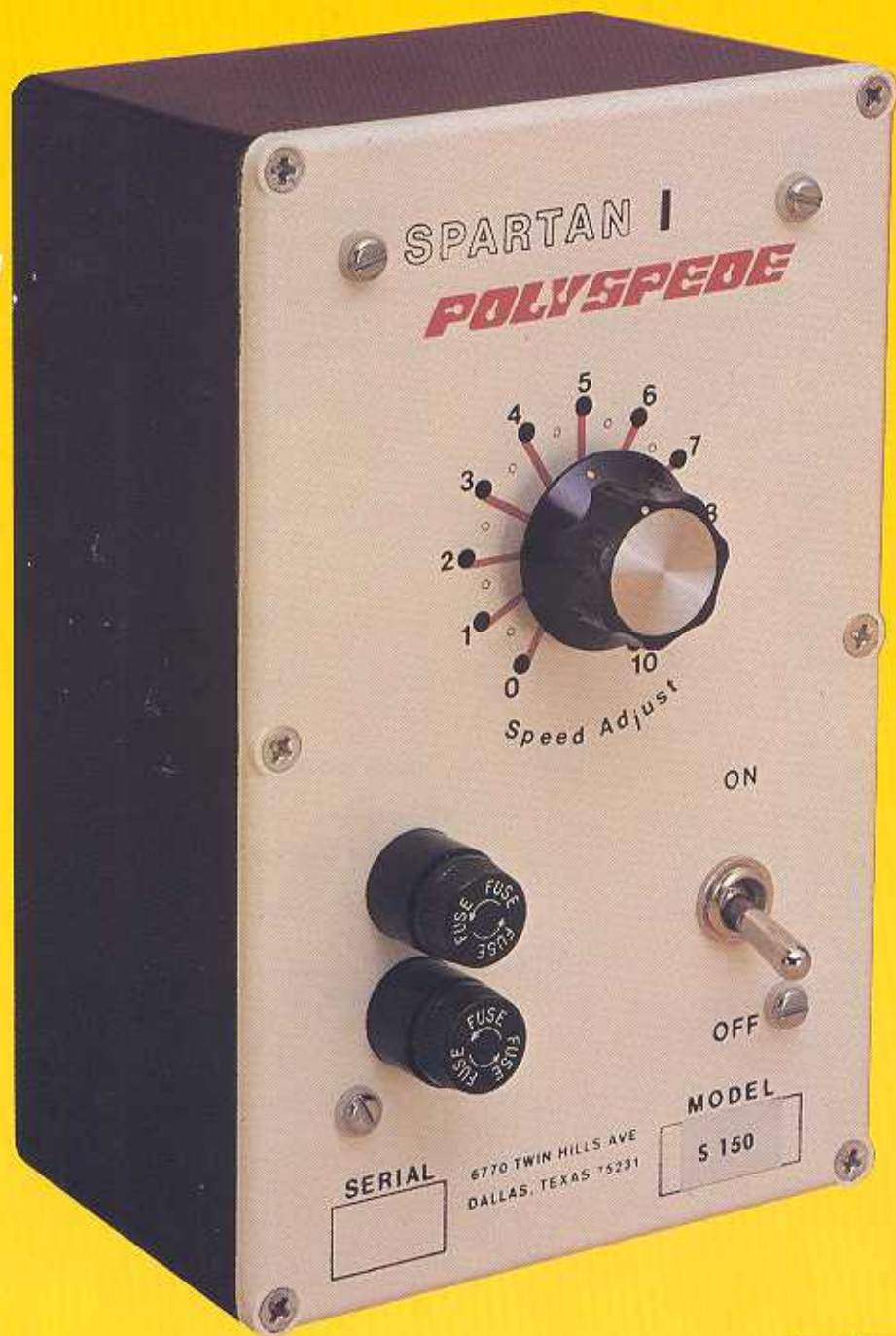


# Spartan I DC SPEED CONTROL

1/8 through 1 1/2 hp



The Polyspede Spartan I is an SCR control which operates a variable speed DC motor from an AC power source. It is suitable for both shunt wound and permanent magnet motors.

The Spartan I is a low cost, compact, non-modifiable design for general purpose applications where  $\pm 3\%$  speed regulation accuracy is sufficient. It is completely enclosed, with rugged construction and conservatively rated components for long, continuous service in industrial environments. A high degree of standardization allows the inclusion of many features which are usually found in more expensive controls.

