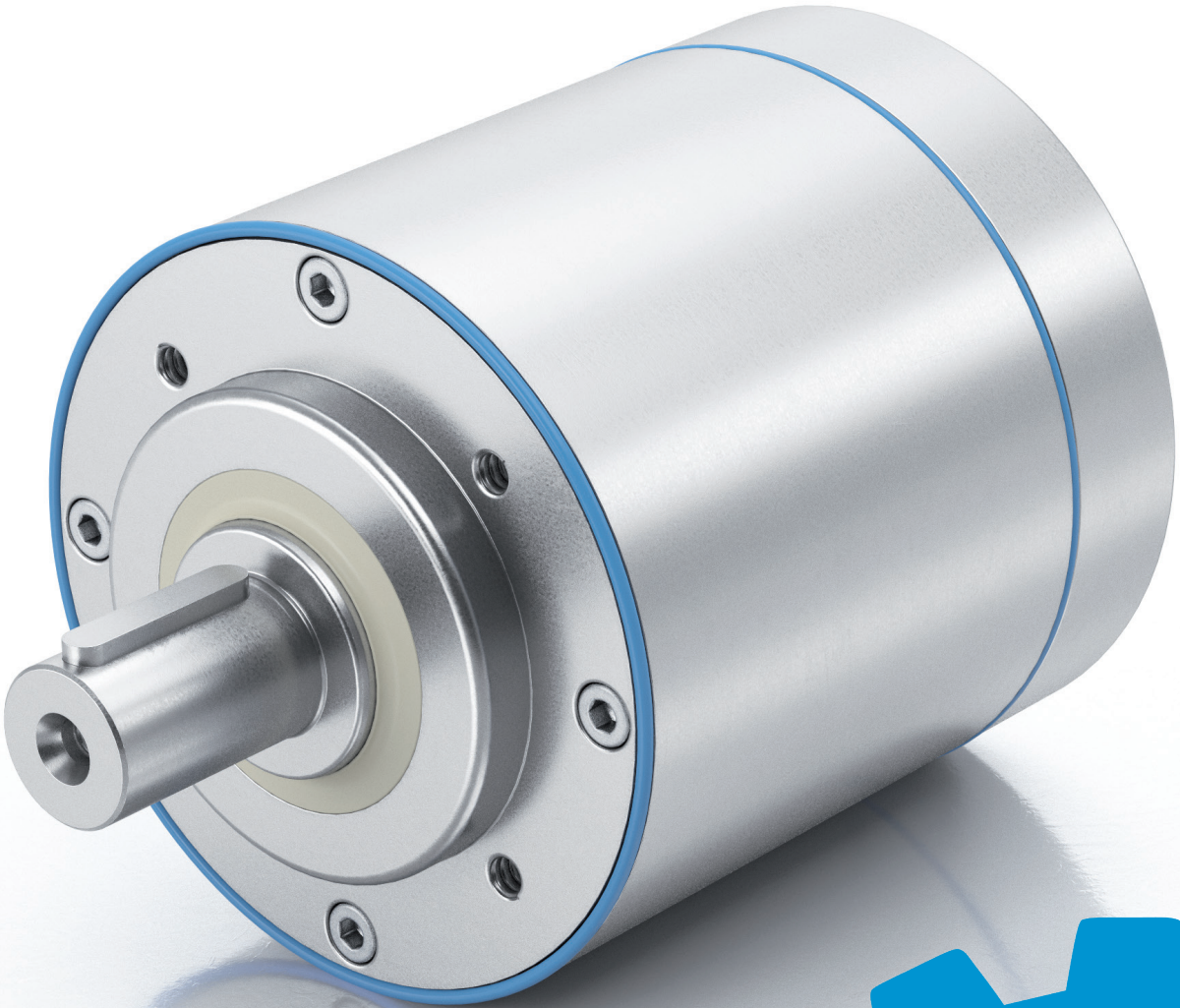
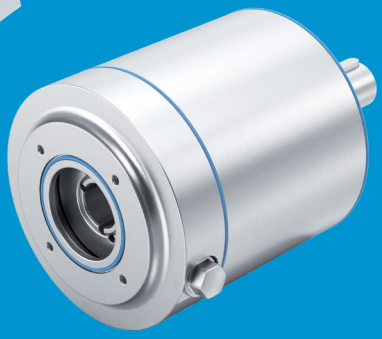
PLANETARY GEARBOX
PNH „Hygienic Design“





success based on
quality and reliability

rehfuss.com

Technical data

T2N = Nominal output torque, T2B = Max. acceleration torque, T2S = Emergency stop torque. (max. 500 times), J = Mass moment of inertia, VS = Torsional stiffness

