

# Montalvo TS-Series Torque Sensor

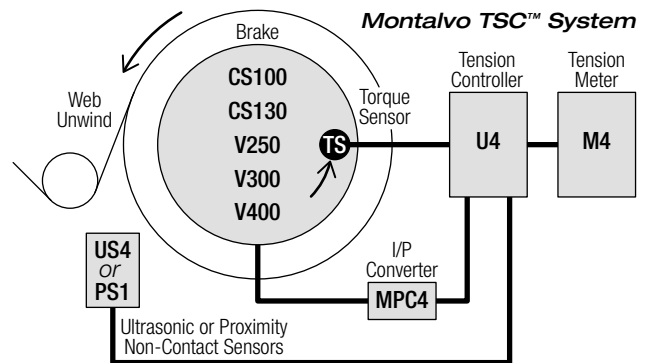
For brake models:  
CS100 / CS130 / V250 / V300 / V400

- Integral Part of Montalvo TSC™
- Torque Ranges Compliment Brakes
- Can Upgrade Existing Brakes
- Corrosion Resistant Materials
- Rugged Construction

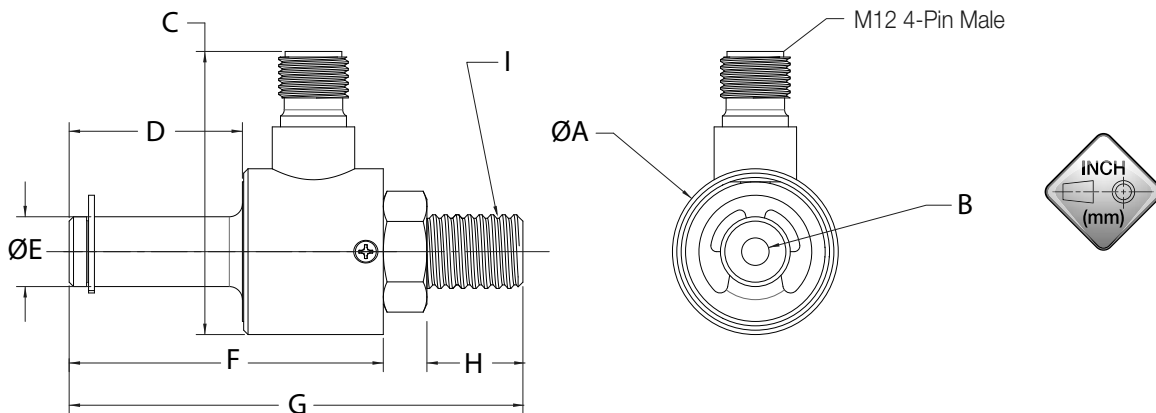
Montalvo's TS Torque Sensor provides force (torque) feedback directly from a Montalvo tension brake (V or CS series), eliminating the need for a tension sensing roller using load cells. Its signal can be processed by Montalvo's U4 Tension Controller to indicate web tension. The TS, sized to match Montalvo brakes, is the key component of the **Montalvo TSC™ System** →



TSC™ System Component → TS



## Dimensions



Size	Brake	ØA	B	C	D	ØE	F	G	H	*I
TS1	CS100, CS130	1-3/16	M6x1.0 - 6H	2	1.24	1/2	2-1/4	3-1/4	5/16	1/2-13 or
	V250, V300	(30.2)	6.0 deep	(49.5)	(31.5)	(12.7)	(63.2)	(82.6)	(6)	(M12x1.75)
TS2	V400	1.375	M6x1.0 - 6H	2.22	1.24	1/2	2.25	3.50	7/16	**3/4-10 or (M20x2.5)
		(35)	6.0 deep	(56.4)	(31.5)	(12.7)	(63.2)	(88.9)	(11.2)	

\*Standard thread is imperial (inch). Metric thread is an option.

\*\*Standard V400 Anti-Rotation Studs are 1/2-13 (M12x1.75 option). Some non-standard installations may use a single 3/4-10 (M20x2.5 option) stud. An existing mounting hole (or a new hole) may need to be drilled and tapped at 3/4-10 or M20x2.5 to accept the TS2. Check thread size carefully!

BETTER  
WEBS  
CONTROL

# Montalvo TS-Series

## Torque Sensor

Specifications	
Excitation	5VDC
Output	250 mV, nominal @ full load
Gauge Resistance	80 - 130 $\Omega$
Gauge Type	Semi-conductor
Non-Repeatability	$\pm 1/4\%$ full span
Non-Linearity and Hysteresis (combined)	$\pm 1/2\%$ full span
Connector	Male 4 pin M12
Pin 1	Excitation
Pin 2	Signal
Pin 3	No Connection
Pin 4	Excitation
Classification	I/P54
Operating Temperature	-4 to +150°F (-20 to +70°C)
Temperature coefficient (% per degree)	0.02 (0.01) typ.
Deflection in (mm)	0.008 to 0.015 (0.203 to 0.381)
Finish	Stainless Steel

### Standard Product





Only **ONE** TS is to be used per brake. It replaces all Anti-Rotation Studs required for a normal single disc brake installation. *Make sure to check thread size if replacing existing Anti-Rotation Studs.*

TS Size	Compatible Brake Model	Brake/Sensor Torque Range in-lb (Nm)	Anti-Rotation Stud Thread Size*	TS Torque Sensor Thread Size*	TS Torque Sensor Part Number
TS1	CS100	0.22-300 (0.025-34)	1/2-13	1/2-13	25000029
			M12x1.75	M12x1.75	25000030
TS1	CS130	0.29-600 (0.032-67)	1/2-13	1/2-13	25000027
			M12x1.75	M12x1.75	25000028
TS1	V250	1.4-2880 (0.16-324)	1/2-13	1/2-13	25000012
			M12x1.75	M12x1.75	25000017
TS1	V300	1.7-4696 (0.2-527)	1/2-13	1/2-13	25000001
			M12x1.75	M12x1.75	25000011
TS2	**V400	2.1-7021 (0.24-788)	<b>**1/2-13</b>	<b>**3/4-10</b>	25000040
			<b>**M12x1.75</b>	<b>**M20x2.5</b>	25000049

\*Standard thread is imperial (inch). Metric thread is an option.

**\*\*Standard V400 Anti-Rotation Studs are 1/2-13 (M12x1.75 option). Some non-standard installations may use a single 3/4-10 (M20x2.5 option) stud. An existing mounting hole (or a new hole) may need to be drilled and tapped at 3/4-10 or M20x2.5 to accept the TS2. Check thread size carefully!**

### Installation Hotlines

	207-856-2501 / 800-226-8710
	+86-21-52188010
	+45 75 57 27 11
	+49 (0)511 760 691 41

See the **TS Torque Sensor Manual** and **U4 Tension Controller Manual** for installation, wiring and calibration instructions.

