

POWERGEAR DATA SHEET P-110



L Series



FL Series



H Series



FH Series

Specifications:

Ratio:	1:1	1.5:1	2:1	3:1	4:1	5:1
Nominal output torque:	150Nm	150Nm	150Nm	120Nm	100Nm	85Nm
Acceleration torque:	225Nm	225Nm	225Nm	180Nm	150Nm	128Nm
Emergency torque:	300Nm	300Nm	300Nm	240Nm	200Nm	170Nm
Input speed:	1400rpm	1600rpm	1600rpm	2100rpm	2100rpm	2100rpm
Max input speed (Special measures on request)	4500rpm	4500rpm	4500rpm	4500rpm	4500rpm	4500rpm
Standard output backlash:	≤13 arcmin	≤13 arcmin	≤13 arcmin	≤13 arcmin	≤13 arcmin	≤13 arcmin
Reduced output backlash:	≤8 arcmin	≤8 arcmin	≤8 arcmin	≤8 arcmin	≤8 arcmin	≤8 arcmin
Permissible radial load*: (Output)	2500N	2500N	2500N	2500N	2500N	2500N
Permissible radial load*: (Input)	2000N	2000N	2000N	2000N	2000N	2000N
Permissible axial load*: (Output)	1250N	1250N	1250N	1250N	1250N	1250N
Permissible axial load*: (Input)	1000N	1000N	1000N	1000N	1000N	1000N
Efficiency at max load:	>98%	>98%	>98%	>98%	>98%	>98%
Running noise at 1500rpm, partial load	≤76db(A)	≤76db(A)	≤76db(A)	≤76db(A)	≤76db(A)	≤76db(A)
Weight:	13.0kg	13.0kg	13.0kg	13.0kg	13.0kg	13.0kg
Service life:	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h
Oil quantity:	0.3 litres	0.3 litres	0.3 litres	0.3 litres	0.3 litres	0.3 litres
Operating temperature:	Up to 80°C	Up to 80°C	Up to 80°C	Up to 80°C	Up to 80°C	Up to 80°C
Mass moments of inertia related to input for shaft arrangement 13:	12.5kg/cm ²	9.17kg/cm ²	7.41kg/cm ²	6.18kg/cm ²	5.71kg/cm ²	5.48kg/cm ²

*At centre of shaft

Order code:

P-	110-	2-	3-	4-	5-	6-	7
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2:	Version:	L = solid shaft version; FL = solid shaft version with input flange H = hollow shaft version; FH = hollow shaft version with input flange
3:	Ratio:	1:1; 1.5:1; 2:1; 3:1; 4:1; 5:1
4:	Shaft arrangement:	Wa1; Wa3; Wa12; Wa13; Wa23; Wa123
5:	Mounting position:	MP1; MP2; MP3; MP4; MP5; MP6
6:	Input speed:	????rpm
7:	Special requirements:	As specified

Dimensions

a:	110mm	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>L Series</p> </div> <div style="text-align: center;"> <p>H Series</p> </div> </div>
b dia:	108mmh7	
c dia:	106mm	
d1 dia:	22mmk6	
l1:	40mm	
d2 dia:	22mmk6	
d3 dia:	22mmH7	
l2:	40mm	
l3:	60mm	
l4:	40mm	
e:	55mm	
f1:	155mm	
f2:	112mm	
g1:	15mm	
g2:	15mm	
h:	60mm	
k:	M8x15.5mm	
m1:	115mm	
m2:	72mm	
n1:	2mm	
n2:	2mm	
p:	44mm	
r1:	M8	
r2:	M8	
s:	6x M6x12	
t:	8mm	
u dia:	107mmg6	
v dia:	92mm	
Key d1:	6x6x32mm	
Key d2:	6x6x32mm	<div style="text-align: center;"> <p>FH Series</p> </div>
Z:	5mm	
Input shaft d1	19mmG7 x 43mm /	
dia x L1 with keyway to DIN6885/1	5x5mm 24mmG7 x 53mm / 8x7mm	

Flange options:

Input flange B5 = u dia/ v dia/ w dia with 4x threaded holes:	120mm/ 100mm/ 80mmF7/ M6	140mm/ 115mm/ 95mmF7/ M8	160mm/ 130mm/ 110mmF7/ M8	200mm/ 165mm/ 130mmF7/ M10
Input flange B14 = u dia/ v dia/ w dia with 4x bored holes:			160mm/ 130mm/ 110mmF7/ 9mm	200mm/ 165mm/ 130mmF7/ 11mm

