

ULTIMATE-CI



Acceleration capacity	+++++
Fast reversals	+++++
Radial load rating	++++
Axial load rating	+++++
Stiffness	+++++
Precision	+++++
Economy	+++

ULTIMATE-CI-ST _ Internal construction

Ultimate is a low-backlash, heavy-duty planetary gearbox.

It provides amazing acceleration capacity to severe applications including new-generation laser-cutting machines, delta robots or punching machines, where high precision is needed, together with torsional stiffness.

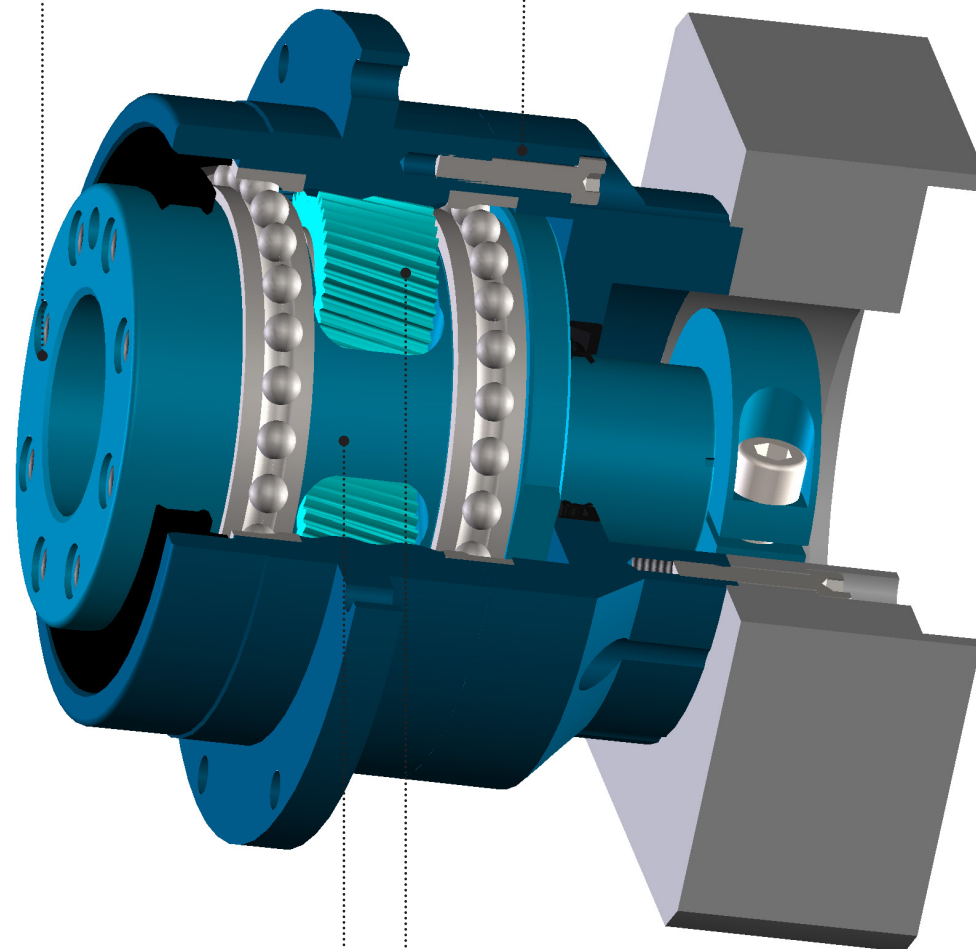


PerfectPitch™

The planet carrier is dual-supported by angular-contact ball bearings (small sizes) or tapered roller bearings (sizes above 140), to improve stiffness, guarantee a perfect alignment of gears during operation and provide greater acceptance to radial loads.

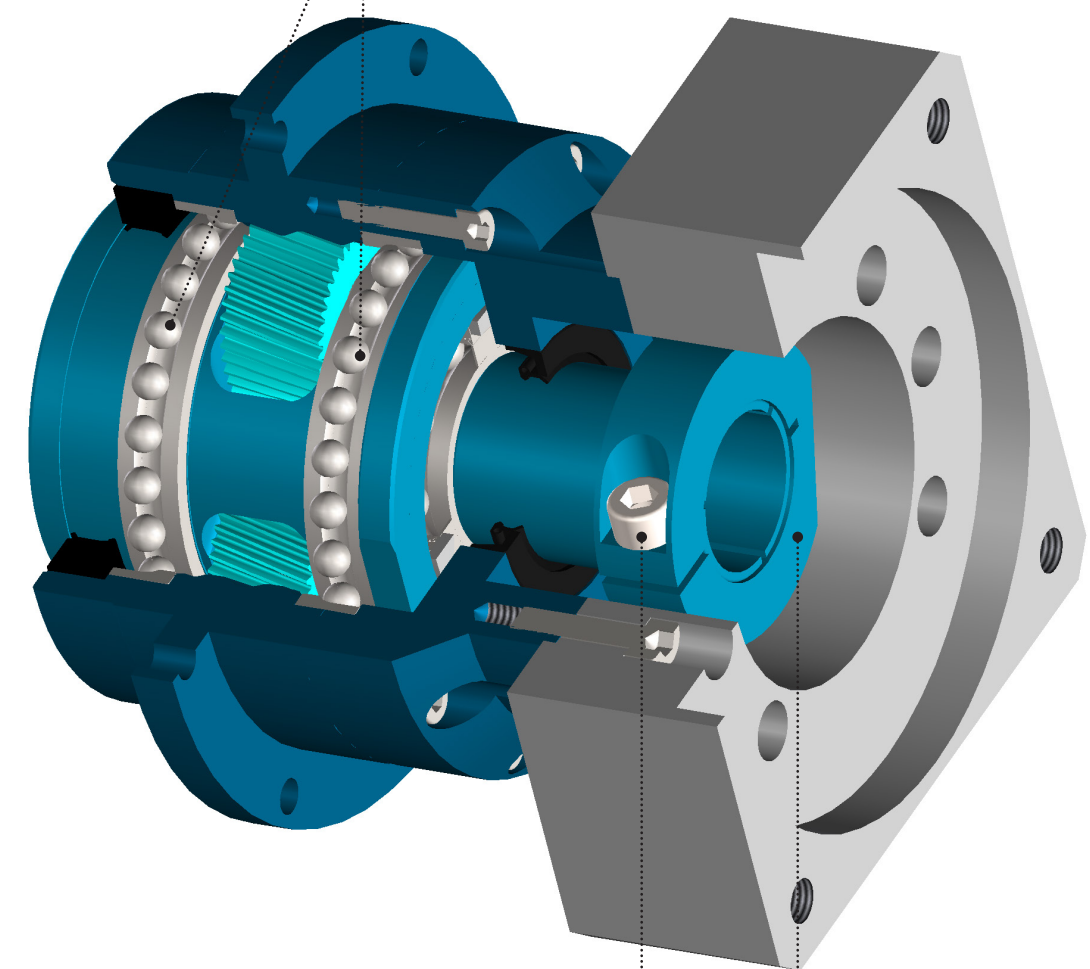
The output flange is ideal for fast reversals, strong acceleration requiring stiffness in heavy-duty applications.

Ring gear is monobloc with the external housing and the output flange, to provide higher stiffness and allow more dynamic reversals.



The caged planet carrier provides stiffness, reliability and acceleration capacity to the gearbox.

Carburized and quenched helical teeth for quiet operation, reliability and acceleration capacity.



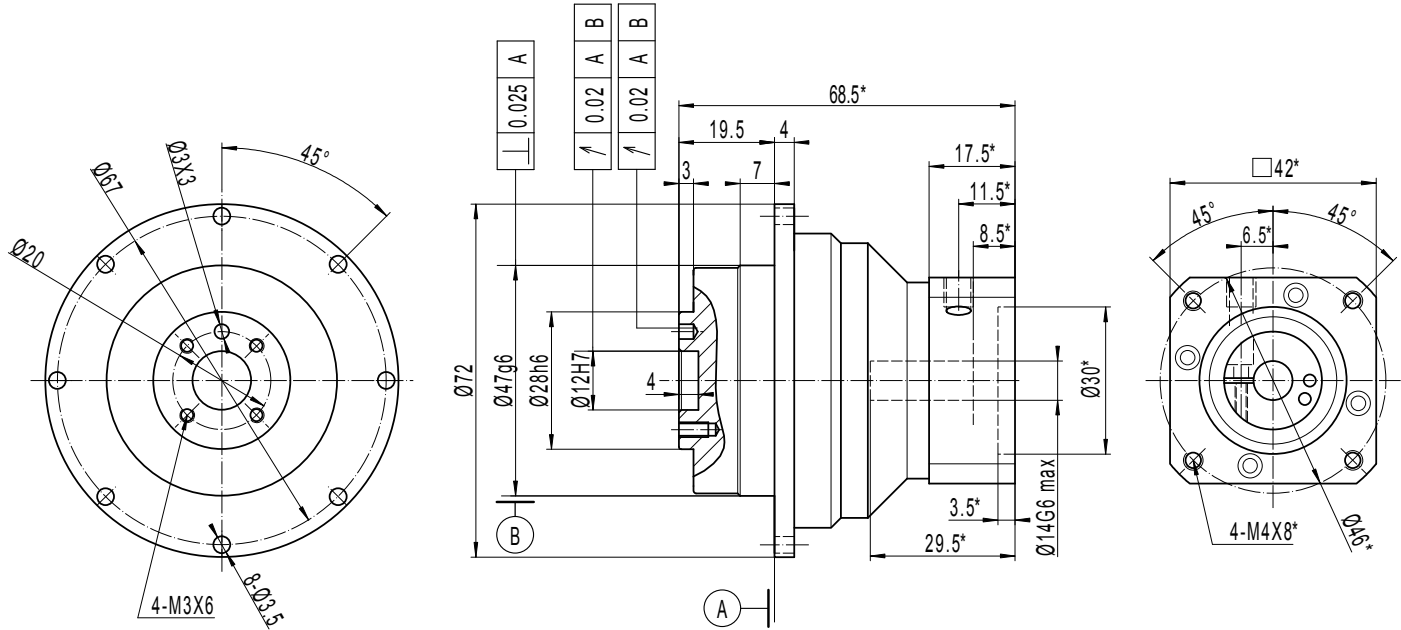
Easy and safe, 1-screw installation to your motor shaft.

