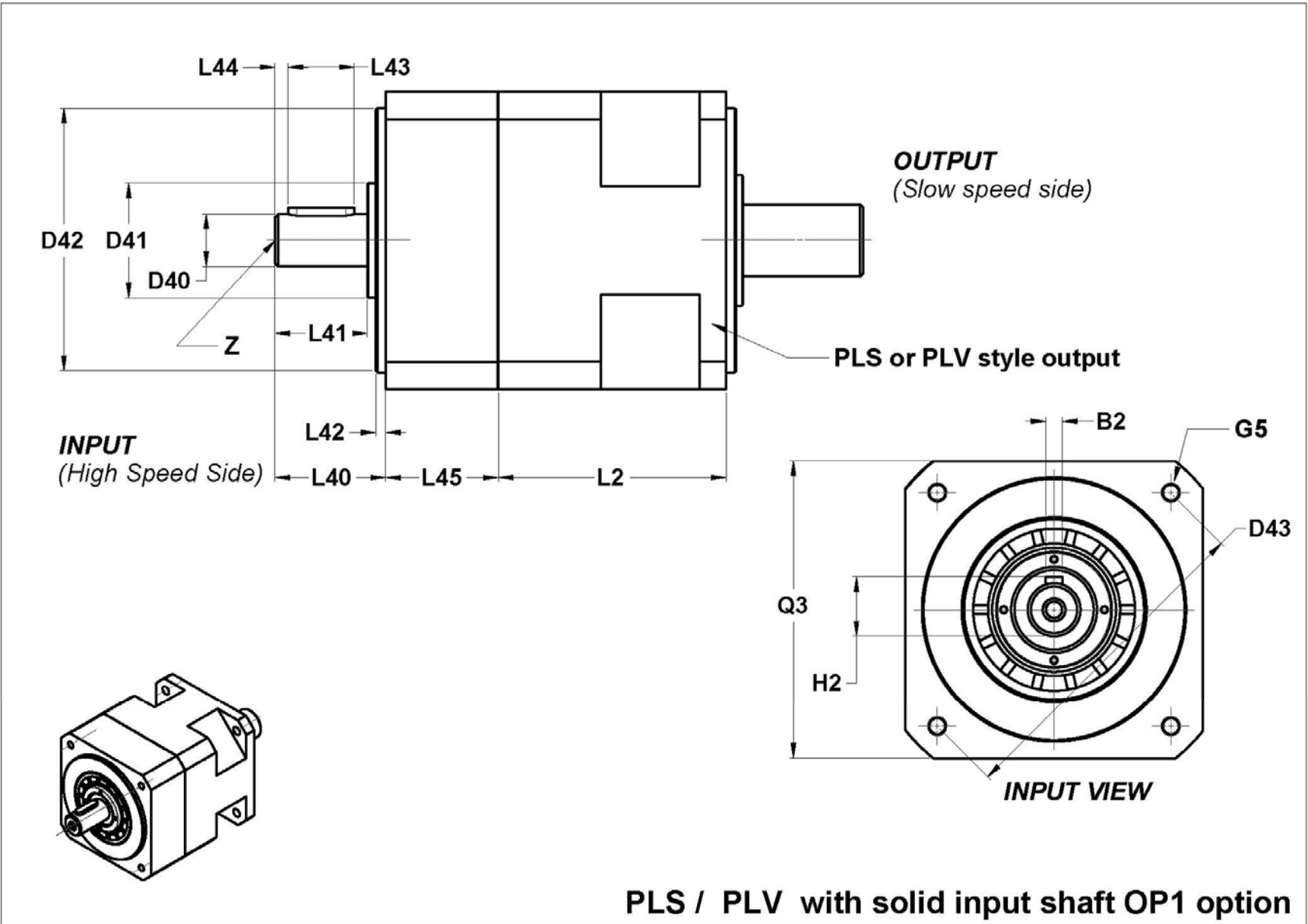
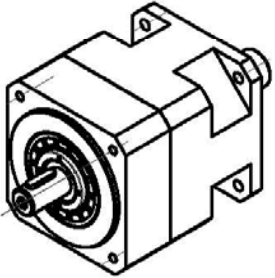




