BOOSTER-SQ

Acceleration capacity	++++
Fast reversals	++++
Radial efforts	+++
Axial efforts	++
Stiffness	++++
Precision	++++
Economy	++++

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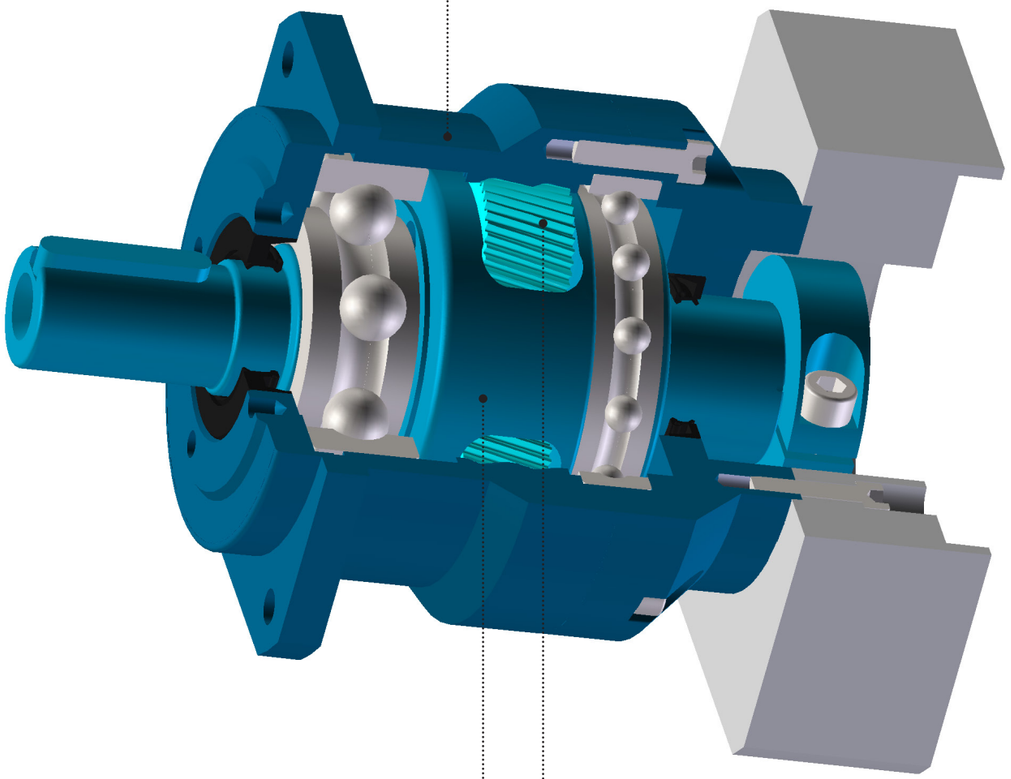
BOOSTER-SQ-ST
_ Internal construction

BOOSTER is a high-performance, high precision planetary gearbox.
It delivers high acceleration and fast reversals to heavy duty servo-applications.

The ring gear is monobloc with the external housing and the output flange, to provide higher stiffness and allow very dynamic reversals.

