



# Quick start with installation-ready gears

Nabtesco gearheads are fully-enclosed, filled with lubricant and encapsulated. Because of the pre-installed motor adapter plate and the motor shaft coupling for servomotors, the amount of construction and assembly work required is reduced considerably.



## **RD\_E**

The gearheads have a very lightweight and compact construction. They can also be run with a belt drive or with an attached rectangular pre-stage.



## **RD\_C**

These gearheads have a large hollow shaft to run cable lines through. The hollow shaft rotates at the speed of the drive.



## **RS**

RS gears were developed specifically for reliable and precise positioning of heavy loads (up to 9t).



## **RA-EA/EC**

RA-EA/EC solid shaft gears were developed specifically for the exact positioning of chain or disc magazines.



## **GH**

These gearheads for high output speeds are ideal for the automation of robot travel axes, machine tools and conveyor systems.

## **New: the RH-N series**

The locally-produced, installation-ready gearheads already have an integrated drive pinion and motor flange for all current motor types. That is why they are especially suitable for use in machine tools, modern rotary positioners, and numerous handling applications.



# Highest flexibility and precision, the way you want it

The newest generation of Nabtesco gearheads is based on the compact RV-N component sets. They were developed specifically for the European market and are produced locally. The torque rating and precision of the gears is outstanding, but they are still very compact. Since the drive pinion and a motor flange for all current motor types are already integrated in the gearhead, it is possible to integrate them in the drive train quickly and simply. Plug & play!

## SPECIFICATIONS

Model RH-	25N	42N	60N	80N	125N	160N	380N	500N	700N	
Standard ratio	41	41	41	41	41	41	75	81	105	
	81	81	81	81	81	81	93	105	118	
	107.66	105	102.17	101	102.17	102.81	117	123	142.44	
	126	126	121	129	121	125.21	139	144	159	
	137	141	145.61	141	145.61	156	162	159	183	
	164.07	164.07	161	171	161	201	185	192.75	203.52	
Rated torque (Nm)	245	412	600	784	1,225	1,600	3,724	4,900	7,000	
Allowable acc./dec. torque (Nm)	612	1,029	1,500	1,960	3,062	4,000	9,310	12,250	17,500	
Emergency stop torque (Nm)	1,225	2,058	3,000	3,920	6,125	8,000	18,620	24,500	35,000	
Hysteresis loss (arcmin)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Torsional rigidity (Nm/arcmin)	61	113	200	212	334	490	948	1,620	2,600	
Main bearing capacity	Allowable moment (Nm)	784	1,660	2,000	2,150	3,430	4,000	7,050	11,000	15,000
	Axial load (N)	2,610	5,220	5,880	6,530	13,000	14,700	25,000	32,000	44,000

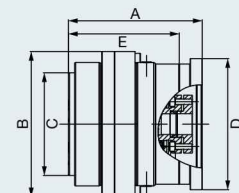
## DIMENSIONS

Model RH-	25N	42N	60N	80N	125N	160N	380N	500N	700N	
Weight *	7	11	16	17	23	33	On request	77	On request	
A (mm)	1FK703 □-... <sup>(1)</sup>	112.5	117.5	–	–	–	On request	–	On request	
	1FK704 □-... <sup>(1)</sup>	122.5	127.5	134	141	–		–		
	1FK706 □-... <sup>(1)</sup>	132.5	137.5	144	151	155.4		181.5		219
	1FK708 □-... <sup>(1)</sup>	–	145.5	152	159	163.4		189.5		227
	1FK710 □-... <sup>(1)</sup>	–	–	–	–	185.4		211.5		249
B (∅ mm)	133	159	183	189	221	238	325	325		
C h7 (∅ mm)	94	118	140	140	160	179	253	253		
D (mm)	1FK703 □-... <sup>(1)</sup>	∅ 90	∅ 90	–	–	–	On request	–	On request	
	1FK704 □-... <sup>(1)</sup>	∅ 120	∅ 120	□ 138	□ 138	–		–		
	1FK706 □-... <sup>(1)</sup>	□ 126	□ 126	□ 138	□ 138	□ 126		□ 126		□ 126
	1FK708 □-... <sup>(1)</sup>	–	□ 155	□ 155	□ 155	□ 175		□ 175		□ 175
	1FK710 □-... <sup>(1)</sup>	–	–	–	–	□ 192		□ 192		□ 192
E (mm) **	101.5	106.5	113	120	127.9	154	191.5	191.5		

\* Reference value unlubricated, dependent on model and choice of motor. Optional: aluminium flange design

\*\* Optional: gear without predefined motor flange with predefined interface for customer design

<sup>(1)</sup> This table was prepared based on Siemens servomotors. Combination with other servomotors possible on request.



## AREAS OF USE

- Medical technology
- Palletising robots
- Milling heads

## ADVANTAGES

- Quick and low-cost installation
- Already integrated: drive pinion and motor flange for current motor types
- Fully enclosed, pre-filled with lubricant, low-maintenance
- Can be adapted to specific customer needs



RH-N  
Solid shaft  
T: 245 – 7,000 Nm  
i: 41 – 203.52

