

CPD-250

CPD-250 Mechanical Specifications		Performance Configuration		
	Units	High Load - Low Speed	Medium Load - Medium Speed	Low Load - High Speed
Frame Size	in	2.5		
Standard Stroke Lengths <i>(Custom Lengths Available)</i>	in	4, 8, 12, 16, 20, 24		
Maximum Allowable Continuous Dynamic Force	lbf	6,750		
	kN	30		
Maximum Allowable Static Force	lbf	14,400		
	kN	64.1		
Maximum Allowable Input Torque	lb-ft	8	18	58
	N-m	10.8	24.4	78.6
Limiting Input Speed	RPM	46,667	19,833	6,123
Standard Operating Temperature Range	F	-15° to 165°		
	C	-26° to 74°		
Roller Screw Lead	mm	10		
Accuracy	in	0.003		
Efficiency	%	85.7%	88.3%	88.3%
Repeatability	in	0.0008		
Total Actuator Speed Ratio		5.4:1	2.125:1	.656:1

Note: Information in this catalog is intended for marketing purposes. Any inaccuracies are unintentional and information is subject to change without notice.

CPD-250 Reflective Inertia

CPD-250 Reflective Inertias			High Load - Low Speed	Medium Load - Medium Speed	High Speed - Low Load
Parallel Motor Mount	$J_1^{(5)}$	slug-ft ²	5.371E-04	2.157E-04	2.854E-04
		kg-m ²	7.283E-04	2.925E-04	3.870E-04
	$J_2^{(6,7)}$	slug-ft ² /in	1.451E-06	3.868E-07	4.127E-07
		kg-m ² /in	1.967E-06	5.244E-07	5.596E-07
(5)	J_1 = Fixed inertia of internal rotating components				
(6)	J_2 = Variable inertia of rotating components that are dependent on system stroke length				
(7)	$J_{TOTAL} = J_1 + L * J_2$				

CPD-250 System Weight

Basic Actuator Weight ⁽⁴⁾				
Stroke Length		4 in	8 in	12 in
Oil Filled	lb	35.2	41.5	47.8
	kg	16.0	18.8	21.7
Dry	lb	28.8	35.1	41.4
	kg	13.1	15.9	18.8

Configuration Specific Weight Adjustments ⁽⁴⁾																
Parallel Drive (Excluding Motor)		Front Flange		Rear Flange		Rear Clevis		Rear Eye		Angle Mounts		Trunnions		Dual Foot		
lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	
6.7	3.0	1.6	0.7	4.4	2.0	4.8	2.2	5.0	2.3	n/a	n/a	4.3	2.0	2.6	1.2	
(4)		For complete configuration weight, add basic actuator weight to appropriate configuration specific weight adjustments. For example, 12" stroke oil filled system with trunnion mounts: $47.8 \text{ lb} + 6.7 \text{ lb} + 4.3 \text{ lb} = 58.8 \text{ lb}$														