

## Planetary Gearbox

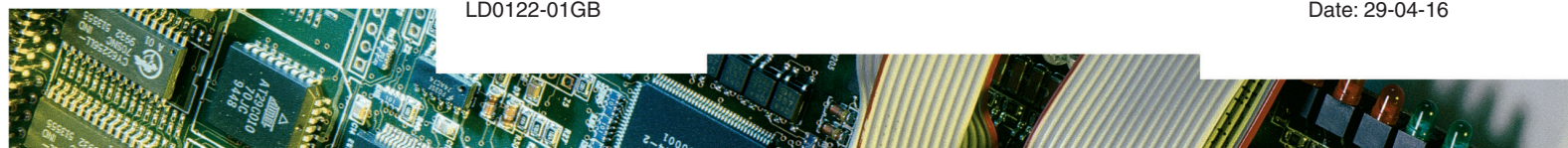
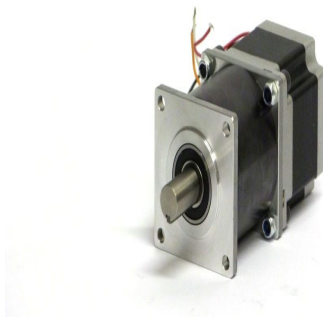
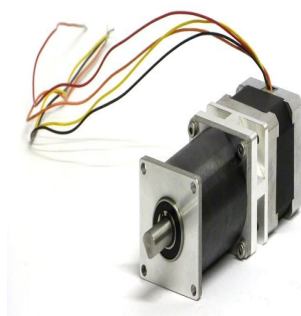
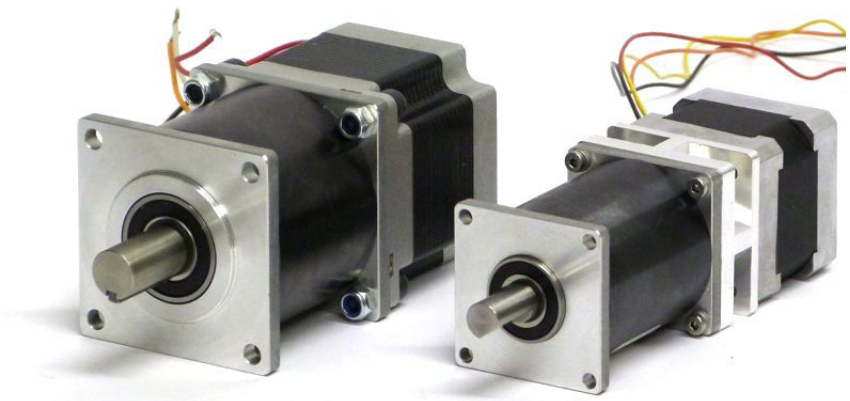
**HMEH04/05     $\varnothing$ 40mm to 57mm**

The series of HMEH planetary gears are specially designed for JVL. With their NEMA17 standard flanges they can be directly mounted on the MIS17 and MST17 series of integrated motors.

Planetary Gearbox HMEH for NEMA17 Stepper Motors, possible to get this with round or square flange, diameter range from 40mm to 57mm. Ratios from 5 to 500.

Shafts longer than 120mm is supported however an adapter is required.

Grease used in these gears are from Klüber type ISOFLEX TOPAS L 32, a low temperature grease ( $-40^{\circ}\text{C}$ ), which consist of a synthetic hydrocarbon oil combined with a special lithium soap. This gives the grease a good long service life due to its resistance to ageing and oxidation and good corrosion protection and water resistance.





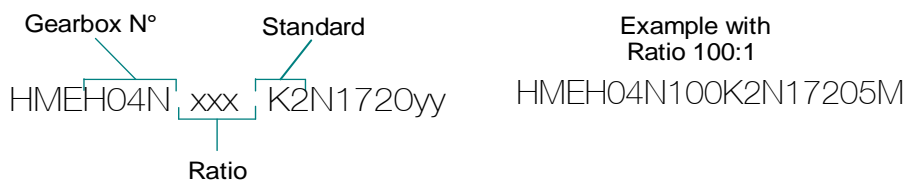
# Planetary gearbox 1040 ball bearing

ø40mm - 5...15 Nm

## Technical data

Output shaft material	Stainless steel
Cover material	Steel
Radial play at 5mm from bearing	30µm
Axial play	~0 (no-load)
Average backlash at no-load	0.5°
Max. radial force at 5mm from bearing	500N
Max. axial force	300N

