

Fred V. Fowler Company, Inc.



Horizon Premium Length Measuring and Setting Instrument

System Specifications (all models)

Resolution (analog)	.00005", .00002", .00001", .000005" (.01, .001, .0001mm)
Resolution (digital)	.001", .0001", .00001" (.01, .001, .0001mm)
Repeatability (± 2s)	.000008"/.0002mm
Measuring Force	0—43 ounces/12N (adjustable) - Constant measuring force of the floating probe movement with digital indication
Displacement speed	60"/sec. - 1.5 m/sec.
Fine adjustment range	.394"/10mm
Operational temperature limit	10°—40°C
Operational humidity limit	30—80%

Accuracy

Analog	
54-196-050	.00010" (.0025mm)
54-196-110	.00013" (.0033mm)
54-196-260	.00018" (.0045mm)
54-196-280	.00021" (.0053mm)
54-196-320	.00027" (.0068mm)

Digital	
54-196-750	.00007" (.0018mm)
54-196-800	.00010" (.0025mm)
54-196-815	.00013" (.0033mm)
54-196-820	.00017" (.0042mm)
54-196-850	.00020" (.0051mm)



Order No.	Description	Weight
ANALOG		
54-196-050	0—21.5" (550mm) Horizon Premium	176 lbs (80 kg.)
54-196-110	0—41" (1050mm) Horizon Premium	264 lbs (120 kg.)
54-196-260	0—61" (1550mm) Horizon Premium	352 lbs (160 kg.)
54-196-280	0—80.5" (2050mm) Horizon Premium	440 lbs (200 kg.)
54-196-320	0—120" (3050mm) Horizon Premium	616 lbs (279 kg.)
DIGITAL		
54-196-750	0—21.5" (550mm) Horizon Premium	176 lbs (80 kg.)
54-196-800	0—41" (1050mm) Horizon Premium	264 lbs (120 kg.)
54-196-815	0—61" (1550mm) Horizon Premium	352 lbs (160 kg.)
54-196-820	0—80.5" (2050mm) Horizon Premium	440 lbs (200 kg.)
54-196-850	0—120" (3050mm) Horizon Premium	616 lbs (279 kg.)

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Order No.	Description
Measuring tables and supports	
54-196-160	Universal measuring table
54-197-132	Holding device for indicator, fits on 54-196-160 table for displacement
54-196-107	Set of vertically adjustable supports
54-196-108	Adjustable support (one only)
54-196-022	Set of L-shaped supports to fit No. 54-196-107/108
54-196-021	Set of V-shaped supports to fit No. 54-196-107/108
54-197-106	Floating measuring table with location centers and V-shaped supports requires 54-196-160, 107 or 108
54-197-001	Temperature compensation package for digital Horizon
54-197-019	Heavy duty universal measuring table
Accessories for setting and checking of comparative measuring instruments and indicators	
54-190-805	Set of carbide gage block attachments 1" (2" total)
54-196-006	Set of carbide gage block attachments for checking calipers
54-190-823	Dial indicator holder (for 3/8" and 8mm stems)
54-197-015	Dial indicator holder for max range of 2"/50mm (for 3/8" and 8mm stems)
54-197-115	Adjustable holding device for lever dial indicator
54-190-825	Set of V-shaped blocks for checking external micrometers over 2.36"/60mm requires 54-190-805
54-197-114	Holding device for external micrometers from .48"—4"/12"—100mm requires 54-196-160
54-190-820	Holding device for setting of 2 point bore gages (fits on standard probes)
54-190-817	Set of supporting plates for setting of 2 point bore gages total length of 13"/330mm
54-190-829	Set of supporting plates for setting of 2 point bore gages total length of 7.08"/180mm
54-196-040	Adjustable support for setting of the reversal point requires 54-190-817 or 54-190-829
54-190-807	Set of anvils with Tungsten carbide balls for flat measuring surfaces
Accessories for external measurements	
54-190-806	Set of anvils with tungsten carbide tipped measuring surface diameter 0.256"/6.50mm
54-197-806	Set of anvils with tungsten carbide tipped measuring surface diameter 0.315"/8mm
54-190-865	Set of knife shaped anvils with tungsten carbide measuring surfaces
54-190-807	Set of anvils with tungsten carbide balls for flat measuring surfaces
54-197-007	Set of wires on holders for checking pitch diameters of external threads, pitch of 72-5 threads per inch/0.25-5mm
Accessories for internal measurements	
54-197-162	Set of L-shaped probes (minimum internal measurement: .475"/12mm) for height of 1.57"/40mm
54-190-815	Clamping device for snap gages from .475" to 6"(12 to 150mm)
54-197-142	Set of clamping attachments for height of 2.36"/60mm - use with 54-196-160
54-190-818	Set of measuring devices for checking of pitch diameters of internal threads (minimum internal diameter of .475"/12mm) requires No. 54-190-826
54-190-826	Set of cones, 60°, for pitch of 64-5 threads per inch/ 0.4 to 5mm. Use ring No. 54-190-804
54-190-804	Setting ring, 60° for use with 54-190-826
54-197-070	Measuring device for checking of internal diameters from .04"/1mm upwards and pitch diameters of internal threads from M4/32UNC-NC upwards for analog system - requires 54-197-073
54-197-073	Analog display for measuring device for No. 54-197-070
54-197-074	Measuring device for checking of internal diameters from .04"/1mm upwards and pitch diameters of internal threads from M4/32UNC-NC upwards for digital system
54-197-075	Set of T-shaped measuring inserts with ruby balls for pitch from 56 threads per inch/0.7mm upwards for use with 54-197-070 & 074
54-197-913	T-shaped measuring insert with ruby balls, dia. 0.01319"/.335mm for use with 54-197-070 & 074
54-197-076	Set of ruby ball measuring inserts for checking internal diameters from .04"/1mm upwards for use with 54-197-070 & 074
Reference gages	
54-197-050	Master plug gage, dia 1.9685"/50mm includes calibration certificate
54-197-040	Master ring gage, dia. 1.5748"/40mm includes calibration certificate