

- 1 → Txd TTL
- 2 → Rxd TTL
- 3 → IN3, Dir, ADC, SPS
- 4 → Reset
- 5 → IN5, EncB
- 6 → Output
- 7 → IN7, Joystick, EncA
- 8 → IN8, Joystick, Index
- 9 → IN9, Step
- 10 → Gnd
- 11 → Gnd
- 12 → Gnd
- 13 → +V
- 14 → +V
- 15 → +V

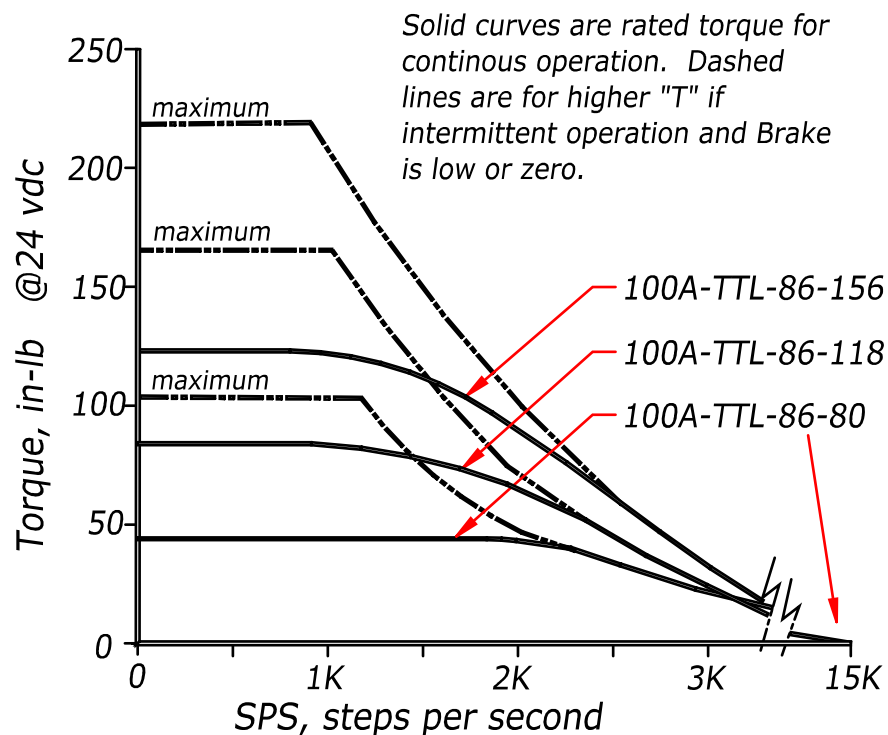
DB15F, shell
is grounded

Note! all signals are TTL (+5v).
Maximum allowable voltage is +5.5,
minimum is -0.5. Do not connect RS232
(±10v) signals directly. For interface to
RS232 PCs, use our RS232-TTL Adaptor,
which translates the ±10v to +5v logic.

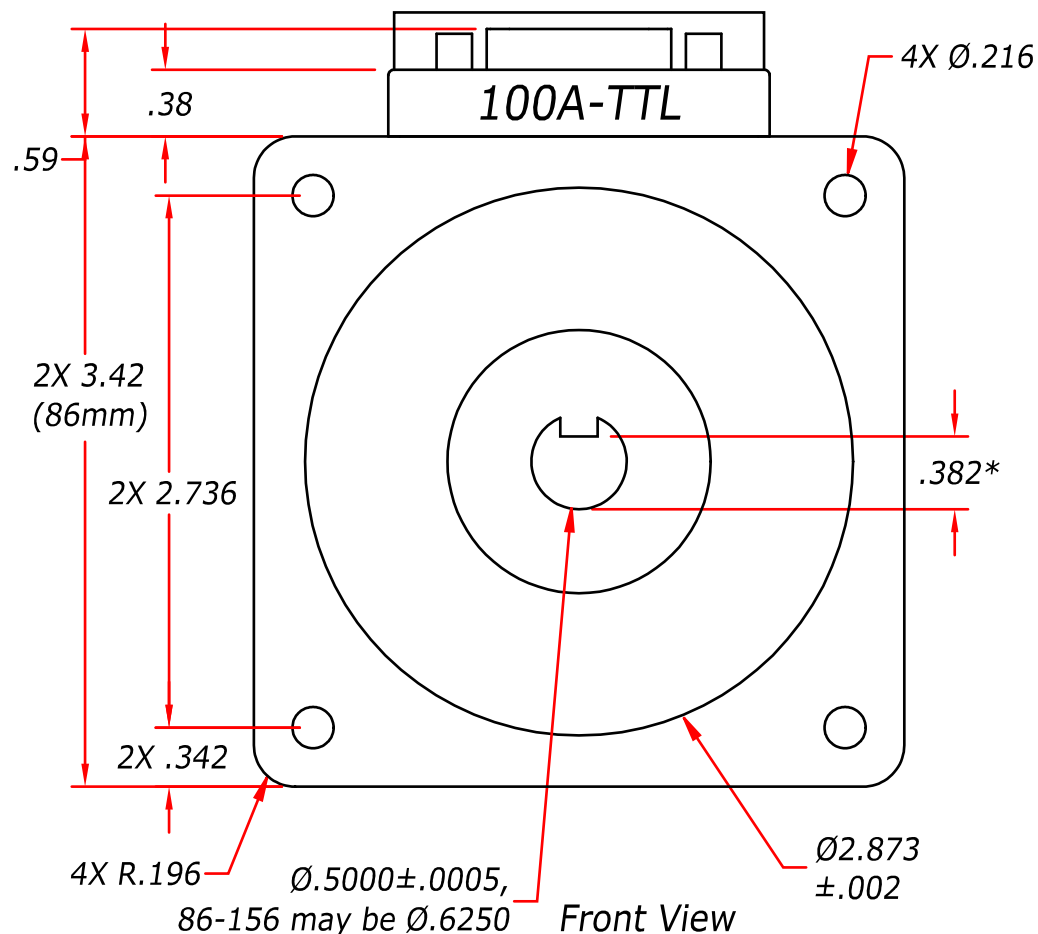
Power supply voltage:

