



PTN Planetary Gearbox

Economy Uniflange Series

Catalogue: 192-753012 N2 / UK
Version 2, June 2006



PTN Economy Planetary Gearbox

PTN planetary gearbox in three sizes

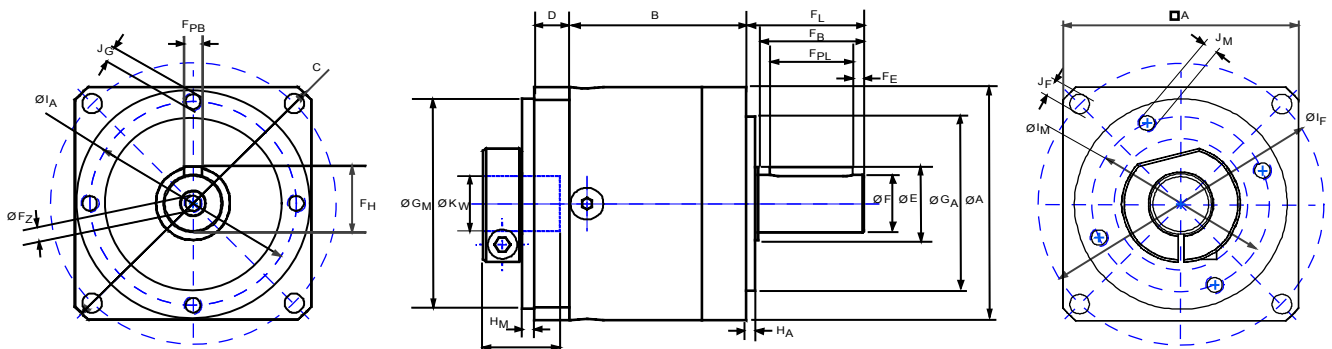
Product description

The PTN planetary gearbox of the economy series was developed for applications, where an extremely low backlash is not required.



- ◆ space-saving design
- ◆ high output torques
- ◆ high efficiency (96%)
- ◆ low noise <65dB (A)
- ◆ life time lubrication
- ◆ high quality (ISO 9001)
- ◆ fast and direct motor mounting
- ◆ direction of rotation equidirectional
- ◆ ratios: 4:1, 8:1, 25:1

Dimensions



Gearbox size		Unit	PTN060	PTN080	PTN120
A	∅ Housing □ cross section of universal flange	mm	60	80	115
B	Housing length (ratio 4:1, 8:1)	mm	47	60	74
	Housing length (ratio 25:1)	mm	59.5	77.5	101
C	Diagonal dimension of universal flange	mm	80	107	145
D	Thickness of universal flange	mm	8.2	12	25.5
E	∅ Shaft collar	mm	17	25	35
F	∅ Drive shaft (h7)	mm	14	20	25
F _Z	Centre bore of drive shaft	mm	M5x12	M6x16	M10x22
F _L	Shaft length from face	mm	35	40	55
F _B	Usable shaft length	mm	30	36	50
F _H	Shaft height with key	mm	16	22.5	28
F _E	End of shaft to key	mm	2.5	4	5
F _{PL}	Key length	mm	25	28	40
F _{PB}	Key width	mm	5	6	8
G _A	∅ Output pilot (h7)	mm	40	60	80
G _M	∅ Input pilot (h7)	mm	52	72	84
H _A	Output pilot length	mm	3	3	4
H _M	Input pilot length	mm	3	4	5
I _A	∅ Hole circle on pilot side	mm	52	70	100
I _M	∅ Hole circle on output side	mm	44	60	100
I _F	∅ hole circle of universal flange	mm	70	97	130
J _G	Mounting thread on pilot side	mm	M5x8	M6x10	M10x16
J _M	Mounting thread on output side	mm	M5x8	M6x10	M8x16
J _F	∅ mounting thread universal flange	mm	5.5	6.6	9
K _W	∅ Input bore	mm	9	19	19
K _T	Input shaft bore depth	mm	20	26	36

Technical data

Gearbox size	Unit	PTN060			PTN080			PTN120		
		Ratio	4:1	8:1	25:1	4:1, 8:1	25:1	4:1	8:1	25:1
Nominal torque	Nm	16	15	44	50	110	100	120	230	
Backlash	Winkelmin	<20		<25	<12	<17	<8		<12	
Torsional rigidity	Nm/arcmin	1.5			4.5			11		
Noise emission	dB(A)	<58		<58	<60	<60	<65		<65	
Efficiency	%	>96		>94	>96	>94	>96		>94	
Weight	kg	0.9	1.1		2.1	2.6		6.0	8.0	
Input speed (1)	rpms	4000			4000			3500		
Load on output shaft (2) radial	N	500			950			2000		
Load on input shaft (2) axial	N	600			1200			2800		
Operating temperature	°C	-25 ... +90								
Ratio		4:1	8:1	25:1	4:1	8:1	25:1	4:1	8:1	25:1
Moment of Inertia	kgcm ²	0.093	0.065	0.075	0.52	0.39	0.44	1.79	1.32	1.49

[1] Intermittent operation, the max. permissible operating temperature is not to be exceeded.

[2] Based on a lifetime of 20.000 hrs – working cycle of 50%

Order code

Order Code Gearbox

Order code P T N 0 6 0 - 0 0 4 S 7

Frame size Ø (060, 080, 120)

Ratio (4:1, 8:1, 25:1)

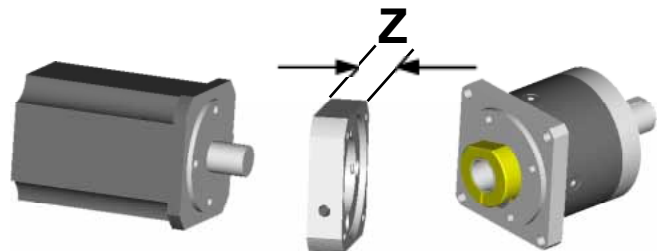
Standard shaft with key

Order code for Motor Kit (adapter flange and adaptor sleeve if applicable)

Gearbox	Input dimensions*	Cross section of adaptor flange	z-dimension of motor flange		Order Code Motor Kit
PTN060	040/063/09/20	60mm	16mm	⇒	M003-321-000
PTN060	060/075/11/23	70mm	16mm	⇒	M051-000-000
PTN060	Nema23 for SY56	60mm	16mm	⇒	M060-140-000
PTN080	060/075/11/23	80mm	21.2mm	⇒	M049-284-000
PTN080	080/100/14/30	90mm	21.2mm	⇒	M004-128-000
PTN080	080/100/19/40	90mm	31.2mm	⇒	M030-000-000
PTN080	Nema34 for SY87	90mm	23.2mm	⇒	M034-376-000
PTN080	Nema42 for SY107	115mm	41.2mm	⇒	M125-363-000
PTN120	095/115/19/40	115mm	21.8mm	⇒	M008-031-000

* Explanation of Input Dimensions (example 040/063/09/20)

Pilot Ø = 40mm; PCD Ø = 63mm; Shaft Ø = 9mm; max. Ingress of Motor Shaft = 20mm

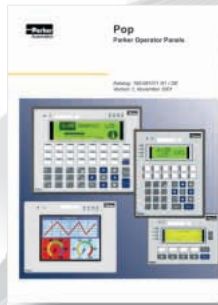




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We reserve the right to make technical changes.
The information contained in this manual corresponds to the current status at the time of printing.



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