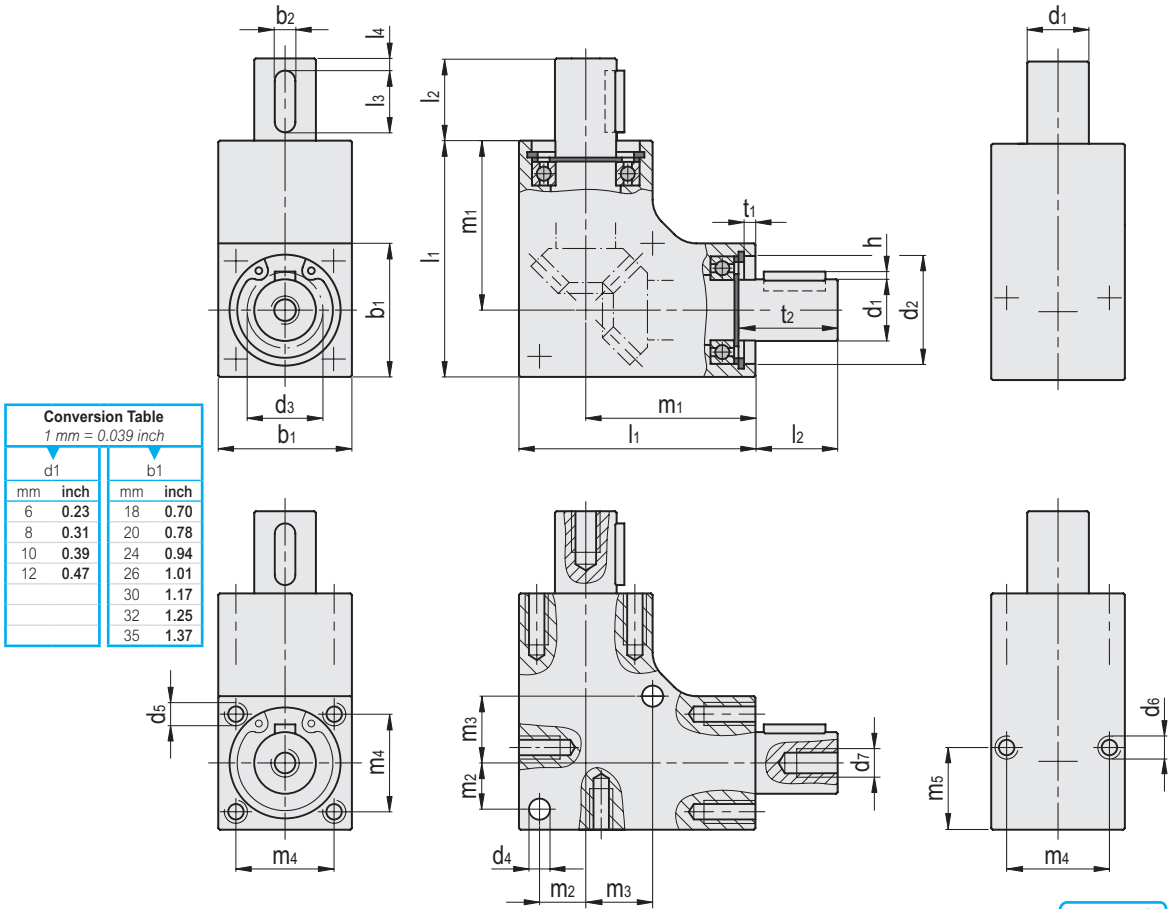
Do not exert any forces onto the housing or into the bearings during assembly. Use of the threaded holes d7 in the shaft is recommended. The use of a corresponding coupling is recommended to compensate for manufacturing-related shaft offsets and runout tolerances as well as for damping vibrations and shocks.



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 20 °C
Maintenance	Permanent lubrication with grease, maintenance-free

b1	Max. torque in Nm			Max. radial force in N*	Max. axial force in N**
	at 100 min-1	at 500 min-1	at 1000 min-1		
18	0.35	0.1	0.05	60	60
20	0.75	0.3	0.15	100	100
24	2.5	1	0.5	120	120
26	4	1.5	0.75	140	140
30	5	2	1	240	240
32	8	3	1.5	550	550
35	10	4	2	550	550

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



Conversion Table 1 mm = 0.039 inch			
d1		b1	
mm	inch	mm	inch
6	0.23	18	0.70
8	0.31	20	0.78
10	0.39	24	0.94
12	0.47	26	1.01
		30	1.17
		32	1.25
		35	1.37

Code	Description	d1	j6	d3**	d2	d4	d5***	d6***	d7****	b1	b2	l1	l2	l3	l4	h	t1	t2	m1	m2	m3	m4	m5	Δ
GN.21901	GN 3971-18-L-6-AN	6	-	13	3.1	M 3	M 3	M 3	M 3	18	2	32	12	8	2	0.8	2.1	15.4	23	6	8.5	13	11	55
GN.21903	GN 3971-20-L-8-AN	8	9.2	16	3.1	M 3	M 3	M 3	M 3	20	2	35	12	8	2	0.8	1.95	15.3	25	7	10	15	10	80
GN.21905	GN 3971-24-L-10-AN	10	11.8	19	4.1	M 4	M 4	M 4	M 4	24	4*	42	16	12	3	1.5	2	18	30	8	12	18	16	144
GN.21907	GN 3971-26-L-12-AN	12	13.6	21	4.1	M 4	M 4	M 5	M 5	26	4	46	16	12	3	1.5	2	19.5	33	9	13	20	16	190
GN.21909	GN 3971-30-L-12-AN	12	16.4	24	4.1	M 4	M 4	M 5	M 5	30	4	53	16	12	3	1.5	2.1	18.3	38	11	15	22	16	270
GN.21911	GN 3971-32-L-12-AN	12	19.8	28	4.1	M 4	M 4	M 5	M 5	32	4	56	16	12	3	1.5	2.1	18.3	40	12	17	24	16	332
GN.21913	GN 3971-35-L-12-AN	12	20.4	30	4.1	M 4	M 4	M 5	M 5	35	4	60	16	12	3	1.5	2.1	18.3	42.5	13.5	17.5	26	16	418

* Deviating from DIN 6885
** Theoretically usable hub diameter
*** Usable thread depth: min. 2 x d5 / d6
**** Usable thread depth: min. 1.6 x d7