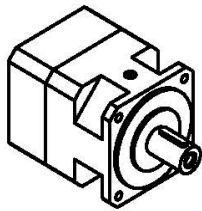
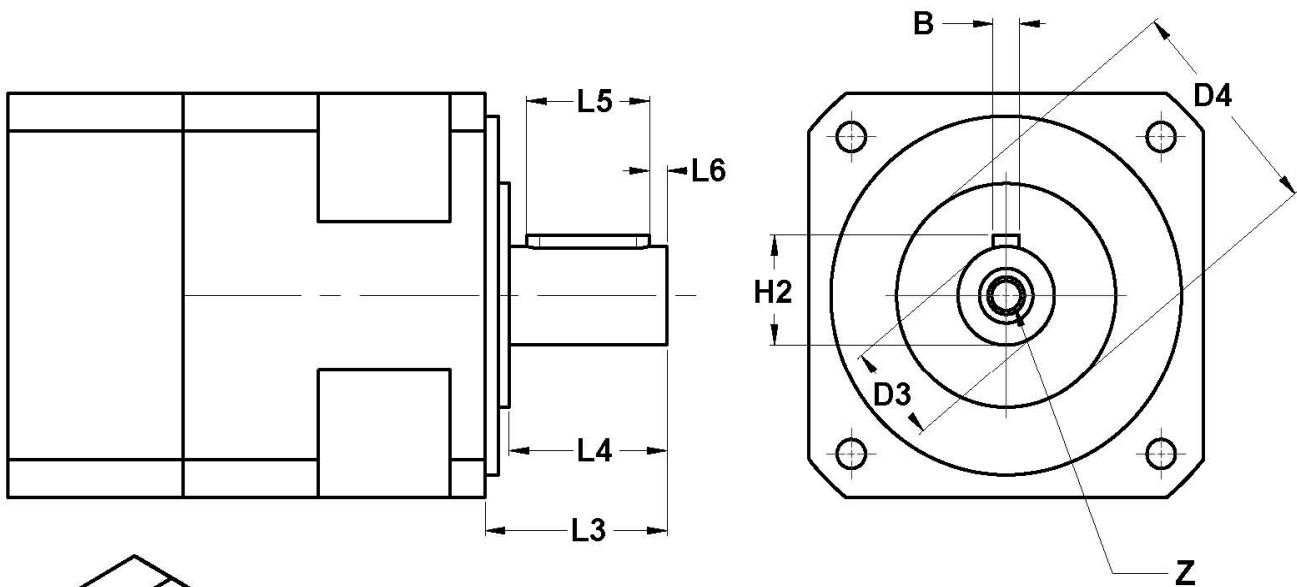


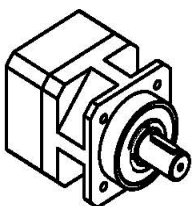
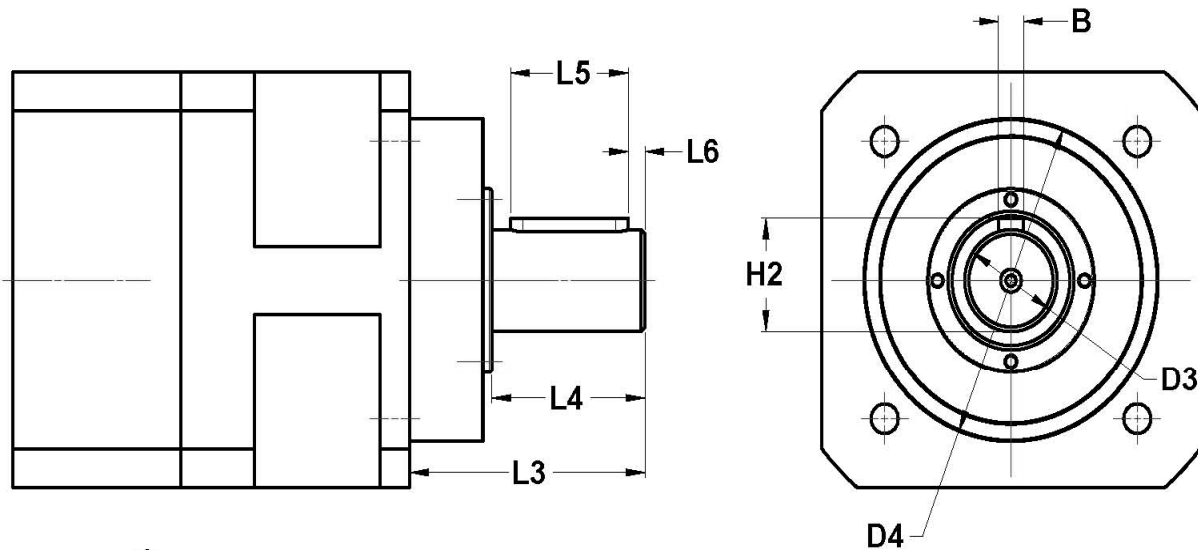


