

MATERIAL
Glass-fibre reinforced polyamide based (PA) technopolymer, RAL 5005 blue colour, matte finish.
Produced from FDA compliant raw material (FDA CFR.21 and EU 10/2011).

STANDARD EXECUTIONS
- **ZCL-1.0-VD**: module 1.0, pre-drilled pass-through hole
- **ZCL-1.5-VD**: module 1.5, pre-drilled pass-through hole
- **ZCL-2.0-VD**: module 2.0, pre-drilled pass-through hole

In the table the size "d" of the hole represents the minimum diameter of the hole that can be obtained through machining.

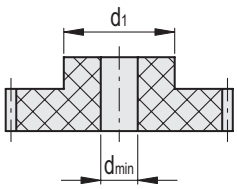
FEATURES
The RAL 5005 blue colour is easily visible in case of accidental food contamination.
Particularly suitable for applications in the food and pharmaceutical industries.
The torques indicated in the tables are granted with rpm included between 0 and 150. Torque values can vary depending on lubrication, temperature, pairing with different materials and continuous operating hours.
Maximum tolerance on plain pass-through hole: IT 9.

TECHNICAL DATA
See: Transmission elements (on page -).

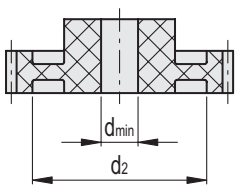
SPECIAL EXECUTIONS ON REQUEST
- Gears of various dimensions.
- Assembly by means of a transversal grub screw.
- Hub with hole and keyway in compliance with UNI 6604 tolerance D10.

MOUNTING
To pair two spur gears, a positive backlash must be considered. For modules 1.0 - 1.5 is recommended the tolerance (+0.03 +0.1). For module 2.0 is recommended the tolerance (+0.08 +0.3).

ZCL-1.0 (Z ≤ 48)



ZCL-1.0 (Z = 60)



Conversion Table *1 mm = 0.039 inch*	
L	
mm	**inch**
25	**0.98**

ZCL-1.0-VD

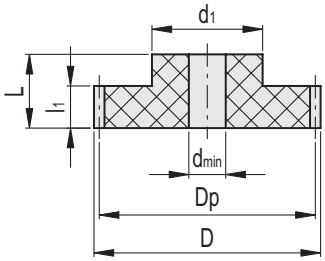
METRIC

Code	Description	Module M	No. of teeth Z	Dp*	D	L	d	d1	d2	l1	Max. torque [Nm]	⚖
553103	ZCL-1.0-12-VD	1.0	12	12	14	25	4	9	-	15	2.6	3
553109	ZCL-1.0-15-VD	1.0	15	15	17	25	4	10	-	15	3.2	4
553111	ZCL-1.0-16-VD	1.0	16	16	18	25	5	13	-	15	3.4	5
553119	ZCL-1.0-20-VD	1.0	20	20	22	25	5	16	-	15	4.3	8
553127	ZCL-1.0-24-VD	1.0	24	24	26	25	6	20	-	15	5.1	12
553139	ZCL-1.0-30-VD	1.0	30	30	32	25	6	25	-	15	6.4	18
553143	ZCL-1.0-32-VD	1.0	32	32	34	25	6	25	-	15	6.8	19
553151	ZCL-1.0-36-VD	1.0	36	36	38	25	8	30	-	15	7.7	28
553159	ZCL-1.0-40-VD	1.0	40	40	42	25	8	30	-	15	8.5	29
553169	ZCL-1.0-45-VD	1.0	45	45	47	25	10	35	-	15	9.6	37
553173	ZCL-1.0-48-VD	1.0	48	48	50	25	10	35	-	15	10.3	42
553189	ZCL-1.0-60-VD	1.0	60	60	62	25	14	40	51	15	12.8	58

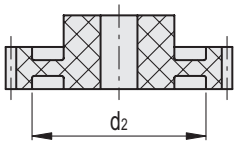
* Pitch diameter.

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ZCL-1.5 (Z ≤ 36)
ZCL-2.0 (Z ≤ 30)



ZCL-1.5 (Z ≥ 40)
ZCL-2.0 (Z ≥ 36)



Conversion Table *1 mm = 0.039 inch*	
L	
mm	inch
30	1.18
35	1.38

ZCL-1.5-VD METRIC

Code	Description	Module M	No. of teeth Z	Dp*	D	L	d	d1	d2	l1	Max. torque [Nm]	⚖
553301	ZCL-1.5-12-VD	1.5	12	18	21	30	5	14	-	17	6.3	7
553307	ZCL-1.5-15-VD	1.5	15	22.5	25.5	30	5	18	-	17	7.9	13
553313	ZCL-1.5-18-VD	1.5	18	27	30	30	6	20	-	17	9.5	16
553317	ZCL-1.5-20-VD	1.5	20	30	33	30	8	25	-	17	10.5	23
553325	ZCL-1.5-24-VD	1.5	24	36	39	30	8	28	-	17	12.7	28
553337	ZCL-1.5-30-VD	1.5	30	45	48	30	12	35	-	17	15.8	45
553349	ZCL-1.5-36-VD	1.5	36	54	57	30	12	35	-	17	19	48
553357	ZCL-1.5-40-VD	1.5	40	60	63	30	16	40	48	17	21.1	64
553371	ZCL-1.5-48-VD	1.5	48	72	75	30	16	45	53	17	25.3	99

ZCL-2.0-VD METRIC

Code	Description	Module M	No. of teeth Z	Dp*	D	L	d	d1	d2	l1	Max. torque [Nm]	⚖
553501	ZCL-2.0-12-VD	2.0	12	24	28	35	8	18	-	20	15.8	15
553507	ZCL-2.0-15-VD	2.0	15	30	34	35	8	22	-	20	19.8	23
553517	ZCL-2.0-20-VD	2.0	20	40	44	35	10	30	-	20	26.4	42
553525	ZCL-2.0-24-VD	2.0	24	48	52	35	10	35	-	20	31.7	56
553537	ZCL-2.0-30-VD	2.0	30	60	64	35	14	40	-	20	39.6	83
553549	ZCL-2.0-36-VD	2.0	36	72	76	35	16	50	59	20	47.5	115
553557	ZCL-2.0-40-VD	2.0	40	80	84	35	16	55	66	20	52.8	138
553573	ZCL-2.0-48-VD	2.0	48	96	100	35	16	60	75	20	63.3	193

* Pitch diameter.

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