



Shown from left to right:
ES-1010, ES-256, ES-252
ES-10010, ES-504, ES-59, ES-2510

ES-SERIES GENERAL PURPOSE, SINGLE ACTING CYLINDERS

Features

- ◆ Complies with ASME B30.1. High strength steel for durability and increased safety.
- ◆ Hardened and chromed piston increase durability and reduces wear.
- ◆ Collar threads, piston threads and base mounting holes enable easy fixturing.
- ◆ Heavy-duty piston return springs.
- ◆ High quality EAB-201 quick couplers.
- ◆ Environmentally friendly painting process provides a durable anti-corrosion finish.



106 EAGLE PRO ES-306 single acting cylinders are used to press the laminates into the stator core hold down gear.

Quality pressure hoses

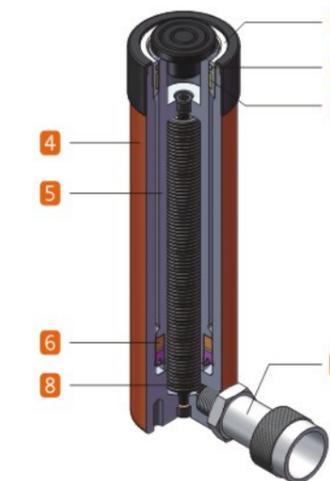
Use with EV-23 manually operated check valve for load holding

Pressure gauges available to monitor system pressure

Optional Tilt Saddle

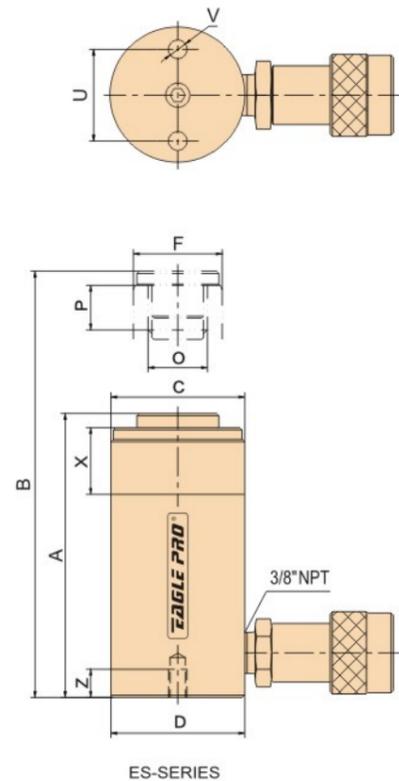
For use with Cylinder Capacity	Tilt Saddle Model	For use with Cylinder Capacity	Tilt Saddle Model
Metric Ton (US Ton)		Metric Ton (US Ton)*	
5 (5.5)	-	30 (33)	ST-50
10 (11)*	ST-10	50 (55)	ST-100
15 (16.5)	ST-10	75 (82.5)	ST-100
25 (27.5)	ST-50	95 (102.3)	ST-100

* Except ES-101
Note: for more information please see the page 56

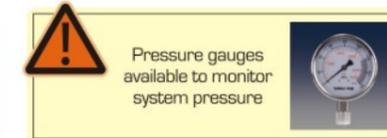


1. Guide Ring eliminates over travel, and provides support to reduce wear from off center loads.
2. Heavy-duty wiper ring keep dust and debris out of cylinder body, improving performance and service life of cylinder.
3. Bearing ring provides additional support to reduce wear from off center loads.
4. All steel body with baked enamel finish for durability.
5. Hardened and chromed piston increase durability and reduces wear.
6. Secondary gasket and industrial seal ring assembly prevent costly leaks.
7. Standard coupler on all cylinders provided with heavy duty dust cover.
8. High strength return spring.

