

Western instruments Inc. - Magnetic Coils, Models, & Summary

Model	Description	I.D. in/mm	Amperes & Voltage	Amp Turns/ Gauss	Comments	January, 2017
WA-Series Magnetizing Coils						
WA-8	AC Coil.	8 Inches 201 mm	13 Amps 115V/60Hz 6.5 Amps 230V 50Hz	4,250	Used with Wet/Dry Method Media for Magnetization applications. Normally used to find transverse cracks in Tubes/Pipes, Shafts/Bars, or Small Parts. Standard foot switch. 115/60 or 230/50 (WA-8K)	
WA-10	AC Coil.	10 Inches 254 mm	15 Amps 115V/60Hz 8 Amps 230V 50Hz	4,150	Used with Wet/Dry Method Media for Magnetization applications. Normally used to find transverse cracks in Tubes/Pipes, Shafts/Bars, or Small Parts. Standard foot switch. 115/60 or 230/50 (WA-10K)	
WA-12	AC Coil.	12 Inches 305 mm	16 Amps 115V/60Hz 9 Amps 230V 50Hz	4,050	Used with Wet/Dry Method Media for Magnetization applications. Normally used to find transverse cracks in Tubes/Pipes, Shafts/Bars, or Small Parts. Standard foot switch. 115/60 or 230/50 (WA-12K)	
WA-14	AC Coil.	14 Inches 355 mm	16 Amps 115V/60Hz 9 Amps 230V 50Hz	3,875	Used with Wet/Dry Method Media for Magnetization applications. Normally used to find transverse cracks in Tubes/Pipes, Shafts/Bars, or Small Parts. Standard foot switch. 115/60 or 230/50 (WA-14K)	
WP-Series Magnetizing / Demagnetization Coils						
WP-8	AC only Coil	8 Inches 201 mm	13 Amps 115V/60Hz 6.5 Amps 230V 50Hz	4250 AC	Base model of these Small ID Medium Duty Coils. Up-gradable with DC Options, to allow these Coils to be full feature for greater inspection capabilities.115/60 or 230/50 (WP-8K)	
WP-8D	AC and DC Coil	8 Inches 201 mm	13 Amps 115V/60Hz 6.5 Amps 230V 50Hz	4150 AC 6000 DC	Base AC / DC model of these Small ID Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-8DK)	
WP-8DV	AC with Varriable DC Coil	8 Inches 201 mm	13 Amps 115V/60Hz 6.5 Amps 230V 50Hz	4150 AC 0 to 6000DC	AC / Varriable DC model of these Small ID Medium Duty Coils. Up-graded with Varriable DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-8DVK)	
WP-8DVR	AC with Varriable and Reversing DC Coil	8 Inches 201 mm	13 Amps 115V/60Hz 6.5 Amps 230V 50Hz	4150 AC +/- 0 to 6000DC	AC / Varriable and Reversable DC model of these Small ID Medium Duty Coils. Up-graded with Varriable and Reversting DC Option, to allow Reversing DC Demag capabilities.115/60 or 230/50 (WP-8DVRK)	
WP-10	AC only Coil	10 Inches 254 mm	15 Amps 115V/60Hz 8 Amps 230V 50Hz	4150 AC	Base model of these mid-Size Medium Duty Coils. Up-gradable with DC Options, to allow these Coils to be full feature for greater inspection capabilities.115/60 or 230/50 (WP-10K)	
WP-10D	AC and DC Coil	10 Inches 254 mm	15 Amps 115V/60Hz 8 Amps 230V 50Hz	4150 AC 6000 DC	Base AC / DC model of these mid-Size Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-10DK)	
WP-10DV	AC with Varriable DC Coil	10 Inches 254 mm	15 Amps 115V/60Hz 8 Amps 230V 50Hz	4150 AC 6000 DC	AC / Varriable DC model of these mid-Size Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-10DVK)	

