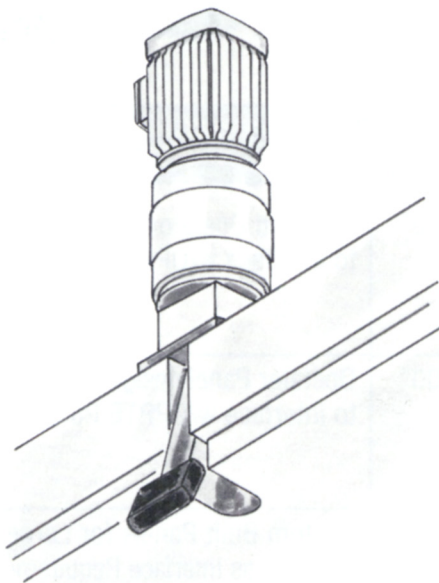
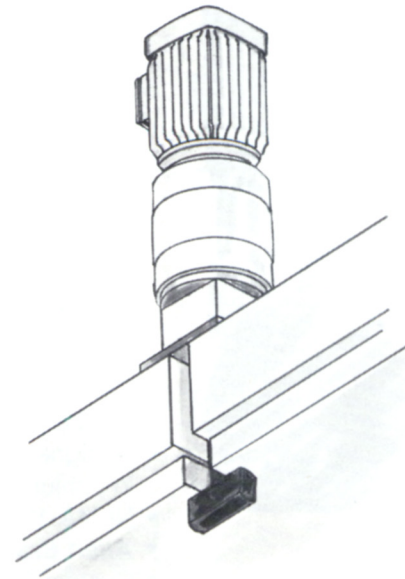


## Electro-Mechanical Swing-Out Clamp

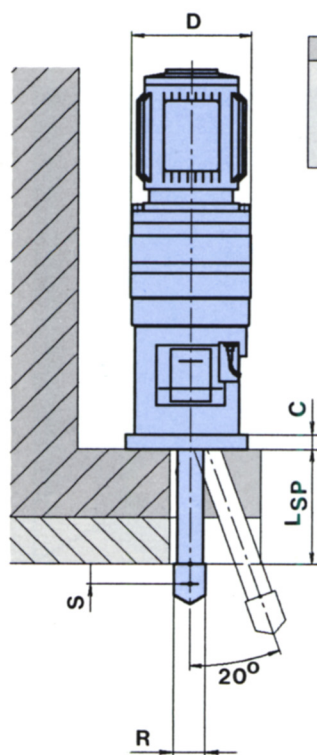
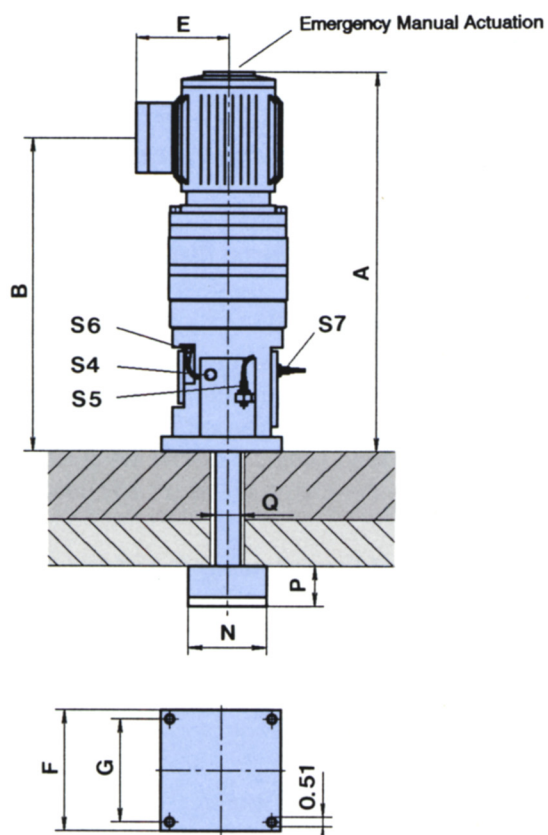
Optima's ESS Swing-Out Clamp represents the culmination of 25 years experience in the tool clamping field. These electro-mechanical units offer the highest degree of operational safety with unmatched reliability and clamping versatility. The unique advantages of these self contained units (no external power sources, i.e. hydraulics, required) make them ideal for both OEM and retrofit applications.



### Features:

- Compact Design
- High Clamp Forces
- Continuous Clamp Force Monitoring
- Simple Installation (2 cables) - No external power source required (no lines, valves, pumps, etc.)
- High Clamping Tolerance ( $\pm .30$  inches)
- Mechanically Self Locking (power is only required during clamp/unclamp operation)
- Trouble Free Operation
- High Operational Safety
- Emergency Manual Operation
- Electrical Monitoring of All Important Functions

## Technical Data:



PROXIMITY SWITCH FUNCTION	
S4	= Tie-Rod Swung In
S5	= Tie-Rod Swung Out
S6	= Continuous Clamp Force Monitoring
S7	= Maximum Upper Tie-Rod Travel Limit

Dimensions shown in inches

TYPE	Clamp force (tons)	Holding capacity (tons)	Stroke S	Motor-power (hp)	A	B	C	D	E	F	G	L <sub>SP</sub>	N	P	Q	R	Weight (lbs.)
ESS 60	6.6	11	0.59	0.75	18.30	14.17	0.79	5.90	4.02	6.30	5.12	*	2.48	0.98	0.94	0.98	66
ESS 120	13.2	22	0.59	1.00	19.49	15.19	0.79	6.30	4.88	6.30	5.12	*	3.15	1.18	1.26	1.42	77
ESS 240	26.4	33	0.59	2.00	21.61	17.32	0.79	6.30	4.88	6.30	5.12	*	3.86	1.97	1.42	1.65	77

\* Customer specified

### Motors:

Standard 3-phase motors  
Voltage 460V/60 Hz  
DF 3%-15%  
n = 3000 rpm

### Limit Switches:

4 "Balluff" proximity switches  
Voltage 24V  
Cable length 10 ft.

### Temperature:

Applications up to 160°F

### Mounting:

For installation please use  
4 socked head cap screws  
(1/2", Grade 8)