Industrial Series DX Compression-Only Models

Industrial Series DX Compression-Only Models are designed for high-capacity compression, bend/flex, and shear testing. Featuring a single footprint, these frames are available in capacities of 300 and 600 kN (67,500 and 135,000 lbf). Understanding the critical importance of operator safety, the Instron® DX Models are constructed of high-quality materials, components, and craftsmanship.

Features and Benefits

- Single compression-only test space design is ideal for compression testing on metals, concrete, and soil specimens
- Special fixtures available for stabilometer and moisture exudation testing
- · Load frame, hydraulic power supply, and controller combined in a single package saves valuable lab floor space while providing a protective environment for hydraulic and electrical components
- Easy-to-adjust upper crosshead assembly facilitates changing fixtures and specimens
- · Convenient working height and ergonomic controls increase operator productivity and comfort
- Productivity panel with multiple function keys and displays allows the operator to perform common testing functions and view key test information without returning to the computer
- Powerful, yet user-friendly, materials testing software provides repeatable and reproducible results for simple to sophisticated testing requirements
- Variable pressure power supply provides pressure on demand, reducing heat generation, increasing oil life, and eliminating the need for water cooling
- · Available capacities:
 - 300 kN (67,500 lbf)
 - 600 kN (135,000 lbf)

Testing Applications

- Asphalt
- Concrete/Refractory Products Cubes, Cylinders, Bricks
- Metals
- Soil
- Wood
- Components

Standards Compliance

DX Compression-only Models conform to many international standards, including (but not limited to):

- ASTM A370, C39, C99, C109, C880, D2844, E4, E9, E83, and E290
- CTM (California Test Method) 301, 304, 308, 360, 366, 371, and 373
- ISO 7438
- JIS Z2248



Accessories

- Bend/Flex and Shear Fixtures
- · Compression Platens Plane and Self-Aligning
- Extensometers. Deflectometers
- Safety Enclosures
- Compression Table Extension for Supporting Fixtures (Stabilometer, etc)