The balanced coupling limits vibration and reduces the loads on your motor shaft bearings.

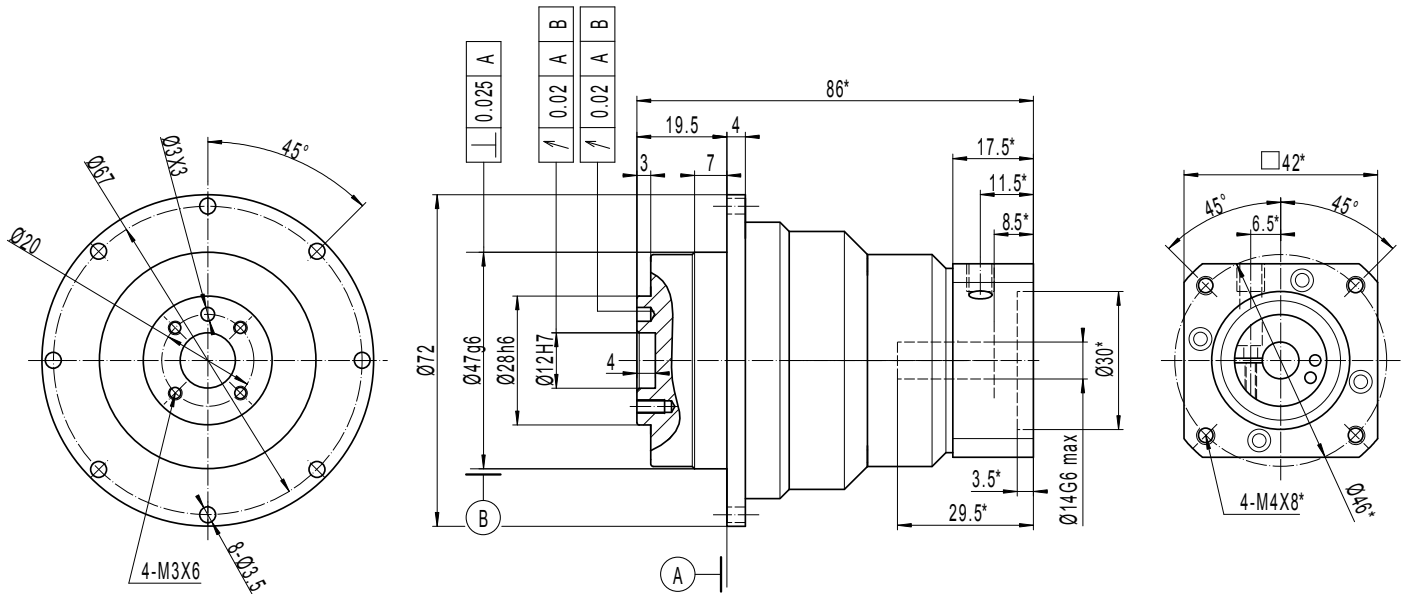
		Ratio**	ULTIMATE-CI-ST																				
			047-P*		064-P*	090-R*	090-P*	110-R*	110-P*	140-R*		140-P*		200-R*		200-P*	255-R*		255-P*		285-R*		285-P*
Nominal torque ¹ T _{2N} (Nm)	4	8	42			154			244			407			1,180			3,075			4,252		
	5	11	33			120			190			438			1,225			2,390			3,663		
	5,5	-	44			164			260			590			1,660			3,270			4,500		
	6	-	27			81			179			440			1,225			2,420			3,670		
	7	8	30			108			203			465			1,300			2,560			3,900		
	8	-	18			55			164			408			1,185			2,450			3,800		
	9	-	16			47			137			353			1,035			2,150			3,330		
	10	5	18			66			147			308			922			1,925			2,980		
	16	8	42		86	154	244	244	377	407	764	1,180	2,244	3,075	4,252	4,252							
	20	8	42	90	154	244	244	393	407	1,096	1,180	2,340	3,075	4,252	4,252								
	22	-	44	118	164	260	260	518	590	1,051	1,660	3,085	3,270	4,500	4,500								
	25	11	33	113	120	190	190	438	438	1,225	1,225	2,390	2,390	3,663	3,663								
	27,5	-	44	124	164	260	260	540	590	1,507	1,660	3,218	3,270	4,500	4,500								
	28	8	42	68	154	183	244	359	407	960	1,180	2,222	3,075	4,251	4,252								
	30	-	27	81	81	179	179	440	440	1,225	1,225	2,420	2,420	3,670	3,670								
	35	11	33	85	120	190	190	438	438	1,200	1,225	2,390	2,390	3,663	3,663								
	38,5	-	44	94	164	252	260	494	590	1,320	1,660	3,055	3,270	4,500	4,500								
	40	8	39	40	113	113	218	218	407	577	1,180	1,397	3,075	4,236	4,252								
	42	-	27	81	81	179	179	440	440	1,225	1,225	2,420	2,420	3,670	3,670								
	49	8	30	108	108	203	203	465	465	1,300	1,300	2,560	2,560	3,900	3,900								
50	11	33	49	120	141	190	273	438	721	1,225	1,746	2,390	3,663	3,663									
55	-	44	54	164	156	260	300	590	794	1,660	1,921	3,270	4,500	4,500									
60	-	27	59	81	170	179	327	440	866	1,225	2,096	2,420	3,670	3,670									
70	8	30	69	108	198	203	382	465	1,010	1,300	2,445	2,560	3,900	3,900									
80	-	18	55	55	164	164	408	408	1,154	1,185	2,450	2,450	3,800	3,800									
90	-	16	47	47	137	137	353	353	1,035	1,035	2,150	2,150	3,330	3,330									
100	5	18	66	66	147	147	308	308	922	922	1,925	1,925	2,980	2,980									
Peak torque ² T _{max} (Nm)	4	14	77			190			488			810			1,786			5,950			8,474		
	5	14	55			170			380			870			2,380			4,770			7,303		
	5,5	-	73			235			500			1,100			2,900			5,630			8,636		
	6	-	38			114			327			815			2,250			4,450			6,235		
	7	14	54			161			379			804			2,170			4,400			6,643		
	8	-	37			111			322			765			2,050			4,170			6,260		
	9	-	36			104			305			728			1,970			4,000			6,000		
	10	13	50			157			353			715			1,470			3,950			6,000		
	16	14	77	122	190	322	488	669	810	1,524	1,786	4,240	5,950	8,474	8,474								
	20	14	77	115	190	275	488	636	810	1,786	1,786	3,885	5,950	8,474	8,474								
	22	-	73	168	235	443	500	920	1,100	2,095	2,900	5,630	5,630	8,636	8,636								
	25	14	55	144	170	344	380	795	870	2,238	2,380	4,770	4,770	7,303	7,303								
	27,5	-	73	158	235	378	500	875	1,100	2,462	2,900	5,342	5,630	8,636	8,636								
	28	14	77	113	190	282	488	609	810	1,651	1,786	3,611	5,950	8,474	8,474								
	30	-	38	114	114	327	327	815	815	2,250	2,250	4,450	4,450	6,235	6,235								
	35	14	55	141	170	353	380	762	870	2,064	2,380	4,514	4,770	7,303	7,303								
	38,5	-	73	155	235	388	500	838	1,100	2,270	2,900	4,965	5,630	8,636	8,636								
	40	14	77	109	190	259	488	560	810	1,480	1,786	3,337	5,950	8,474	8,474								
	42	-	38	114	114	327	327	815	815	2,250	2,250	4,450	4,450	6,235	6,235								
	49	14	54	161	161	379	379	804	804	2,170	2,170	4,400	4,400	6,643	6,643								
50	14	55	136	170	324	380	700	870	1,850	2,380	4,171	4,770	7,303	7,303									
55	-	73	150	235	356	500	770	1,100	2,035	2,900	4,589	5,630	8,636	8,636									
60	-	38	114	114	327	327	815	815	2,220	2,250	4,450	4,450	6,235	6,235									
70	14	54	161	161	379	379	804	804	2,170	2,170	4,400	4,400	6,643	6,643									
80	-	37	111	111	322	322	765	765	2,050	2,050	4,170	4,170	6,260	6,260									
90	-	36	104	104	305	305	728	728	1,970	1,970	4,000	4,000	6,000	6,000									
100	13	50	157	157	353	353	715	715	1,470	1,470	3,950	3,950	6,000	6,000									
Emergency stop torque (Nm) ³		1,5 x T _{max}																					
Max angular backlash (minutes)	1 stage	Standard : ≤5 ; Option : ≤3		Standard : ≤3 ; Option : ≤1																			
	Standard : ≤5 ; Option : ≤3																						
Nominal input speed (rpm) ⁴		4 000	4 000	3,100		2,800		2,600		2,000		1,700		1,500									
Max input speed (rpm) ⁵		8 000	7 500	6,000		5,500		5,000		4,500		3,000		3,000									
Max radial load (N) ⁶		320	465	1,440		3,960		11,680		22,500		36,500		42,750									
Max axial load (N) ⁶		420	565	2,050		5,700		16,900		17,400		32,600		37,500									
Tilting moment (Nm) ⁶		11	23	95		335		1,130		2,280		4,600		5,950									
Efficiency (%) ⁷	1 stage	≥97																					
	2 stages	≥94																					
Torsional stiffness (Nm/min)		6	13	32		82		150		600		1000		1400									
Life (h) ⁸		20,000																					
Min / max ambient temperature ⁹		-15 / +45																					
Max temperature of the body (°C)		90																					
Protection class		IP 65																					
Noise level (dB) ¹⁰		≤58	≤60	≤62	≤63		≤66		≤71		≤75		≤77										
Lubrication		Lifetime lubrication (grease)																					
Coating color		Capri blue (RAL 5019)																					
Input flange		Anodized aluminum																					

* 2 stage-gearboxes, can be equipped with a light, space-saving, low inertia input stage (R) or with a larger input stage (P), offering more power (as a paying option).
** Others ratios are available upon request.

