

POWERGEAR DATA SHEET P-054



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:	15Nm	15Nm	12Nm	12Nm	-	-
Acceleration torque:	23Nm	23Nm	18Nm	18Nm	-	-
Emergency torque:	30Nm	30Nm	24Nm	24Nm	-	-
Input speed:	2500rpm	3000rpm	3000rpm	3500rpm	3500rpm	3500rpm
Max input speed (Special measures on request)	7500rpm	7500rpm	7500rpm	7500rpm	7500rpm	7500rpm
Standard output backlash:	<=18 arcmin	<=18 arcmin	<=18 arcmin	<=18 arcmin	<=18 arcmin	<=18 arcmin
Reduced output backlash:	<=12arcmin	<=12arcmin	<=12arcmin	<=12arcmin	<=12arcmin	<=12arcmin
Permissible radial load*: (Output)	400N	400N	400N	400N	400N	400N
Permissible radial load*: (Input)	300N	300N	300N	300N	300N	300N
Permissible axial load*: (Output)	200N	200N	200N	200N	200N	200N
Permissible axial load*: (Input)	150N	150N	150N	150N	150N	150N
Efficiency at max load:	>98%	>98%	>98%	>98%	>98%	>98%
Running noise at 1500rpm, partial load	70db(A)	70db(A)	70db(A)	70db(A)	70db(A)	70db(A)
Weight:	1.8kg	1.8kg	1.8kg	1.8kg	1.8kg	1.8kg
Service life:	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h
Oil quantity:	0.05 litres	0.05 litres	0.05 litres	0.05 litres	0.05 litres	0.05 litres
Operating temperature:	upto 80°C	upto 80°C	upto 80°C	upto 80°C	upto 80°C	upto 80°C
Mass moments of inertia related to input for shaft arrangement 13:	0.28kg/cm ²	0.15/cm ²	0.11kg/cm ²	0.09kg/cm ²	-	-

*At centre of shaft

Order code:

P-	054-	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:	54mm	<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:	53mmh7	
c dia:	53mm	
d1 dia:	11mmk6	
l1:	23mm	
d2 dia:	11mmk6	
d3 dia:	-	
l2:	23mm	
l3:	-	
l4:	-	
e:	27mm	
f1:	95mm	
f2:	60mm	
g1:	43mm	
g2:	9mm	
h:	45mm	
k:	M5x14.5mm	
m1:	72mm	
m2:	37mm	
n1:	2mm	
n2:	1mm	
p:	22mm	
r1:	M4	
r2:	M4	
s:	-	
t:	-	
u dia:	-	
v dia:	-	
Key d1:	4x4x18mm	
Key d2:	4x4x18mm	<div style="text-align: center;"> <p>FH Series</p> </div>
Z:	-	
Input shaft d1 dia x L1 with keyway to DIN6885/1	-	

Flange options:

Input flange B5 = u dia/ v dia/ w dia with 4x threaded holes:	-	-	-	-
Input flange B14 = u dia/ v dia/ w dia with 4x bored holes:	-	-	-	-

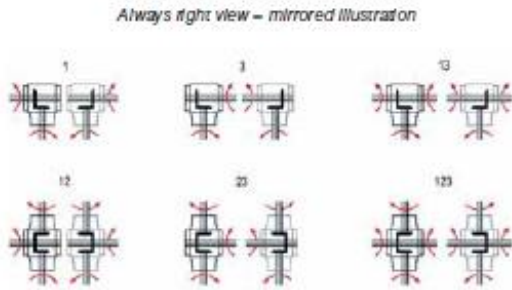
Thermal performance limit (P) = 1.6kW at 20°C and 100% duty cycle

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

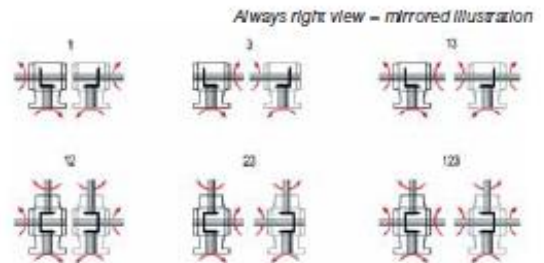
Eg: Duty cycle = 80%; ambient temp = 30°C

Therefore P = 1.6 x 1.2 x 0.87 = 1.67kW

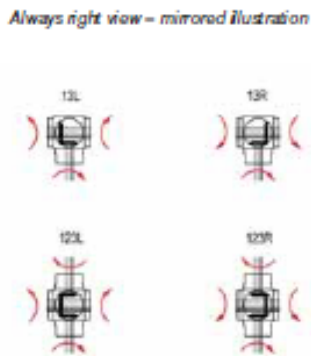
Shaft arrangements L:



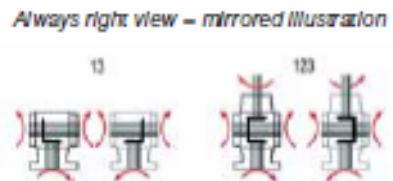
Shaft arrangements FL:



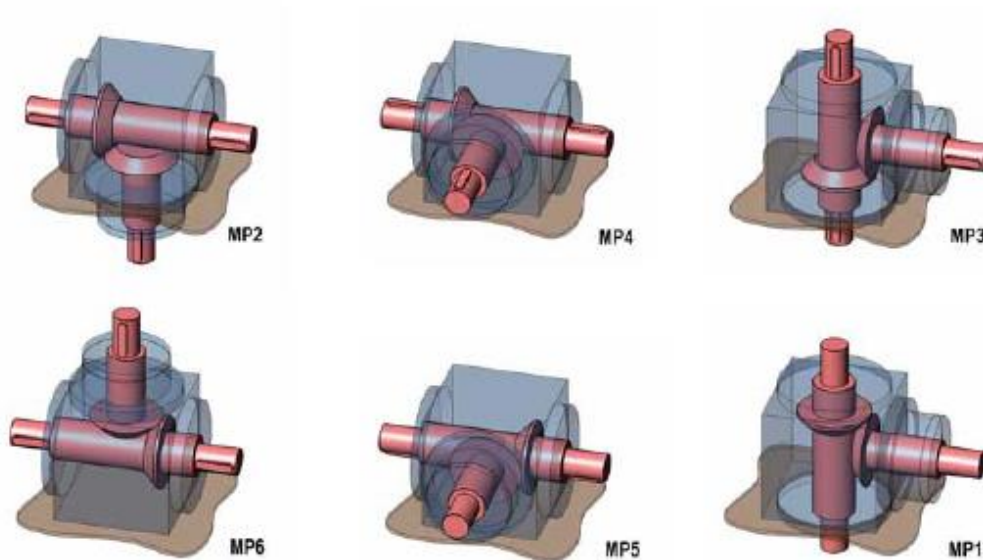
Shaft arrangements H:



Shaft arrangements FH:



Mounting positions:



For full specifications, see PowerGear catalogue.