

Bevel gear drive with plastic bevel gears



Material:

Housing, ZnAl4Cu1 die-cast zinc.

Shafts, 1.4301 stainless steel.

Bevel gears, polyacetal (POM) or polyketone (PK).

Version:

Housing and shafts, bright.

Bevel gears, injection moulded, straight teeth. Engagement angle 20°.

Polyacetal, white.

Polyketone, ivory-tone.

Sample order:

nlm 22715-1210

Note:

Polyacetal: Standard material with high hardness grade and low coefficient of friction.

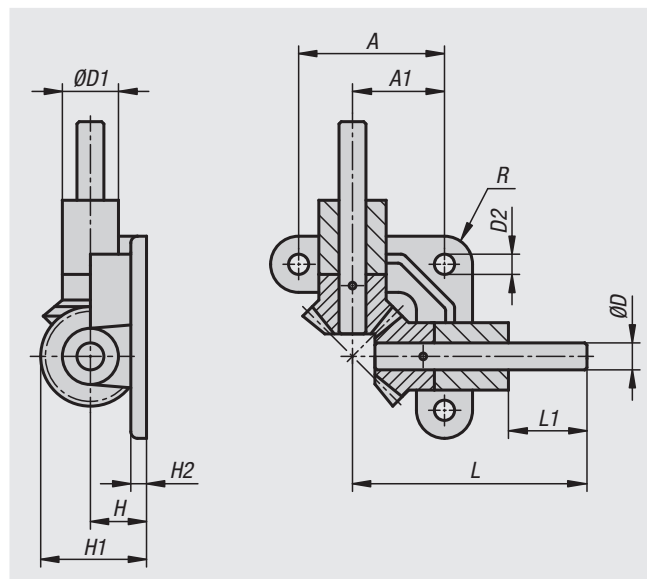
Polyketone: Material with significantly longer service life, higher power transmission and greater security against tooth breakage due to the extraordinarily high wear resistance and very good tribological properties.

Universally applicable and maintenance-free bevel gear drives in six different sizes with the ratio 1:1. The rotation direction is arbitrary. The shafts are mounted in the housing on self-lubricating plain bearings. The axis angle is 90°.

These bevel gears are suitable for manual drives and for temporary power drives at low speeds and with a low load.

Temperature range:

-20 °C to +100 °C.



Attention:

The torques specified in the tables relate exclusively to the toothings. The shaft diameter, key size, etc. are not taken into account. The permissible load calculations are based on the basic principles of the pitting load capacity of the tooth flanks as well as the occurring tooth root stress. The respective permissible load of a gear wheel depends on so many different factors that the values specified can only be reference values meant to make selection easier. The torque specifications relate to a single tooth. The overlap, which is essential for determining the transmissible torque, occurs depending on the pitch diameter, gear wheel pairing, etc. In the simplest straight tooth cases, an overlap ratio of 1.1 to 1.25 is normal. To increase the overlap, a higher number of teeth with smaller modules is used. A good profile overlap can minimise damage such as pitting.

Order No.	Component material	Transmission ratio	Module	No. of teeth	A	A1	D	D1	D2	H	H1	H2	L	L1	R	Max. torque Ncm
22715-1210	polyacetal	1:1	1	16/16	32	19,4	5h9	12	4,8	10	18,8	4	50	15	6	8,3
22715-1215	polyacetal	1:1	1,5	16/16	45	28,4	8h9	18	5,8	15	28,2	5	70	20	9	29
22715-1220	polyacetal	1:1	2	16/16	55	35	10h6	22	7	20	37,5	6	90	30	11	73
22715-1225	polyacetal	1:1	2,5	16/16	65	41	12h6	25	9	25	46,8	7	105	35	12,5	145
22715-1230	polyacetal	1:1	3	16/16	75	47,5	15h6	30	9	30	56,2	8	120	40	15	250
22715-1235	polyacetal	1:1	3,5	16/16	85	54	18h6	33	11	35	65,7	9	135	45	16	440
22715-2210	polyketone	1:1	1	16/16	32	19,4	5h9	12	4,8	10	18,8	4	50	15	6	8,7
22715-2215	polyketone	1:1	1,5	16/16	45	28,4	8h9	18	5,8	15	28,2	5	70	20	9	30,4
22715-2220	polyketone	1:1	2	16/16	55	35	10h6	22	7	20	37,5	6	90	30	11	76,6
22715-2225	polyketone	1:1	2,5	16/16	65	41	12h6	25	9	25	46,8	7	105	35	12,5	152,2
22715-2230	polyketone	1:1	3	16/16	75	47,5	15h6	30	9	30	56,2	8	120	40	15	262,5
22715-2235	polyketone	1:1	3,5	16/16	85	54	18h6	33	11	35	65,7	9	135	45	16	462