

# Western Instruments

26509 Township Road 543  
Sturgeon County, Alberta  
T8T 1M1 Canada

Phone: (780) 459-6720  
Fax: (780) 459-7837  
Email: info@westerninstruments.com

Web: www.westerninstruments.com

## Yoke Model List & Summary

February 2018

| Model                           | Description                           | Comments<br>see Brochures at www.westerninstruments.com  | Applications   | Poles<br>(In to Outside) | Minimum Pull  | Switch Type<br>Index finger activation<br>(Left or Right) |
|---------------------------------|---------------------------------------|--|--|--------------------------|---|---|
| <b>Standard Yokes</b>           |                                       |  | <b>Standard Yokes</b>  |                          |   |   |
| WE-3                            | Standard AC Yoke                      | Manufactured with an economical Standard Switch (Licon Type II), SJOW vinyl Power Cord, Heyco Strain Relief and Slip in Switch Cover. This unit compares to competitive yokes. Not recommended for Wet Method Inspection Media. 115/60 or 230/50 VAC Input / 6 or 12 VDC (intermittent)  | Not recommended for Wet Method Media due to switch and unsealed wiring.  | 0 -11"<br>(0-280mm)      | 10 Pounds<br>(4.5 Kg)   | Full current, not sealed                                  |
| WE-3HD                          | Heavy Duty Standard AC Yoke           | Based on the Compact Frame, uses standard Micro Switch and exclusive slip in Switch Cover. The WE-3HD uses the WC-Series End Cap and Strain Relief System making it the most durable and maneuverable Standard AC Yoke in the industry. AC supply or 6 or 12 VDC   | To avoid shocks when using Wet Method Media, regular 'Drying' of switch cavity is required. AC Voltages for Intermittent use with 6 or 12V DC.     | 0 -11"<br>(0-280mm)      | 10 Pounds<br>(4.5 Kg)   | Full current, not sealed.<br>Slip in Switch Cover         |
| WE-3LT                          | Ultra Light and Small AC Yoke         | Based on extensive R&D, this is the Worlds lightest AC Yoke, and designed for small hands. Due to the smaller contact area of the Pole Pieces, operators must be mindful of positioning for Testing, and during a Pull Test. AC Supply or 6 or 12 VDC (Intermittent)   | Uses a standard Yoke Switch. Best suited to Dry Method. AC Voltages for Intermittent use with 6 or 12V DC.   | 0-11"<br>(0-280mm)       | 10 Pounds<br>(4.5 Kg)   | Full current, not sealed.<br>Slip in Switch Cover         |
| <b>Safety and Premium Yokes</b> |                                       |  | <b>Safety and Premium Yokes</b>  |                          |   |   |
| WC-6                            | Compact AC Yoke                       | The WC-6 is the industry's <b>Safety</b> AC Yoke. The electrical load is taken by an Electronics Module protected by the Junction Tube and Strain Relief Assembly. Thus, the switch only conducts 1/2 Watt of load. Furthermore, the switch itself is grounded and sealed. The Switch Cover is also sealed, allowing the switch to last indefinitely with minimal risk of electrical shock. 115/60 or 230/50 VAC input             | Best suited for Wet Method Media but can also be used with Dry Method Media. Suitable for damp environments. AC Voltage Only. Confined work areas. | 0 -11"<br>(0-280mm)      | AC - 10 Pounds<br>(4.5 Kg)                                      | Signal only, 50 mA and sealed. Safety Switch®             |
