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For immediate assistance call
1-800-750-6842

TLS

Torque Limiting Screwdrivers Internally Adjustable

Designed and manufactured to meet or exceed the accuracy and repeatability requirements of ISO 6789:1992 ($\pm 6\%$ of setting).

Various models that range from 0.7 ozf.in to 120 lbf.in.

Precision radial ball clutch "slips-free" when the preset torque is reached preventing overtorquing.

Thrust bearings insure that the torque setting is independent of any end load applied by the operator.

Tamper-proof internal adjustment.

All models provide bi-directional operation. Available with a one-way clutch system so the screwdriver will operate in one direction but lock solid in the opposite direction for easy screw removal.

Can be clean room modified upon request.

Four different colored lightweight aluminum handles allow color coding of specific torque values in production areas.

ESD compliant IEC 61340-5-1: 1998 (except TLS 1360).



Model	1/4" MALE SQUARE DRIVES		1/4" FEMALE HEX DRIVES		Presetable Torque Ranges			Weight	
	Item#	Color	Item#	Color	American	S.I.	Metric	oz.	gr.
Micro Minimaster	-	-	020083	Red	3 - 32 ozf.in	2 - 22 cN.m	216 - 2300 gf.cm	1.8	50
Minimaster	-	-	020074	Gold	0.7 - 32 ozf.in	0.5 - 22 cN.m	50 - 2306.2 gf.cm	2.5	72
Minor	020062	Blue	020066	Blue	3 ozf.in - 12 lbf.in	2 - 135 cN.m	200 gf.cm - 14 kgf.cm	7.4	210
	020063	Gold	020067	Gold					
	020064	Green	020068	Green					
	020065	Red	020069	Red					
Standard	020075	Blue	020079	Blue	8 ozf.in - 36 lbf.in	6 - 406 cN.m	600 gf.cm - 40 kgf.cm	9.9	280
	020076	Gold	020080	Gold					
	020077	Green	020081	Green					
	020078	Red	020082	Red					
TLS 1360*	020060	Black	020061	Black	10 - 120 lbf.in	113 - 1360 cN.m	11 - 138 kgf.cm	11.5	325

* TLS 1360 can be modified to be ESD compliant. It needs to be requested when ordering the screwdriver(s)

- For Class 100 Clean Room, see page 2.4
- For Accessories, see page 2.8
- For Screwdriver Tool Kits, see page 2.7
- Clean Room seal item# **200030**



TLS "Impact Free" Resetting Models

Dimensions below apply to both TLS & IFR models

Designed and manufactured to meet or exceed the accuracy and repeatability requirements of ISO 6789:1992 ($\pm 6\%$ of setting).

All IFR models are "impact free" when the cam resets. The IFR screwdriver torques in the CW direction only.

Various models that range from 3 ozf.in to 120 lbf.in.

Can be special ordered to torque in the CCW direction.

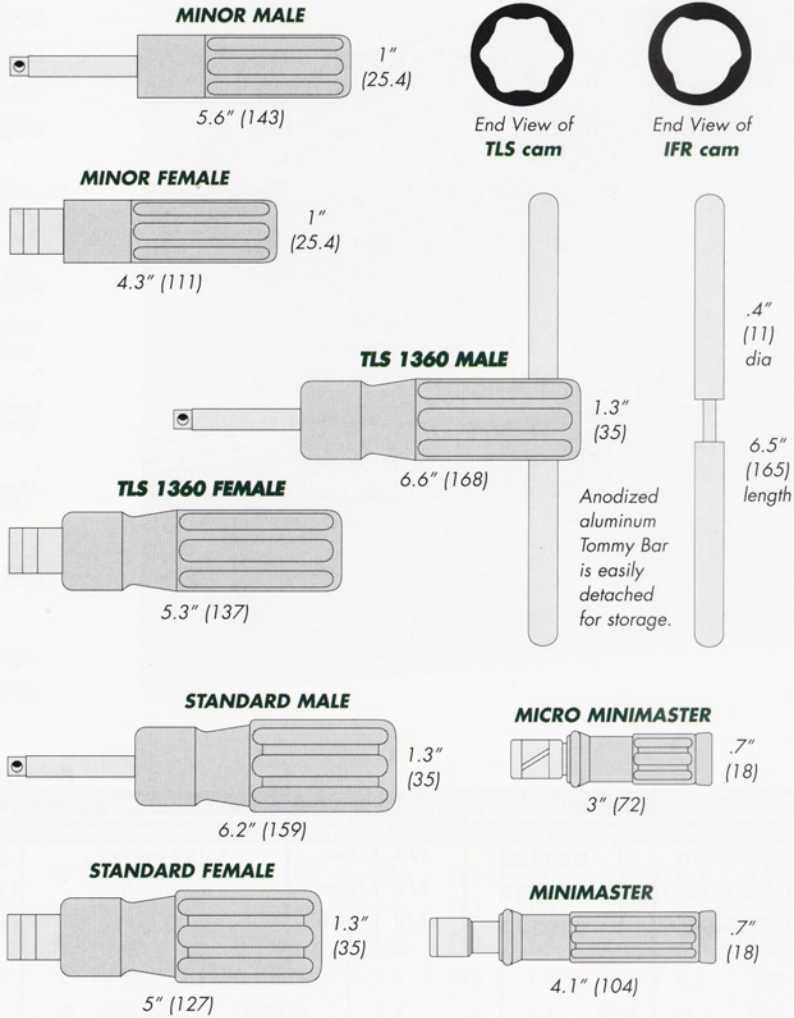
Thrust bearings insure that the torque setting is independent of any end load applied by the operator.

Four different colored lightweight aluminum handles allowing color coding of specific torque values in production areas.

Can be clean room modified upon request.

The "Down Ramp" design limits the torque applied to the assembly by disengaging the clutch upon reaching the preset torque value.

ESD compliant IEC 61340-5-1: 1998 (except TLS 1360).



IFR Models	1/4" MALE SQUARE DRIVES		1/4" FEMALE HEX DRIVES		Presettable Torque Ranges			Weight	
	Item#	Color	Item#	Color	American	S.I.	Metric	oz.	gr.
IFR - Minor	020465	Blue	020464	Blue	3 ozf.in - 12 lbf.in	2 - 135 cN.m	216 gf.cm - 14 kgf.cm	7.4	210
	020467	Gold	020466	Gold					
	020469	Green	020468	Green					
	020471	Red	020470	Red					
IFR - Standard	020473	Blue	020472	Blue	8 ozf.in - 36 lbf.in	6 - 406 cN.m	600 gf.cm - 40 kgf.cm	9.9	280
	020475	Gold	020476	Gold					
	020477	Green	020478	Green					
	020479	Red	020480	Red					
IFR - TLS 1360*	020481	Black	020482	Black	10 - 120 lbf.in	113 - 1360 cN.m	11 - 138 kgf.cm	11.5	325

* IFR - TLS 1360 can be modified to be ESD compliant. It needs to be requested when ordering screwdriver(s).

- For Class 100 Clean Room, see page 2.4
- For Accessories, see page 2.8

- For Screwdriver Tool Kits, see page 2.7
- Clean Room seal item# 200030