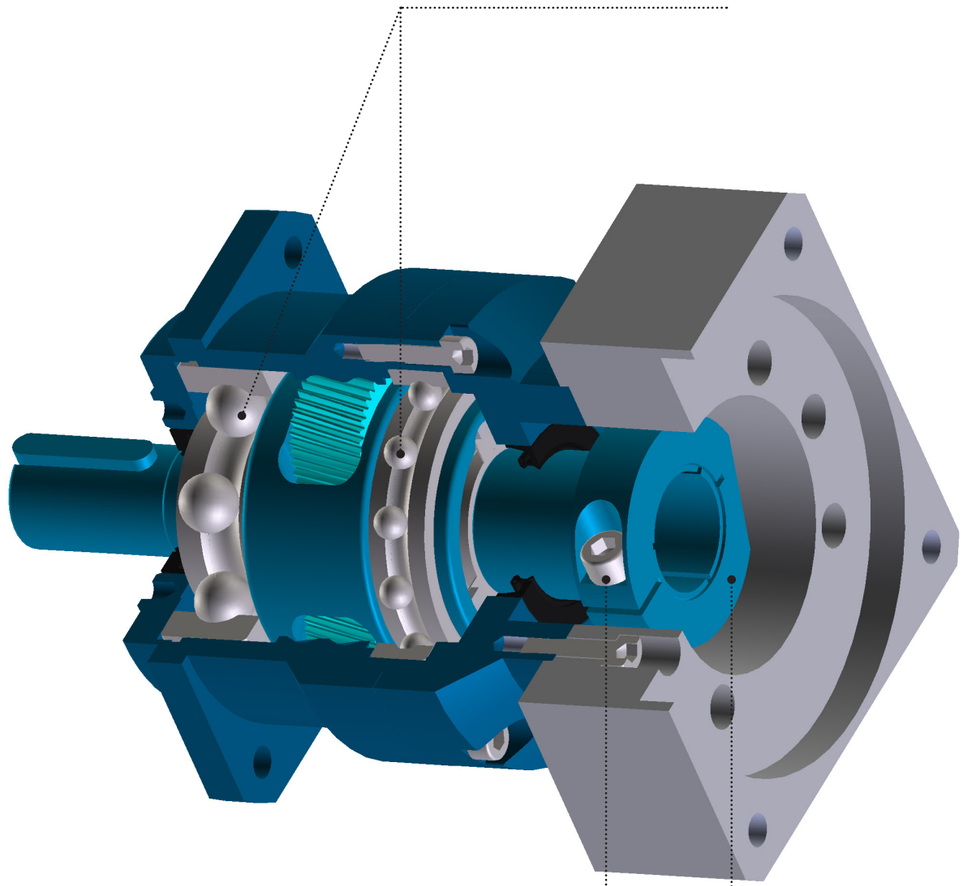


The caged planet carrier provides stiffness, reliability and acceleration capacity to the gearbox.

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

PerfectPitch™

The planet carrier is dual-supported by deep groove ball bearings, to improve stiffness, guarantee a perfect alignment of gears during operation and provide greater acceptance of radial loads.



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

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

BOOSTER-SQ

BOOSTER-SQ-ST_Technical data

	Ratio**	BOOSTER-SQ-ST				
		060-P*	090-R*	090-P*	120-R*	120-P*
Nominal torque [1] T_{2N} (Nm)	3	29	102		231	
	4	42	154		244	
	5	33	120		190	
	5,5	44	164		260	
	6	27	81		179	
	7	30	108		203	
	8	18	55		164	
	9	16	47		137	
	10	18	66		147	
	12	29	65	102	203	231
	15	29	68	102	210	231
	16	42	86	154	244	244
	20	42	90	154	244	244
	21	29	51	102	137	231
	22	44	118	164	260	260
	25	33	113	120	190	190
	27,5	44	124	164	260	260
	28	42	68	154	183	244
	30	27	81	81	179	179
	35	33	85	120	190	190
	38,5	44	94	164	252	260
	40	39	40	113	113	218
	42	27	81	81	179	179
	49	30	108	108	203	203
	50	33	49	120	141	190
	55	44	54	164	156	260
	60	27	59	81	170	179
	70	30	69	108	198	203
	80	18	55	55	164	164
	90	16	47	47	137	137
	100	18	66	66	147	147
Peak torque [2] T_{max} (Nm)	3	64	200		378	
	4	77	190		488	
	5	55	170		380	
	5,5	73	235		500	
	6	38	114		327	
	7	54	161		379	
	8	37	111		322	
	9	36	104		305	
	10	50	157		353	
	12	64	92	200	242	378
	15	64	86	200	206	378
	16	77	122	190	322	488
	20	77	115	190	275	488
	21	64	85	200	212	378
	22	73	168	235	443	500
	25	55	144	170	344	380
	27,5	73	158	235	378	500
	28	77	113	190	282	488
	30	38	114	114	327	327
	35	55	141	170	353	380
	38,5	73	155	235	388	500
	40	77	109	190	259	488
	42	38	114	114	327	327
	49	54	161	161	379	379
	50	55	136	170	324	380
	55	73	150	235	356	500
	60	38	114	114	327	327
	70	54	161	161	379	379
	80	37	111	111	322	322
	90	36	104	104	305	305
	100	50	157	157	353	353
Emergency stop torque (Nm) [3]		1,5 x T_{max}				
Max angular backlash (minutes)	1 stage	Standard : ≤5 Option : ≤3	Standard : ≤3 ; Option : ≤1			
	2 stages		Standard : ≤5 ; Option : ≤3			
Nominal input speed (rpm) [4]		4,000	3,100		2,800	
Max input speed (rpm) [5]		7,500	6,000		5,000	
Max radial load (N) [6]		1,530	3,300		6,700	
Max axial load (N) [6]		765	1,800		3,350	
Efficiency (%) [7]	1 stage	≥97				
	2 stages	≥94				
Torsional stiffness (Nm/min)		8	15		27	
Life (h) [8]		20,000				
Min / max ambiant temperature [9]		-15 / +45				
Max temperature of the body (°C)		90				
Protection class		IP 65				
Noise level (dB) [10]		≤60	≤62		≤63	
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.

