

EH series

High Precision Large Size Reducer





EH-N Solid shaft type

The solid shaft type (N type) offers high torque density by integrating the motor and reducer on the same shaft. This design reduces mechanical complexity and optimizes space usage, making it ideal for applications that require both compactness and power.





1 HIGH RIGIDITY

KINEX series gearbox offer exceptional high rigidity, designed specifically for six-axis robots to ensure stability, minimize deformation under heavy loads, and deliver reliable, high-torque performance.

2 HIGH ACCURACY

KINEX series gearbox offer high accuracy for precise positioning in diverse applications, including arc welding, ensuring minimal backlash and reliable performance.





3 LOW NOISE

Our innovative gear reducers tackle the noise issues commonly associated with traditional models, providing a low-noise solution that enhances efficiency and improves the overall user experience.

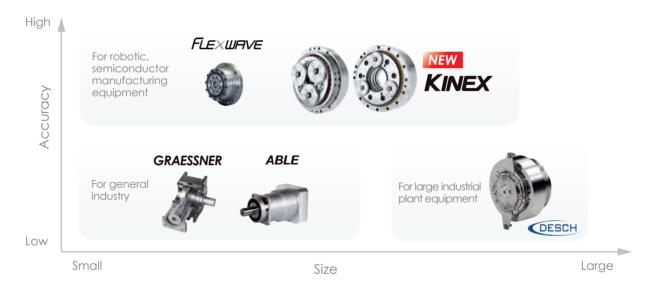
EH-C Hollow shaft type

The hollow shaft type (C type) allows large input shaft to pass trough, ideal for internal wiring, but requires an offset design for the motor and reducer. NIDEC offers a broad product lineup, which enhances robot performance and provides end users with greater value.



Achieve excellent motion with Nidec gearbox

We deliver tailored solutions that blend performance and cost-efficiency across various sizes, from low to high precision — your all-in-one solution for every needs.



One-Stop Gearbox Solutions



Application

Our new gearboxes feature zero backlash and high output torque in a lightweight, compact design, ensuring high stiffness, making them ideal for robotic applications, automatic tools and other machinery that require exceptional positional accuracy!



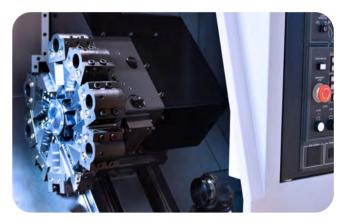
Articulated Robot



Wafer-transfer Robot



Positioner



Automatic Tool Changer



Turret Head



Index Table

Model Nomenclature

EH – Series Size

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Type

N: 25,42,80,125 C: 50,120

N : Solid shaft type C : Hollow shaft type

Ratio

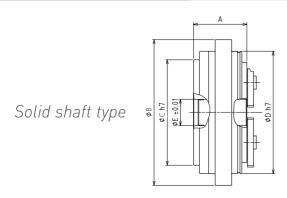
Specification

			*1							* 2		
Product Model	Ratio		Rated torque	Rated output Speed	Rated service life	Allowable acceleration/ deceleration torque	Momentary maximum allowable torque	Backlash/ Lost motion	Transmission Angular Accuracy	Allowable moment	Momentary allowable moment(Max.)	Mass
	Output flange rotation	Frame Rotation	(Nm)	(rpm)	(h)	(Nm)	(Nm)	(arc min)	(arc sec)	(Nm)	(Nm)	(kg)
EH-25N	41	40	245	15	6,000	612	1,225	1.0/1.0	70	784	1,568	3.8
	81	80										
	107.67	106.67										
	126	125										
	137	136										
	164.07	163.07										
EH-42N	41	40	412	15	6,000	1,029	2,058	1.0/1.0	60	1,660	3,320	6.3
	81	80										
	105	104										
	126	125										
	141	140										
	164.08	163.08										
EH-80N	41	40	784	15	6,000	1,960	3,920	1.0/1.0	50	2,150	4,300	9.8
	81	80										
	101	100										
	129	128										
	141	140										
	171	170										
EH-125N	41	40	1,225	15	6,000	3,062	6,125	1.0/1.0	50	3,430	6,860	15
	81	80										
	102.18	101.18										
	121	120										
	145.62	144.62										
	161	160										
EH-50C	32.54	31.54	490	15	6,000	1,225	(Bolt) 2,450	1.0/1.0	60	1,764	3,528	16.4
EH-120C	36.75	35.75	1,177	15	6,000	2,940	5,880	1.0/1.0	50	3,920	7,350	21.2

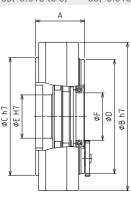
- No-load running torque will increase when the reducer is used at low temperature. Please be careful when selecting a motor.
- If you require a reduction ratio other than the above, or if you have any questions regarding motor selection, please contact our sales representative.
- The above specifications are based on our evaluation method. The customer is requested to use the product only after confirming that there are no problems under the operating conditions of the actual equipment to be installed.
- *1. The rated torque is the torque value that corresponds to the rated lifetime when operating at the rated output rotation speed, and does not indicate the upper limit of the load.
- st 2. The allowable moment changes depending on the axial load.

Dimension Table

Size / Type		EH-25N	EH-42N	EH-80N	EH-125N	EH-50C	EH-120C
A (Width)	mm	62	66	75	81	79	82.5
B (Outer diameter)	mm	133	159	189	221	222	250
C (Output side pilot diameter)	mm	94	118	140	160	176	199
D (Input side pilot diameter)	mm	113	136	160	186	169	192
E (Center hole diameter)	mm	24	30	35	40	66	73
F [Inner diameter of the Bearing]	mm			-		65(-0.015 to 0)	80(-0.015 to 0)



Hollow shaft type





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NIDEC DRIVE TECHNOLOGY CORPORATION	Nidec PARK Bldg.C, 1-1 Higashinokuchi, Morimoto-cho, Muko-shi, Kyoto, 617-0003, Japan	+81-75-280-3777
NIDEC DRIVE TECHNOLOGY KOREA CORPORATION	#317, Kolon sciencevally II, 55, Digital-ro 34-gil, Guro-gu, Seoul 08378, Korea	+82-2-2038-3537
NIDEC DRIVE TECHNOLOGY TAIWAN CORPORATION	Taiwan Boulevard, Xitun Dist., Taichung City 40767, Taiwan	+886-4-2358-2628
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NIDEC MECHANICAL (SHANGHAI) DRIVE TECHNOLOGY Co., Ltd.	100 Zunyi Road, Chang Ning District, Shanghai, China	+86-21-64400700
NIDEC DRIVE TECHNOLOGY INDIA PRIVATE LIMITED	BVR Lake Front, No. 40/32/50/1/2, Nagavara Village, Kasaba Hobli, Near Ring Road, Veerannapalya, Arabi College Post, Bangalore -560 045, India	+91-80-4953-6579
NIDEC DESCH Global Services GmbH	Kleinbahnstraße 21, 59759 Arnsberg, Germany	+49-2932-300-0
NIDEC GRAESSNER GmbH & Co.KG	Kuchenäcker 11, 72135 Dettenhausen, Germany	+49-7157-1230
NIDEC DRIVE TECHNOLOGY AMERICA CORPORATION	175 Wall Street, Glendale Heights, IL60139,USA	+1-800-842-1479
NIDEC DRIVE TECHNOLOGY DO BRASIL Ltda.	Rua Luis Gois, 1586, S34-A, São Paulo – SP 04043-200 Brazil	+55-11-5071-0015





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