



VERSIONS

- Type **L**: angular gear 90°
- Type **T**: bevel gear with dual output shafts

Housing

- Aluminum
- 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.

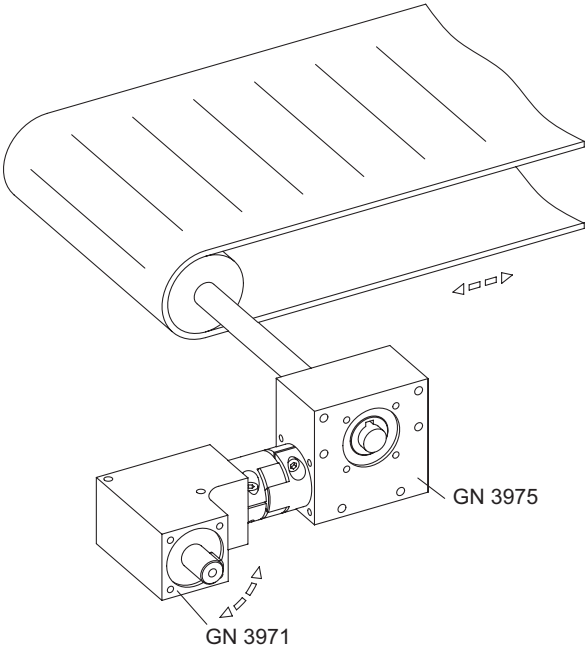
FEATURES AND APPLICATIONS

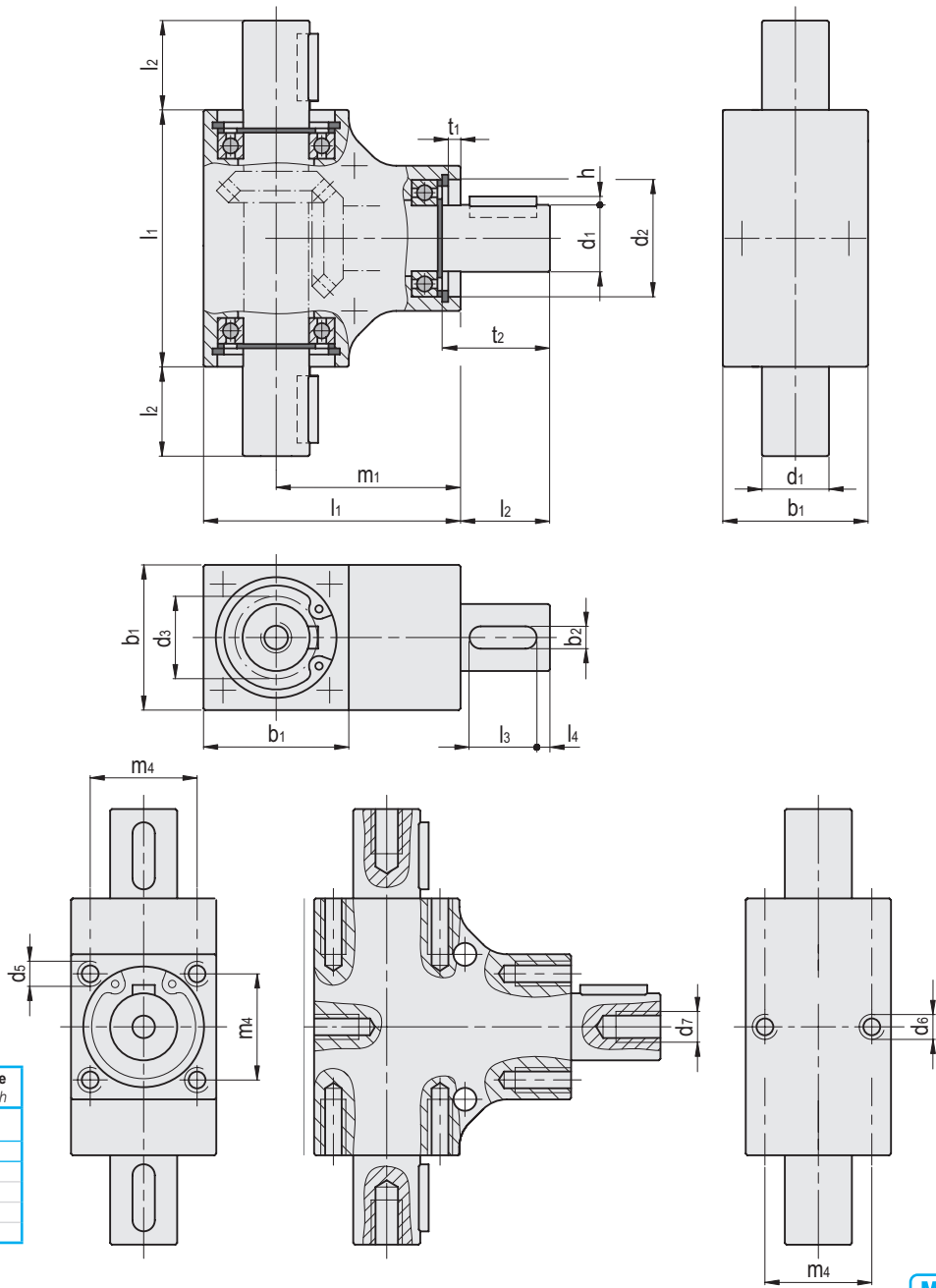
Bevel gear boxes GN 3971 can transmit high torque despite their very compact dimensions. !da duplicazione! They can readily be used for a multitude of applications, such as height adjustments or to change the direction of shaft rotation.