ULTIMATE-CI-ST-047- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT ≤ Ø14



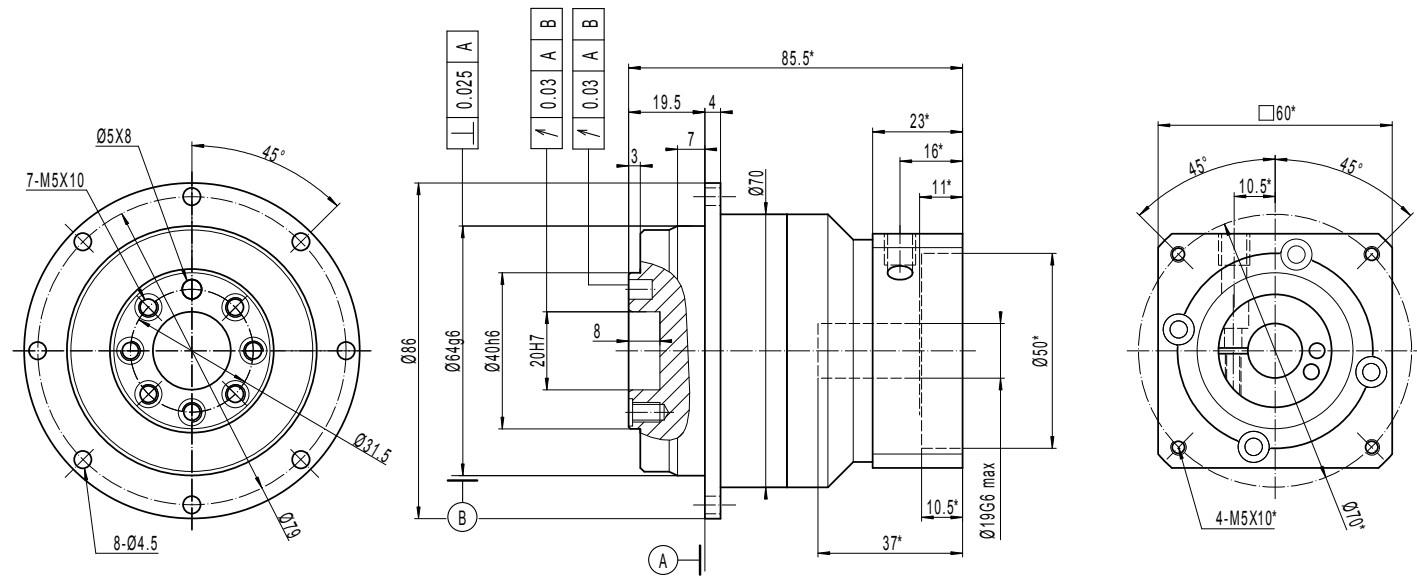
ULTIMATE-CI-ST-047- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT ≤ Ø14



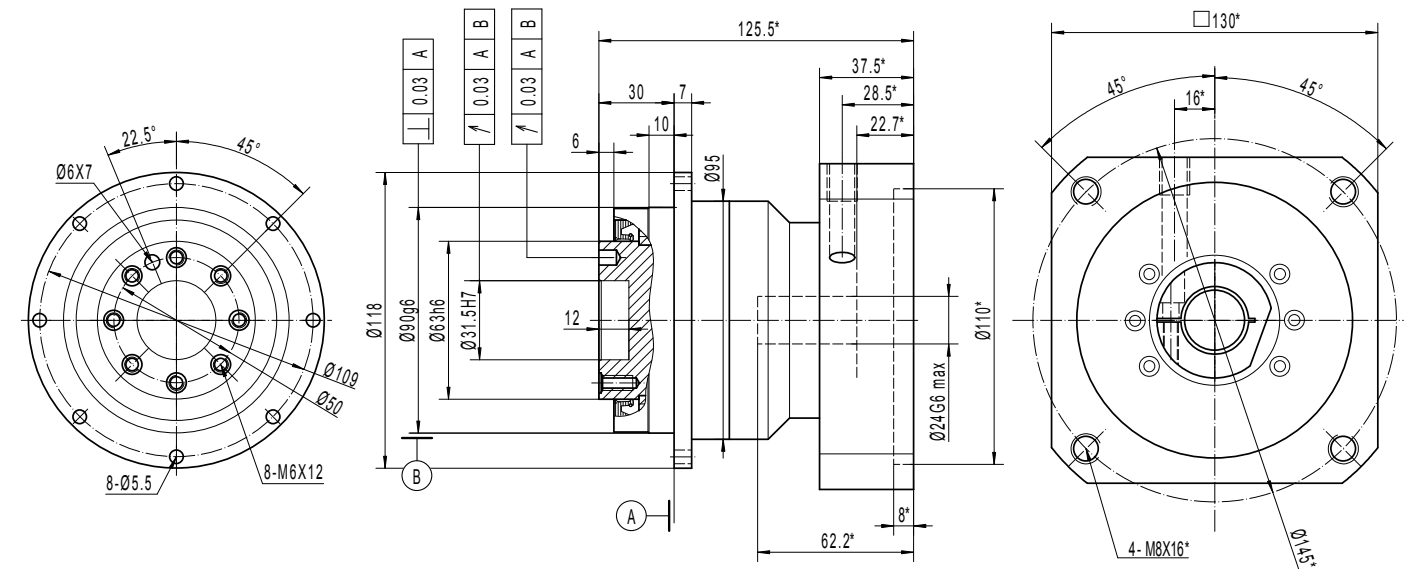
1 : Calculation based on the ISO 6336-2 standard (life = 20 000 h, speed = nominal speed, internal temperature = 60°C, Application Factor = 1,25).
Using max 10% of the max tilting moment, the max radial load. Torque capacity decreases when the radial load increases. Please refer to the website for more information
2 : Calculation based on the ISO 6336-2 standard (life = 2 000 h, speed = nominal speed, internal temperature = 60°C, Safety Factor = 1,4).
This rating will not provide a 2 000 hours life if used at max speed. Contact us to get an estimation of the product lifetime in your application.
Using a torque higher than the rated torque may affect the gearbox precision.
3 : 1 000 occurrences maximum.
4 : Speed at which the nominal torque is applicable 20 000 hours.
5 : Peak speed only.
6 : A pplied on the front face of the output shaft at 100rpm.
7 : Measured at full load and at 25°C
8 : Lifetime at nominal torque and speed. Consult us to obtain a free estimation of lifetime in your working conditions
9 : Room temperature. Refer to temperature factors in dedicated section.
10 : Ratio 10 at nominal speed, measured at 1m.

*VARIES WITH YOUR MOTOR DIMENSIONS

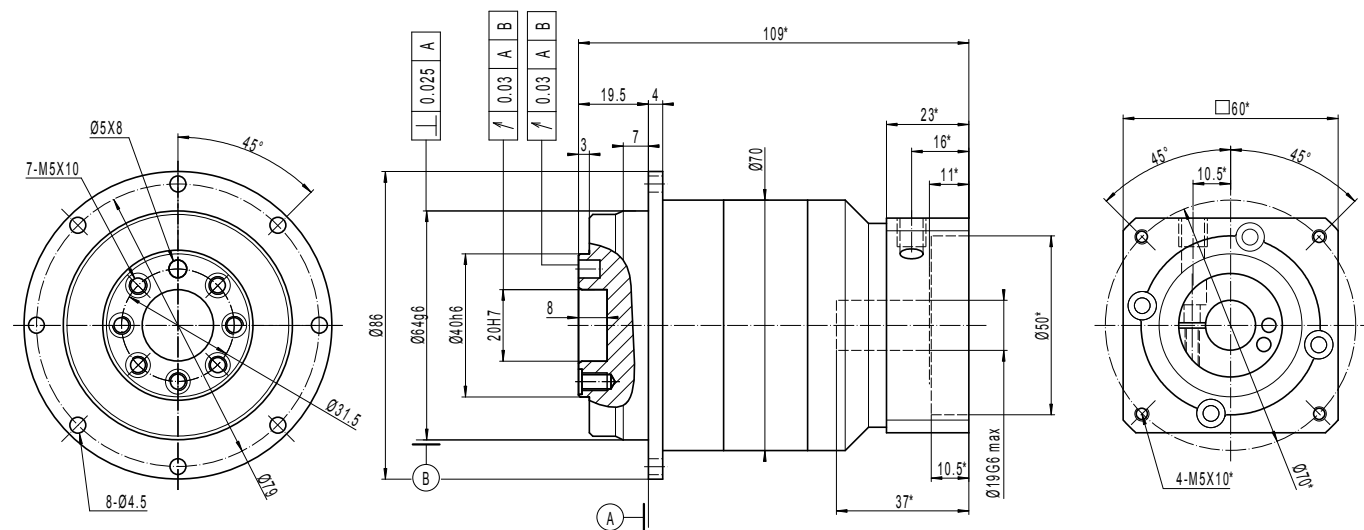
ULTIMATE-CI-ST-064- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 19$