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 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 : Applied at the middle of the output shaft at 100 rpm.
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.

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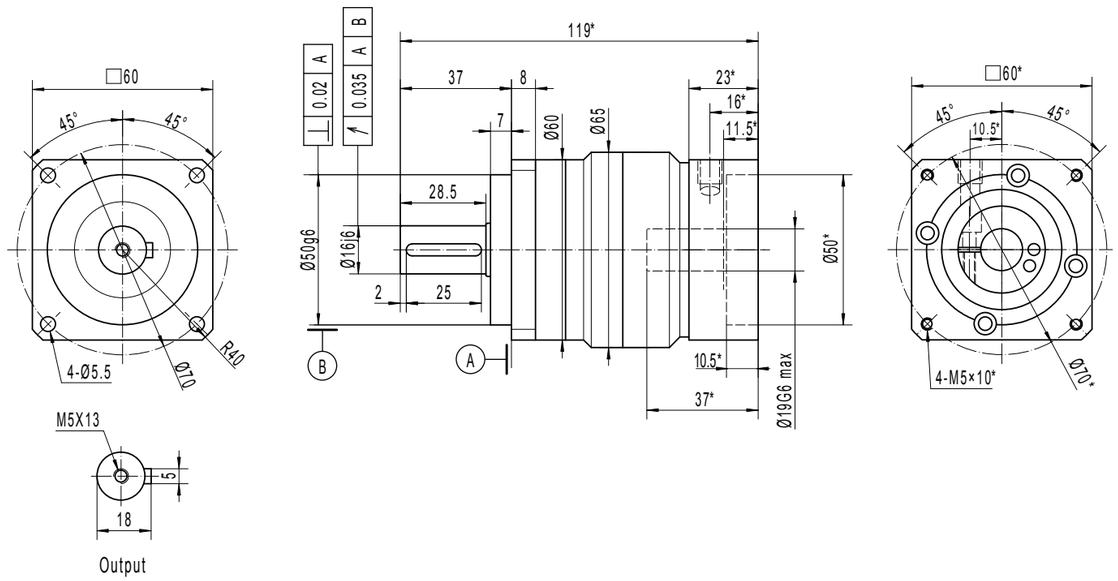
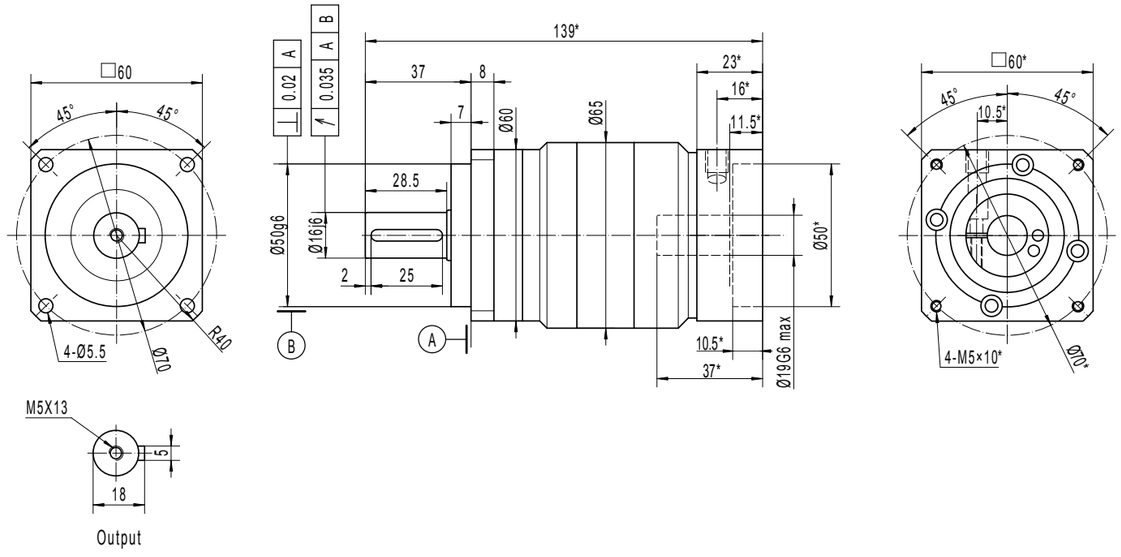
BOOSTER-SQ-ST-060- 1 STAGE - RATIOS 3 TO 10
FOR MOTOR SHAFT ≤ Ø19