They can readily be used for a multitude of applications, such as height adjustments or to change the direction of shaft rotation. The parallel keys can take any angular positions.

ASSEMBLY INSTRUCTION

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.





GN 3971-T

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.21902	GN 3971-18-T-6-AN	6	-	13	3.1	M 3	M 3	M 3	M 3	18	2	32	12	8	2	0.8	3.1	15.1	23	6	8.5	13	11	59
GN.21904	GN 3971-20-T-6-AN	6	9.2	16	3.1	M 3	M 3	M 3	M 3	20	2	35	12	8	2	0.8	2.25	14.25	25	7	10	15	10	70
GN.21906	GN 3971-24-T-8-AN	8	11.8	19	4.1	M 4	M 4	M 4	M 4	24	3	42	16	10	3	1.2	2	18	30	8	12	18	16	140
GN.21908	GN 3971-26-T-8-AN	8	13.6	21	4.1	M 4	M 4	M 4	M 4	26	3	46	16	10	3	1.2	2	18	33	9	13	20	16	179
GN.21910	GN 3971-30-T-8-AN	8	16.4	24	4.1	M 4	M 4	M 4	M 4	30	3	53	16	10	3	1.2	2.3	18.3	38	11	15	22	16	251
GN.21912	GN 3971-32-T-10-AN	10	19.8	28	4.1	M 4	M 4	M 4	M 4	32	3	56	16	10	3	1.2	2.8	18.8	40	12	17	24	16	294
GN.21914	GN 3971-35-T-12-AN	12	20.4	30	4.1	M 4	M 4	M 5	M 5	35	4	60	16	12	3	1.5	3.2	19.2	42.5	13.5	17.5	26	16	407

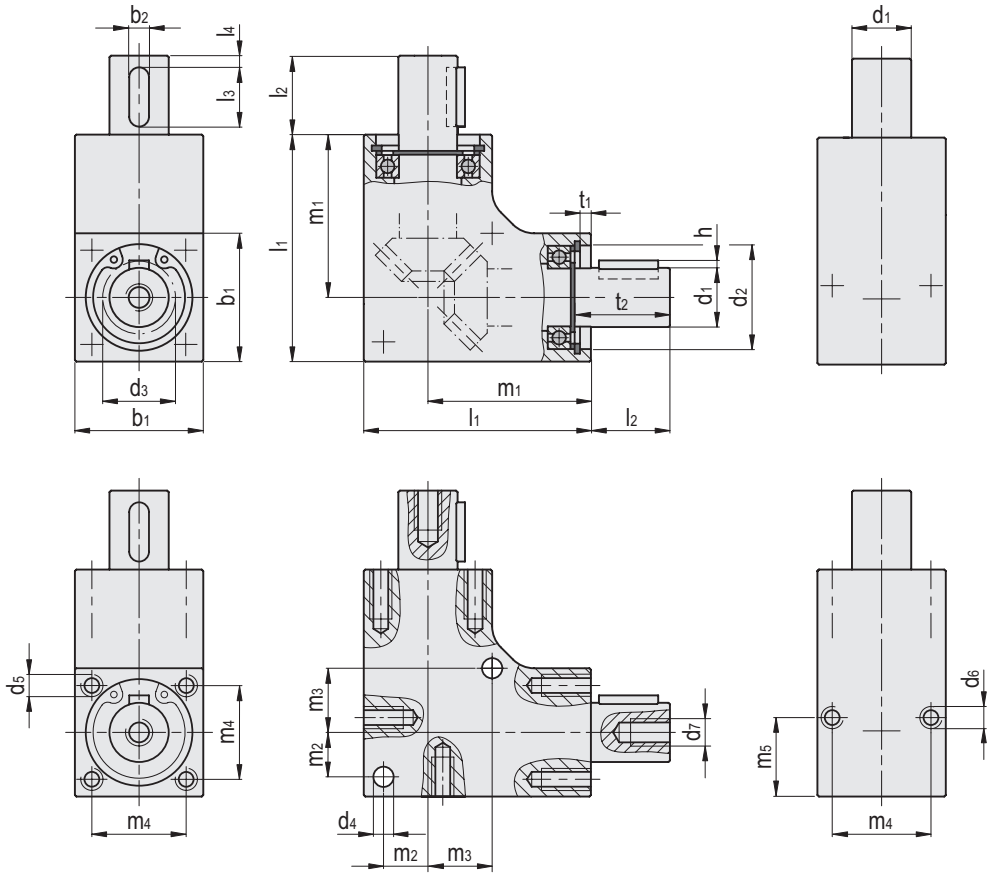
* Deviating from DIN 6885
** Theoretically usable hub diameter
*** Usable thread depth: min. 2 x d5 / d6
**** Usable thread depth: min. 1.6 x d7

Gear ratio i	1 : 1
Circumferential backlash at the drive shaft	$3^{\circ} \pm 0.5^{\circ}$
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	
mm	inch
6	0.23
8	0.31
10	0.39
12	0.47

METRIC

GN 3971-L

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	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	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	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	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	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	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	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. $2 \times d5 / d6$

**** Usable thread depth: min. $1.6 \times d7$