1-stage

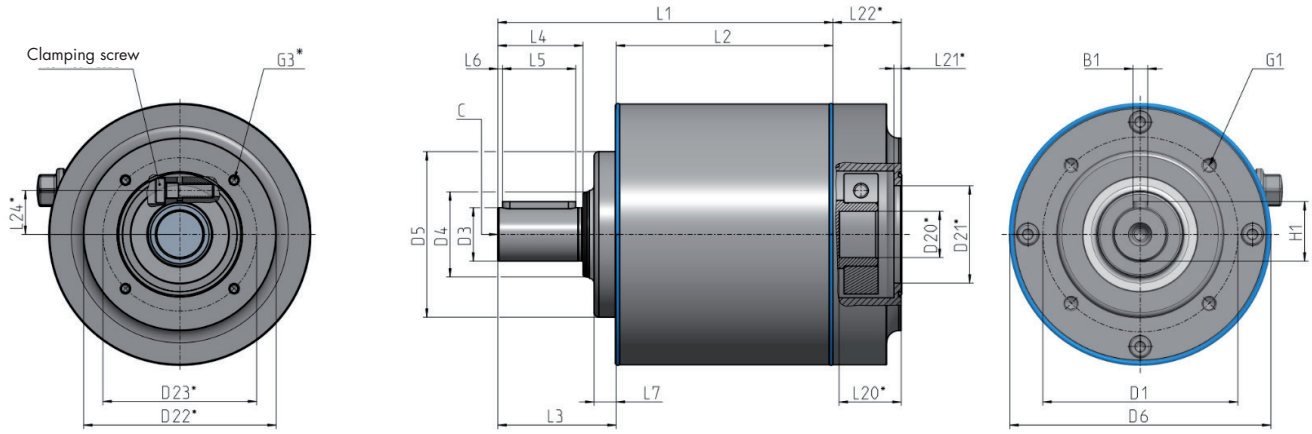
	PNH106Z					PNH108Z					PNH110Z				
Ratios	T2N	T2B	T2S	J	VS	T2N	T2B	T2S	J	VS	T2N	T2B	T2S	J	VS
i	Nm	Nm	Nm	kgcm²	Nm/ arcmin	Nm	Nm	Nm	kgcm²	Nm/ arcmin	Nm	Nm	Nm	kgcm²	Nm/ arcmin
3	25	38	78	0,44	2,4	47	75	155	1,33	7,1	110	165	363	4,43	17
4	29	44	90	0,40	2,4	65	104	215	1,14	7,1	140	210	462	3,73	17
5	29	44	90	0,38	2,4	65	104	215	1,07	7,1	140	210	462	3,33	17
7	29	44	90	0,37	1,7	65	104	215	1,02	4,8	140	210	462	3,01	14
10	20	30	62	0,36	1,3	51	82	168	0,99	3,4	110	165	363	2,81	8,3
Torsional backlash [arcmin]															
	< 10					< 7					< 7				
Weight approx. [kg]															
	4,1					7,6					16,3				
Efficiency at full load [%]															
	92														

2-stage

	PNH206Z					PNH208Z					PNH210Z				
Ratios	T2N	T2B	T2S	J	VS	T2N	T2B	T2S	J	VS	T2N	T2B	T2S	J	VS
i	Nm	Nm	Nm	kgcm²	Nm/ arcmin	Nm	Nm	Nm	kgcm²	Nm/ arcmin	Nm	Nm	Nm	kgcm²	Nm/ arcmin
9	41	49	78	0,44	2,4	78	94	155	1,33	7,1	182	206	363	4,43	17,0
12	41	49	78	0,40	2,4	78	94	155	1,14	7,1	182	206	363	3,73	17,0
16	48	57	90	0,40	2,4	107	130	215	1,14	7,1	231	263	462	3,73	17,0
20	48	57	90	0,38	2,4	107	130	215	1,07	7,1	231	263	462	3,33	17,0
25	48	57	90	0,38	2,4	107	130	215	1,07	7,1	231	263	462	3,33	17,0
28	48	57	90	0,37	2,4	107	130	215	1,02	7,1	231	263	462	3,01	17,0
30	48	57	90	0,36	2,4	107	130	215	0,99	7,1	231	263	462	2,81	17,0
35	48	57	90	0,37	2,4	107	130	215	1,02	7,1	231	263	462	3,01	17,0
40	48	57	90	0,36	2,4	107	130	215	0,99	7,1	231	263	462	2,81	17,0
50	48	57	90	0,36	2,4	107	130	215	0,99	7,1	231	263	462	2,81	17,0
70	48	57	90	0,36	1,7	107	130	215	0,99	4,8	231	263	462	2,81	14,0
100	23	39	62	0,36	1,3	59	102	168	0,99	3,4	127	206	363	2,81	8,3
Torsional backlash [arcmin]															
	< 12					< 9					< 9				
Weight approx. [kg]															
	4,7					9,0					19,7				
Efficiency at full load [%]															
	90														

Radial force / Axial force [N] at n2 = 100 1/min		
950 / 500	1500 / 1000	3000 / 1500
Noise emission (dbA) at n1= 3000 1/min, Measuring point 1m distance, without load		
< 63	< 63	< 65
Nominal input speed / max. input speed [1/min] – allowed operation temperature must not be exceeded		
3500 / 6000	3000 / 6000	2500 / 5000
Life time [h]		
> 30.000		
Lubrication		
H1 registered lifetime lubrication		
Protection class		
IP69K		
Installation position		
universal		
Operation temperature		
-25°C to +90°C		

