PITTMAN®
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# G30A Series

The G30A is a 30mm planetary gearbox suitable for servo applications where DC Servo brush or BLDC motor technology is specified. The G30A provides maximum efficiency, minimum backlash, has a smaller mechanical footprint and is available with round and square mounting endbell configurations.

**Compatible Motors**: DC026C, DC030B, DC030C, DC040B, EC033A, EC044A, ES030A

## Benefits

– Sintered metal gears for high torque capacity
– Sintered metal output bearing

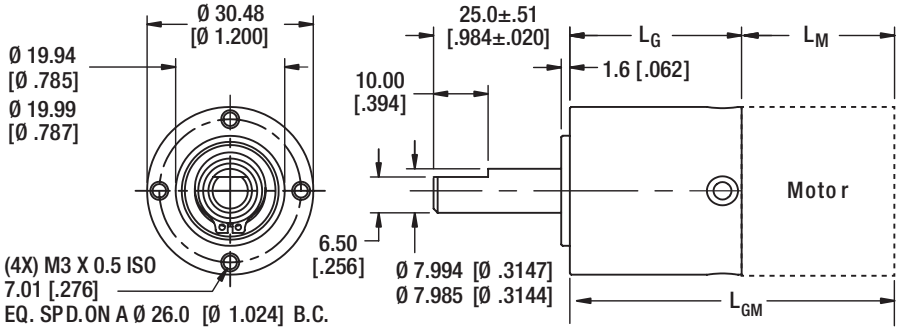
## Characteristics

| Gear Data | Units | G30A 4:1 | G30A 6:1 | G30A 16:1 | G30A 24:1 | G30A 36:1 | G30A 64:1 | G30A 96:1 |
|---|---|---|---|---|---|---|---|---|
| Maximum Load | Nm | 2.47 | 2.47 | 3.53 | 3.53 | 3.53 | 6.5 | 6.5 |
| | oz-in | 350 | 350 | 500 | 500 | 500 | 920 | 920 |
| Weight (Mass) | g | 110.6 | 110.6 | 124.7 | 124.7 | 124.7 | 138.9 | 138.9 |
| | oz | 3.9 | 3.9 | 4.4 | 4.4 | 4.4 | 4.9 | 4.9 |
| Length (L) | mm | 32.64 | 32.64 | 38.48 | 38.48 | 38.48 | 44.32 | 44.32 |
| | inches | 1.285 | 1.285 | 1.515 | 1.515 | 1.515 | 1.745 | 1.745 |
| Stages | – | 1 | 1 | 2 | 2 | 2 | 3 | 3 |
| Ratio | – | 4/1 | 6/1 | 16/1 | 24/1 | 36/1 | 64/1 | 96/1 |
| Efficiency | – | 0.90 | 0.90 | 0.81 | 0.81 | 0.81 | 0.73 | 0.73 |
| Shaft Rotation | – | CW | | | | | | |

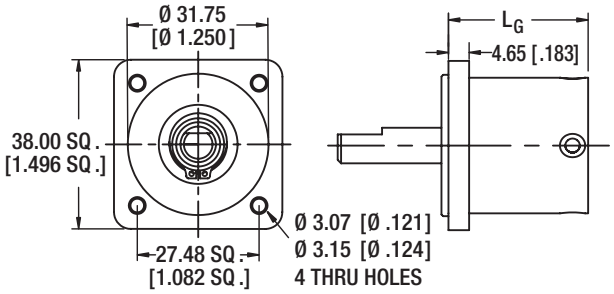
| Gear Data | Units | G30A 144:1 | G30A 216:1 | G30A 256:1 | G30A 384:1 | G30A 576:1 | G30A 864:1 | G30A 1296:1 |
|---|---|---|---|---|---|---|---|---|
| Maximum Load | Nm | 6.5 | 6.5 | 8.83 | 8.83 | 8.83 | 8.83 | 8.83 |
| | oz-in | 920 | 920 | 1250 | 1250 | 1250 | 1250 | 1250 |
| Weight (Mass) | g | 138.9 | 138.9 | 155.9 | 155.9 | 155.9 | 155.9 | 155.9 |
| | oz | 4.9 | 4.9 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| Length (L) | mm | 44.32 | 44.32 | 50.17 | 50.17 | 50.17 | 50.17 | 50.17 |
| | inches | 1.745 | 1.745 | 1.975 | 1.975 | 1.975 | 1.975 | 1.975 |
| Stages | – | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| Ratio | – | 144/1 | 216/1 | 256/1 | 384/1 | 576/1 | 864/1 | 1296/1 |
| Efficiency | – | 0.73 | 0.73 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 |
| Shaft Rotation | – | CW | | | | | | |

## Dimensional Drawings

Dimensions = mm [in]




With Optional Square Mounting Flange (G30AF)




### Combined Length

| Compatible Motors / Length (mm) | | | | |
|---|---|---|---|---|
| Stage | 1 | 2 | 3 | 4 |
| DC026C-1 | 78.3 | 84.2 | 90.0 | 95.8 |
| DC026C-2 | 81.5 | 87.3 | 93.2 | 99.0 |
| DC026C-3 | 87.8 | 93.7 | 99.5 | 105.4 |

| Compatible Motors / Length (mm) | | | | |
|---|---|---|---|---|
| Stage | 1 | 2 | 3 | 4 |
| EC033A-1 | 70.7 | 76.6 | 82.4 | 88.3 |
| EC033A-2 | 83.4 | 89.3 | 95.1 | 101.0 |
| EC033A-3 | 96.1 | 102.0 | 107.8 | 113.7 |

| Stage | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DC030B-1 | 85.2 | 91.1 | 96.9 | 102.7 |
| DC030B-2 | 88.4 | 94.2 | 100.1 | 105.9 |
| DC030B-3 | 94.7 | 100.6 | 106.4 | 112.3 |

| Stage | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| EC044A-1 | 84.9 | 90.8 | 96.6 | 102.5 |
| EC044A-2 | 97.6 | 103.5 | 109.3 | 115.2 |
| EC044A-3 | 110.3 | 116.2 | 122.0 | 127.9 |

| Stage | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DC030C-1 | 86.3 | 92.2 | 98.0 | 103.9 |
| DC030C-2 | 98.3 | 104.1 | 110.0 | 115.8 |
| DC030C-3 | 110.3 | 116.1 | 122.0 | 127.8 |

| Stage | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| ES030A-1 | 91.6 | 97.5 | 103.3 | 109.2 |
| ES030A-2 | 101.8 | 107.6 | 113.5 | 119.3 |

| Stage | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| DC040B-1 | 79.1 | 84.9 | 90.8 | 96.6 |
| DC040B-2 | 88.6 | 94.4 | 100.3 | 106.1 |
| DC040B-3 | 93.7 | 99.5 | 105.4 | 111.2 |
| DC040B-4 | 101.3 | 107.1 | 113.0 | 118.8 |
| DC040B-5 | 110.2 | 116.0 | 121.9 | 127.7 |
| DC040B-6 | 117.8 | 123.6 | 129.5 | 135.3 |



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