

Bevel Gearboxes DZR, Stainless Steel

General data: High resistance to corrosion.

4 sizes and 2 versions.

Ratio either 1 : 1 or 2 : 1. Any mounting position possible.

Ratio for gearing up to max. 750 min⁻¹ possible.

Housing: Stainless steel 1.4401 (V4A / AISI 316). Thick-walled, one-piece housing, fully oil-tight and dust-proof.

Gearing: Gleason-spiral bevel gears, hardened.

Shafts/bearing system: Stainless steel 1.4401 (V4A / AISI 316), ground and mounted on ball bearings. **From size 2 with keyways.**

Lubrication/maintenance: Lubricated for life, viscosity ISO VG 150. Gearboxes are maintenance free.

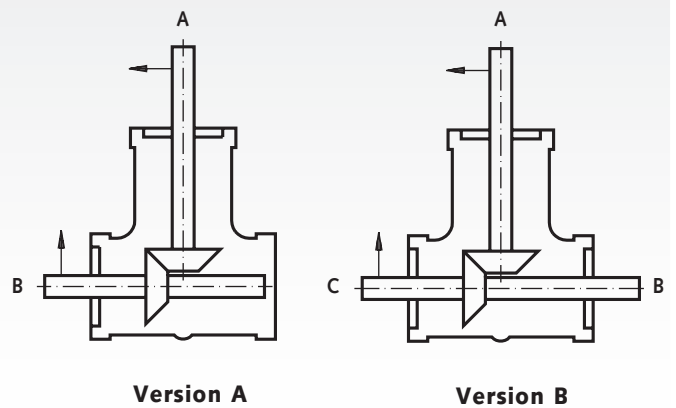
Angular backlash: 15 to 30 angular minutes.

Permiss. operating temperature: -18°C to +80°C.

Ordering details: e.g.: Product No., Type, Ratio, Size, Version



Product No.	Ratio	Size	Version	Shaft-Ø mm	Weight kg
410 910 00	1 : 1	1	A	8	0,483
410 920 00	1 : 1	1	B	8	0,492
410 912 00	1 : 1	2	A	15	1,795
410 922 00	1 : 1	2	B	15	1,855
410 914 00	1 : 1	3	A	20	5,388
410 924 00	1 : 1	3	B	20	5,536
410 916 00	1 : 1	4	A	25	9,136
410 926 00	1 : 1	4	B	25	9,445
410 910 02	2 : 1	1	A	8	0,483
410 920 02	2 : 1	1	B	8	0,492
410 912 02	2 : 1	2	A	15	1,795
410 922 02	2 : 1	2	B	15	1,855
410 914 02	2 : 1	3	A	20	5,538
410 924 02	2 : 1	3	B	20	5,536
410 916 02	2 : 1	4	A	25	9,136
410 926 02	2 : 1	4	B	25	9,445



Performance Data

Output Speed* min ⁻¹	Ratio i	Size 1		Size 2		Size 3		Size 4	
		Input Power kW	Output Torque** Nm	Input Power kW	Output Torque** Nm	Input Power kW	Output Torque** Nm	Input Power kW	Output Torque** Nm
50	1 : 1	0,01	2,20	0,04	7,2	0,11	21,0	0,22	42
100	1 : 1	0,02	2,00	0,07	6,7	0,22	20,5	0,42	40
200	1 : 1	0,04	1,75	0,14	6,5	0,42	20,0	0,80	38
400	1 : 1	0,07	1,75	0,27	6,5	0,82	19,5	1,51	36
700	1 : 1	0,13	1,70	0,44	6,0	1,39	19,0	2,49	34
1400	1 : 1	0,24	1,60	0,88	6,0	2,79	19,0	4,55	31
2000***	1 : 1	0,27	1,30	0,94	4,5	3,35	16,0	5,24	25
3000***	1 : 1	0,35	1,10	1,26	4,0	4,40	14,0	6,91	22
50	2 : 1	0,01	1,60	0,03	5,7	0,10	19,0	0,20	39
100	2 : 1	0,02	1,50	0,06	5,5	0,19	18,0	0,39	37
200	2 : 1	0,03	1,50	0,11	5,0	0,36	17,0	0,73	35
400	2 : 1	0,06	1,40	0,21	5,0	0,67	16,0	1,38	33
700	2 : 1	0,10	1,40	0,35	4,75	1,03	14,0	2,13	29
1400	2 : 1	0,16	1,10	0,59	4,0	1,76	12,0	3,37	23

* The gearboxes are thus dimensioned, that the lifetime comes to 10,000 hours at full load and a starting speed of 1,400 min⁻¹.