PLS / PLV
High Precision Planetary Servo Gearhead
With Solid Input (High Speed) Shaft (OP1 Option)



PLS / PLV with solid input shaft OP1 option





PLS / PLV

High Precision Planetary Servo Gearhead

With Solid Input (High Speed) Shaft (OP1 Option)



<i>DIMENSIONS</i> ^(a) mm (in.)	Tol./#	<i>PLS 70</i> <i>PLV 70</i>	<i>PLS 90</i> <i>PLV 90</i>	<i>PLS 115</i> <i>PLV 115</i>	<i>PLS 142</i> <i>PLV 142</i>	<i>PLS 190</i>	
D40 Input shaft diameter	j6	12 (0.472)	16 (0.630)	20 (0.787)	35 (1.378)	40 (1.575)	
D41 Diameter at shaft collar	•	35 (1.378)	35 (1.378)	45 (1.772)	55 (2.165)	55 (2.165)	
D42 Pilot diameter	h7	60 (2.362)	80 (3.150)	100 (3.937)	130 (5.118)	150 (5.906)	
D43 Bolt circle diameter	•	75 (2.953)	100 (3.937)	115 (4.528)	165 (6.496)	215 (8.465)	
G5 Mounting thread (M size x depth)	4	M5 x 12	M6 x 15	M8 x 20	M10 x 25	M12 x 25	
B2 Key width	•	4 (0.157)	5 (0.197)	6 (0.236)	10 (0.394)	No key	
H2 Key height	•	13.5 (0.531)	18 (0.709)	22.5 (0.886)	38 (1.496)	No key	
L44 Key location from shaft end	•	3 (0.118)	4 (0.157)	4 (0.157)	7 (0.275)	No key	
L2 Body length	1-stage	•	62.5 (2.461)	69 (2.717)	77.5 (3.051)	102 (4.016)	121.5 (4.783)
	2-stage	•	86 (3.386)	97.5 (3.839)	111 (4.370)	143 (5.630)	169 (6.654)
L40 Shaft length (to mounting face)	•	22 (0.866)	33.5 (1.319)	46.5 (1.831)	65 (2.559)	70 (2.756)	
L41 Shaft length (to collar)	•	18 (0.709)	28 (1.102)	40 (1.575)	58 (2.283)	62 (2.441)	
L42 Pilot length	•	3 (0.118)	3 (0.118)	4 (0.157)	5 (0.196)	6 (0.236)	
L43 Key length	•	12 (0.472)	20 (0.787)	32 (1.259)	45 (1.711)	No key	
L45 Flange thickness	•	26 (1.023)	34 (1.338)	41.5 (1.633)	58 (2.283)	57.5 (2.263)	
Z Thread in shaft end	•	M4 x 10	M6 x 16	M6 x 16	M12 x 28	No thread	
Input shaft radial load N (lb) ⁽¹⁾	•	200 (45)	600 (135)	750 (169)	1000 (225)	1800 (405)	
Input shaft axial load N (lb) ⁽²⁾	•	230 (52)	800 (180)	1000 (225)	1200 (270)	2000 (450)	
Recommended peak rpm ⁽³⁾	•	8000	7000	6500	6000	5500	
Recommended mean rpm ⁽³⁾	•	Any rpm combination as long as the gearbox temperature does not exceed the recommended max 90C					

⁽¹⁾ Based on 20000 hrs L10 life, 50% duty cycle, radial force acting at shaft midpoint, 1000 rpm

⁽²⁾ Based on 20000 hrs L10 life, 50% duty cycle, 1000 rpm

⁽³⁾ Gearbox temperature shall not exceed 90° C

^(a) This table shows INPUT dimensions only - for OUTPUT dimensions, see corresponding pages.