| WC-6W                           | Compact Water Resistant AC Yoke       | Almost identical to the WC-6 but designed for wet environments (IP67), shallow submergence and Ultrasonic Cleaning to remove radioactive contaminants. The only underwater AC Yoke with a relatively standard Switch. 115/60 or 230/50 VAC input only.   | General use with Wet environments. AC Voltages Only. Confined work areas. Rated at maximum depth of 10' for 24 hours.                              | 0 -11"<br>(0-280mm)      | 10 Pounds<br>(4.5 Kg)   | Signal only, 50 mA and sealed. Safety Switch®             |
| WC-8                            | Compact, Battery Operated 12V DC Yoke | Available with 3 sizes of Battery Packs; 3, 7, & 12 Amp Hour (2 Hours of Continuous use/Amp Hour). 115 or 230 Volt battery chargers. Electronics Module (similar to WC-6) 'Chops' DC Waveform (at approximately 125Hz) to slightly aid Particle Mobility.  | General use with Wet or Dry Method Media. 12V DC Only. Highly portable and Low Voltage safety.   | 0 -11"<br>(0-280mm)      | 50 Pounds<br>(23 Kg)  | Signal only, 50 mA and sealed. Safety Switch®             |
| WE-7                            | Compact AC/DC Yoke (Variable DC)      | The smallest, lightest, and most maneuverable AC/DC Yoke in the industry. Well protected Toggle Switch allows Operator Selection of an AC or DC Field. Well protected DC Intensity Potentiometer allows Infinitely Variable output. Based on the Compact Frame using a standard Micro Switch and exclusive Slip in Switch Cover. Models for 115/60 or 230/50 VAC Input. Specifications limit pole spacing to 6" (152mm) in DC mode | General use with Wet or Dry Method Media. AC Voltages Only. DC provides sub surface (1mm) sensitivity. Excellent for confined work areas.          | 0 -11"<br>(0-280mm)      | <b>AC</b> - 10 Pounds (4.5 Kg)<br><b>DC</b> - 50 Pounds (23 Kg) | Full current, not sealed.<br>Slip in Switch Cover         |
| <b>Specialty Yokes</b>          |                                       |  | <b>Specialty Yokes</b>   |                          |   |   |
| W-6CS                           | AC Cavity Yoke                        | AC Cavity Yoke allows the operator to inspect inside tight cavities, such as Cylinders Bores, without having to spray his hand (or the switch) with wet method media. The W-6CS is also water resistant, to shallow submergence, expected in tight spaces or unusual geometries.   | Pump Housings, ID Threads (Box Ends), Cylinder Bores, Complex Structural Steel, Ship Hulls, Nozzles, etc.  | 0-15"<br>(0-380mm)       | 10 Pounds<br>(4.5 Kg)   | Full Current, Fluid Seal,<br>Sealed Switch Cover.         |
| WC-6UW                          | Compact Underwater Yoke               | Is based on the WC-6 Platform, however designed for underwater use. The WC-6UW power is supplied from a switchable <i>Top Side</i> power supply; 115 or 230 VAC, <i>Pulsed DC</i> or a 12 Volt battery. The WC-6UW is supplied with 250 feet (76m) of special Urethane Power Cable, or at a lower cost with a 6' Urethane Pig Tail for installing a suitable connector or for splicing onto.                                       | Typical Underwater Environments or extremely Wet Industrial Environments.  | 0 -11"<br>(0-280mm)      | <b>AC</b> - 10pds (4.5kg)<br><b>DC</b> - 50pds (23kg)           | N/A   |