absolute maximum	30
typical	12 to 24
absolute minimum	10

Optional range is 36 to 48 volts,
contact Excitron.
DB15 male connector and housing
provided with each motor/controller.



Industry standard NEMA size 34 motors. All 86 series motors are 1.8 deg/full step
and usually operate best in half-step.



Above 4,000 sps, the 86-80 will run with
more torque and speed then the longer
motors in this series. The 86-80 may run
up to 15,000 half-steps/sec.

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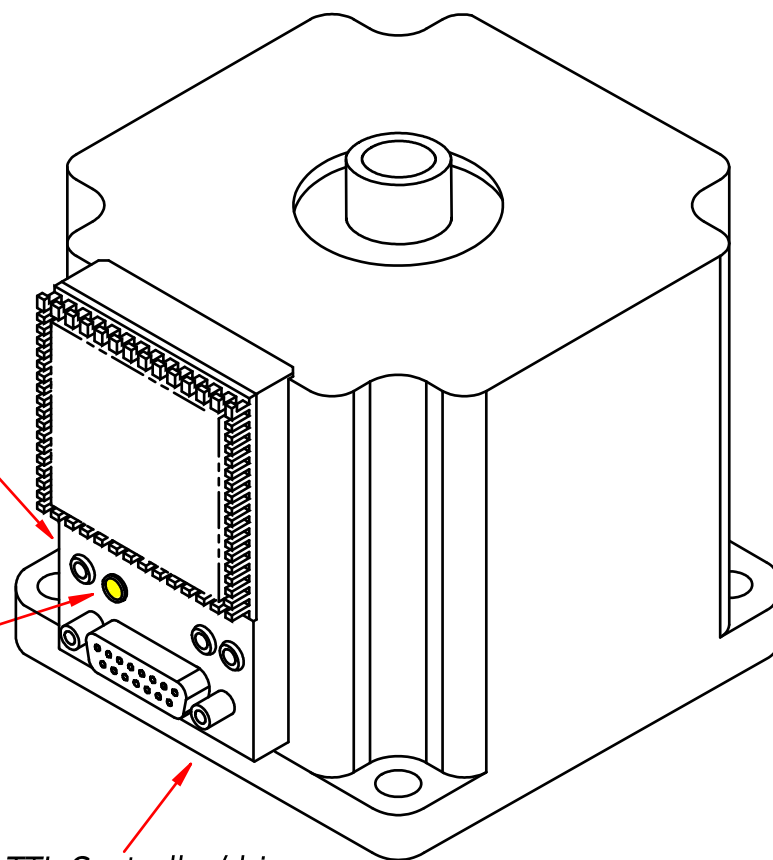
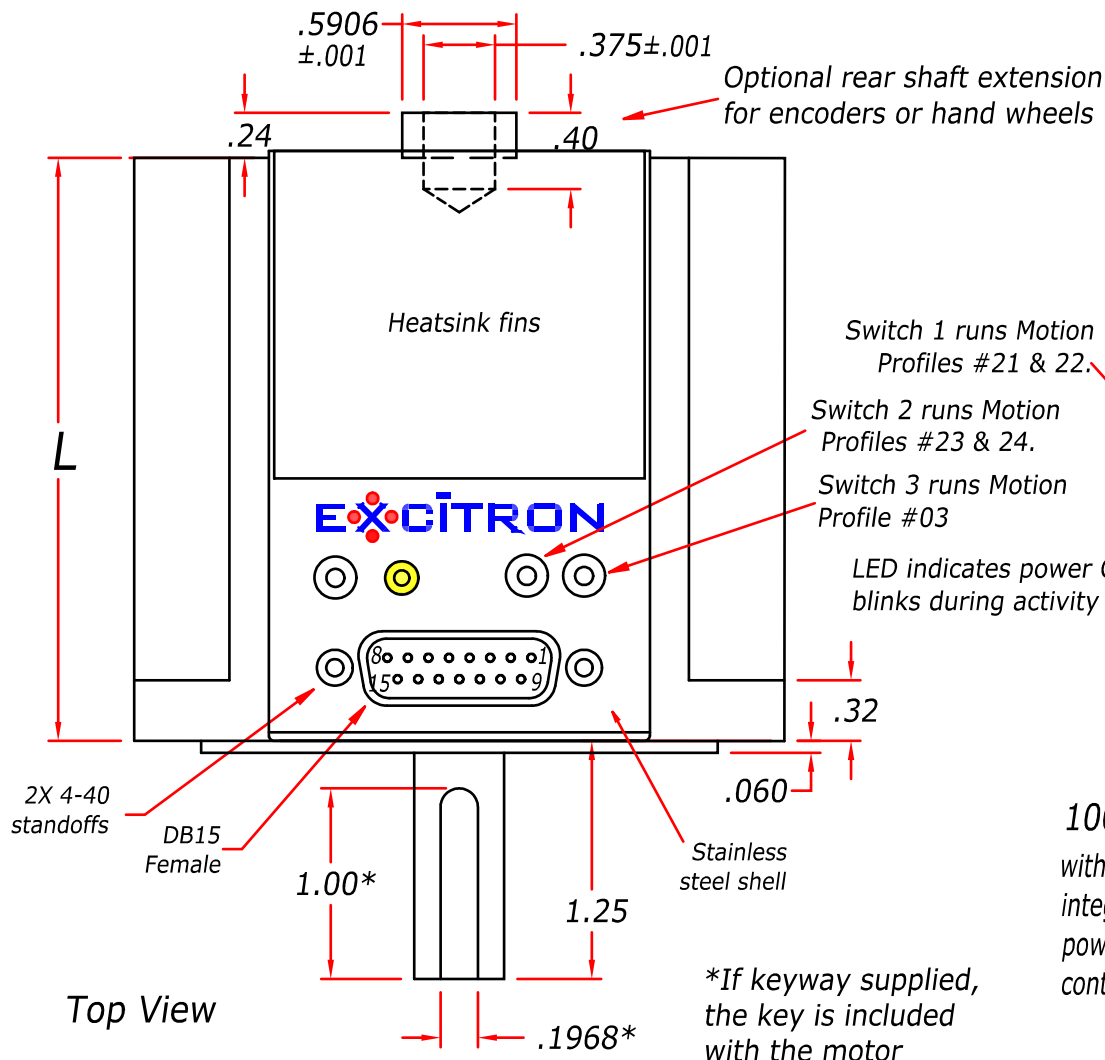
100A-TTL-86 Series

Motor/Controller	L ±.02"	Wt.	Torque	Trq*
100A-TTL-86-65	2.52"	3.8lb	32 in-lb	009
100A-TTL-86-80	3.07	5.1	44	012
100A-TTL-86-118	4.58	8.4	83	021
100A-TTL-86-156	6.08	11.9	122	026

* Rated Trq values are for command "T" with a 24 vdc supply; for 12 volt, you may double these values.

Important--do not adjust "T" higher in order to improve torque and performance without first adjusting A, M, and V. "T" controls the amperage which increases temperature. Also, when stepping faster than the point on the speed curve where torque starts to decrease, "T" has no effect because the motor's inductance limits the current. "T" only controls the amperage during the flat section of the speed curve, so be aware.

Temperature is the prime limiting factor for proper running and long life. Do not abuse the controller by running T more than 2.5 times higher than rated. If you must operate at higher values than given in the chart, then provide adequate cooling, and you must derate as the motor temperature rises.



100A-TTL Controller/driver with 100 amp power driver, integrated with the motor. The power supply filter is inside the controller.

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