** Only for version A. At version B, the torque at each output shaft end may be only 50%.

*** Speeds above 1,400 min⁻¹ shorten the lifespan and are only permitted for a short time. If the permiss. operating temperature is exceeded, oil leaks may occur.

Input shaft / output shaft, speed

At both types and both ratios, the input can be at shaft A as well as at shaft B/C.

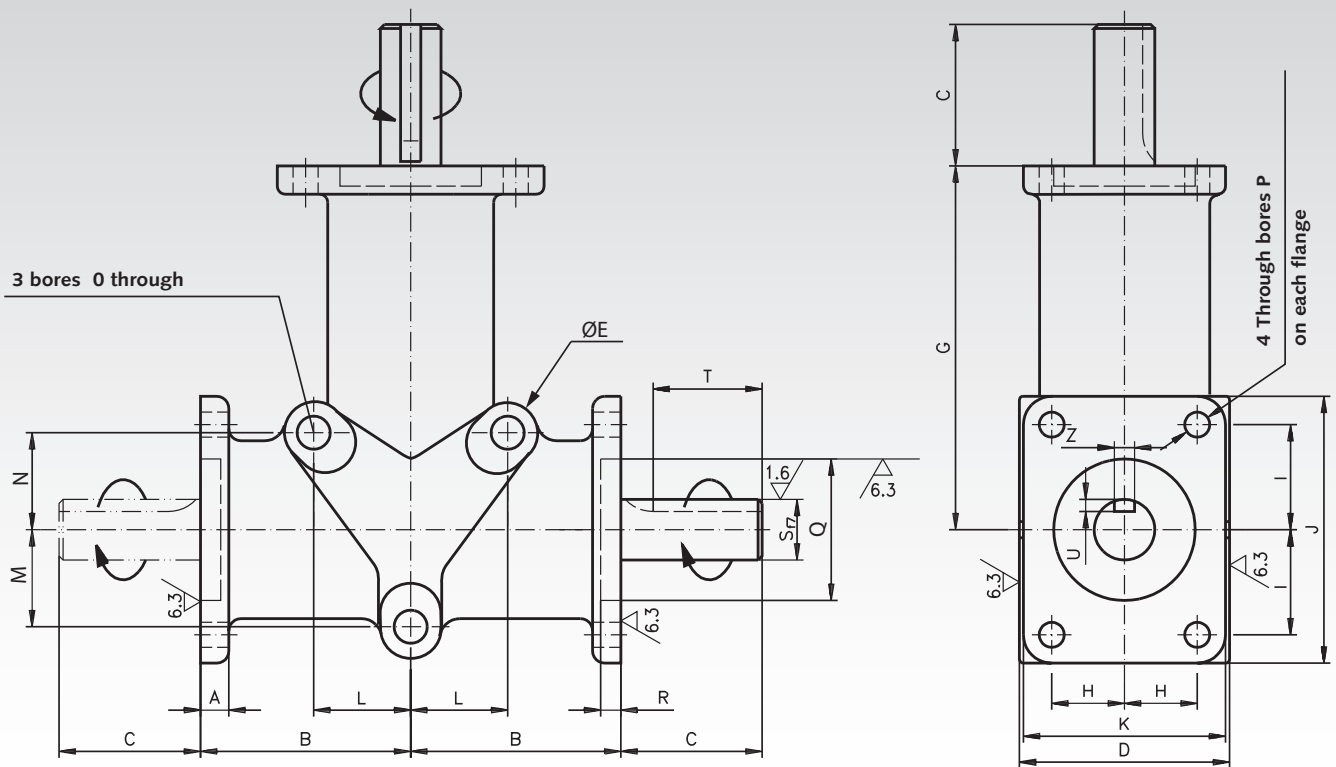
At ratio 1:1 the maximum speed is 1,400 min⁻¹.