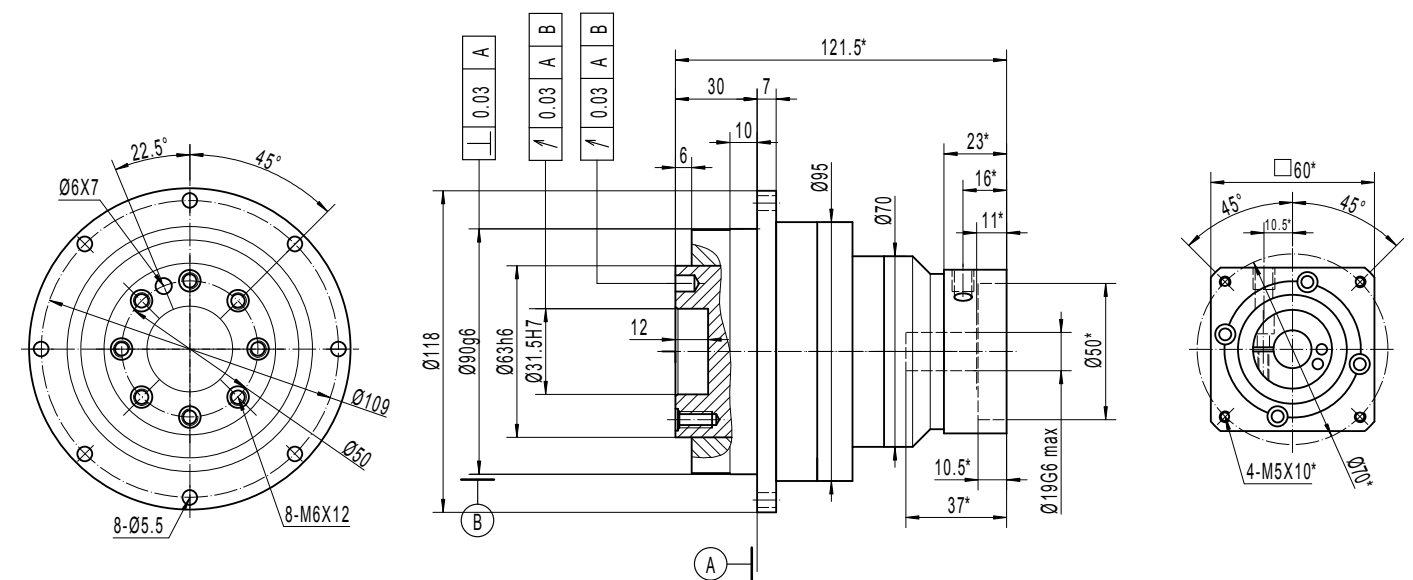
ULTIMATE-CI-ST-090- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 24$



ULTIMATE-CI-ST-064- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 19$



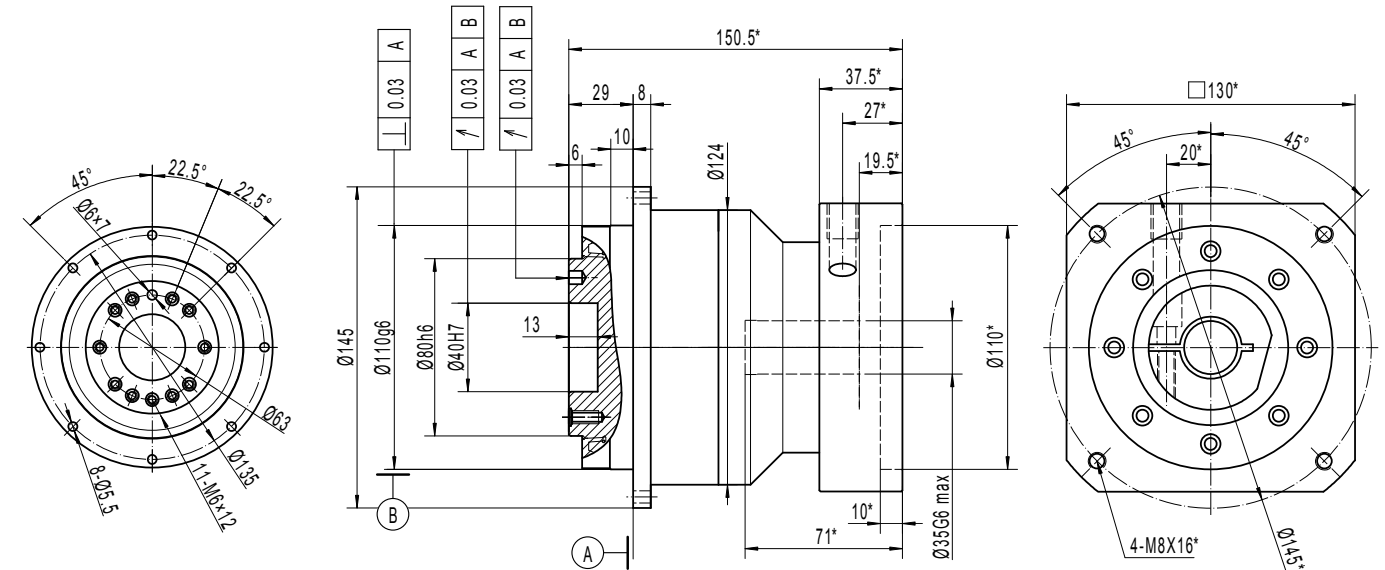
ULTIMATE-CI-ST-090- 2 STAGES-R - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 19$



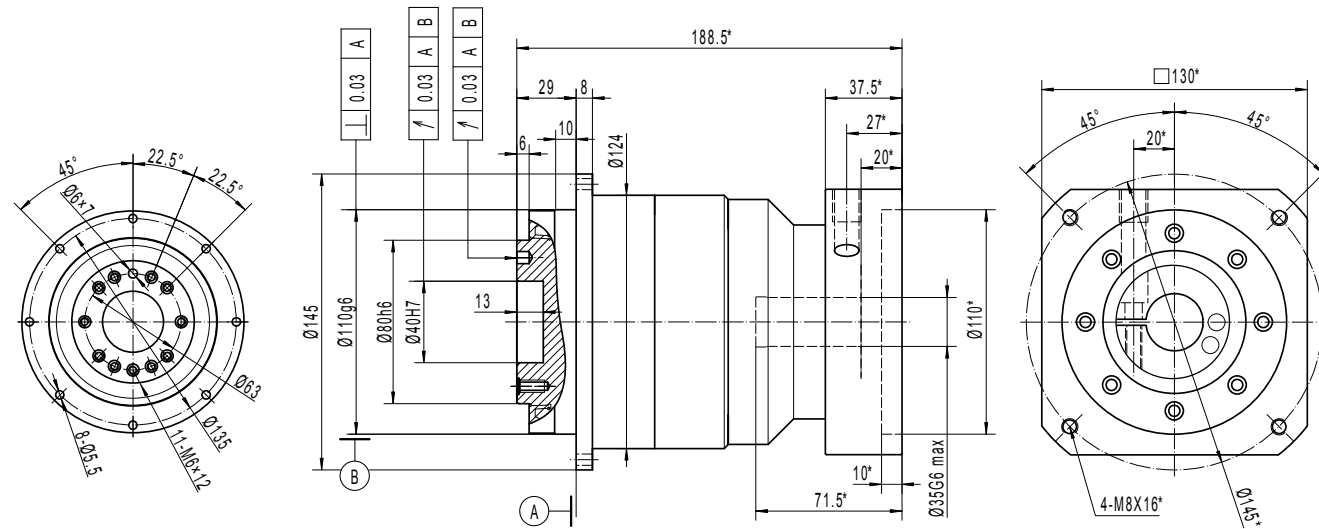
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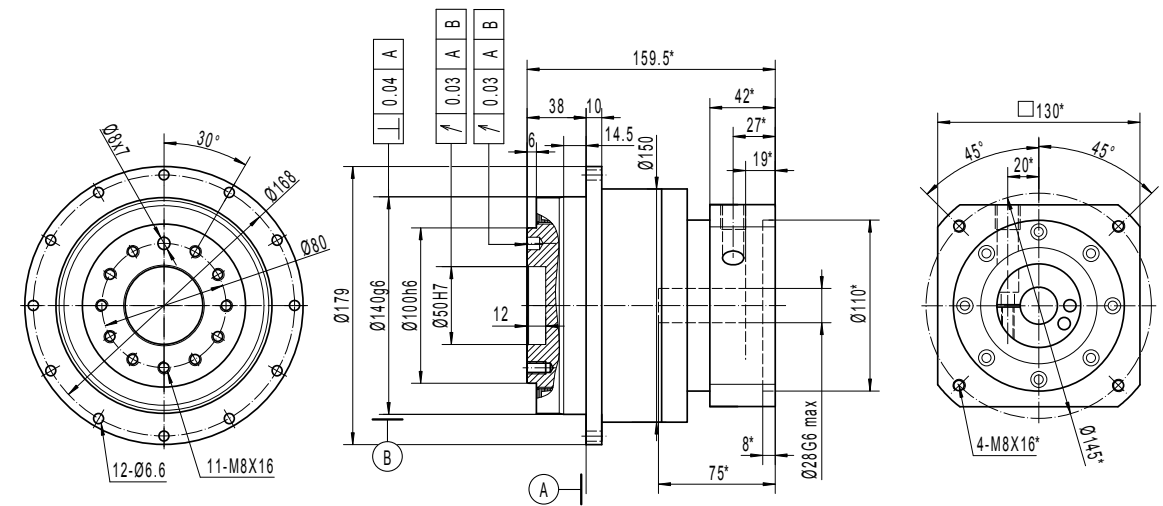
ULTIMATE-CI-ST-110- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 35$



