



# Planetary Gearbox AM-22P Series

**ASSUN MOTOR**

2017 edition. Specifications are subject to change without notice.

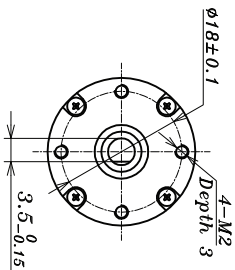
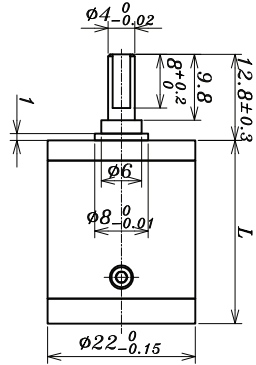
## GEARBOX CHARACTER

<b>GEAR TYPE</b>	Straight teeth	<b>AVERAGE BACKLASH NO LOAD</b>	<2°
<b>OUTPUT SHAFT</b>	Stainless steel hardened	<b>RADIAL PLAY</b>	<0.1
<b>MAIN GEAR</b>	alloy steel	<b>PERMISSIBLE AXIAL LOAD</b>	<40N
<b>RING GEAR</b>	Steel	<b>PERMISSIBLE FORCE FOR PRESS FITS</b>	<100N(5mm from mounting face)
<b>ADAPTER PLATE</b>	Copper	<b>RECOMMENDED INPUT SPEED</b>	<10000RPM
<b>BEARING AT OUTPUT</b>	Ball bearing	<b>OPERATING TEMPERATRE RANGE</b>	-20°C ~ +50°C
<b>AXIAL PLAY</b>	0-0.3	<b>OPERATING HUMIDITY RANGE</b>	10-90%RH
<b>DIRECTIONS</b>	CW/CCW		

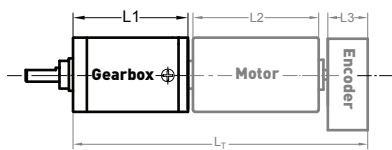
## GEARBOX DATA

NUMBER OF STAGE	1	2	3	4	5						
<b>REDUCTION RATIO X:1</b>	3.3 3.8 4.4 5.4	11 12 14 16 18	19 20 24 29	37 41 47 53 84	62 64 72 76 158	97 104 109 128 158	175 198 231 270 316	370 410 455 522 561	591 690 850	742 1014 1185 1386 1621	1996 2458 3027 3728 4592
<b>REDUCTION RATIO ABSOLUTE</b>	63/19 15/4 57/13 27/5	3969/361 945/76 225/16 855/52 1701/95	3249/169 81/4 1539/65 729/25	250047/6859 59535/1444 3375/64 14175/304 12825/208 204687/3211 48735/676	1215/16 185193/2197 45927/475 87723/845 2187/20 41553/325 19683/125	212625/1216 50625/256 192375/832 731025/2704 2777895/8788 10556001/28561 531441/625	6561/16 5000211/10985 1240029/2375 2368521/4225 59049/100 1121931/1625	759375/1024 10965375/10816 41668425/35152 158340015/114244 601692057/371293 285012027/142805 1350056977/54925 63950067/21125 30292137/8125 14348907/3125			
<b>GEARBOX LENGTH "L" (mm)</b>	22.5	27.6	32.6	37.7	42.6						
<b>RATED TORQUE (Kgf.cm)</b>	6	8	10	12	12						
<b>BREAKING TORQUE (Kgf.cm)</b>	18	24	30	36	36						
<b>GEARBOX EFFICIENCY</b>	93%	86%	80%	75%	70%						
<b>MOMENT OF INERTIA RANGE (g.cm<sup>2</sup>)</b>	0.5	0.4	0.5	0.4	0.5						
<b>GEARBOX WEIGHT APPROX (g)</b>	56	68	82	92	103						
<b>GEARBOX MODEL</b>	AM-22PA-X-01	AM-22PB-X-01	AM-22PC-X-01	AM-22PD-X-01	AM-22PE-X-01						

"X" Stand for RATIO



## AM-22P EXAMPLE OF COMBINATION



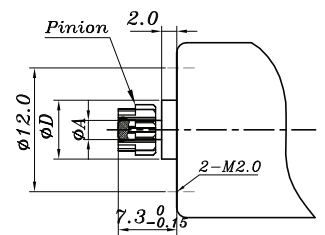
Recommend Motor:  
Coreless Motor (w/E):  
AM-CL2232MA/B  
AM-CL2232GA/B  
AM-CL2242MA/B  
AM-CL2242GA/B  
Brushless Motor (w/E):  
AM-BL2040A/B  
AM-BL2453A/B

Recommend Encoder:  
Suitable for Coreless Motor  
Encoder S: AM-EN22-S\*\*\*  
2 ~3 Channels  
Suitable for Brushless Motor  
Encoder S: AM-EN16-S\*\*\*  
2 ~3 Channels  
Encoder T: AM-EN16/24-T\*\*\*  
2 ~3 Channels

## INPUT GEAR DATA

<b>MODULUS</b>	0.35
<b>PRESS ANGLE</b>	20°
<b>TEETH NUMBER</b>	10 13 16 19
<b>MAX GEAR HOLE "A"</b>	1.5 2.0 3.0
<b>MAX MOTOR SHAFT</b>	1.5 2.0 3.0
<b>MOTOR DIMENSION "D"</b>	6.15 8.0

## MOTOR DIMENSION



## GEAR MOTOR LENGTH "LT"

<b>GEAR MOTOR LENGTH LT</b>					
<b>GEARMOTOR LENGTH L1</b>	22.4	27.6	32.6	37.7	42.6
<b>MOTOR LENGTH L2</b>	32	42	40	53	
<b>ENCODER LENGTH L3</b>	12	10.7	10	7.1	

For more motor and encoder specs' see Assun Motor website.

## REMARKS

Clients can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.

Motor Data Tested at 25°.  
Motor Operation exceeds continuous limits of operating range will compromise the life of the device.