WP-10DVR	AC with Variable and Reversing DC Coil	10 Inches	254 mm	15 Amps 115V/60Hz 8 Amps 230V 50Hz	4150 AC +/- 0 to 6000 DC	AC / Variable and Reversible DC model of these mid-Size Medium Duty Coils. Up-graded with Variable and Reversing DC Option, to allow Reversing DC Demag capabilities.115/60 or 230/50 (WP-10DVRK)
WP-12	AC only Coil	12 Inches	305 mm	16 Amps 115V/60Hz 9 Amps 230V 50Hz	4050 AC	Base model of these Larger Size Medium Duty Coils. Up-gradable with DC Options, to allow these Coils to be full feature for greater inspection capabilities.115/60 or 230/50 (WP-12K)
WP-12D	AC and DC Coil	12 Inches	305 mm	16 Amps 115V/60Hz 9 Amps 230V 50Hz	4050 AC 6000 DC	Base AC / DC model of these Larger Size Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-12DK)
WP-12DV	AC with Variable DC Coil	12 Inches	305 mm	16 Amps 115V/60Hz 9 Amps 230V 50Hz	4050 AC 0 to 6000 DC	AC / Variable DC model of these Larger Size Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-12DVK)
WP-12DV	AC with Variable and Reversing DC Coil	12 Inches	305 mm	16 Amps 115V/60Hz 9 Amps 230V 50Hz	4050 AC +/- 0 to 6000 DC	AC / Variable and Reversible DC model of these Larger Size Medium Duty Coils. Up-graded with Variable and Reversing DC Option, to allow Reversing DC Demag capabilities.115/60 or 230/50 (WP-12DVRK)
WP-14	AC only Coil	14 Inches	355 mm	18 Amps 115V/60Hz 10 Amps 230V 50Hz	3875 AC	Base model of these Larger Size Medium Duty Coils. Up-gradable with DC Options, to allow these Coils to be full feature for greater inspection capabilities.115/60 or 230/50 (WP-14K)
WP-14D	AC and DC Coil	14 Inches	355 mm	18 Amps 115V/60Hz 10 Amps 230V 50Hz	3875 AC 6000 DC	Base AC / DC model of these Larger Size Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-14DK)
WP-14DV	AC with Variable DC Coil	14 Inches	355 mm	18 Amps 115V/60Hz 10 Amps 230V 50Hz	4050 AC 0 to 6000 DC	AC / Variable DC model of these Larger Size Medium Duty Coils. Up-graded with DC Option, to allow surface and sub-surface inspection capabilities.115/60 or 230/50 (WP-14DVK)
WP-14DV	AC with Variable and Reversing DC Coil	14 Inches	355 mm	18 Amps 115V/60Hz 10 Amps 230V 50Hz	3875 AC +/- 0 to 6000 DC	AC / Variable and Reversible DC model of these Larger Size Medium Duty Coils. Up-graded with Variable and Reversing DC Option, to allow Reversing DC Demag capabilities.115/60 or 230/50 (WP-14DVRK)
WS-Series Magnetizing Coil						
WS-8	Pulsed DC Drill Pipe Coil	8 Inches	201 mm	15 Amps 115V/60Hz 15 Amps 230V 50Hz (Inrush Current)	21,000 DC (@1Hz) 1,125 Gauss	Pulsed Drill Pipe Coil, with fixed DC output. Using our specialized Capacitive Discharge Power Supply, that pulses once per second. 50% Duty Cycle.115/60 or 230/50 (WS-8K)
WS-10	Pulsed DC Drill Pipe Coil	10 Inches	254 mm	15 Amps 115V/60Hz 15 Amps 230V 50Hz (Inrush Current)	18,000 DC (@1Hz) 800 Gauss	Strong DC Field like the old Drilco Pulse Coils. WS Coils are activated intermitently with our durable <i>Endrgize</i> Button.