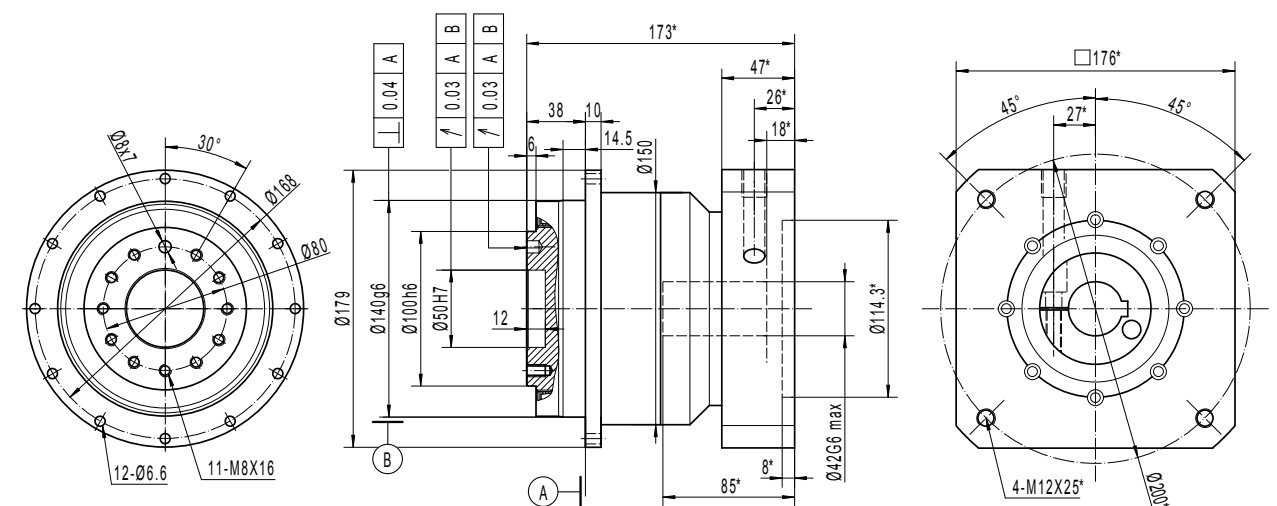
ULTIMATE-CI-ST-110- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 35$



ULTIMATE-CI-ST-140- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 28$



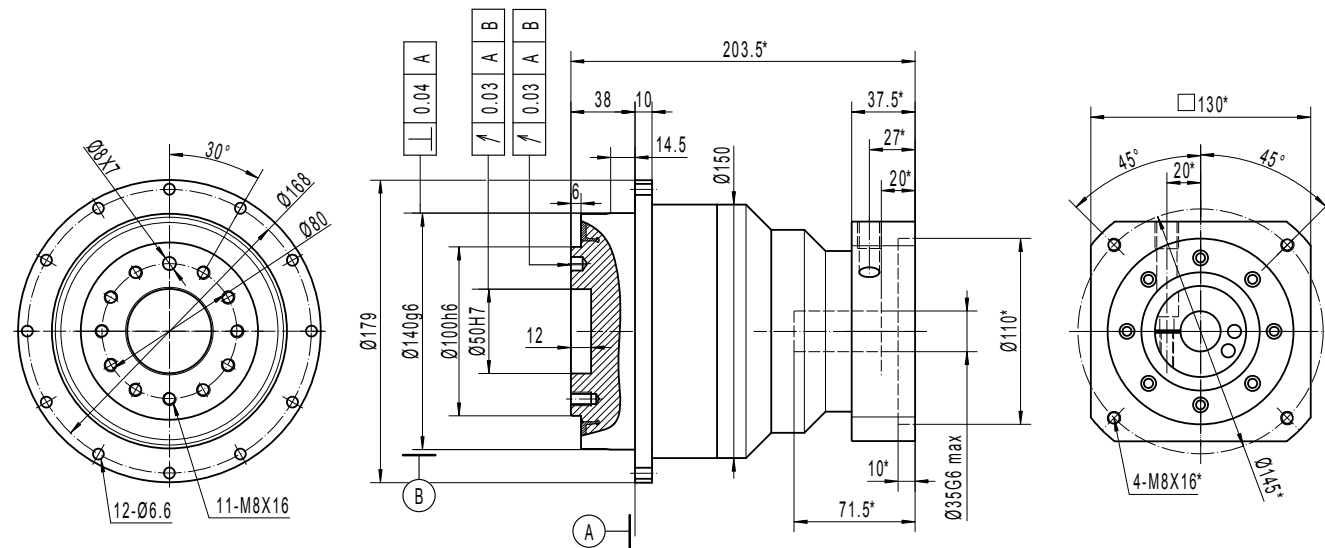
ULTIMATE-CI-ST-140- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 42$



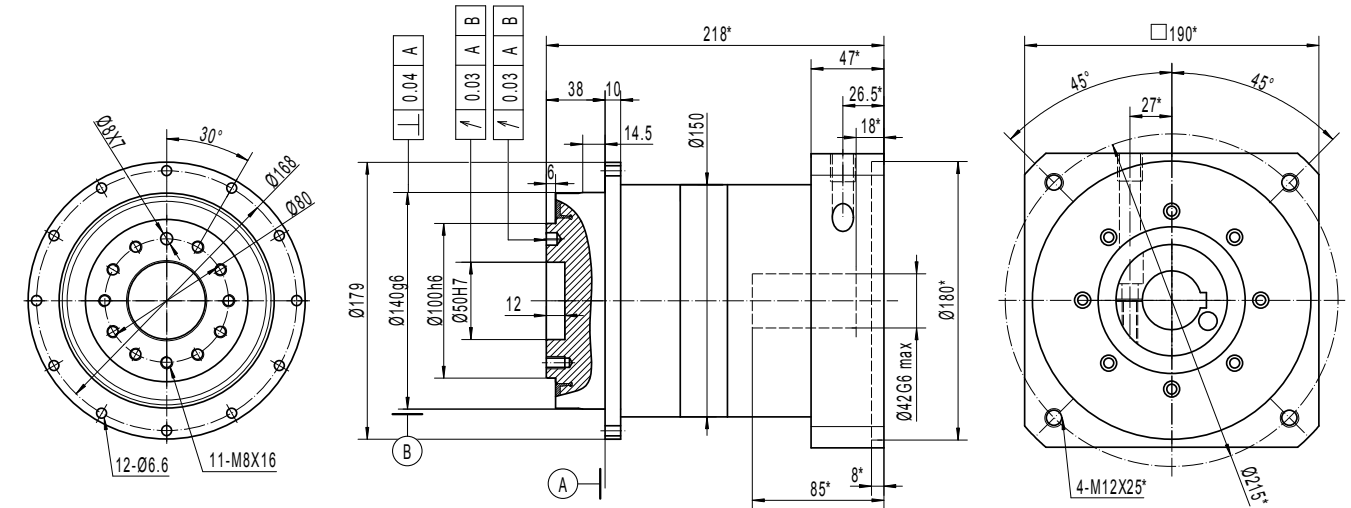
*VARIES WITH YOUR MOTOR DIMENSIONS

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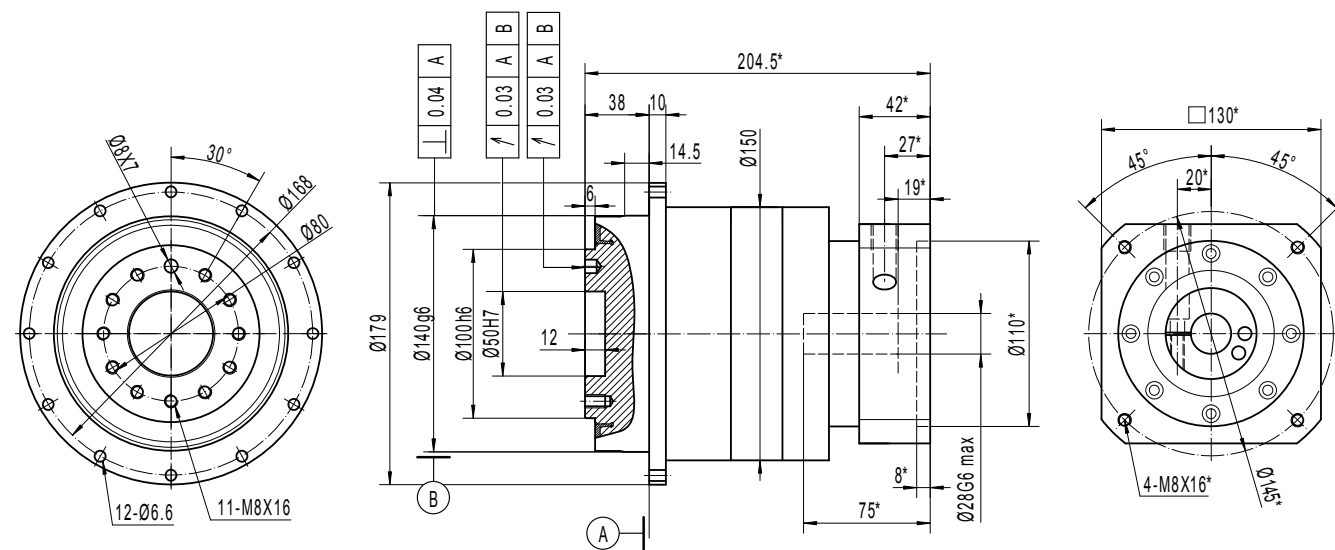
ULTIMATE-CI-ST-140- 2 STAGES-R - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 35$