Dimensions (in mm):



Type of gearbox		PNH106Z 1-stage	PNH206Z 2-stage	PNH108Z 1-stage	PNH208Z 2-stage	PNH110Z 1-stage	PNH210Z 2-stage
D1	Pitch circle Ø	62		80		108	
$D3_{k6}$	Output shaft Ø	16		22		32	
D4	Shaft collar Ø	25		30		40	
$D5_{h7}$	Centering Ø	52		68		90	
D6	Housing Ø	88		107		130	
G1	Thread / depth 4x	M6/12		M6/14		M10/15	
C	Centering thread / depth	M5/12		M8/19		M12/26	
L1	Length without drive flange	110	132	137,5	170	202	233,5
L2	Housing length	70	92	89	121,5	127,5	159
L3	Installation dimension	40		48,5		74,5	
L4	Shaft length	28		35		58	
L7	Centering collar length	7,5		9		12	
L5	Feather key length	25		30		50	
L6	Feather key position	2		2		4	
B1	Feather key width	5		6		10	
H1	Height including feather key	18		24,5		35	
Motor flange / motor shaft							
	Max. drill hole clamping system	14		19		24	
D20*	Diameter hole motor shaft	***Motor-specific flange and motor shaft geometries. For motor shafts without feather key. Dimensions vary.**					
$D21^{G7}$*	Inner diameter centering						
D22*	Diameter motor flange						
D23*	Bolt circle thread motor flange						
L20*	Length diameter motor shaft						
L21*	Length Inner centering						
L22*	Length motor flange						
L24*	Position clamping screw						
G3*	Mounting thread						

Order key:

PNH106Z-0005-MF-XXXXXX

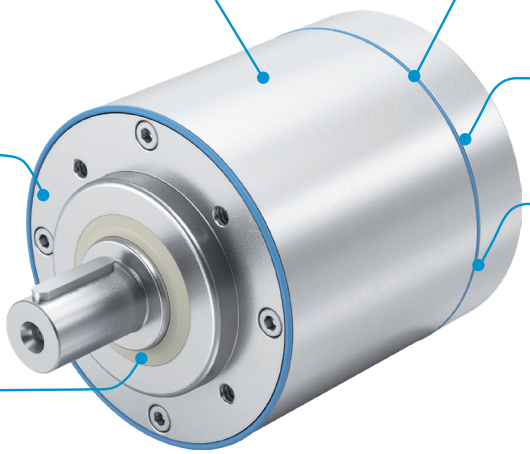
- PNH — Model series
- 1 — Stage
- 06 — Size
- Z — with centering collar
- 0005 — Reduction
- MF — Motor flange
- XXXX — Motor shaft code
- XXX — Motor flange code

Highlights

EASY CLEANING DUE TO SMOOTH SURFACE RA ≤ 0,8

H1 REGISTERED LIFETIME LUBRICATION

SHAFT SEAL FREE OF DEAD SPACE



OPTIMIZED SEALING MATERIALS

LOW TORSIONAL BACKLASH

MADE OF STAINLESS STEEL

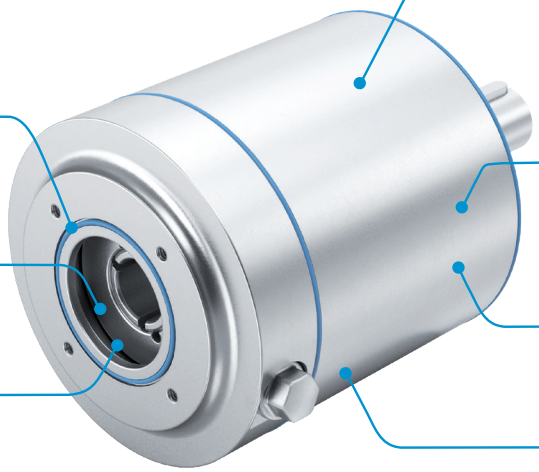
REHFUSS stainless steel

HIGH PROTECTION CLASS IP69K

AXIAL LOAD-FREE DIRECT MOTOR MOUNTING WITH CLAMP CONNECTION

SAFE MOTOR SPECIFIC MOUNTING SYSTEM

MODULAR EXCHANGE-ABLE FLANGE SYSTEM
adaptable with all common servo motors



LOW NOISE AND OPTIMAL RUNNING SMOOTHNESS

INTEGER RATIOS

HIGH TORSIONAL RIGIDITY

Options:

- Can be combined with our stainless steel motors (SBH, SBE and N) as well as other motor connections
- Flange options for synchronous servo motors
- Suitable for food, beverage and pharmaceutical industries

Characteristics:

- Robust and compact
- Lubricant suitable for the food industry (NFS H1 authorized)
- Lifetime lubrication
- Made of stainless steel (1.4404)
- Any mounting position

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