

Y-6 Slim

AC Electromagnetic Yoke

The Y-6 Slim is a portable electromagnetic yoke type magnetizing device that works on alternating current. It is lightweight and has a super ergonomic design, which improves inspection performance and productivity, reducing inspector arm and wrist fatigue, especially when in hard-to-reach places, confined areas or overhead inspections. The magnetic field generated by the Y-6 Slim in alternating current is ideal for the detection of surface or slightly subsurface discontinuities by magnetic particles in ferromagnetic materials.

With less than 2.9 kg, it can be considered one of the lightest and most ergonomic Yokes on the market, in addition the Y-6 Slim was designed to be more resistant to impact and eventual drops and has better shielding against water and some chemical compounds. Its extra-flexible power cable is 2.5 m long with a very resistant, waterproof cable gland with pressure relief device.

BENEFITS

- It's the lighter Yoke from the market, with 2.9 kg, and it has a differentiated ergonomics.
- Exceeds ASTM, ASME and PETROBRAS mass lifting specifications.
- Larger usable area, reduces the amount of inspections to be carried out in an area.
- Robust, ergonomic, safe and durable construction.
- Oil and abrasion resistant power cord.
- Impact resistant
- Body shielded against water and some chemical compounds - IP54.
- 12 months warranty against manufacturing defects.



APPLICATIONS

Location of surface and/or subsurface discontinuities in ferromagnetic materials by the magnetic particle method.

Ideal for:

- Field inspections
- Hard-to-reach areas
- Localized inspections
- Equipment inspections
- Weld inspection

Defect examples:

- Cracks
- Folds
- Contraction cracks
- Lack of fusion
- Bite
- Heat treatment cracks
- Fatigue and stress cracks

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CHARACTERISTICS

Waveform	AC
Electrical requirements	230V, 60Hz, 2,6 A
Span between legs (poles)	Between 50 and 140 mm
Legs dimension (poles)	25 x 25 mm
Cord length	2,5 m
Duty cycle	50%, max on time is 10 seconds
Lifting force	5,5 Kg
Tangential Field Strength	> 2.0 kA/m at midpoint between legs / poles
Yoke dimensions	190 x 50 x 250 mm
Weight (only Yoke)	2,9 Kg
Total weight (yoke + cord)	3,4 Kg
Yoke Ingress Protection	IP54
Contents	- Certificate - Instruction Manual - Carrying case

SPECIFICATION COMPLIANCE

- ASME BPVC
- ASTM E709
- ASTM E1444
- ASTM E3024
- N-1598 Rev. G
- PETROBRAS 1598

PRODUCT PROPERTIES

When the Yoke is activated with the shoes positioned on a ferrous surface, it generates a magnetic field that is induced in the longitudinal direction between the shoes, on the surface of the part. All surface or slightly subsurface discontinuities located perpendicular to the direction of applied magnetic flux will generate a magnetic flux leakage field that will attract magnetic particles. This accumulation of particles forms the

indications.

In order for the entire area of interest to be inspected, it is necessary to carry out what we call an overlapping scheme, in the form of a cross or an “x”, so that each small area is inspected twice, each in one direction, if necessary, looking for discontinuities perpendicular to the applied flow direction. That is why it is necessary to know the useful area of each Yoke, as stated in the calibration report, delivered with the product. The Y-6 Slim has an average usable area of 60 cm² when on its 220V rated electrical supply.

WARRANTY

This equipment is guaranteed for 12 months against manufacturing defects, counted from the date of issue of the Invoice to the consumer.

Magnaflux will arrange for the repair and maintenance of the equipment during the warranty period in accordance with the Magnaflux Warranty Term, after evaluation and report by the technical team and verification of material or manufacturing defect.

Magnaflux maintains spare parts, local technical support and ongoing technical assistance even after the warranty period has expired.

If you have any questions, please contact Magnaflux Brazil: +55 11 5197-7500 or by email at contato@magnaflux.com

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