

POWERGEAR DATA SHEET P-140



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:	360Nm	360Nm	330Nm	270Nm	224Nm	196Nm
Acceleration torque:	540Nm	540Nm	495Nm	180Nm	336Nm	294Nm
Emergency torque:	720Nm	720Nm	300Nm	660Nm	448Nm	392Nm
Input speed:	1100rpm	1400rpm	1400rpm	2000rpm	2000rpm	2000rpm
Max input speed (Special measures on request)	3500rpm	3500rpm	3500rpm	3500rpm	3500rpm	3500rpm
Standard output backlash:	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin
Reduced output backlash:	≤ 7 arcmin	≤ 7 arcmin	≤ 7 arcmin	≤ 7 arcmin	≤ 7 arcmin	≤ 7 arcmin
Permissible radial load*: (Output)	4500N	4500N	4500N	4500N	4500N	4500N
Permissible radial load*: (Input)	3500N	3500N	3500N	3500N	3500N	3500N
Permissible axial load*: (Output)	2250N	2250N	2250N	2250N	2250N	2250N
Permissible axial load*: (Input)	1750N	1750N	1750N	1750N	1750N	1750N
Efficiency at max load:	>98%	>98%	>98%	>98%	>98%	>98%
Running noise at 1500rpm, partial load	≤76 db(A)	≤76 db(A)	≤76 db(A)	≤76 db(A)	≤76 db(A)	≤76 db(A)
Weight:	22.0kg	22.0kg	22.0kg	22.0kg	22.0kg	22.0kg
Service life:	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h
Oil quantity:	0.4 litres	0.4 litres	0.4 litres	0.4 litres	0.4 litres	0.4 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:	36.8 kg/cm ²	22.4 kg/cm ²	15.6 kg/cm ²	10.9 kg/cm ²	9.19 kg/cm ²	8.32 kg/cm ²

*At centre of shaft

Order code:

P-	140-	2-	3-	4-	5-	6-	7
----	------	----	----	----	----	----	---

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:	140mm	<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> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>FL Series</p> </div> <div style="text-align: center;"> <p>FH Series</p> </div> </div>
b dia:	135mmh7	
c dia:	104mm	
d1 dia:	32mmk6	
l1:	50mm	
d2 dia:	32mmk6	
d3 dia:	32mmH7	
l2:	50mm	
l3:	70mm	
l4:	50mm	
e:	70mm	
f1:	180mm	
f2:	137mm	
g1:	15mm	
g2:	15mm	
h:	60mm	
k:	M10x19.5mm	
m1:	130mm	
m2:	87mm	
n1:	2mm	
n2:	2mm	
p:	55mm	
r1:	M12	
r2:	M12	
s:	6x M6x12	
t:	10mm	
u dia:	103mmg6	
v dia:	92mm	
Key d1:	10x8x32mm	
Key d2:	6x6	
Z:	5mm	
Input shaft d1 dia x L1 with keyway to DIN6885/1	24mmG7 x 53mm / 8x7mm with 28mmG7 x 63mm / 8x7mm keyway to DIN6885/1 32mmG7 x 63mm / 10x8mm	

Flange options:

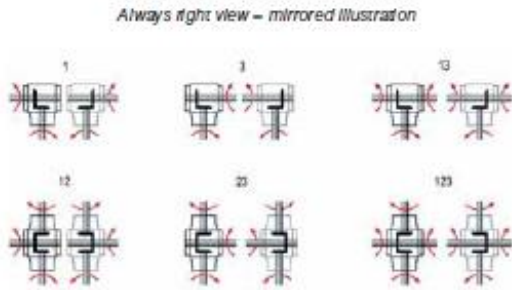
Input flange B5 = u dia/ v dia/ w dia with 4x threaded holes:	160mm/ 130mm/ 110mmF7/ M8	200mm/ 165mm/ 130mmF7/ M10	250mm/ 215mm/ 180mmF7/ M12	300mm/ 265mm/ 230mmF7/ M12
Input flange B14 = u dia/ v dia/ w dia with 4x bored holes:			160mm/ 130mm/ 110mmF7/ 9mm	200mm/ 165mm/ 130mmF7/ 11mm

