

POWERGEAR DATA SHEET P-170



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:	585Nm	585Nm	544Nm	450Nm	376Nm	320Nm
Acceleration torque:	878Nm	878Nm	816Nm	675Nm	564Nm	480Nm
Emergency torque:	1170Nm	1170Nm	1088Nm	900Nm	752Nm	640Nm
Input speed:	1000rpm	1300rpm	1300rpm	1800rpm	1800rpm	1800rpm
Max input speed (Special measures on request)	3000rpm	3000rpm	3000rpm	3000rpm	3000rpm	3000rpm
Standard output backlash:	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin	≤ 12 arcmin
Reduced output backlash:	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin
Permissible radial load*: (Output)	6000N	6000N	6000N	6000N	6000N	6000N
Permissible radial load*: (Input)	5000N	5000N	5000N	5000N	5000N	5000N
Permissible axial load*: (Output)	3000N	3000N	3000N	3000N	3000N	3000N
Permissible axial load*: (Input)	2500N	2500N	2500N	2500N	2500N	2500N
Efficiency at max load:	>98%	>98%	>98%	>98%	>98%	>98%
Running noise at 1500rpm, partial load	≤ 78db(A)	≤ 78db(A)	≤ 78db(A)	≤ 78db(A)	≤ 78db(A)	≤ 78db(A)
Weight:	38.5kg	38.5kg	38.5kg	38.5kg	38.5kg	38.5kg
Service life:	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h
Oil quantity:	1.0 litres	1.0 litres	1.0 litres	1.0 litres	1.0 litres	1.0 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:	85.9kg/cm ²	54.6kg/cm ²	39.3kg/cm ²	28.5kg/cm ²	24.5kg/cm ²	22.6kg/cm ²

*At centre of shaft

Order code:

P-	170-	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:	170mm	<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:	165mmh7	
c dia:	128mm	
d1 dia:	40mmk6	
l1:	60mm	
d2 dia:	40mmk6	
d3 dia:	40mmH7	
l2:	60mm	
l3:	80mm	
l4:	55mm	
e:	85mm	
f1:	215mm	
f2:	162mm	
g1:	15mm	
g2:	15mm	
h:	70mm	
k:	M12x23mm	
m1:	155mm	
m2:	102mm	
n1:	2mm	
n2:	2mm	
p:	67mm	
r1:	M16	
r2:	M16	
s:	6x M8x14	
t:	10mm	
u dia:	127mmg6	
v dia:	114mm	
Key d1:	12x8x50mm	
Key d2:	12x8x50mm	
Z:	6mm	
Input shaft d1 dia x L1 with keyway to DIN6885/1	28mmG7 x 63mm / 8x7mm 32mmG7 x 83mm / 10x8mm 38mmG7 x 83mm / 10x8mm	
		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>FL Series</p> </div> <div style="text-align: center;"> <p>FH Series</p> </div> </div>

Flange options:

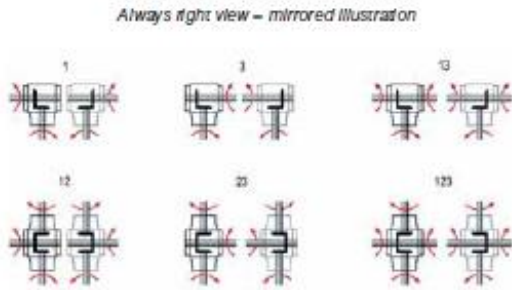
Input flange B5 = u dia/ v dia/ w dia with 4x threaded holes:	200mm/ 165mm/ 130mmF7/ M10	250mm/ 215mm/ 180mmF7/ M12	300mm/ 265mm/ 230mmF7/ M12	350mm/ 300mm/ 250mmF7/ M16
Input flange B14 = u dia/ v dia/ w dia with 4x bored holes:				200mm/ 165mm/ 130mmF7/ 11mm

Thermal performance limit (P) = 13.2kW at 20°C and 100% duty cycle

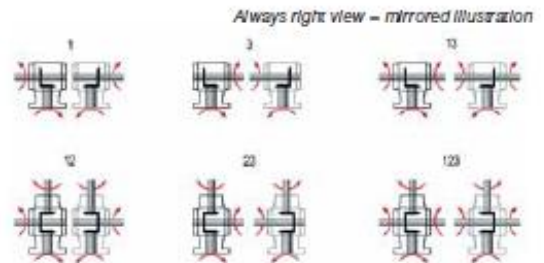
Duty cycle:	100%	80%	60%	40%	20%
Factor:	1.0	1.2	1.4	1.6	1.8
Ambient temp:	10°C	20°C	30°C	40°C	50°C
Factor:	1.2	1.0	0.87	0.75	0.62

Eg: Duty cycle = 80%; ambient temp = 30°C Therefore P = 13.2 x 1.2 x 0.87 = 13.78kW

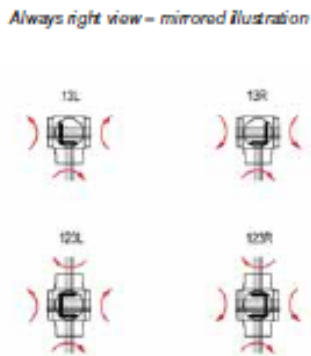
Shaft arrangements L:



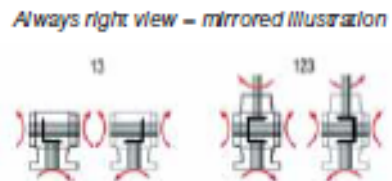
Shaft arrangements FL:



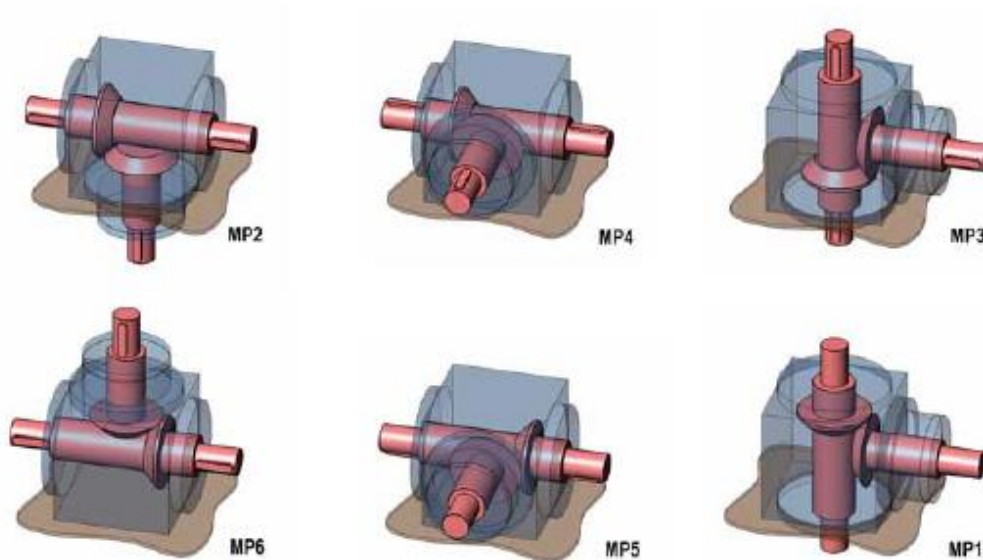
Shaft arrangements H:



Shaft arrangements FH:



Mounting positions:



For full specifications, see PowerGear catalogue.

Please note: P-170 supplied without lubricant. Please order separately.