

POWERGEAR DATA SHEET P-280



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:	3200Nm	3200Nm	3050Nm	2850Nm	2300Nm	2000Nm
Acceleration torque:	4800Nm	4800Nm	4575Nm	4275Nm	3450Nm	3000Nm
Emergency torque:	6400Nm	6400Nm	6100Nm	5700Nm	4600Nm	4000Nm
Input speed:	650rpm	850rpm	850rpm	1200rpm	1200rpm	1200rpm
Max input speed (Special measures on request)	1700rpm	1700rpm	1700rpm	1700rpm	1700rpm	1700rpm
Standard output backlash:	≤ 11 arcmin	≤ 11 arcmin	≤ 11 arcmin	≤ 11 arcmin	≤ 11 arcmin	≤ 11 arcmin
Reduced output backlash:	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin	≤ 6 arcmin
Permissible radial load*: (Output)	18000N	18000N	18000N	18000N	18000N	18000N
Permissible radial load*: (Input)	15000N	15000N	15000N	15000N	15000N	15000N
Permissible axial load*: (Output)	9000N	9000N	9000N	9000N	9000N	9000N
Permissible axial load*: (Input)	7500N	7500N	7500N	7500N	7500N	7500N
Efficiency at max load:	>98%	>98%	>98%	>98%	>98%	>98%
Running noise at 1500rpm, partial load	≤ 83db(A)	≤ 83db(A)	≤ 83db(A)	≤ 83db(A)	≤ 83db(A)	≤ 83db(A)
Weight:	155.0kg	155.0kg	155.0kg	155.0kg	155.0kg	155.0kg
Service life:	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h	>15,000h
Oil quantity:	3.0 litres	3.0 litres	3.0 litres	3.0 litres	3.0 litres	3.0 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:	230kg/cm ²	762kg/cm ²	506kg/cm ²	328kg/cm ²	263kg/cm ²	230kg/cm ²

*At centre of shaft

Order code:

P-	280-	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:	280mm
b dia:	275mmh7
c dia:	200mm
d1 dia:	60mmk6
l1:	110mm
d2 dia:	60mmk6
d3 dia:	55mmH7
l2:	110mm
l3:	130mm
l4:	80mm
e:	140mm
f1:	360mm
f2:	276mm
g1:	25mm
g2:	25mm
h:	95mm
k:	M16x30mm
m1:	250mm
m2:	167mm
n1:	2mm
n2:	2mm
p:	110mm
r1:	M20
r2:	M20
s:	6x M10x17
t:	10mm
u dia:	198mmg6
v dia:	176mm
Key d1:	18x11x80mm
Key d2:	18x11x80mm
Z:	6mm
Input shaft d1	48mmG7 x 115mm / 14x9mm
dia x L1 with keyway to DIN6885/1	55mmG7 x 115mm / 16x10mm

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Flange options:

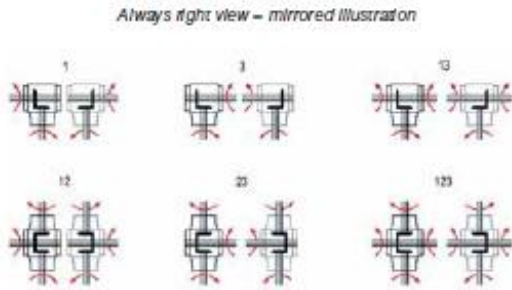
Input flange B5 = u dia/ v dia/ w dia with 4x threaded holes:	300mm/ 265mm/ 230mmF7/ M12	350mm/ 300mm/ 250mmF7/ M16	400mm/ 350mm/ 300mmF7/ M16	450mm/ 400mm/ 350mmF7/ M16
Input flange B14 = u dia/ v dia/ w dia with 4x bored holes:				

Thermal performance limit (P) = 38.4kW at 20°C and 100% duty cycle

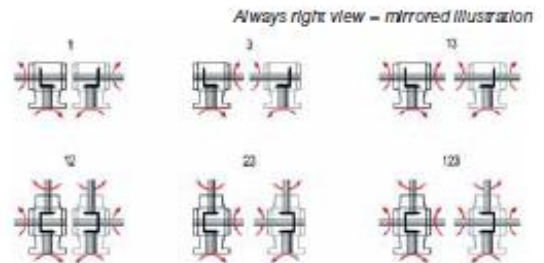
Duty cycle:	100%	80%	60%	40%	20%
Factor:	1.0	1.2	1.4	1.6	1.8
Ambient temp:	10°C	20°C	30°C	40°C	50°C
Factor:	1.2	1.0	0.87	0.75	0.62

Eg: Duty cycle = 80%; ambient temp = 30°C Therefore P = 38.4 x 1.2 x 0.87 = 40.08kW

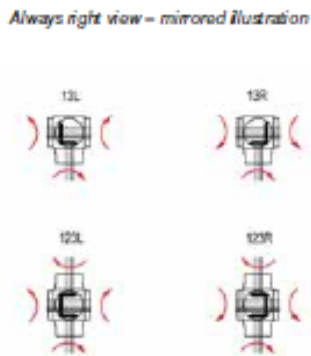
Shaft arrangements L:



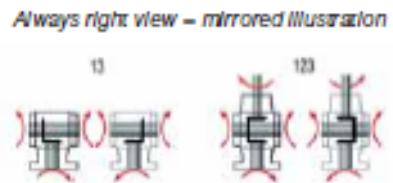
Shaft arrangements FL:



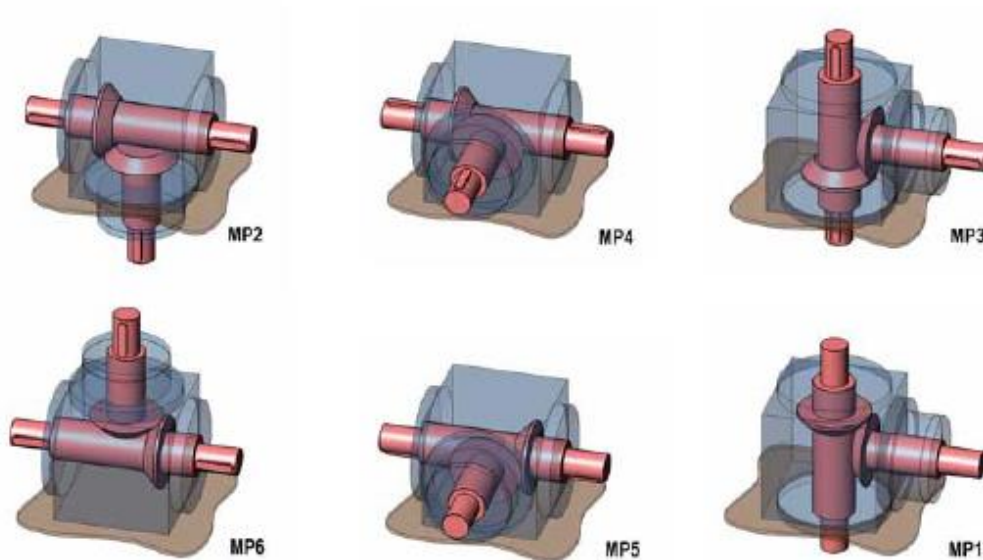
Shaft arrangements H:



Shaft arrangements FH:



Mounting positions:



For full specifications, see PowerGear catalogue.

Please note: P-280 supplied without lubricant. Please order separately.