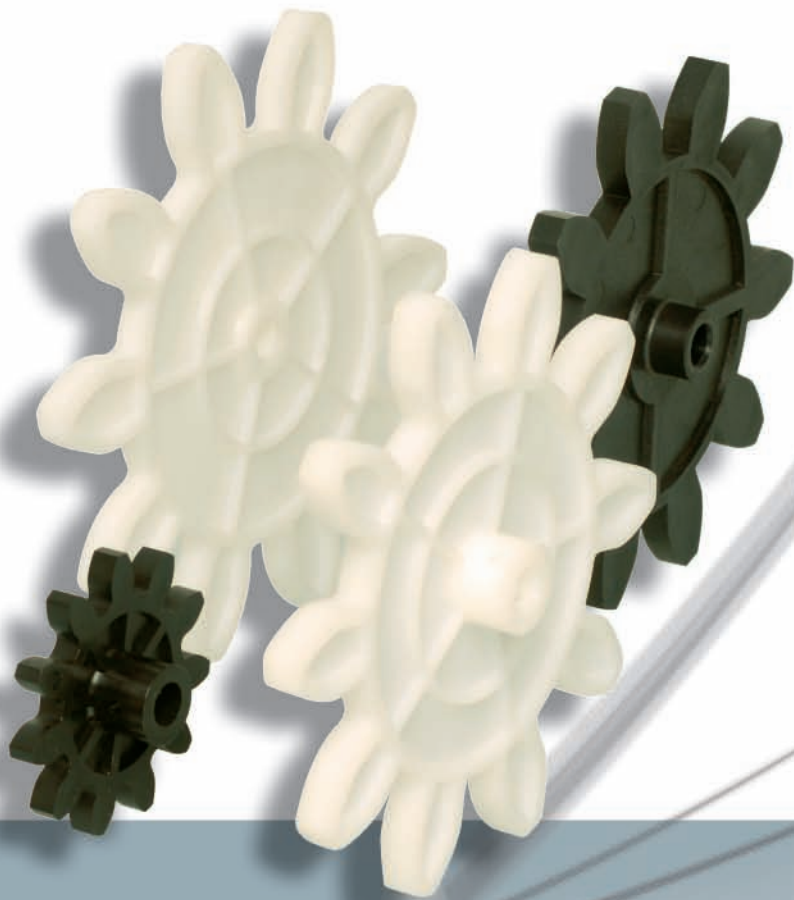




*PINION GEAR SERIES ZETA*



## PINION GEAR SERIES ZETA



Our pinion gears are specially designed and manufactured for the use of encoder and rotary limit switches. They are sold in combination with our rotary limit switches of series FRS, FCN and FRM, but may as well suited to each shaft dimensions from absolute or incremental encoders.

The biggest application range for these products is wind energy sector, especially for monitoring the blade pitch or nacelle rotation by using this pinion gear along with rotary limit switches or encoders.

All pinion gears are made of special plastic material, which has been developed for the hardest environmental conditions. The plastic material is REACH approved. Furthermore all pinion gears are certified acc. to cold-climate-license for a operating temperature of maximum -40°C.

### Technical Specifications

Temperature	
Operational :	- 40°C up to +70°C
Material :	Polyamide
Colour :	white / black

### Individual Production

The charts of the following pages contain previous standard types, which are always on stock in our headquarters in Hamburg.

We have recognized the necessity of a flexible production for the changing markets and changing customer requirements. Through a special procedure it is possible to reduce the time of tooling for the moulds to two weeks and therefore new series types are available after three to five weeks.

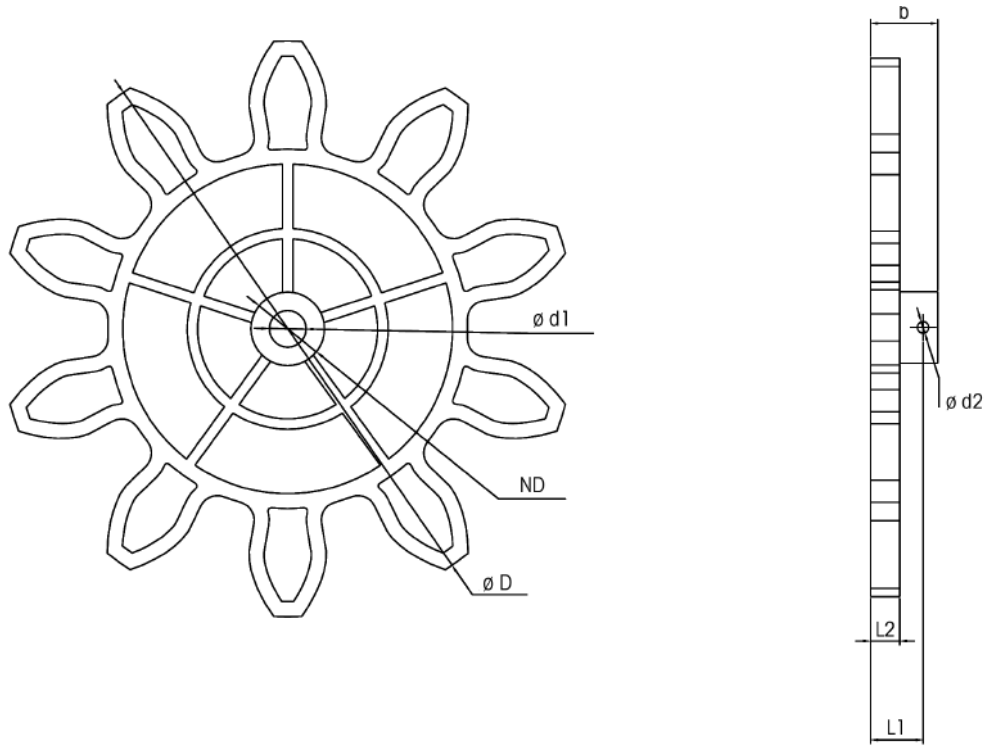
The fabrication of a new mould is often profitable also at a small quantity. If you need new sizes of pinion gears, we gladly check your inquiry and calculate for you, when it is profitable to fabricate a new tool. You will be surprised how cost-effective and time-saving it is to fabricate your pinion gear with modern technology.

