

CPD-700

CPD-700 Mechanical Specifications		Performance Configuration		
	Units	High Load - Low Speed	Medium Load - Medium Speed	Low Load - High Speed
Frame Size	in	7.0		
Standard Stroke Lengths <i>(Custom Lengths Available)</i>	in	4, 8, 12, 16, 20, 24, 30, 36, 48		
Maximum Allowable Continuous Dynamic Force	lbf	95,000		
	kN	422.6		
Maximum Allowable Static Force	lbf	199,750		
	kN	888.5		
Maximum Allowable Input Torque	lb-ft	269	633	2,050
	N-m	364.7	858.2	2779.4
Limiting Input Speed	RPM	11,667	4,958	1,531
Standard Operating Temperature Range	F	-15° to 165°		
	C	-26.1° to 73.9°		
Roller Screw Lead	mm	25		
Accuracy	in	0.003		
Efficiency	%	85.2%	87.9%	87.9%
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-700 Reflective Inertia

CPD-700 Reflective Inertias			High Load - Low Speed	Medium Load - Medium Speed	High Speed - Low Load
Parallel Motor Mount	$J_1^{(5)}$	slug-ft ²	6.585E-02	3.057E-02	4.887E-02
		kg-m ²	8.928E-02	4.144E-02	6.626E-02
	$J_2^{(6,7)}$	slug-ft ² /in	6.960E-04	4.490E-05	4.684E-04
		kg-m ² /in	9.437E-04	6.088E-05	6.351E-04
(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-700 System Weight

Basic Actuator Weight ⁽⁴⁾							
Stroke Length		6 in	12 in	18 in	24 in	36 in	48 in
Oil Filled	lb	116.2	133.8	151.5	169.2	204.4	239.5
	kg	52.7	60.7	68.7	76.8	92.7	108.6
Dry	lb	103.4	115.9	128.5	141.2	176.3	211.5
	kg	46.9	52.6	58.3	64.0	80.0	95.9

Configuration Specific Weight Adjustments ⁽⁴⁾															
Parallel Drive (Excluding)		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
18.7	8.5	4.4	2.0	12.3	5.6	13.4	6.1	14.0	6.4	n/a	n/a	12.1	5.5	7.3	3.3
(4)		For complete configuration weight, add basic actuator weight to appropriate configuration specific weight adjustments. For example, 12 " stroke oil filled system with parallel drive configuration and trunnion mounts: $133.8 \text{ lb} + 18.7 \text{ lb} + 12.1 \text{ lb} = 164.6 \text{ lb}$													