

Y6

AC Electromagnetic Yoke



The Y6 is a durable, lightweight AC magnetic yoke designed for reliable, one-person detection of surface and sub-surface indications.

Featuring sealed chemical-resistant construction, articulating legs to contour to any part shape and robust strain-relieved power cord for field use, the Y6 is ideal for inspection of welds and other remote testing.

FEATURES

- Sealed, durable construction
- Chemical and abrasion resistant
- Exceeds ASTM lifting specifications
- Individual serial number on each yoke
- Articulated, double-jointed legs
- Demagnetising capability

APPLICATIONS

Defect location: Surface and sub surface

Ideal for:

- Field testing
- Difficult to reach areas
- Spot inspections
- In-service inspections
- Weld inspection

Defect examples:

- Seams
- Tears
- Shrink cracks
- Grinding cracks
- Quenching cracks
- Fatigue cracks

SPECIFICATION COMPLIANCE

- ASME Boiler and Pressure Vessel Code Section V, Article 7
- ASTM E709
- ASTM E1444
- EN-ISO 9934-3
- MIL-STD-271

All our Y6 yokes carry the CE mark and conform to the appropriate European Union directives.

USER RECOMMENDATIONS

NDT Method	Magnetic Particle Testing
Accessories	Y6 Yoke Light Source and Leg Assembly (002L115) Magnetic Indicator Strips (008M004, 008M005) Certified Test Weights (026T018A, 026T018B) Polysray (004G004) Powder Dispenser (008D003)

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PRODUCT PROPERTIES

Weight	3.4 kg
Leg Span	25 - 250 mm
Cord Length	3.7 m
Duty Cycle	23%, max on time is 30 seconds
Method of current control and effect on waveform	Sinusoidal AC mains or DC battery
Duty cycle at maximum output (ratio of current 'ON' to 'Total' time)	23%
Maximum current 'ON' time	30 seconds
Recommended pole spacing (maximum and minimum pole spacing)	S_{min} 35 mm S_{max} 140 mm
Cross sectional dimensions of the poles	25 x 25 mm
Pole spacing (AC tangential field strength in kA/m at the central point between the poles on a 500 x 250 x 10 mm steel plate)	35 mm: 12 kA/m 140 mm: 2 kA/m 250 mm: 1.4 kA/m
Overall dimensions	220 x 155 x 50 mm
Specified electrical protection	IP 64
Minimum requirements of EN-ISO 9934-3(E):	
Duty cycle > 10%	Exceeds
Current ON time > 5 seconds	Exceed
Surface temperature of handle < 40 °C	Complies
Tangential field strength at S_{max} > 2 kA/m (rms)	Exceeds
Lifting force > 44 N	Complies

AC voltage	50 V	110 V	115 V	230 V
DC voltage	-	12 V	-	12 V
Frequency	50 Hz	50 Hz	60 Hz	50 Hz
Supply current in air - AC	15 A	3.5 A	3.5 A	2.3 A
Supply current in air - DC	-	8.5 A	8.5 A	2.5 A
Weight lifted at 140 mm pole spacing	AC: 10.5 kg	AC: 10.5 kg DC: 32 kg	AC: 10.5 kg	AC: 10.5 kg 32 kg
Part number	001Y022	001Y004	001Y013	001Y020