ULTIMATE-CI-ST-140- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 42$



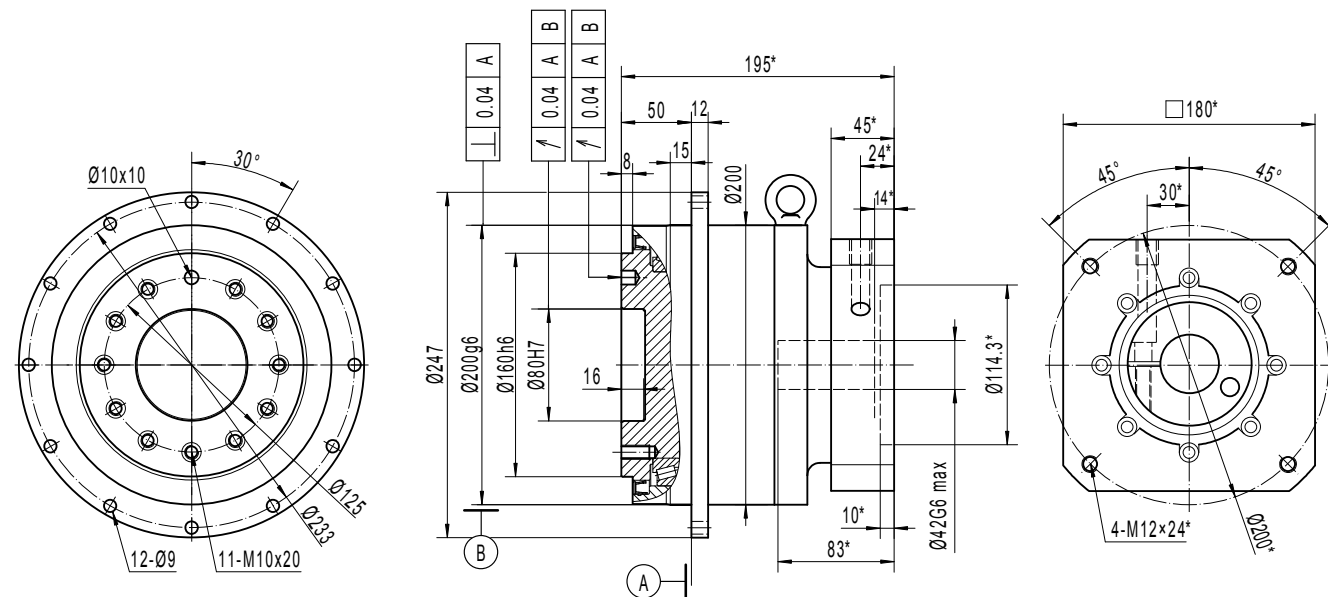
ULTIMATE-CI-ST-140- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 28$



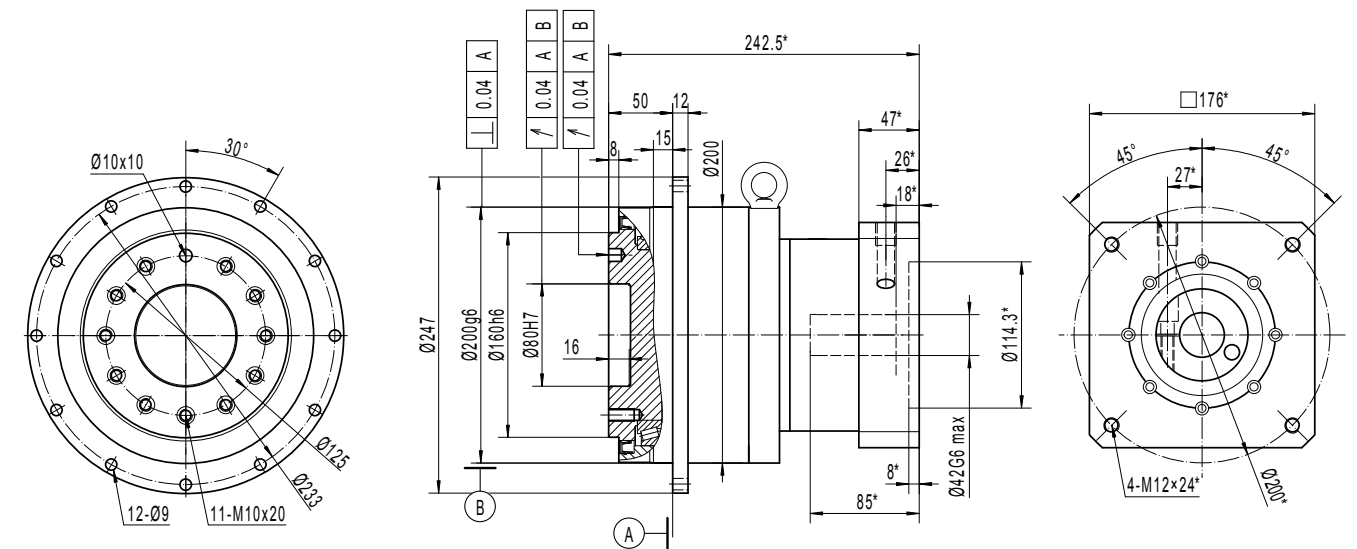
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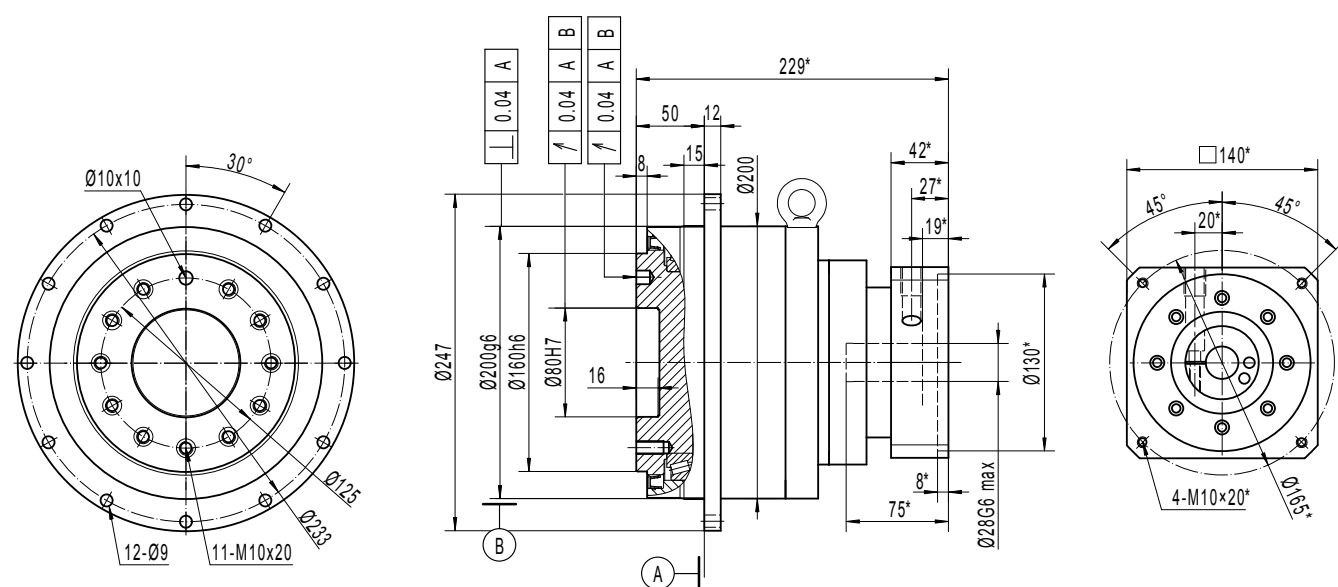
ULTIMATE-CI-ST-200- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 42$



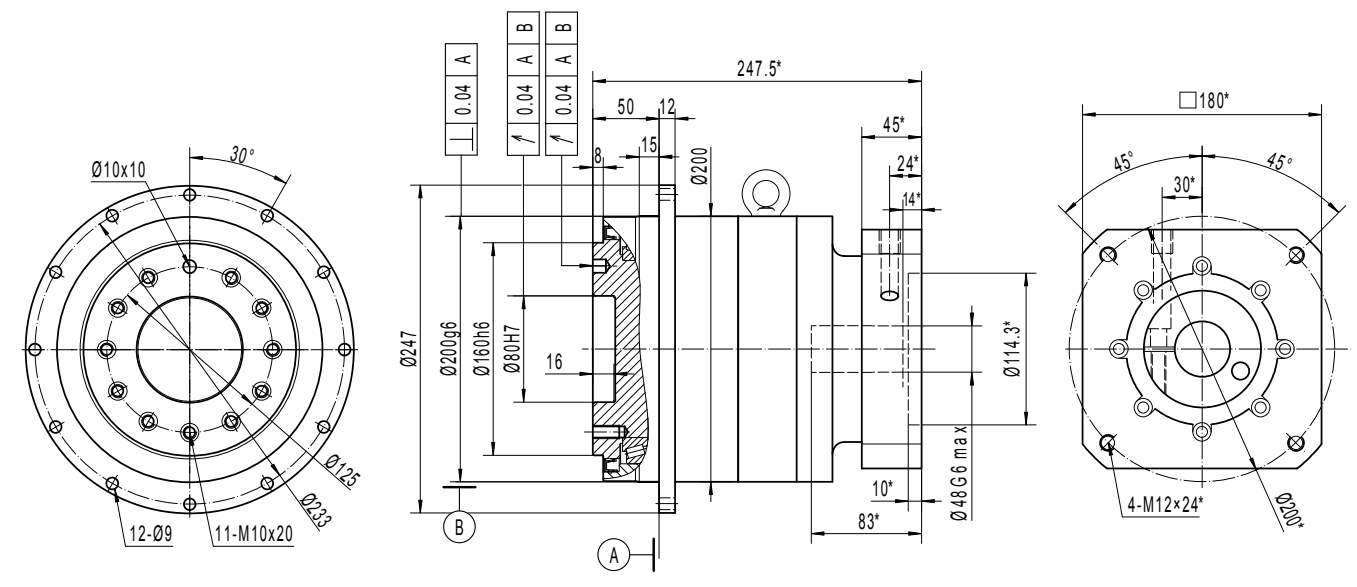
ULTIMATE-CI-ST-200- 2 STAGES-R - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 42$



ULTIMATE-CI-ST-200- 2 STAGES-R - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 28$