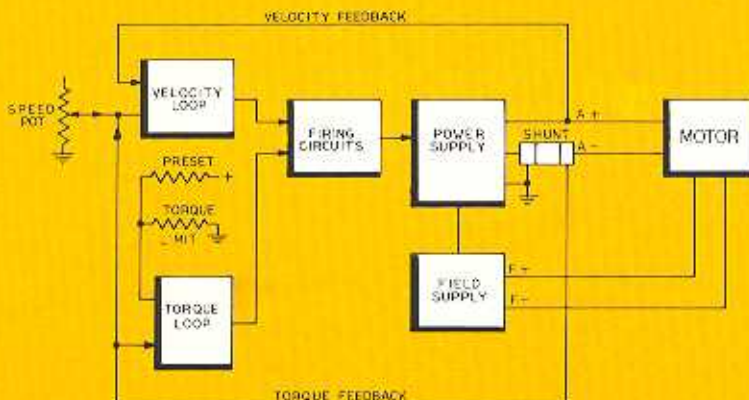
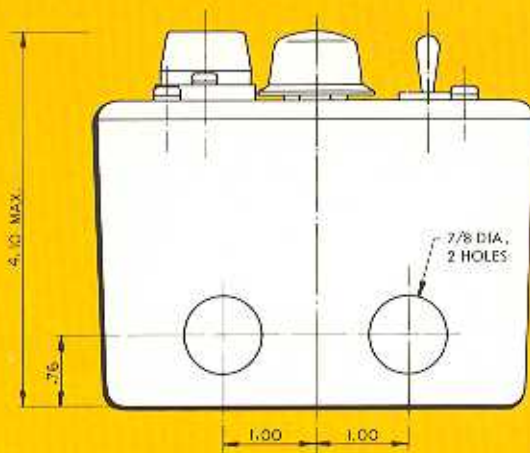
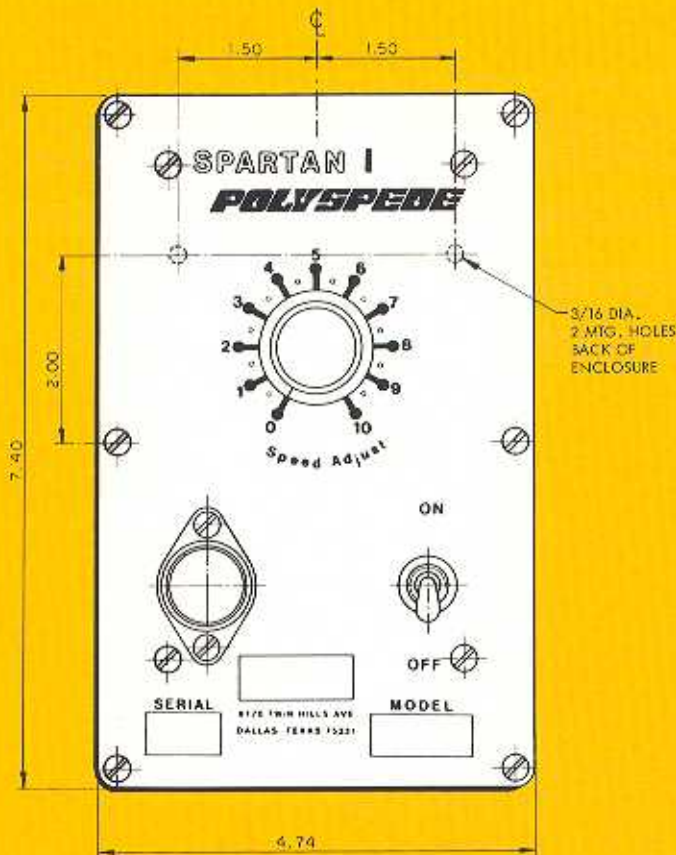
Spartan I is a part of Polyspede's overall product line, which includes fractional through 400 hp DC SCR drives in single-quadrant and four-quadrant regenerative designs.

**POLYSPEDE**

# Spartan I

## Standard Features

- 50/60 Hz, single phase input power. Choice of 115 VAC  $\pm 10\%$  or 230 VAC  $\pm 10\%$ .
- Rated for continuous duty at 40°C ambient.
- Front panel mounted sub-cycle fusing for short circuit and semi-conductor protection.
- 100 : 1 speed control range.
- Fixed torque limit—150% of rated torque or current.
- Speed regulation  $\pm 3\%$  of base speed, over entire range of 0 to 100% load.
- Transient voltage protection.
- Maximum speed adjustment.
- Fixed IR compensation — 4% boost.
- Overload protection.
- Fixed, controlled, exponential acceleration from 0 to 90% final speed in 0.58 seconds. Soft start.
- Temperature-stable speed setting.
- Leads-out design for input/output connections.
- Linear speed dial.
- Suitable for shunt wound or permanent magnet DC motors.
- Comprehensive Basic Manual included.



Motor Horsepower	Catalog Number	
	115 Volts	230 Volts
1/8	S-12	—
1/6	S-16	—
1/4	S-25	—
1/3	S-33	S-34
1/2	S-50	S-51
3/4	S-75	S-76
1	—	S-101
1 1/2	—	S-150

Input voltage tolerance is  $\pm 10\%$

## POLYSPEDE

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