B-COMMAND - reliability and quality are the arguments we stand for.  
We are pleased to quote especially created types you require.



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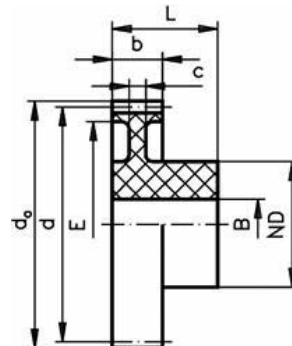
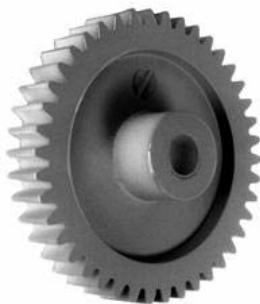
### Dimensions



Item-Code	Module-Size	Number of Teeth	D (mm)	d1 (mm)	b (mm)	L1 (mm)	d2 (mm)	ND (mm)	L2 (mm)
M5Z12	M5	12	70	12	23	13	4	25	8
M6Z11	M6	11	78	12	23	13	4	25	8
M8Z12	M8	12	112	12	23	13	4	25	9
M10Z12	M10	12	144	12	23	13	4	25	10
M12Z10	M12	10	144	12	23	16	4	25	10
M12Z12	M12	12	168	12	24,2	17	4	25	10
M14Z10	M14	10	168	12	24	17	4	24	10
M16Z10	M16	10	192	12	23	18	4	24,5	10
M18Z10	M18	10	216	12	26	20,5	4	27	11
M18Z11	M18	11	234	12	20	15	4	32	8
M18Z12	M18	12	252	12	23	16	4	25	10
M20Z8	M20	8	200	12	23	17	4	24,5	10
M20Z11	M20	11	260	12	20	15	4	32	8
M22Z10	M22	10	264	12	24	17	4	32	10
M24Z12	M24	12	336	12	25	17	4	32	10

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### Selection Chart



Item-Code	Module-Size	Number of Teeth	D (mm)	d1 (mm)	b (mm)	ND (mm)	L2 (mm)
M1Z100	M1,0	100	102	12	18	24	9
M1Z110	M1,0	110	112	12	18	24	9
M1Z120	M1,0	120	122	12	18	24	9
M1Z130	M1,0	130	132	12	18	24	9
M1Z140	M1,0	140	142	12	18	24	9
M1,5Z50	M1,5	50	78	12	23	27	12
M1,5Z52	M1,5	52	81	12	23	27	12
M1,5Z54	M1,5	54	84	12	23	27	12
M1,5Z55	M1,5	55	85,5	12	23	27	12
M1,5Z60	M1,5	60	93	12	23	27	12
M2Z35	M2,0	35	74	12	27	26	15
M2Z36	M2,0	36	76	12	27	26	15
M2Z38	M2,0	38	80	12	27	26	15
M2Z40	M2,0	40	84	12	27	26	15
M2Z42	M2,0	42	88	12	27	26	15
M3Z12	M3,0	12	42	12	34	24	19
M3Z13	M3,0	13	45	12	34	24	19
M3Z14	M3,0	14	48	12	34	24	19
M3Z15	M3,0	15	51	12	34	24	19
M3Z16	M3,0	16	54	12	34	24	19
M3Z17	M3,0	17	57	12	34	24	19
M3Z18	M3,0	18	60	12	34	24	19
M3Z19	M3,0	19	63	12	34	24	19
M3Z20	M3,0	20	66	12	34	24	19
M3Z21	M3,0	21	69	12	34	24	19
M3Z22	M3,0	22	72	12	34	24	19
M3Z23	M3,0	23	75	12	34	24	19
M3Z24	M3,0	24	78	12	34	24	19