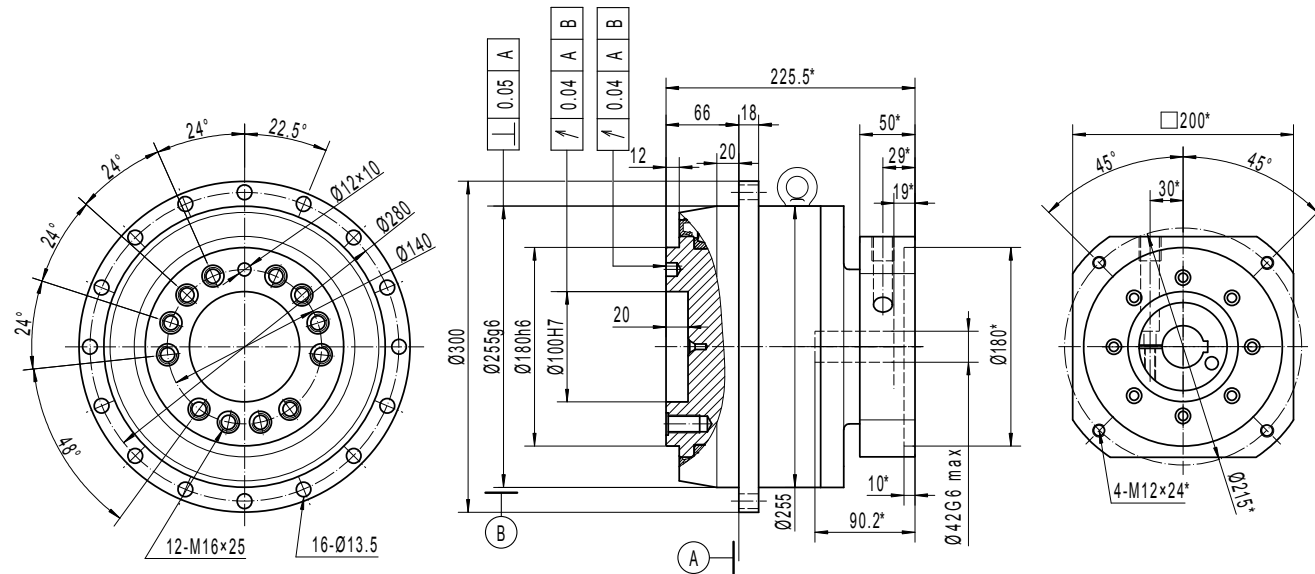
ULTIMATE-CI-ST-200- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 48$



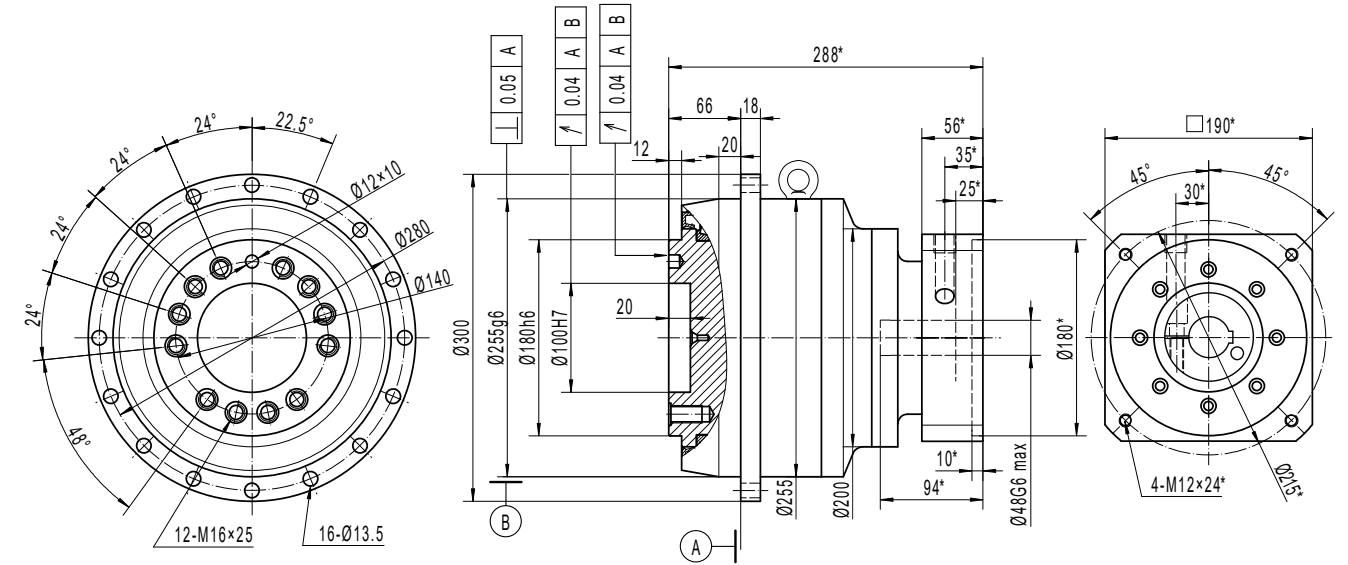
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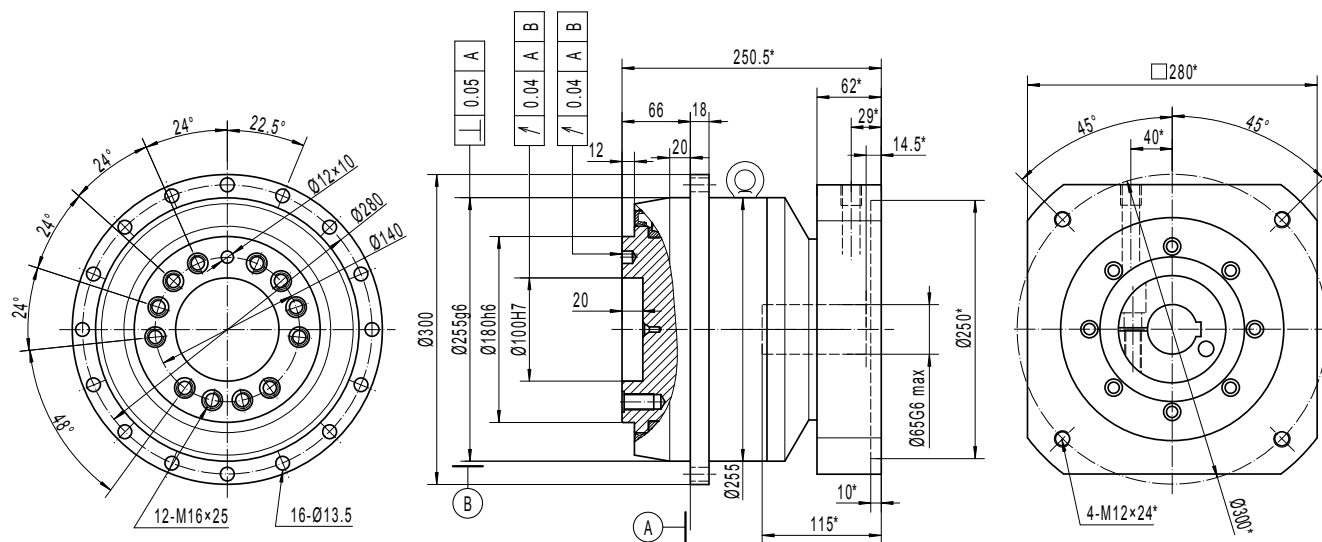
ULTIMATE-CI-ST-255- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 42$



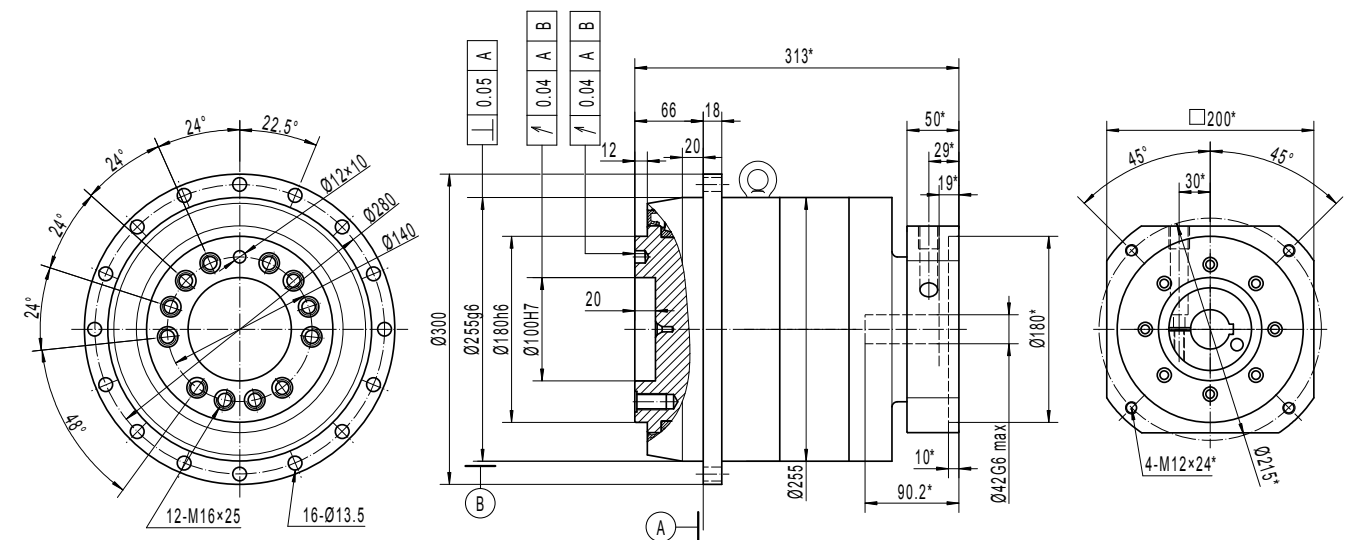
ULTIMATE-CI-ST-255- 2 STAGES-R - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 48$