## Part number



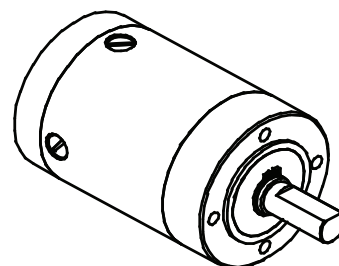
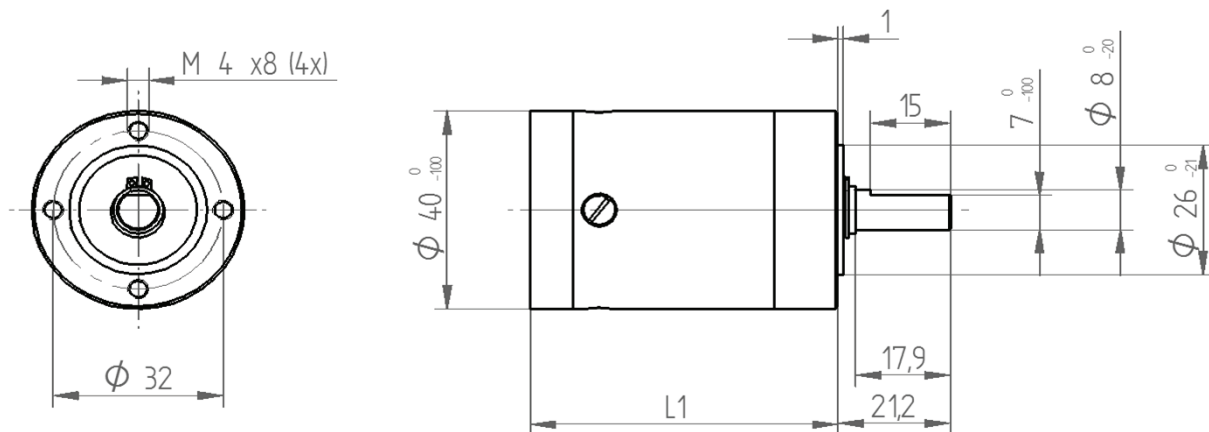
## Characteristics

Ratio	5:1	10:1	20:1	25:1	40:1	50:1	100:1	125:1	200:1	250:1	400:1	500:1
No. of gear stages	1	1	2	2	2	2	2	3	3	3	3	3
Max. torque permanent      Nm	5	5	10	10	10	10	10	15	15	15	15	15
Max. torque intermittent      Nm	7.5	7.5	15	15	15	15	15	22.5	22.5	22.5	22.5	22.5
Dir. of rotation entrance - exit	=	=	=	=	=	=	=	=	=	=	=	=
Mass      g	~310	~310	~380	~380	~380	~380	~380	~450	~450	~450	~450	~450
Length gearbox L1      mm	58	58	67.5	67.5	67.5	67.5	67.5	77	77	77	77	77

Other ratio on request

Other adaptor flange on request

(cotation mm, tolerances µm)



# Planetary gearbox 1043 ball bearing

ø43mm - 5...15 Nm

## Technical data

Output shaft material	Stainless steel
Cover material	Steel
Radial play at 5mm from bearing	30µm
Axial play	~0 (no-load)
Average backlash at no-load	0.5°
Max. radial force at 5mm from bearing	500N
Max. axial force	300N

## Part number

Gearbox N°      Standard  
 HMEH04N    xxx    K1N1710yy

Example with  
 Ratio 100:1  
 HMEH04N100K1N17105M

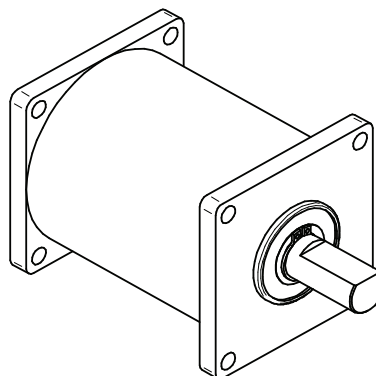
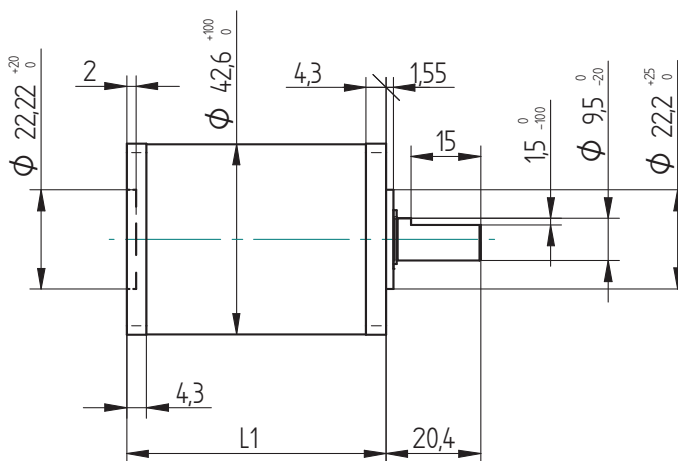
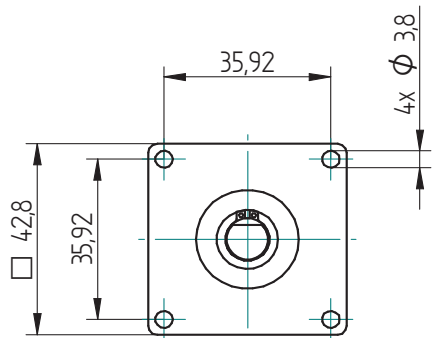
## Characteristics