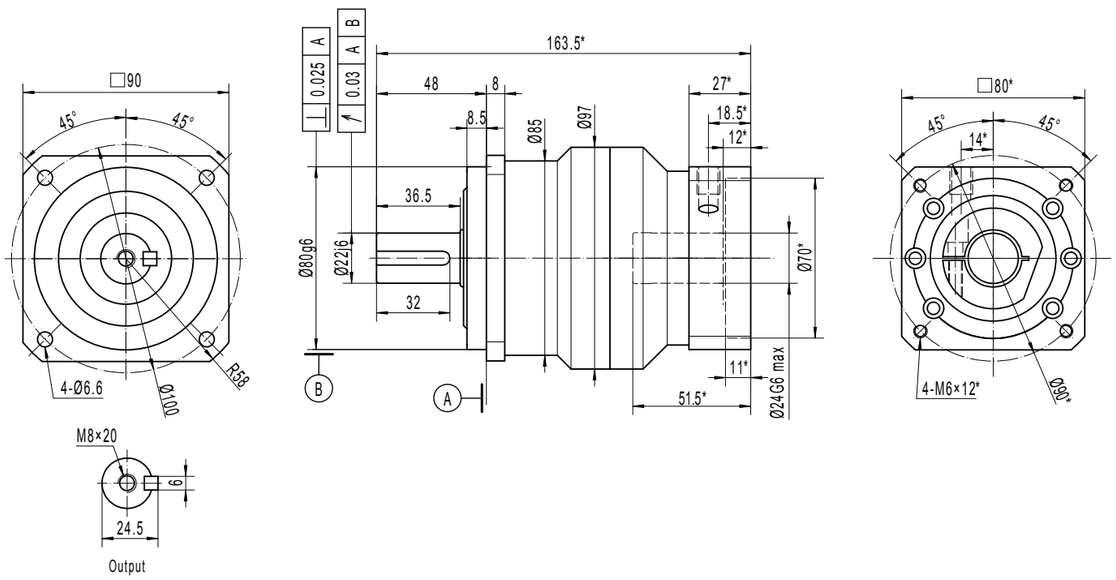
BOOSTER-SQ-ST-060- 2 STAGES-P -RATIOS 12 TO 100
FOR MOTOR SHAFT ≤ Ø19



