

ELECTRIC CYLINDERS QUICK REFERENCE

Use the following charts to select the electric cylinder that best fits your application. Refer to drawings on page 133. Contact Joyce/Dayton with questions regarding the proper selection of electric cylinders.

10-Ton Thrust Capacity Electric Cylinders													
Model	Max Static Capacity (tons)	Screw Lead (in)	Linear Speed (in/min)	External Gearbox Ratio	Estimated Efficiency	Max Dynamic Load at HP (lbs)							
						.33HP	.5HP	.75HP	1HP	1.5HP	2HP	3HP	5HP
ACME Screw													
ECAL2410	10	0.250	1.76	10	10%	5,417	9,111	14,543	19,976				
ECAL2410	10	0.250	1.71	10	10%							20,000	
ECAM2410	10	0.500	3.53	10	16%	4,468	7,515	11,996	16,872				
ECAM2410	10	0.500	3.42	10	17%							20,000	
ECAH2410	10	0.666	4.70	10	18%	3,811	6,409	10,231	14,390				
ECAH2410	10	0.666	4.55	10	19%							20,000	
ECAL810	10	0.250	5.29	10	12%	2,134	3,689	5,977	8,468				
ECAL810	10	0.250	5.13	10	13%							20,000	
ECAM2410	10	0.500	6.94	5	18%		3,554	6,112	8,896	14,126	19,355		
ECAM2410	10	0.500	7.29	5	19%							20,000	
ECAH2410	10	0.666	9.25	5	20%		3,031	5,213	7,587	12,047	16,508		
ECAH2410	10	0.666	9.71	5	21%							20,000	
ECAM810	10	0.500	10.59	10	20%		3,043	4,930	6,984				
ECAM810	10	0.500	10.25	10	21%							20,000	
ECAH810	10	0.666	14.10	10	23%		2,595	4,205	5,957				
ECAH810	10	0.666	14.10	10	24%							20,000	
ECAL2410	10	0.250	18.23	Direct drive	14%					2,440			
ECAM810	10	0.500	20.83	5	22%			2,367	3,503	5,637	7,771		
ECAM810	10	0.500	21.88	5	23%							11,611	19,837
ECAH810	10	0.666	27.75	5	25%			2,019	2,988	4,808	6,628		
ECAH810	10	0.666	29.14	5	26%							9,903	16,919
ECAM2410	10	0.500	36.46	Direct drive	23%					2,012			
ECAL810	10	0.250	54.69	Direct drive	16%							2,461	4,732
ECAM810	10	0.500	109.38	Direct drive	26%							2,030	3,903
ECAH810	10	0.666	145.69	Direct drive	29%								3,329
Ball Screw													
ECBL2410	10	0.474	3.34	10	34%	10,130	17,038	20,000					
ECBL2410	10	0.474	6.58	5	39%	4,113	8,057	13,858	20,000				
ECBM2410	10	1.000	7.06	10	34%	4,798	8,071	12,883	18,121				
ECBM2410	10	1.000	6.83	10	36%							20,000	
ECBL810	10	0.474	10.03	10	43%	3,990	6,899	11,178	15,834				
ECBL810	10	0.474	9.71	10	46%							20,000	
ECBH2410	10	1.875	13.24	10	34%	2,559	4,304	6,871	9,664				
ECBM2410	10	1.000	13.89	5	39%		3,817	6,565	9,554	15,171	20,000		
ECBL810	10	0.474	19.74	5	47%		2,999	5,366	7,942	12,781	17,619		
ECBL810	10	0.474	19.11	5	50%							20,000	
ECBM810	10	1.000	21.18	10	43%		3,268	5,295	7,501				
ECBM810	10	1.000	20.50	10	46%							20,000	
ECBH2410	10	1.875	26.04	5	39%		2,036	3,501	5,096	8,091	11,086		
ECBL2410	10	0.474	34.54	Direct drive	49%					4,562			
ECBH810	10	1.875	39.71	10	43%			2,824	4,000				
ECBM810	10	1.000	41.67	5	47%			2,542	3,762	6,054	8,346		
ECBM810	10	1.000	43.75	5	49%							12,470	20,000
ECBM2410	10	1.000	72.92	Direct drive	49%					2,161			
ECBH810	10	1.875	78.13	5	47%				2,006	3,229	4,451		
ECBH810	10	1.875	82.03	5	49%							6,651	11,363
ECBL810	10	0.474	103.62	Direct drive	56%						2,478	4,602	8,849
ECBM810	10	1.000	218.75	Direct drive	56%							2,180	4,192
ECBH810	10	1.875	410.16	Direct drive	56%								2,236

10-Ton Electric Cylinders			
	Maximum Rise		Cylinder Tube Torque (in*lb) Per Pound Thrust
	Vertical Operation	Horizontal Operation	
ACME Screw			
ECAL	84"	63"	.161
ECAM	60"	45"	.195
ECAH	76"	57"	.228
Ball Screw			
ECBL	38"	28"	.084
ECBM	38"	28"	.178
ECBH	41"	31"	.332

Note: For proper model selection refer to Selection Guidelines on page 129.