# PLS / PLV

High Precision Planetary Servo Gearhead  
Shaft Options (OP7, OP8, OP11 Options)



**PLS with keyed output shaft**  
Option OP7, OP8 and OP11



**PLV with keyed output shaft**  
Option OP7



# PLS<sup>(b)</sup> / PLV<sup>(b)</sup>

## High Precision Planetary Servo Gearhead

Shaft Options (OP7, OP8,<sup>(a)</sup> OP11 options)



PLS with keyed output shaft option OP7						
DIMENSIONS mm (in.)	Tol./#	PLS 70	PLS 90	PLS 115	PLS 142	PLS 190
<b>D3</b> Output shaft diameter	k6	19 (0.748)	22 (0.866)	32 (1.260)	40 (1.575)	55 (2.165)
<b>D4</b> Pilot diameter	h7	60 (2.362)	80 (3.150)	110 (4.331)	130 (5.118)	160 (6.299)
<b>L3</b> Shaft length to mounting face	•	32 (1.260)	41.5 (1.634)	64.5 (2.539)	87 (3.425)	90 (3.543)
<b>L4</b> Shaft length to collar	•	28 (1.102)	36 (1.417)	58 (2.283)	80 (3.150)	82 (3.228)
<b>L5</b> Key length	•	20 (0.787)	28 (1.102)	50 (1.969)	65 (2.559)	70 (2.756)
<b>L6</b> Key from shaft end	•	4 (0.157)	4 (0.157)	4 (0.157)	8 (0.315)	6 (0.236)
<b>B</b> Key width	•	6 (0.236)	6 (0.236)	10 (0.394)	12 (0.472)	16 (0.630)
<b>H2</b> Key height	•	21.5 (0.846)	24.5 (0.965)	35 (1.378)	43 (1.693)	59 (2.323)
<b>Z</b> Thread in shaft end <sup>(1)</sup>	•	M6 x 16	M8 x 19	M12 x 28	M16 x 35	M20 x 42

<sup>(1)</sup> Shaft threaded hole is optional, please specify if it is required.

PLS with keyed output shaft option OP11A <sup>(1)</sup> / OP11D <sup>(2)</sup>					
DIMENSIONS mm (in.)	Tol./#	PLS 70	PLS 90	PLS 115	PLS 142
<b>D3</b> Output shaft diameter	k6	16 (0.620)	20 (0.787)	25 (0.984)	40 (1.575)
<b>D4</b> Pilot diameter	h7	60 (2.362)	80 (3.150)	110 (4.331)	130 (5.118)
<b>L3</b> Shaft length to mounting face	•	32 (1.260)	41.5 (1.634) OP11A 45.5 (1.719) OP11D	56.5 (2.224)	87 (3.425)
<b>L4</b> Shaft length to collar	•	28 (1.102)	36 (1.417) OP11A 40 (1.575) OP11D	50 (1.969)	80 (3.150)
<b>L5</b> Key length	•	20 (0.787)	28 (1.102)	40 (1.575)	65 (2.559)
<b>L6</b> Key from shaft end	•	4 (0.157)	4 (0.157)	5 (0.197)	8 (0.315)
<b>B</b> Key width	•	5 (0.197)	6 (0.236)	8 (0.315)	12 (0.472)
<b>H2</b> Key height	•	18 (0.709)	22.5 (0.886)	28 (1.102)	43 (1.693)
<b>Z</b> Thread in shaft end <sup>(1) (2)</sup>	•	M5 x 10	M6 x 16	M10 x 22	M16 x 35

<sup>(1)</sup> For OP11A Shaft threaded hole is optional, please specify if it is required <sup>(2)</sup> For OP11D Shaft threaded hole is standard

PLV with keyed output shaft option OP7A					
DIMENSIONS mm (in.)	Tol./#	PLV 70	PLV 90	PLV 115	PLV 142
<b>D3</b> Output shaft diameter	k6	19 (0.748)	22 (0.866)	32 (1.260)	40 (1.575)
<b>D4</b> Pilot diameter	h7	60 (2.362)	70 (2.756)	90 (3.543)	130 (5.118)
<b>L3</b> Shaft length to mounting face	•	48 (1.890)	56 (2.205)	88 (3.465)	110 (4.331)
<b>L4</b> Shaft length to collar	•	28 (1.102)	36 (1.417)	58 (2.283)	80 (3.150)
<b>L5</b> Key length	•	20 (0.787)	28 (1.102)	50 (1.969)	65 (2.559)
<b>L6</b> Key from shaft end	•	4 (0.157)	4 (0.157)	4 (0.157)	8 (0.315)
<b>B</b> Key width	•	6 (0.236)	6 (0.236)	10 (0.394)	12 (0.472)
<b>H2</b> Key height	•	21.5 (0.846)	24.5 (0.965)	35 (1.378)	43 (1.693)

<sup>(a)</sup> OP8 option is customer specified output shaft with nonstandard diameter and/or key combinations

<sup>(b)</sup> Also applicable to the right angle WPLS / WPLV gearheads