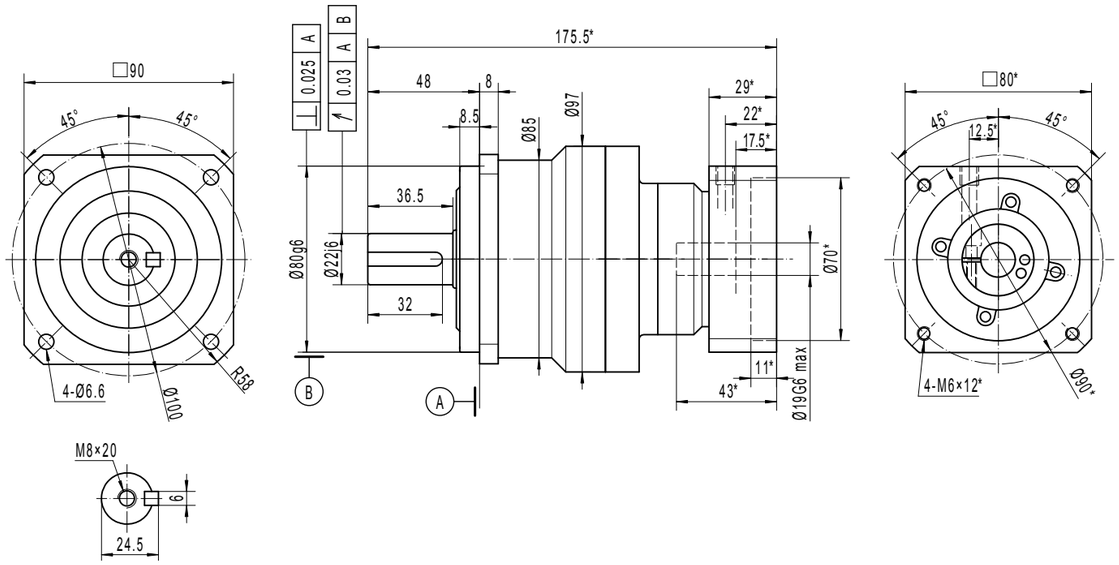
*VARIES WITH YOUR MOTOR DIMENSIONS

BOOSTER-SQ

BOOSTER-SQ-ST-090- 1 STAGE - RATIOS 3 TO 10
FOR MOTOR SHAFT ≤ Ø24



BOOSTER-SQ-ST-090- 2 STAGES-R - RATIOS 12 TO 100
FOR MOTOR SHAFT ≤ Ø19



