





# MultiTest-xt Technical Datasheet



## MultiTest 0.5-xt, 1-xt & 2.5-xt



#### All measurements are in millimetres and (inches)

	Height	Width (test frame only)	Max Width (with console fitted)	Depth	Vertical Daylight*
MultiTest 0.5-xt	1710mm (67.3)	290mm (11.4)	546mm (21.5)	414mm (16.3)	1359mm (53.5)
MultiTest 1-xt	1510mm (59.4)	290mm (11.4)	546mm (21.5)	414mm (16.3)	1159mm (45.6)
MultiTest 2.5-xt	941mm (37)	290mm (11.4)	546mm (21.5)	414mm (16.3)	590mm (23.2)
* Measured without load	cell or grips				

## Intelligent Loadcell ILC

**NOTE:** Compatible with all test stands of equal or higher capacity than loadcell. Requires adaptor 432-256 to fit to MultiTest 10-*xt*, 25-*xt* & 50-*xt*.



All measurements are in millimetres and (inches)

ILC capacity	Part No.	Thread	Overall daylight reduction	Loadcell width (W)	Loadcell depth (D)	Loadcell height (H)	Total daylight reduction using twin-column dovetail (432-256)
2N	879-009	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
5N	879-010	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
10N	879-001	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
25N	879-002	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
50N	879-003	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
100N	879-004	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
250N	879-005	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)
500N	879-006	#10-32UNF	15 (0.59)	72 (2.8)	46.5 (1.8)	48 (1.9)	99 (3.9)

See page 3 for ILS-S loadcells (100N to 5000N)

### **ILC Load Measurement Accuracy**

% of full scale (fs)	Ν
±0.1% fs	2N - 500N

# MultiTest 5-xt



## Intelligent Loadcell ILC-S

**NOTE:** Compatible with all test stands of equal or higher capacity than loadcell Requires adaptor 432-256 to fit to MultiTest 10-*xt*, 25-*xt* & 50-*xt* 



ILC-S capacity	Part No.	Thread	Overall daylight reduction	Loadcell width (W)	Loadcell depth (D)	Loadcell height (H)	Total daylight reduction using twin-column dovetail (432-256)
100N	879-064	M6 x 1	70 (2.7)	51 (2)	13 (0.5)	64 (2.5)	154 (6)
200N	879-065	M6 x 1	70 (2.7)	51 (2)	13 (0.5)	64 (2.5)	154 (6)
500N	879-066	M6 x 1	82 (3.2)	51 (2)	19 (0.7)	76 (2.9)	166 (6.5)
1000N	879-067	M10 x 1.5	82 (3.2)	51 (2)	19 (0.7)	76 (2.9)	166 (6.5)
2500N	879-008	M12 x 1.75	82 (3.2)	51 (2)	25 (0.98)	76 (2.9)	166 (6.5)
5000N	879-024	M12 x 1.75	82 (3.2)	51 (2)	25 (0.98)	76 (2.9)	166 (6.5)

All measurements are in millimetres and (inches)



### **ILC-S Load Measurement Accuracy**

% of full scale (fs)	Ν
±0.1% fs	100N - 2500N
±0.2% fs	5000N

All measurements are in millimetres (inches) \* measured without loadcell or grips

# MultiTest 10-xt & 25-xt



ILC-T capacity	Part No.	Thread	Overall daylight reduction	Loadcell width (W)	Loadcell depth (D)	Loadcell height (H)
10kN	879-025	M12 x 1.75	134 (5.3)	51 (2)	25 (0.98)	76 (2.9)
25kN	879-026	M16 x 2	147 (5.8)	76 (2.9)	38 (1.5)	89 (3.5)

All measurements are in millimetres and (inches)



\* measured without loadcell or grips

**Note:** Adaptors are supplied to allow fitting of ILC and ILC-S / T loadcells directly to moving crosshead

### **Twin-Column Dovetail Adaptor**

**NOTE:** For use with ILC and ILC-S Supplied as standard with MultiTest 10-*xt* & 25-*xt* 

Rated capacity	Part No.	
5kN	432-256	

### **ILC-T Load Measurement Accuracy**

% of full scale (fs)	Ν
±0.2% fs	10kN - 25kN

# MultiTest 50-xt



ILC-P capacity	Part No.	Thread	Overall daylight reduction	Loadcell diameter (ø)	Loadcell height (H)
20kN	879-077	M18 x 1.5	134 (5.3)	118 (4.6)	134 (5.3)
50kN	879-076	M18 x 1.5	134 (5.3)	118 (4.6)	134 (5.3)

20/2 (7.9)

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572 (22.5)

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All measurements are in millimetres and (inches)



**Note:** Adaptors are supplied to allow fitting of additional ILC and ILC-S / T loadcells to ILC-P loadcells or directly to moving crosshead.

