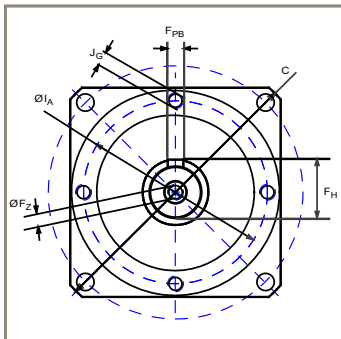


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PTN Planetary Gearbox

Economy Uniflange Series



ENGINEERING YOUR SUCCESS.

Autoryzowany dystrybutor Parker:

ARA
 PNEUMATIK

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 ul. Wyścigowa 38 fax 71 364 72 83
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PTN Economy Planetary Gearbox

PTN planetary gearbox in three sizes

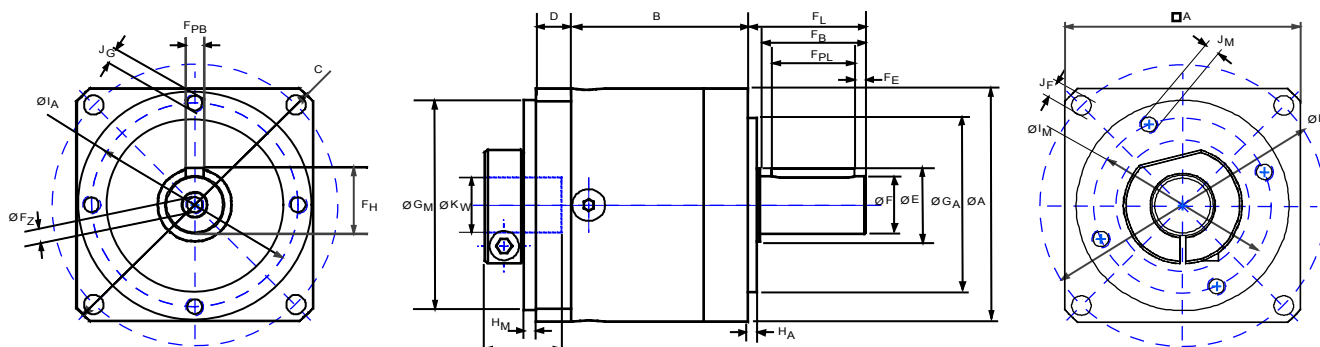
Product description

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 | Ø 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 | Ø Shaft collar | mm | 17 | 25 | 35 |
| F | Ø 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 | Ø Output pilot (h7) | mm | 40 | 60 | 80 |
| G _M | Ø 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 | Ø Hole circle on pilot side | mm | 52 | 70 | 100 |
| I _M | Ø Hole circle on output side | mm | 44 | 60 | 100 |
| I _F | Ø 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 | Ø mounting thread universal flange | mm | 5.5 | 6.6 | 9 |
| K _W | Ø 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)

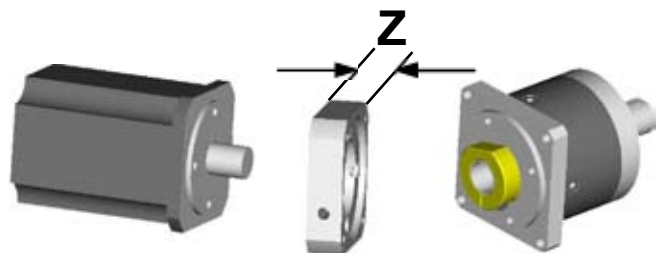
Standard shaft with key

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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