Ratio 2:1 can be used for gearing down and also for gearing up.

Gearing down: Input at shaft A with max. speed 1,400 min⁻¹ (output speed max. 700 min⁻¹).

Gearing up: Input at shaft B/C with max. speed 750 min⁻¹ (output speed max. 1,500 min⁻¹).

Dimensions Table Bevel Gearboxes DZR, Stainless Steel



Size	Shaft- Ø mm	No. of Output- Shafts	Ratio	A	B	C	D	E	G	H	I	J	K	L	M	N	O	P	Q ^{H7}	R	S ^{S7}	T*	U	Z	Weight kg
				Dim. in mm																					
1	8	1	1:1	5	34	15	33	11	60	11	15	42,4	32	16	16	16	5,2	4,2	22	1,3	8	-	-	-	0,483
1	8	2	1:1	5	34	15	33	11	60	11	15	42,4	32	16	16	16	5,2	4,2	22	1,3	8	-	-	-	0,492
1	8	1	2:1	5	34	15	33	11	60	11	15	42,4	32	16	16	16	5,2	4,2	22	1,3	8	-	-	-	0,483
1	8	2	2:1	5	34	15	33	11	60	11	15	42,4	32	16	16	16	5,2	4,2	22	1,3	8	-	-	-	0,492
2	15	1	1:1	7	52	35	52	17	90	18	26	65	50	24	24	24	8,5	6,2	35	2,0	15	27	3	5	1,795
2	15	2	1:1	7	52	35	52	17	90	18	26	65	50	24	24	24	8,5	6,2	35	2,0	15	27	3	5	1,855
2	15	1	2:1	7	52	35	52	17	90	18	26	65	50	24	24	24	8,5	6,2	35	2,0	15	27	3	5	1,795
2	15	2	2:1	7	52	35	52	17	90	18	26	65	50	24	24	24	8,5	6,2	35	2,0	15	27	3	5	1,855
3	20	1	1:1	9	75	50	76	18	140	27	38	94	74	38	38	38	9,0	8,5	52	2,0	20	40	3,5	6	5,388
3	20	2	1:1	9	75	50	76	18	140	27	38	94	74	38	38	38	9,0	8,5	52	2,0	20	40	3,5	6	5,536
3	20	1	2:1	9	75	50	76	18	140	27	38	94	74	38	38	38	9,0	8,5	52	2,0	20	40	3,5	6	5,538
3	20	2	2:1	9	75	50	76	18	140	27	38	94	74	38	38	38	9,0	8,5	52	2,0	20	40	3,5	6	5,536
4	25	1	1:1	11	80	70	100	25	150	38	38	101	98	45	45	70	12,5	10,3	62	3,0	25	60	4	8	9,136
4	25	2	1:1	11	80	70	100	25	150	38	38	101	98	45	45	70	12,5	10,3	62	3,0	25	60	4	8	9,445
4	25	1	2:1	11	80	70	100	25	150	38	38	101	98	45	45	70	12,5	10,3	62	3,0	25	60	4	8	9,136
4	25	2	2:1	11	80	70	100	25	150	38	38	101	98	45	45	70	12,5	10,3	62	3,0	25	60	4	8	9,445

* Size 1 without feather key groove.

Permissible Radial and Axial Loads

Size	F _R ** N	F _A *** N
1	60	20
2	140	50
3	300	80
4	400	160

** Permiss. radial force for F_A=0.

*** Permiss. axial force for F_R=0.

Operating Factors

Operating hours per day	3	8	12	24
Uniform load	0,7	0,9	1	1,3
Light shocks	0,9	1	1,3	1,8
Heavy shocks	1,3	1,6	1,8	2,3

Operating temperature -18° to + 80°C.

Size	1	2	3	4
Oil volume (in dm ³)	0.03	0.06	0.10	0.13