Specifications



Crosshead Style Closed G8A G8A Load Capacity kN 300 600 Load Capacity kgf 30,000 60,000 Maximum Test Speed mm/min 76 76 Maximum Test Speed mm/min 3 3 Actuator Stroke mm 152 152 in 6 6 6 Crosshead Adjusting Speed mm/min 380 380 in/min 15 15 Horizontal Opening (between columns) mm 395 526 in 15.563 20.687 Wertical Compression Opening* mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness in 1855 1880 Frame Height in 73 74 Floor Space Requirements (W × D) in 29.875 × 29.688 3			300DX	600DX
Load Capacity kgf 30,000 60,000 Ibf 67,500 135,000 Maximum Test Speed mm/min 76 76 Iin/min 3 3 Actuator Stroke in 6 6 Crosshead Adjusting Speed mm/min 152 152 Iin 6 6 6 Crosshead Adjusting Speed in/min 15 15 Horizontal Opening (between columns) in 15.563 20.687 Wertical Compression Opening* in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 Iin 14 × 14 20 × 22 Crosshead Thickness in 3.875 7 Frame Height mm 1855 1880 Frame Height in 73 74 Floor Space Requirements (W × D) in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 1141 2130 Shipping Weight kgs 1168 × 1116 × 2083 1300 × 1245 × 2134	Crosshead Style	Closed	G8A	G8A
Ibf 67,500 135,000 Maximum Test Speed mm/min 76 76 76 76 76 76 76 7	Load Capacity	kN	300	600
Maximum Test Speed mm/min in/min 76 76 in/min 3 3 Actuator Stroke mm 152 152 in 6 6 6 Crosshead Adjusting Speed mm/min 380 380 in m/min 15 15 Horizontal Opening (between columns) mm 395 526 in 15.563 20.687 20.687 Vertical Compression Opening* mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 20 Crosshead Thickness in 3.875 7 Frame Height mm 1855 1880 in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight lbs 1765 3940 Shipping Weight mm 1168 × 1116 × 2083 1300 × 1245 × 2134		kgf	30,000	60,000
Maximum Test Speed in/min 3 3 Actuator Stroke mm 152 152 in 6 6 6 Crosshead Adjusting Speed mm/min 380 380 Horizontal Opening (between columns) mm 395 526 Horizontal Opening (between columns) mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness mm 98 178 frame Height in 73 74 Frame Height mm 1855 1880 in 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight lbs 1765 3940 Shipping Weight mm 1168 × 1116 × 2083 1300 × 1245 × 2134		lbf	67,500	135,000
In/min 3 3 3 3 3 3 3 3 3	Maximum Test Speed	mm/min	76	76
Actuator Stroke in 6 6 Crosshead Adjusting Speed mm/min 380 380 in/min 15 15 Horizontal Opening (between columns) mm 395 526 in 15.563 20.687 Vertical Compression Opening* mm 171-679 146-679 in 6.75-26.75 5.75-26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness mm 98 178 in 3.875 7 Frame Height in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight lbs 1765 3940 Shipping Weight kgs 1141 2130 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in/min	3	3
in 6 6 6	Actuator Stroke	mm	152	152
Crosshead Adjusting Speed in/min 15 15 Horizontal Opening (between columns) mm 395 526 in 15.563 20.687 Vertical Compression Opening* mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness in 98 178 in 3.875 7 Frame Height in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 lbs 1765 3940 Shipping Weight kgs 1141 2130 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	6	6
in/min 15 15 15 Horizontal Opening (between columns) in 2395 526 in 15.563 20.687 Vertical Compression Opening* mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness in 3.875 7 Frame Height in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 Shipping Weight kgs 1141 2130 Shipping Weight lbs 2515 4690 Shipping Dimensions (L × W × H)	Crosshead Adjusting Speed	mm/min	380	380
Horizontal Opening (between columns) in 15.563 20.687 Vertical Compression Opening* mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness mm 98 178 in 3.875 7 Frame Height mm 1855 1880 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 Shipping Weight kgs 1141 2130 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in/min	15	15
Vertical Compression Opening* in 15.563 20.687 Vertical Compression Opening* mm 171 - 679 146 - 679 in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 mm 98 178 in 3.875 7 Frame Height in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 Shipping Weight kgs 1141 2130 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134	Horizontal Opening (between columns)	mm	395	526
Vertical Compression Opening* in 6.75 - 26.75 5.75 - 26.75 Compression Table Size mm 356 × 356 508 × 559 in 14 × 14 20 × 22 Crosshead Thickness mm 98 178 in 3.875 7 Frame Height mm 1855 1880 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 bs 1765 3940 Shipping Weight kgs 1141 2130 Ibs 2515 4690 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	15.563	20.687
in 6.75 - 26.75 5.75 - 26.75	Vertical Compression Opening*	mm	171 - 679	146 - 679
Compression Table Size in 14 × 14 20 × 22 Crosshead Thickness mm 98 178 in 3.875 7 Frame Height mm 1855 1880 in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 lbs 1765 3940 Shipping Weight kgs 1141 2130 lbs 2515 4690 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	6.75 - 26.75	5.75 - 26.75
In 14 × 14 20 × 22 Crosshead Thickness mm 98 178 In 3.875 7 Frame Height mm 1855 1880 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 In 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 Ibs 1765 3940 Shipping Weight kgs 1141 2130 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134	Compression Table Size	mm	356 × 356	508 × 559
Crosshead Thickness in 3.875 7 Frame Height mm 1855 1880 in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 lbs 1765 3940 Shipping Weight kgs 1141 2130 lbs 2515 4690 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	14 × 14	20 × 22
in 3.875 7 mm 1855 1880 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 lbs 1765 3940 Shipping Weight kgs 1141 2130 Lbs 2515 4690 mm 1168 × 1116 × 2083 1300 × 1245 × 2134	Crosshead Thickness	mm	98	178
Frame Height in 73 74 Floor Space Requirements (W × D) mm 759 × 755 974 × 970 in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 lbs 1765 3940 Shipping Weight kgs 1141 2130 lbs 2515 4690 mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	3.875	7
In	Frame Height	mm	1855	1880
Floor Space Requirements (W × D) in 29.875 × 29.688 38.375 × 38.188 Net Weight kgs 800 1790 Ibs 1765 3940 Shipping Weight kgs 1141 2130 Ibs 2515 4690 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	73	74
in 29.875 × 29.688 38.375 × 38.188 kgs 800 1790 lbs 1765 3940 Kgs 1141 2130 kgs 1141 2130 Shipping Weight lbs 2515 4690 mm 1168 × 1116 × 2083 1300 × 1245 × 2134	Floor Space Requirements (W × D)	mm	759 × 755	974 × 970
Net Weight Ibs 1765 3940 Shipping Weight kgs 1141 2130 Ibs 2515 4690 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		in	29.875 × 29.688	38.375 × 38.188
Shipping Weight Shipping Dimensions (L × W × H) Shipping Dimensions	Net Weight	kgs	800	1790
Shipping Weight Ubs 2515 4690 Shipping Dimensions (L × W × H) mm 1168 × 1116 × 2083 1300 × 1245 × 2134		Ibs	1765	3940
lbs 2515 4690	Shipping Weight	kgs	1141	2130
Shipping Dimensions (L × W × H)		Ibs	2515	4690
Shipping Dimensions (L \times W \times H) in 46 \times 44 \times 82 51 \times 49 \times 84	Shipping Dimensions (L × W × H)	mm	1168 × 1116 × 2083	1300 × 1245 × 2134
		in	46 × 44 × 82	51 × 49 × 84

Common Specifications

Data Acquisition Rate by Software:

Up to 1 kHz synchronous on load and strain

Load Measurement Accuracy:

 \pm 0.5% of reading down to 1/500 of load cell capacity.

Strain Measurement Accuracy:

Meets or surpasses the following standards: ASTM E83, ISO 9513, and EN 10002-4

Position Measurement Accuracy Standard Encoder:

6.35 µm (0.00025 in) resolution and position accuracy: ±1% or 0.254 mm (0.01 in) displacement (whichever is greater)

High Resolution Encoder:

1.27 μm (0.00005 in) resolution and position accuracy: ±0.5% or 0.13 mm (0.005 in) displacement (whichever is greater)

Hydraulic Power Supply Voltage Options:

115V±10%, 1 Ph, 60 Hz, 30 Amp 230V±10%, 1 Ph, 60 Hz, 15 Amp 220V±10%, 1 Ph, 50 Hz, 15 Amp

Spare Parts Kits:

W-1338-A 300DX Basic W-1338-B 300DX Recommended W-1338-C 300DX Comprehensive W-1337-A 600DX Basic W-1337-B 600DX Recommended W-1337-C 600DX Comprehensive

*Minimum Compression Includes Stroke, Measured between Crosshead and Table



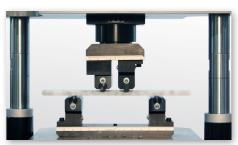
Stabilometer Testing with optional table extension



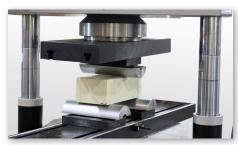
Concrete Cylinder Testing



Moisture Exudation Testing



4-Point Flexure Testing on Marble



3-Point Flexure Testing on Refractory Brick



Concrete Cube Testing

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