Ratio		5:1	10:1	25:1	50:1	100:1	125:1	250:1	500:1
No. of gear stages		1	1	2	2	2	3	3	3
Max. torque permanent	Nm	5	5	10	10	10	15	15	15
Max. torque intermittent	Nm	7.5	7.5	15	15	15	22.5	22.5	22.5
Dir. of rotation entrance - exit		=	=	=	=	=	=	=	=
Mass	g	~325	~325	~410	~410	~410	~500	~500	~500
Length gearbox L1	mm	47	47	56	56	56	66	66	66

Other ratio on request

(cotation mm, tolerances µm)

Other adaptor flange on request



## Technical data

Output shaft material	Stainless steel
Cover material	Steel
Radial play at 5mm from bearing	30m
Axial play	~0 (no-load)
Average backlash at no-load	0.5°
Max. radial force at 5mm from bearing	560N
Max. axial force	490N

## Part number

Gearbox N°
Standard
Example with Ratio 100:1

HMEH05N
xxx
K1N2310YY
HMEH05N100K1N23105M

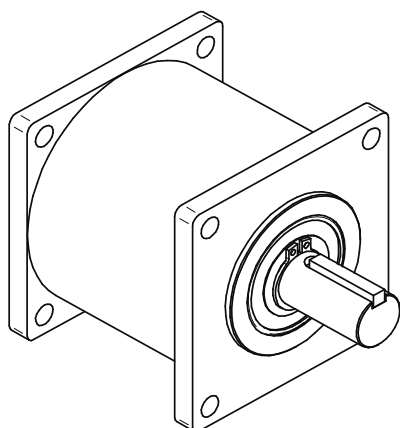
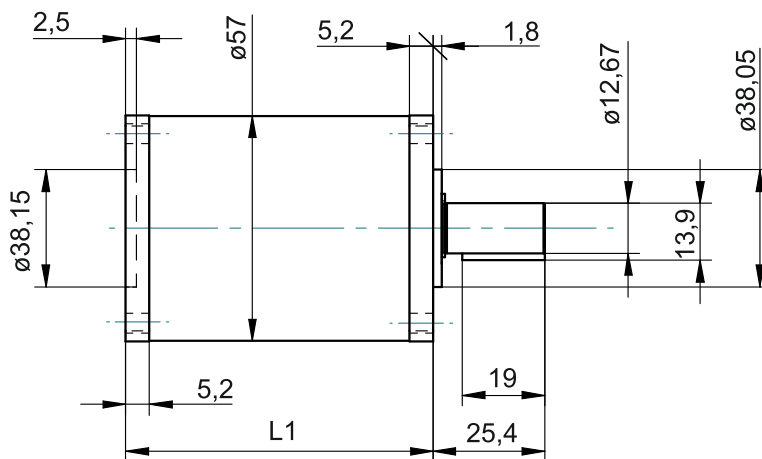
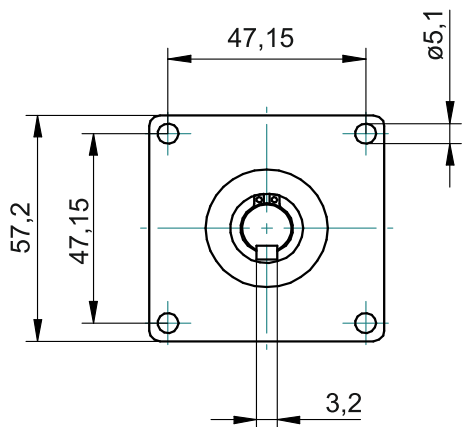
## Characteristics

Ratio		3:1	5:1	10:1	25:1	50:1	100:1	125:1	250:1	500:1
No. of gear stages		1	1	1	2	2	2	3	3	3
Max. torque permanen	Nm	10	10	10	20	20	20	35	35	35
Max. torque intermitt	Nm	15	15	15	30	30	30	45	45	45
Dir. of rotation entrance - exit		=	=	=	=	=	=	=	=	=
Mass	g	~660	~660	~660	~880	~880	~880	~1100	~1100	~1100
Length gearbox L	mm	54	54	54	66	66	66	79	79	79

Other ratio on request

(cotation mm, tolerances µm)

Other adaptor flange on request



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