|  |   |  |  |                  |                    |   |
|--|---|--|--|------------------|--------------------|---|
| <b>WC-6X2</b>  | Compact High Lift AC Yoke               | Similar to the WC-6, but with 'High Lift' for reliable 'Thru Coating' or Large Area Inspection. Like all WC-Series Yokes, when properly grounded, there is a low risk of electrical shock. Models for 115/60 or 230/50 VAC input.                              | General use with Wet or Dry Method Media. Thru Coatings or Large Area. AC Voltage Only   | 0 -11" (0-280mm) | 20 Pounds (9.1 Kg) | Signal only, 50 mA and sealed. Safety Switch® |
| <b>WC-9</b>  | Compact Cordless Yoke                   | Illustrating Western's innovative technology with the world's only Compact Cordless Yoke. Replaceable 13.2 Volt Nickel Metal Hydride Battery Pack. 2 hours continuous operation (for typical 8 hour shift). Chargers available in 115 or 230 VAC.              | Designed for Hazardous Environments where 'Hot Permits' are required. 13.2V Battery Pack with Replaceable Cells. Highly Portable and Low Voltage safety. | 0 -11" (0-280mm) | 50 Pounds (23 Kg)  | Signal only, 50 mA and sealed. Safety Switch® |
| <b>WC-9UW</b>  | Compact Cordless Underwater Yoke        | Rated to 61 meters (200'), with rear mounted Rotary on/off Switch for diver convenience. 13.2 Volt Sealed Nickel Metal Hydride Battery Pack. Chargers available in 115 and 230 Volt AC. Also suitable for Wet Environments and Aqueous Cleaning, like WC-6UW   | 13.2V Battery Pack with Integral Switch. Highly Portable. Rated to 61 meters (250').   | 0-11" (0-288mm)  | 50 Pounds (23 Kg)  | Sealed Rotary Switch on Battery Pack.         |
| <b>WC-24</b>   | South American AC Safety Yoke           | Is based on the WC-6, and supplied from a standard 24 Volt Power Supply (12 Amps minimum), with an input voltage of 230/50. The WC-Series switching Module is rated to 25 Amps, thus a special power supply with an external trigger signal, is not required.  | Complies with South American Safety Regulations for Hazardous Environments such as Confined Vessels  | 0-11" (0-2880mm) | 10 Pounds (4.5 Kg) | Signal only, 50 mA and sealed. Safety Switch® |
| <b>WC-42</b>   | European AC Safety Yoke                 | Is based on the WC-6, and supplied from a standard 42 Volt Power Supply (7.5 Amps minimum), with an input voltage of 230/50. The WC-Series switching Module is rated to 25 Amps, thus a special power supply with an external trigger signal, is not required. | Complies with European Safety Regulations for Hazardous Environments such as Confined Vessels  | 0-11" (0-2880mm) | 10 Pounds (4.5 Kg) | Signal only, 50 mA and sealed. Safety Switch® |
| <b>WC-48</b>   | European AC Safety Yoke                 | Is based on the WC-6, and supplied from a standard 48 Volt Power Supply (7.5 Amps minimum), with an input voltage of 230/50. The WC-Series switching Module is rated to 25 Amps, thus a special power supply with an external trigger signal, is not required. | Complies with European Safety Regulations for Hazardous Environments such as Confined Vessels  | 0-11" (0-2880mm) | 10 Pounds (4.5 Kg) | Signal only, 50 mA and sealed. Safety Switch® |
| <b>Permanent Magnet Yokes</b>  |   |  | <b>Permanent Magnet Yokes</b>  |                  |                    |   |
| <b>WM-5</b>  | Permanent Magnet Yoke                   | Certified 50 Pound (23Kg) Lift, will exceed 70 Pounds (32Kg) when new. Rotatable, Dual Contact Area Feet (Flat and 45° Angle). Field Replaceable Magnets. Specifications limit pole spacing to 6" (152mm).   | Hazardous locations or where no electrical power is available.   | 0 -14" (0-350mm) | 50 Pounds (23 Kg)  | N/A   |
| <b>WM-5LT</b>  | Light and Compact Permanent Magnet Yoke | Certified 50 Pound (23Kg) Lift, will exceed 60 Pounds (27.5kg) when new. Rotatable, Dual Contact Area Feet (Flat and 45° Angle). Field Replaceable Magnets. Specifications limit pole spacing to 6" (152mm).   | Hazardous locations or where no electrical power is available.   | 0-14" (0-350mm)  | 50 Pounds (23 Kg)  | N/A   |
| <b>WM-5C</b>   | Cable Type Permanent Magnet Yoke        | Certified 50 Pound (23Kg) Lift, will exceed 70 Pounds (32kg) when new. Long connection cable allows Contact Poles to be configured to complex workpieces. Specifications limit pole spacing to 6" (152mm).   | Hazardous locations or where no electrical power is available.   | 0 -23" (0-580mm) | 50 Pounds (23 Kg)  | N/A   |
| <b>Comments/Notes</b>  |   |  | <b>Comments/Notes</b>  |                  |                    |   |
| "C" Designation refers to Compact Safety Platform - special Solid State Switch - sized large enough for use with gloves. |   |  | UL & CE designation where required.  |                  |                    |   |
| "E" Designation refers to Economy - standard yoke switch - sized large enough for use with gloves.                       |   |  | UL & CE designation where required.  |                  |                    |   |
| "K" Added to any Model Number designates 220-240 VAC / 50Hz input power or battery charger voltage.                      |   |  | All Grips are Encapsulated in Urethane Rubber (except the WM-5/5LT).   |                  |                    |   |
| "LT" Given to products that are lighter weight than their Series counterparts. Sized large enough for use with gloves.   |   |  | Ergonomically designed, comfortable to hold and can be used in any position with one hand.   |                  |                    |   |
| "UW" Designates Underwater useage. See specifications for depths.  |   |  | All models have articulated legs, except for custom fixed leg models.  |                  |                    |   |
| "W" Designates Wet Environments (shallow submergence, aqueous ultrasonic cleaning).                                      |   |  | Urethane Rubber casting will not crack in cold weather.  |                  |                    |   |
| "HD" Designates Heavy Duty End Cap, Cord and Cord Protector.   |   |  | "WE" Series switch cover does not need tools to replace.   |                  |                    |   |