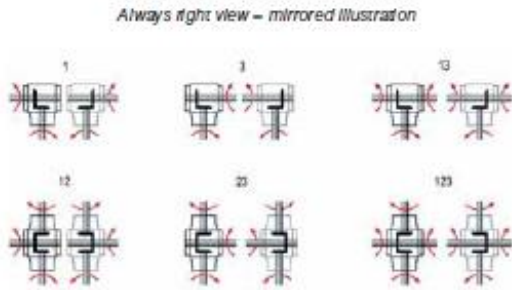
Thermal performance limit (P) = 5.7kW at 20°C and 100% duty cycle

Duty cycle:	100%	80%	60%	40%	20%
Factor:	1.0	1.2	1.4	1.6	1.8
Ambient temp:	10°C	20°C	30°C	40°C	50°C
Factor:	1.2	1.0	0.87	0.75	0.62

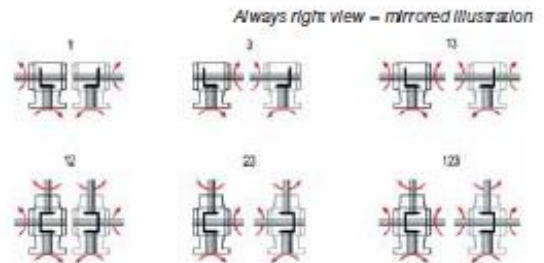
Eg: Duty cycle = 80%; ambient temp = 30°C

Therefore P = 5.7 x 1.2 x 0.87 = 5.95kW

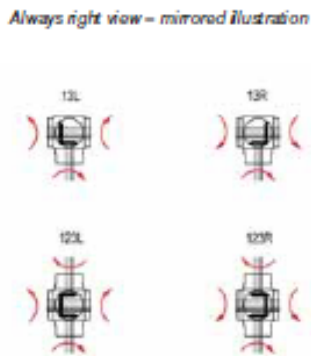
Shaft arrangements L:



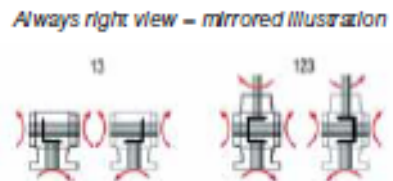
Shaft arrangements FL:



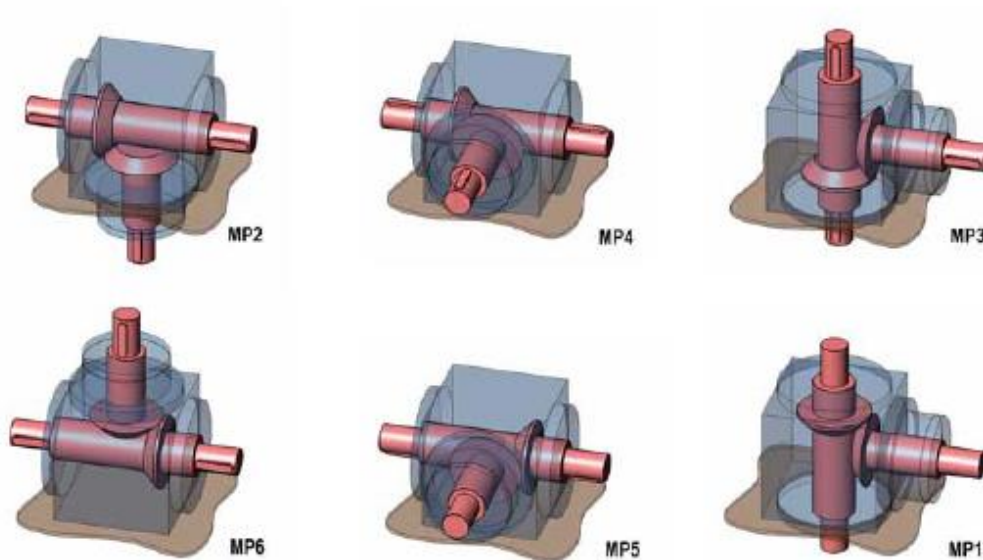
Shaft arrangements H:



Shaft arrangements FH:



Mounting positions:



For full specifications, see PowerGear catalogue