Thermal performance limit (P) = 9.2kW at 20°C and 100% duty cycle

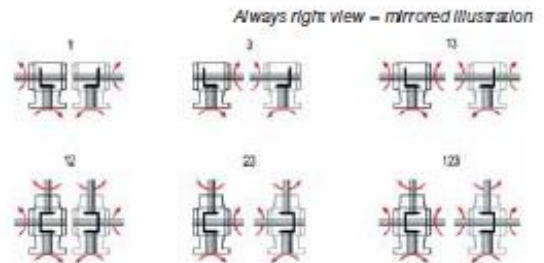
Duty cycle:	100%	80%	60%	40%	20%
Factor:	1.0	1.2	1.4	1.6	1.8
Ambient temp:	10°C	20°C	30°C	40°C	50°C
Factor:	1.2	1.0	0.87	0.75	0.62

Eg: Duty cycle = 80%; ambient temp = 30°C Therefore P = 9.2 x 1.2 x 0.87 = 9.60kW

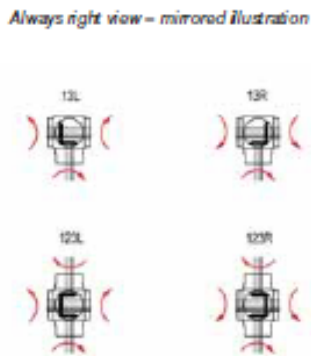
Shaft arrangements L:



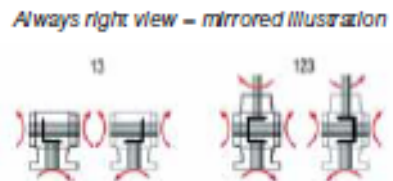
Shaft arrangements FL:



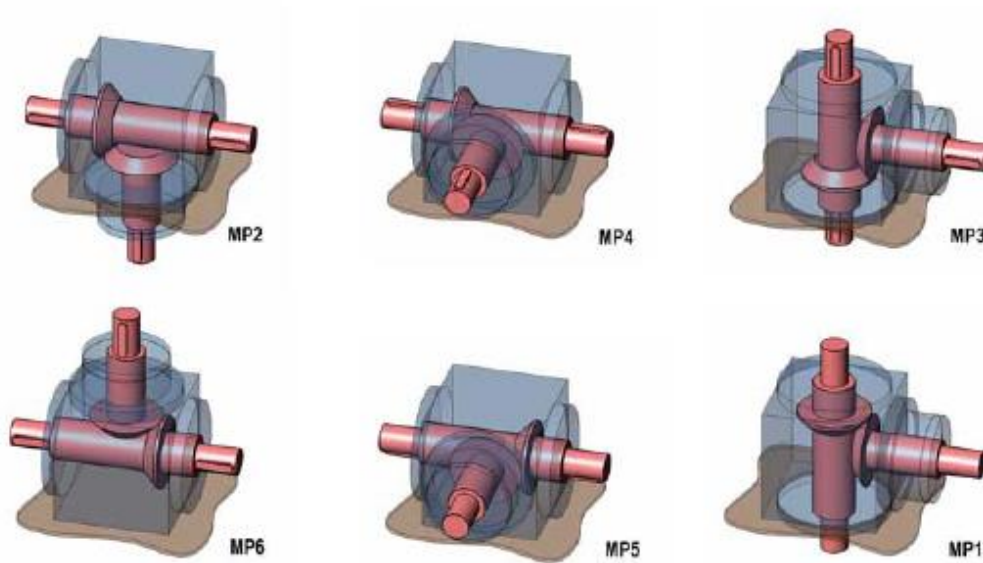
Shaft arrangements H:



Shaft arrangements FH:



Mounting positions:



For full specifications, see PowerGear catalogue.