

Performance - AFHKA (3-Stage) Gearbox

Model No.		Stage	Ratio ⁽¹⁾	AFHKA 240
Nominal Output Torque T_{2N}	Nm	3	100	3,800
			125	3,345
			140	3,800
			175	3,345
			200	3,800
			250	3,345
			350	3,345
			500	3,345
			700	2,555
			1,000	1,650
Emergency Stop Torque T_{2NOT}	Nm	3	100~1,000	2 times T_{2N}
Max. Acceleration Torque T_{2B}	Nm	3	100~1,000	1.5 times T_{2N}
No Load Running Torque ⁽²⁾	Nm	3	100~1,000	6
Backlash ⁽³⁾	arcmin	3	100~1,000	≤ 2
Torsional Rigidity	Nm/arcmin	3	100~1,000	510
Nominal Input Speed n_{1N}	rpm	3	100~1,000	2,100
Max. Input Speed n_{1B}	rpm	3	100~1,000	4,000
Max. Radial Load F_{2r} ⁽⁴⁾	N	3	100~1,000	30,000
Max. Axial Load F_{2a} ⁽⁴⁾	N	3	100~1,000	15,000
Max. Tilting Moment M_{2k} ⁽⁴⁾	Nm	3	100~1,000	5,420
Service Life ⁽⁵⁾	hr	3	100~1,000	20,000
Operating Temp.	°C	3	100~1,000	-10° C~ 90° C
Degree of Gearbox Protection		3	100~1,000	IP65
Lubrication		3	100~1,000	Synthetic lubrication grease
Mounting Position		3	100~1,000	All directions
Running Noise ⁽⁶⁾	dB(A)	3	100~1,000	≤ 72
Efficiency η	%	3	100~1,000	$\geq 92\%$

(1) Ratio ($i = N_{in} / N_{out}$).

(2) These values are measured by gearbox with ratio 1,000 (3-stage) at 3,000 rpm no loading.

(3) Backlash is measured at 2% of Nominal Output Torque T_{2N} .

(4) Applied to the output shaft center at 100 rpm.

(5) Continuous operation is not recommended.

(6) These values are measured by gearbox with ratio 1,000 (3-stage) at 3,000 rpm no loading.

By lower ratio and/or higher RPM, the noise level could be 3 to 5 dB higher.

Inertia - AFHKA (3-Stage) Gearbox

Model No.		AFHKA 240
(C3) \emptyset ^(A)		
32	kg.cm ²	8.11
35		15.32
38		17.72
42		22.95
48		52.74

(A) \emptyset = Input shaft diameter.