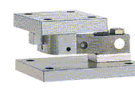
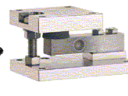
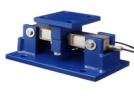


# METTLER TOLEDO - Industrial Weigh Modules



Model	0978 Tension Weigh	VLM2 Value Line	VLM3 Value Line	0972 Ultramount	0970 Ringmount	0958 Flexmount	0958 Centerlign	0958 Flexmount HD
<b>SPECIFICATIONS</b>								
<b>Load plates</b>	Tool Grade Steel	Tool Grade Steel	Tool Grade Steel	Stainless Steel (304)	Stainless Steel (316L)	Tool Grade Steel or Stainless Steel (304)	Tool Grade Steel or Stainless Steel (304)	Tool Grade Steel
<b>Finish</b>	Electroless Nickel	Zinc plated	Painted with Zinc-plated hardware	Glass bead blasted	Polished	MS epoxy painted SS glass bead blasted	MS epoxy painted SS glass bead blasted	Epoxy painted
<b>System capacities</b>	50 lb-40,000 lb	250 lb-10,000 lb	1000-300,000 lb	33 lb-881 lb	550 lb-88,000 lb 250 kg-40,000 kg	750 lb-180,000 lb	750 lb-180,000 lb	150,000 lb-800,000 lb
<b>Legal for trade</b>	3000d Class III 10,000d Class III	5000d Class III	N/A	5000d Class III	5000d Class III	5000d Class III	5000d Class III	10,000d Class III
<b>Standard J-Box</b>	SS, Type 4X/IP65	SS, Type 4X/IP65	SS, Type 4X/IP65	SS, Type 4X/IP65	SS, Type 4X/IP65	SS, Type 4X/IP65	SS, Type 4X/IP65	SS, Type 4X/IP65
<b>Safe overload*</b>	150%	150%	150%	150%	150%	150%	150%	150%
<b>Ultimate overload*</b>	300%	300%	300%	300%	300%	300%	300%	300%
<b>Maximum safe side load*</b>	100%	100%	100%	100%	100%	100%	100%	100%
<b>FEATURES</b>								
<b>Handling of thermal expansion</b>	Minimal	N/A	Minimal	Moderate	Moderate	Superior	Moderate	Superior
<b>Self-checking</b>		X	X	X	X	X	X	X
<b>Hold down mechanism</b>		X	X	X	X	X	X	X
<b>Jacking bolt</b>				X		X		X
<b>Integral conduit fitting</b>		1/4-18 NPT	1/4-18 NPT			1/4-18 NPT	1/4-18 NPT	1/4-18 NPT
<b>LOAD CELL SPECIFICATIONS</b>								
<b>Load cell</b>	Model 736	Model 793 Model 713 (250/2000 lb)	Model 792	Model 777	Model RLC	Model 745/745A Model 744 (250 lb) Model 743 (20,000+)	Model 745/745A Model 744 (250 lb) Model 743 (20,000+)	Model 790
<b>Counterforce design</b>	"S" Beam	Threaded Thru-hole Beam	Dual-ended Beam	Single-ended Beam	Ring	Blind Hole Beam	Blind Hole Beam	Ring
<b>Strain gage placement</b>	Bending	Shear web	Shear web	Bending	Ring torsion	Shear web	Shear web	Ring Torsion
<b>Suspension</b>	Spherical rod ends	Fixed rubber top plate	Fixed yoke	Ball & cup	Load pin	Load pin	Rocker pin	Load pin
<b>Load cell capacity</b>	50 - 10,000 lb 25 - 5000 kg	250 - 2500 lb 113 - 1133 kg	1000 - 75,000 lb 454 - 34,019 kg	11 - 220 lb 5 - 100 kg	551 - 22,046 lb 250 - 10,000 kg	250 - 45,000 lb 113 - 19,051 kg	250 - 45,000 lb 113 - 19,051 kg	50,000 - 200,000 lb 22,680 - 90,718 kg
<b>Load cell material</b>	SS (17-4 PH)	SS (17-4 PH)	Tool steel, nickel plated	SS (17-4 PH)	SS (17-4 PH)	SS (17-4 PH)	SS (17-4 PH)	Tool steel, epoxy painted
<b>Load cell protection</b>	Potted, IP65	793-Welded, IP67 713-Potted, IP65	Potted, IP67	Welded, IP67	Hermetic, IP68	Welded, IP67 Potted, IP65 (250 lb)	Welded, IP67 Potted, IP65 (250 lb)	Potted, IP65
<b>Load cell output</b>	2 mV/V	3mV/V	3mV/V	2mV/V	2 mV/V 1.75 mV/V (250kg)	2 mV/V	2 mV/V	2mV/V