ULTIMATE-CI-ST-255- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 65$



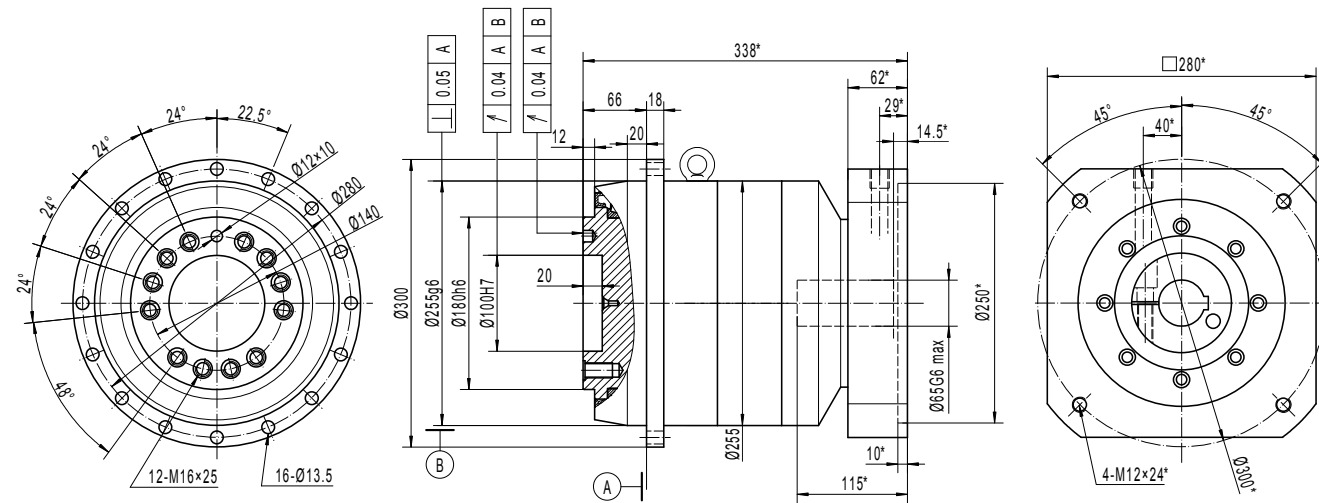
ULTIMATE-CI-ST-255- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 42$



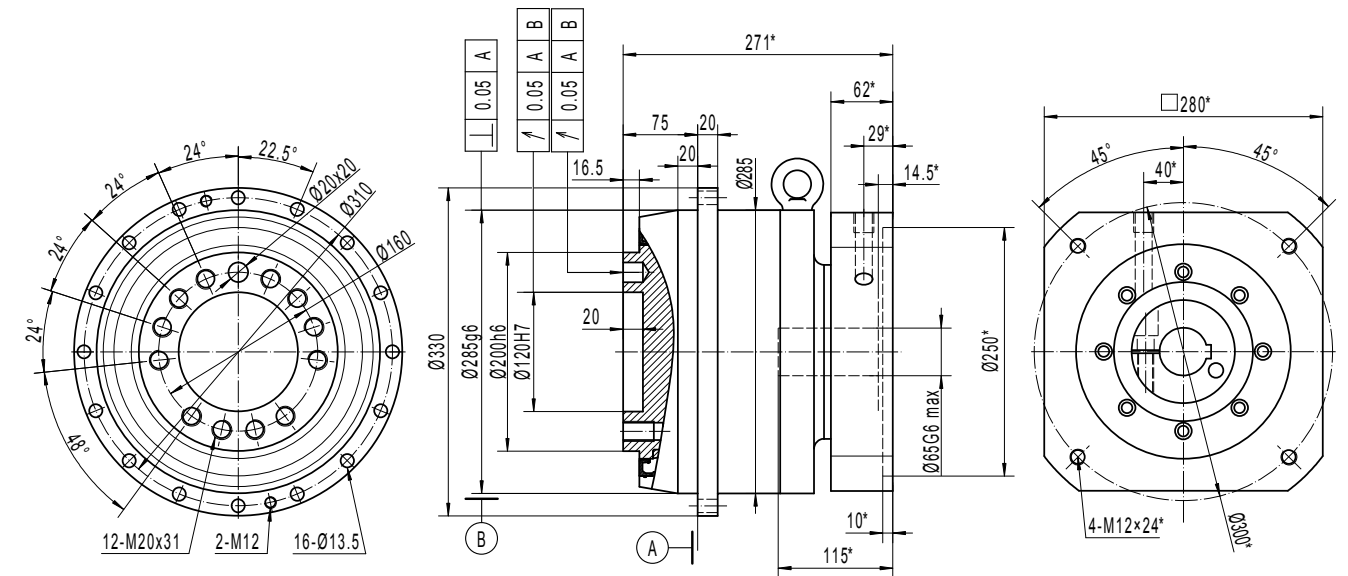
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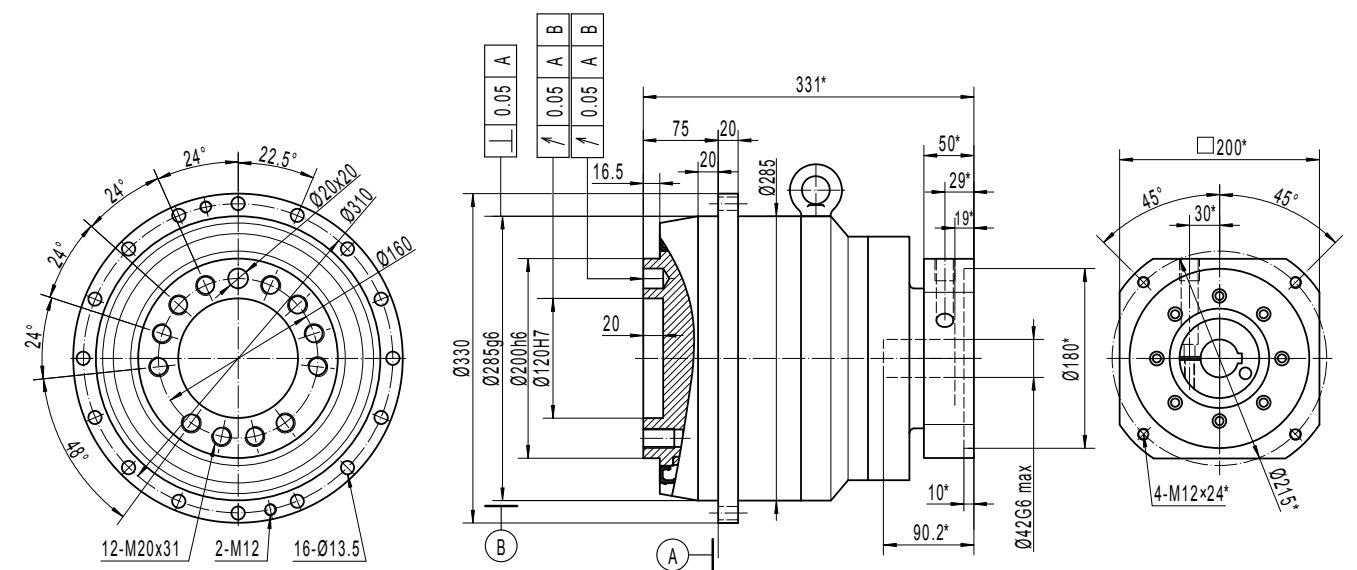
ULTIMATE-CI-ST-255- 2 STAGES-P - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 65$



ULTIMATE-CI-ST-285- 1 STAGE - RATIOS 4 TO 10
FOR MOTOR SHAFT $\leq \varnothing 65$



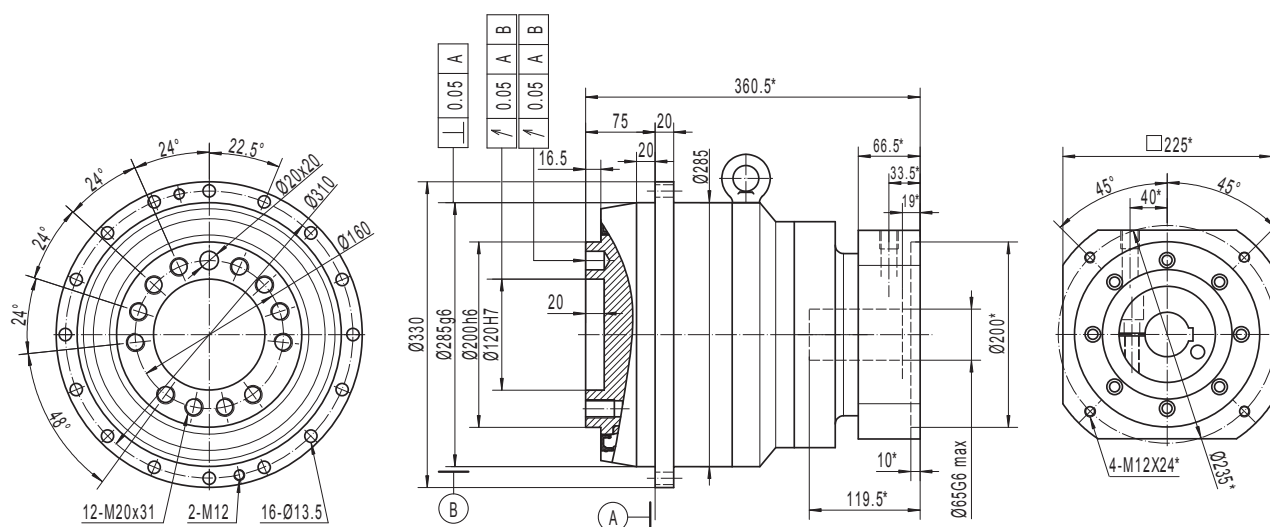
ULTIMATE-CI-ST-285- 2 STAGES-R - RATIOS 16 TO 100
FOR MOTOR SHAFT $\leq \varnothing 42$



*VARIES WITH YOUR MOTOR DIMENSIONS

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ULTIMATE-CI-ST-285- 2 STAGES-R - RATIOS 16 TO 100 FOR MOTOR SHAFT $\leq \varnothing 65$



ULTIMATE-CI-ST-285- 2 STAGES-P - RATIOS 16 TO 100 FOR MOTOR SHAFT $\leq \varnothing 65$

