

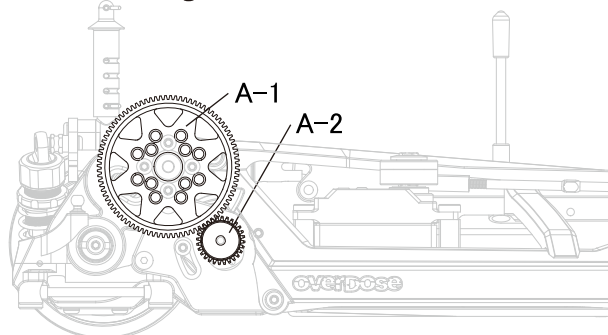
Tip-5

Calculation for XEX drive ratio

Formula for calculating final reduction ratio for XEX spec. R is showing below.

[A] – Primary reduction ratio _____

$$\frac{\text{【A-1】 Spur gear () T}}{\text{【A-2】 Pinion gear () T}} = ()$$

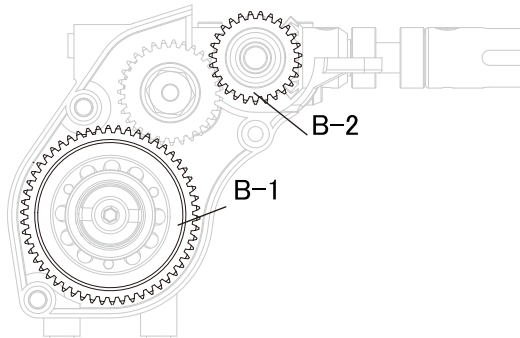


XEX spec.R Primary reduction ratio

48Pitch		Spur											
		84	85	86	87	88	89	90	91	92	93	94	95
Pinion	16	5.250	5.313	5.375	5.438	5.500	5.563	5.625	5.688	5.750	5.813	5.875	5.938
	17	4.941	5.000	5.059	5.118	5.176	5.235	5.294	5.353	5.412	5.471	5.529	5.588
	18	4.667	4.722	4.778	4.833	4.889	4.944	5.000	5.056	5.111	5.167	5.222	5.278
	19	4.421	4.474	4.526	4.579	4.632	4.684	4.737	4.789	4.842	4.895	4.947	5.000
	20	4.200	4.250	4.300	4.350	4.400	4.450	4.500	4.550	4.600	4.650	4.700	4.750
	21	4.000	4.048	4.095	4.143	4.190	4.238	4.286	4.333	4.381	4.429	4.476	4.524
	22	3.818	3.864	3.909	3.955	4.000	4.045	4.091	4.136	4.182	4.227	4.273	4.318
	23	3.652	3.696	3.739	3.783	3.826	3.870	3.913	3.957	4.000	4.043	4.087	4.130
	24	3.500	3.542	3.583	3.625	3.667	3.708	3.750	3.792	3.833	3.875	3.917	3.958
	25	3.360	3.400	3.440	3.480	3.520	3.560	3.600	3.640	3.680	3.720	3.760	3.800
	26	3.231	3.269	3.308	3.346	3.385	3.423	3.462	3.500	3.538	3.577	3.615	3.654
	27	3.111	3.148	3.185	3.222	3.259	3.296	3.333	3.370	3.407	3.444	3.481	3.519
28	3.000	3.036	3.071	3.107	3.143	3.179	3.214	3.250	3.286	3.321	3.357	3.393	

[B] – Secondary reduction ratio _____

$$\frac{\text{【B-1】 Final gear (54) T}}{\text{【B-2】 Counter gear () T}} = ()$$



XEX spec.R Secondary reduction ratio

		Counter gear													
		20	21	22	23	24	25	26	27	28	29	30	31	32	33
Differential final gear	54	2.700	2.571	2.455	2.348	2.250	2.160	2.077	2.000	1.929	1.862	1.800	1.742	1.688	1.636

↑ Normal

[C] –Final reduction ratio _____

$$\text{【A】 Primary reduction ratio () } \times \text{ 【B】 Secondary reduction ratio () } = ()$$

【POINT】

- Recommend to start change the setting of final reduction ratio (value of section C) with around 10.0
- You may try larger final reduction ratio if you spin too much the moment reaccelerating or when you coming out from cornering.
- Motion change when the speed reducing by off the accelerator can be minimize and mild by larger primary reduction ratio and smaller secondary reduction ratio even if the final reduction ratio is same.