<b>Load cell cable length</b>	25 ft (7.6 Meters)	20 ft (6.1 Meters)	20 ft (6.1 Meters)	(9.8 ft) 3 meters	(16.4 ft) 5 Meters	15 ft (<10,000 lb) 30 ft (>= 10,000 lb)	15 ft (<10,000 lb) 30 ft (>= 10,000 lb)	35 ft (10.7 Meters)
<b>Load cell bridge resistance (Input/Output)</b>	350Ω / 350Ω	350Ω / 350Ω	700Ω / 700Ω	350Ω / 356Ω	1110Ω / 1025Ω	385Ω / 350Ω 2000Ω / 2200Ω (45 kΩ)	385Ω / 350Ω 2000Ω / 2200Ω (45 kΩ)	750Ω / 700Ω
<b>Load cell excitation</b>	20VDC/VAC max	15 VDC/VAC max	15 VDC/VAC max	18 VDC/VAC max	30 VDC/VAC max	15 VDC/VAC max	15 VDC/VAC max	18 VDC/VAC max
<b>Repeatability*</b>	±0.01%	±0.01%	±0.01%	±0.01%	±0.01%	±0.01%	±0.01%	±0.01%
<b>Combined error*</b>	0%	0%	0%	0%	0%	0%	0%	0%
<b>Creep</b>	0.05% load/ 60 minutes	0.03% load/ 20 minutes	0.03% load/ 20 minutes	0.03% load/ 20 minutes	0.03% load/ 20 minutes	0.03% load/ 20 minutes	<0.03% load/ 20 minutes	0.03% load/ 20 minutes
<b>Load cell zero balance</b>	±1.0% of rated output maximum	±2.0% of rated output maximum	±1.0% of rated output maximum	±1.0% of rated output maximum	±1.0% of rated output maximum	±1.5% of rated output maximum	±1.5% of rated output maximum	±1.0% of rated output maximum
<b>Compensated temp range</b>	14°F to 104°F -10°C to 40°C	14°F to 104°F -10°C to 40°C	14°F to 104°F -10°C to 40°C	14°F to 104°F -10°C to 40°C	14°F to 104°F -10°C to 40°C	14°F to 104°F -10°C to 40°C	14°F to 104°F -10°C to 40°C	14°F to 115°F -10°C to 45°C
<b>Operating temp range</b>	-22° F to 158 °F -30 °C to 70°C	-22° F to 158 °F -30 °C to 70°C	-65°F to 200°F -54°C to 93°C	-22° F to 158 °F -30 °C to 70°C	-22° F to 158 °F -30 °C to 70°C	-22° F to 158 °F -30 °C to 70°C	-22° F to 158 °F -30 °C to 70°C	-22° F to 158 °F -30 °C to 70°C
<b>Safe overload*</b>	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
<b>Ultimate overload*</b>	3	3	3	3	3	3	3	3
<b>Maximum safe side load*</b>	1	1	1	1	1	1	1	1
<b>* As a percent of rated capacity</b>								
<b>APPROVALS</b>								
<b>Capacities</b>	50 - 5000 lb	500 - 2500 lb	N/A	10 - 100 kg	500 - 5000 kg	500 - 45,000 lb	500 - 45,000 lb	50,000 - 200,000 lb
<b>NTEP</b>	91-090	97-072	N/A	99-021	00-124	92-108A3	92-108A3	99-093
<b>Certificate number</b>		92-108A3				88-008A4	88-008A4	
<b>Nmax single load cell</b>	3000d Class III	3000d Class III	N/A	3000d Class III	5000d Class III	5000d Class III	5000d Class III	5000d Class III
<b>Nmax multiple load cell</b>	10,000d Class III	5000d Class III	N/A	5000d Class III	10,000d Class III	10,000d Class III	10,000d Class III	10,000d Class III
<b>OIML</b>								
<b>Capacities</b>	50 - 5000 kg			10 - 100 kg	250 kg - 10,000 kg	220 kg - 4400,	220 kg - 4400,	
<b>Certificate number</b>	TC2826	N/A	N/A	TC5281	PTB D09-00.08	TC2154 TC2977	TC2154 TC2977	N/A
<b>Accuracy class, nmax</b>	C3 R60, 3000d	N/A	N/A	C3 R60, 3000d	C3 R60, 3000d	C3 R60, 3000d	C3 R60, 3000d	
<b>Hazardous Approval</b>								
<b>Certificate</b>	FM: 3013019	FM: 3013019	FM: 3011081	PTB: Ex-98.D.2155	PTB D09-00.08	FM: 3013019	FM: 3013019	FM: 3013019
<b>Number</b>	PTB: Ex-97.D.2174X				KEMA: 03ATEX1372 X KEMA: 03ATEX1373 X	FM: 3005885 PTB: Ex-95.D.2051	FM: 3005885 PTB: Ex-95.D.2051	
<b>FM system</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>FM entity</b>	Yes	Pending	Yes	Yes	Yes	Yes	Yes	Yes