*VARIES WITH YOUR MOTOR DIMENSIONS

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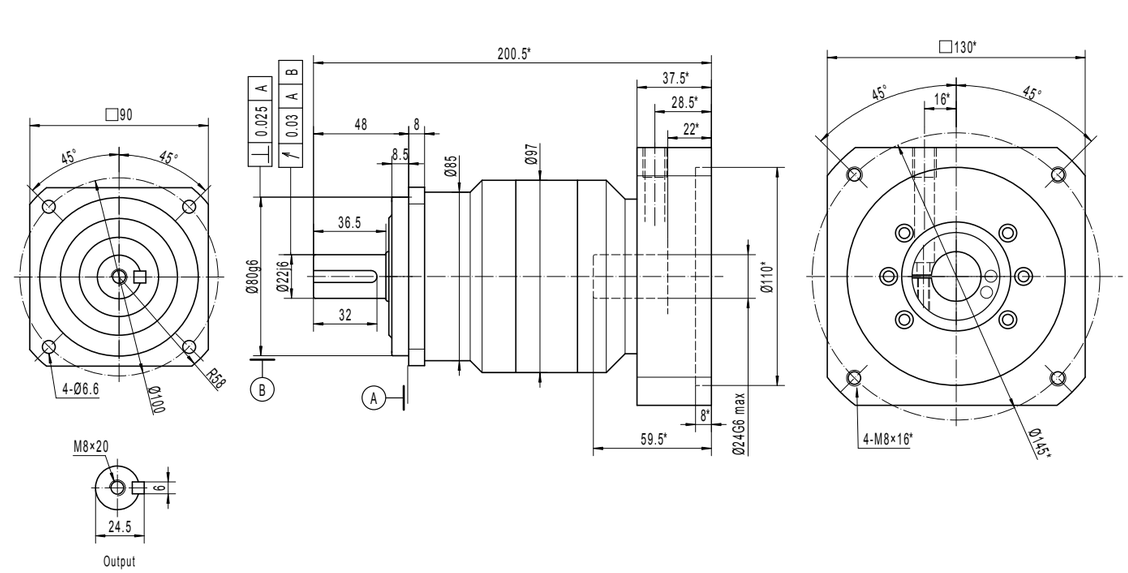
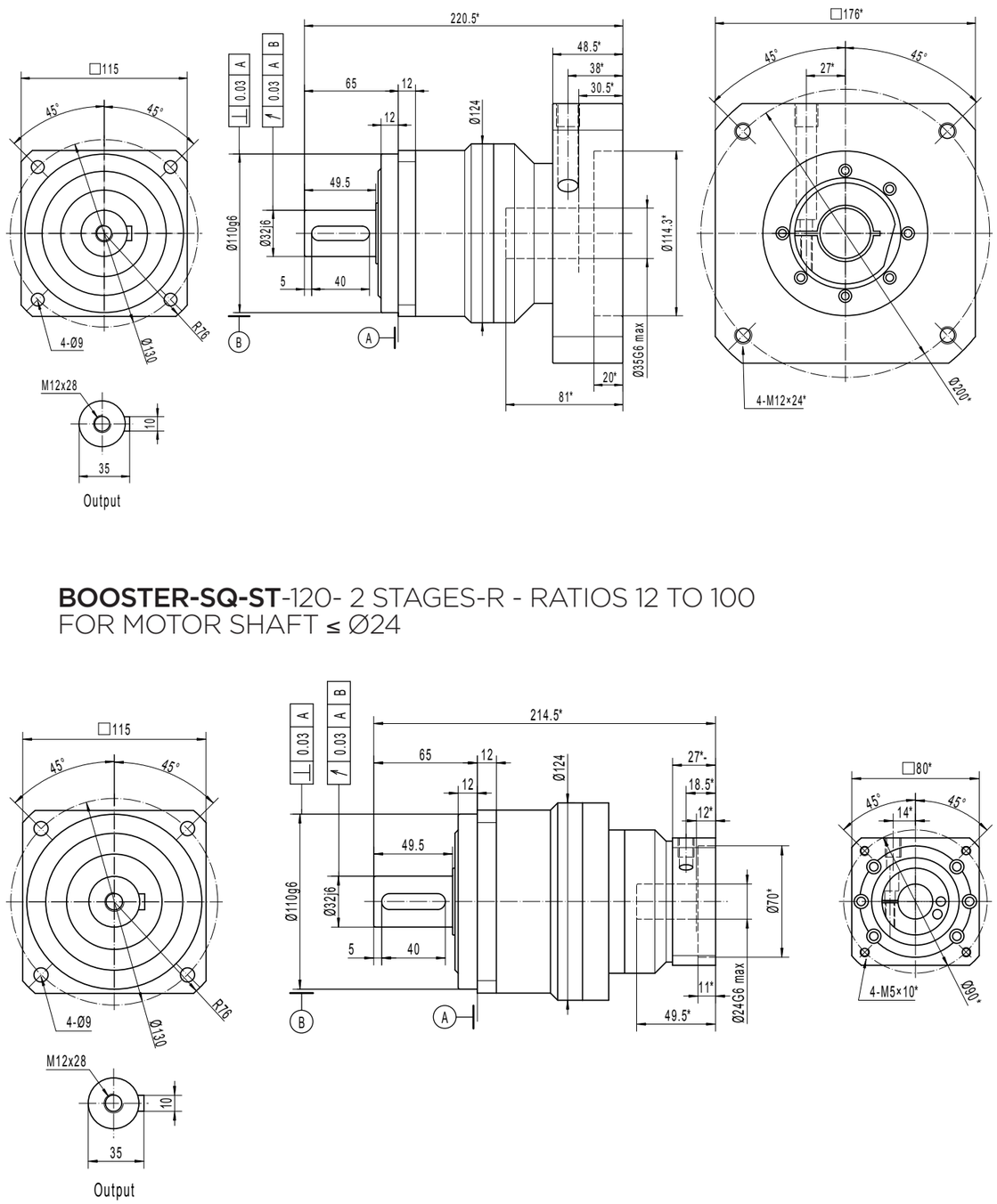
BOOSTER-SQ-ST-090- 2 STAGES-P - RATIOS 12 TO 100
FOR MOTOR SHAFT ≤ Ø24