ES-SERIES GENERAL PURPOSE, SINGLE ACTING CYLINDERS



Cylinder Capacity @ 700 Bar (10,000 PSI) Metric Ton (US Ton)	Stroke in	Model	Cylinder Effective Area in ²	Oil Capacity in ³	Collapsed Height		Extended Height		
					A in	B in			
5 (5.5)	0.63	ES-50	1.10	0.70	1.65	2.28			
	0.98	ES-51	1.10	1.09	4.33	5.31			
	2.95	ES-53	1.10	3.25	6.50	9.45			
	5.00	ES-55	1.10	5.50	8.46	13.46			
	6.97	ES-57	1.10	7.67	10.75	17.72			
	9.13	ES-59	1.10	10.05	12.72	21.85			
10 (11)	1.02	ES-101	2.25	2.30	3.50	4.53			
	2.13	ES-102	2.25	4.78	4.76	6.89			
	4.13	ES-104	2.25	9.29	6.73	10.87			
	6.14	ES-106	2.25	13.80	9.72	15.87			
	7.99	ES-108	2.25	17.96	11.73	19.72			
	10.12	ES-1010	2.25	22.73	13.74	23.86			
	11.97	ES-1012	2.25	26.89	15.75	27.72			
	14.02	ES-1014	2.25	31.49	17.72	31.73			
15 (16.5)	0.98	ES-151	3.29	3.23	4.88	5.87			
	2.01	ES-152	3.29	6.60	5.87	7.87			
	3.98	ES-154	3.29	13.06	7.87	11.85			
	5.98	ES-156	3.29	19.66	10.67	16.65			
	7.99	ES-158	3.29	26.25	12.68	20.67			
	10.00	ES-1510	3.29	32.85	14.69	24.68			
	12.01	ES-1512	3.29	39.44	16.65	28.66			
	14.02	ES-1514	3.29	46.04	18.66	32.68			
	25 (27.5)	1.02	ES-251	5.15	5.27	5.47	6.50		
		1.97	ES-252	5.15	10.13	6.50	8.46		
4.02		ES-254	5.15	20.66	8.46	12.48			
6.22		ES-256	5.15	32.00	10.75	16.97			
8.27		ES-258	5.15	42.53	12.72	20.98			
10.28		ES-2510	5.15	52.86	14.72	25.00			
12.24		ES-2512	5.15	62.98	16.73	28.98			
14.25		ES-2514	5.15	73.31	18.74	32.99			
30 (33)	8.23	ES-308	6.85	56.35	15.24	23.46			
50 (55)	2.01	ES-502	10.99	22.06	6.93	8.94			
	4.02	ES-504	10.99	44.11	8.94	12.95			
	6.26	ES-506	10.99	68.77	11.10	17.36			
	13.27	ES-5013	10.99	145.75	18.11	31.38			
75 (82.5)	6.14	ES-756	16.10	98.87	11.22	17.36			
	13.11	ES-7513	16.10	211.05	19.37	32.48			
95 (102.3)	6.61	ES-1006	20.62	136.30	14.06	20.67			
	10.24	ES-10010	20.62	210.94	17.68	27.91			



Collar Thread	Collar Thread Length	Outside Diameter	Piston Rod Diam.	Piston Internal Thread	Piston Thread Length	Base Fix Hoses			Weight	Model
C	X	D	F	O	P	Bolt Circle U	Thread V	Thread Depth Z	lbs	
in	in	in	in	—	in	in	in	in		
—	—	2.32X1.65	0.98	—	—	1.10	0.22	—	1.8	ES-50
1 1/2"-16	1.10	1.50	0.98	3/4"-16 UNF	0.63	0.98	1/4"-20 UNC	0.55	2.2	ES-51
1 1/2"-16	1.10	1.50	0.98	3/4"-16 UNF	0.63	0.98	1/4"-20 UNC	0.55	2.9	ES-53
1 1/2"-16	1.10	1.50	0.98	3/4"-16 UNF	0.63	0.98	1/4"-20 UNC	0.55	3.7	ES-55
1 1/2"-16	1.10	1.50	0.98	3/4"-16 UNF	0.63	0.98	1/4"-20 UNC	0.55	4.6	ES-57
1 1/2"-16	1.10	1.50	0.98	3/4"-16 UNF	0.63	0.98	1/4"-20 UNC	0.55	5.1	ES-59
2 1/4"-14	1.02	2.25	1.50	10-24 UNC	0.24	1.54	5/16"-18 UNC	0.47	3.7	ES-101
2 1/4"-14	1.02	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	4.8	ES-102
2 1/4"-14	1.02	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	6.4	ES-104
2 1/4"-14	1.10	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	9.0	ES-106
2 1/4"-14	1.02	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	10.8	ES-108
2 1/4"-14	1.10	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	12.3	ES-1010
2 1/4"-14	1.02	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	14.1	ES-1012
2 1/4"-14	1.02	2.25	1.50	1"-8 UNC	0.75	1.54	5/16"-18 UNC	0.47	15.8	ES-1014
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	7.0	ES-151
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	8.1	ES-152
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	11.0	ES-154
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	14.3	ES-156
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	16.9	ES-158
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	19.1	ES-1510
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	21.6	ES-1512
2 3/4"-16	1.38	2.76	1.65	1"-8 UNC	0.98	1.85	3/8"-16 UNC	0.47	23.8	ES-1514
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	11.7	ES-251
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	13.6	ES-252
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	17.6	ES-254
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	22.7	ES-256
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	26.6	ES-258
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	31.0	ES-2510
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	34.1	ES-2512
3 5/16"-12	2.13	3.39	2.24	1 1/2"-16 UN	1.02	2.28	1/2"-13 UNC	0.75	38.3	ES-2514
3 5/16"-12	1.97	4.13	2.24	1 1/2"-16 UN	1.02	2.36	M8	0.47	47.3	ES-308
5"-12	2.17	5.00	3.15	—	—	3.74	1/2"-13 UNC	0.75	31.7	ES-502
5"-12	2.17	5.00	3.15	—	—	3.74	1/2"-13 UNC	0.75	39.8	ES-504
5"-12	2.17	5.00	3.15	—	—	3.74	1/2"-13 UNC	0.75	48.8	ES-506
5"-12	2.17	5.00	3.15	—	—	3.74	1/2"-13 UNC	0.75	75.5	ES-5013
5 3/4"-12	1.77	5.75	3.74	—	—	—	—	—	67.1	ES-756
5 3/4"-12	1.77	5.75	3.74	—	—	—	—	—	110.7	ES-7513
6 7/8"-12	1.73	6.97	4.13	—	—	5.47	3/4"-10 UNC	0.98	131.3	ES-1006
6 7/8"-12	1.73	6.97	4.13	—	—	5.47	3/4"-10 UNC	0.98	160.4	ES-10010