WS-12	Pulsed DC Drill Pipe Coil	12 Inches	305 mm	15 Amps 115V/60Hz 15 Amps 230V 50Hz (Inrush Current)	17,000 DC (@1Hz) 620 Gauss	4 ID Sizes; 8" (203mm), 10" (254mm), 12" (305mm), and 14" (356mm),
WS-14	Pulsed DC Drill Pipe Coil	14 Inches	355 mm	15 Amps 115V/60Hz 15 Amps 230V 50Hz (Inrush Current)	16,000 DC (@1Hz) 470 Gauss	Powerful DC Pulse, once per second from a our CD (Capacitive Discharge) Power Supply. Results in a strong Residual Field. Meets requirments for an Active Field Inspection

WD-Series Magnetizing / Demagnetization Coils							
WDV-8	DC Coil	8.5 Inches	216 mm	13 Amps 6.5 Amps	115V/60Hz 230V 50Hz	12,500	1. The Size (Inside Diameter) of WD-Series Coils is to be sized to the physical size of the Work Piece to be inspected. Based on 1000 Amps per inch of ID.
WDV-10	DC Coil	10.5 Inches	267 mm	13 Amps 6.5 Amps	115V/60Hz 230V 50Hz	12,000	2. All WD-Series Coils have an integral Variable Amperage Power Supply, built into the integral Control Panel mounted on the top of the Coils..
WDV-14	DC Coil	14 Inches	368 mm	13 Amps 6.5 Amps	115V/60Hz 230V 50Hz	14,000	3. The Power Supply includes Infinitely Variable Amperage, Switched Reversible Polarity, and an LCD which always Displays the Amperage setting.
WDV-16	DC Coil	16 Inches	406 mm	8 Amps 8.5 Amps	220V/60Hz 230V 50Hz	16,000	4. WD-Series Coils are manufactured specifically for either 115VAC x 60Hz, or 230VAC x 50Hz power input Other Voltages can be accommodated
WDV-18	DC Coil	18 Inches	457 mm	10 Amps 11 Amps	220V/60Hz 230V 50Hz	18,000	5. The most common applications of WD-Series Coils is for; Oil Well Drilling Assemblies, Moderate size Castings, Engine Components, etc.
WDV-25	DC Coil	25 Inches	635 mm	12 Amps 14 Amps	220V/60Hz 230V 50Hz	24,000	6. WD-Series Coils (under 14" / 368mm) have an optional Automatic Ring-Down (Demagnetization) Option. For fast, reliable, and repeatable Demagnetization.
Note: All WD-Series Coils are available with the exclusive AC Option. AC is added to the End of the Model Number (I.e. WDV-16-AC)							7. The Removable Power Cord is for operators who may want extra mobility without the use of an Extension Cord.
Encapsulated in urethane rubber. Ergonomically designed for comfort and use.							8. Pulse DC Option aids in particle mobility, and ensures the ability to perform an Active Field Inspection.
All units supplied with 2.5m (8') 3-16 SOOW power cord.							9. See Web Document <i>Coil Options</i> for all available Options.
WD Options							
'K' - Added to any coil designation designates 230VAC 50Hz (Frequency may affect output) CSA, UL, & CE							
1 - Supplementary Feet also act as handles to aid handling, furthermore they provide a base to keep the coil from rolling.							
2 - Standard Foot Switch recommended for high throughput. Also available on WP-Series Models. Included on WA-Series Models, or Energize Button at no cost.							
Removable Foot Switch, permits operation with our without the connection of the Foot Switch							
Water Resistant Foot Switch, used in particularly Wet environments with high throughput							
3 - Pulsed DC, permits the operator to perform an Active Field Inspection with a Pulsing Field (80 pulses per minute).							
4 - ID Wear Bars - Upper, to protect the Top Inside Surface of the Coil (Coil dragged on surface of the work piece)							
ID Wear Bars Lower, to protect the Bottom Inside Surface of the Coil (Work piece being dragged on the lower surface)							
Side ID Wear Bars,							
5 - AC Option, is 4000 Amp Turns on WD-Series Coils 16"ID and under. Not available on WDV-18 and Larger Coils. While the AC Option permits AC testing, it also aids Demag procedures as well.							
6 - Automatic Ring-Down for High throughput Demagnetization on common parts.							
7 - Removable Power Cord, for Rough Operators							
8 - Control Housing Lifting Lugs, for hanging smaller ID Coils, or Lifting larger ID (Heavy) Coils							
9 - Pipe End Centralizer Assemblies, for Pipeline Preweld Demagnetizaion							