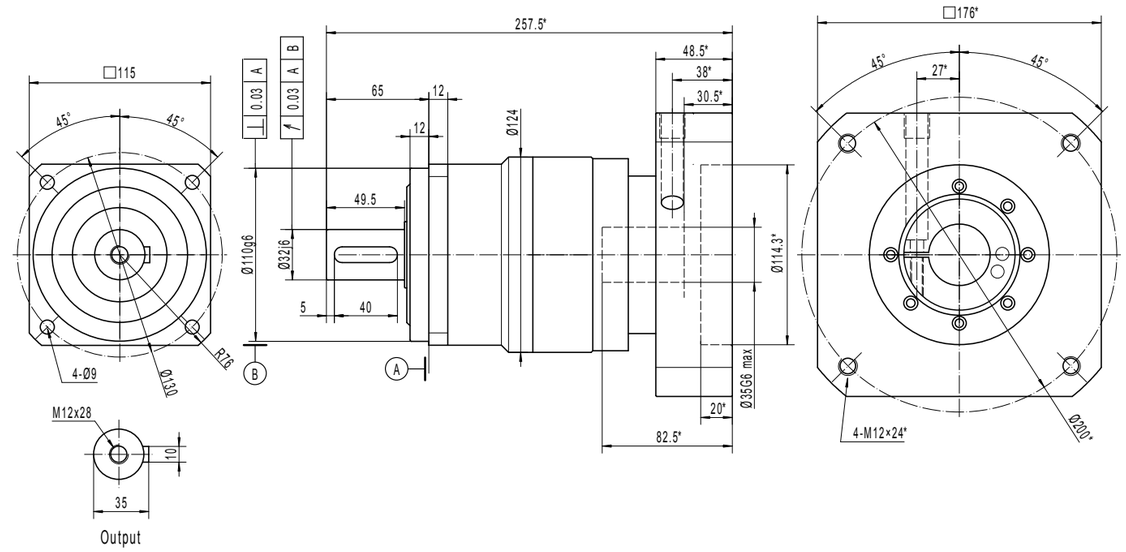
*VARIES WITH YOUR MOTOR DIMENSIONS

BOOSTER-SQ

BOOSTER-SQ-ST-120- 1 STAGE - RATIOS 3 TO 10
FOR MOTOR SHAFT ≤ Ø35



BOOSTER-SQ-ST-120- 2 STAGES-P - RATIOS 12 TO 100
FOR MOTOR SHAFT ≤ Ø35



BOOSTER-SQ-ST-120- 2 STAGES-R - RATIOS 12 TO 100
FOR MOTOR SHAFT ≤ Ø24

*VARIES WITH YOUR MOTOR DIMENSIONS

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