### **Twin-column Dovetail Adaptor**

**NOTE:** For use with ILC and ILC-S Supplied as standard with MultiTest 50-*xt* 

Rated capacity	Part No.	
5kN	432-256	

### **ILC-P Load Measurement Accuracy**

% of full scale (fs)	Ν
±0.2% fs	20kN - 50kN



# **Specifications**

MultiTest-xt		0.5	1	2.5	5	10	25	50
TEST FRAME								
Rated capacity	N kgf lbf	500 50 110	1000 100 220	2500 250 550	5000 500 1100	10000 1000 2200	25000 2500 5500	50000 5000 11000
Number of ballscrews		1	1	1	1	2	2	2
Speed range	mm/min in/min	1 - 1000 0.04 - 40	1 - 1000 0.04 - 40	1 - 1000* 0.04 - 40	1 - 500 0.04 - 20	1 - 1000 0.04 - 40	1 - 1000** 0.04 - 40	1 - 400*** 0.04 - 15
Crosshead speed accuracy	-			±0.	1% of indicated sp	beed		
Distance between columns		-	-	-	-	400mm (15.7")	400mm (15.7")	420mm (16.5")
Throat depth****		67mm (2.6")	67mm (2.6")	67mm (2.6")	95mm (3.7")	-	-	-
Vertical daylight*****		1359mm (53.5")	1159mm (45.6")	590mm (23.2")	710mm (28.0")	1180mm (46.5")	1140mm (44.9")	1330mm (52.4")
Height		1710mm (67.3")	1510mm (59.4")	941mm (37")	1082mm (42.6")	1500mm (59.1")	1500mm (59.1")	1931mm (76")
Width (test frame only)		290mm (11.4")	290mm (11.4")	290mm (11.4")	328mm (12.9")	826mm (32.5")	826mm (32.5")	864mm (34")
Max width (with console fitted)		546mm (21.5")	546mm (21.5")	546mm (21.5")	615mm (24.2")	1061mm (41.8")	1061mm (41.8")	1099mm (43.3")
Depth		414mm (16.3")	414mm (16.3")	414mm (16.3")	526mm (20.7")	512mm (20.2")	542mm (21.3")	572mm (22.5")
Weight		43kg (95lbs)	41kg (90lbs)	27kg (60lbs)	43kg (95lbs)	115kg (254lbs)	145kg (320lbs)	290kg (639lbs)
Maximum power requirement		120 watts	200 watts	250 watts	150 watts	400 watts	450 watts	450 watts
Voltage				230V A	AC 50Hz or 110V A	C 60Hz		
LOAD MEASUREMENT								
Available loadcell ranges	Ν			2	to 50000 (14 mode	els)		
	kgf	0.2 to 5000 (14 models)						
	lbf	0.45 to 11000 (14 models)						
Loadcell measurement accuracy		±0.1% of full scale for loadcells from 2 to 2500N						
		$\pm 0.2\%$ of full scale for loadcells from 5000 to 50000N						
Loadcell measurement resolution	I	1:6500						
DISPLACEMENT								
Crosshead travel*****		1200mm (47.3")	1000mm (39.4")	500mm (19.7")	590mm (23.2")	960mm (37.8")	950mm (37.4")	1100mm (43.3")
Position control resolution				÷	±0.01mm (±0.0004	")		

\* 2.5kN - recommended maximum speed = 750mm/min (30in/min) above 2000N

\*\* 25kN - recommended maximum speed = 500mm/min (20in/min) above 10000N

\*\*\* 50kN - recommended maximum speed = 250mm/min (10in/min) above 25kN

\*\*\*\* measured on centre line of loadcell

\*\*\*\*\* measured without loadcell or grips

Common Specifications	
Operating temperature	10C - 35C (50F - 95F)
Humidity range	Normal industry and laboratory conditions
Sampling rate (Hz)	Selectable from 1000, 500, 100, 50, 10
Compensation for system movement	Yes
Loadholding	Yes
Digital display of Load/Position/Speed	Yes
Output of test results to PC/Printer/Datalogger	Yes, via USB/Network Ports or Wireless Network
	RS232 via USB/Network converter in ASCII Format
Communication with PLC/Digital Control Interface	Yes, via programmable digital ports
	6 Inputs + 6 Outputs

#### Options

Column gaiter Safety guard

Available upon request

Mecmesin reserves the right to alter equipment specifications without prior notice. E&OE







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