

# USER REPLACEABLE • FITS ANY KESTREL<sup>®</sup> HAND-HELD WEATHER METER

- High precision axle and low-friction Zytel<sup>®</sup> bearings
- Light weight impeller
- 25mm diameter
- Factory calibrated
- Fits all Kestrel models
- Quick and easy to replace no tools required



25mm

30mm

14mm

## DESCRIPTION

The impeller assembly is sold as a replacement impeller for all models in the Kestrel hand-held instrument range. It can also be used in other flow measurement applications.

The light weight impeller is mounted on a precision axle with low-friction Zytel<sup>®</sup> bearings to provide accurate flow measurements even at low wind speeds. A magnet is mounted on the axle so the impeller's rotation can be easily sensed.

The impeller housing is designed so no adjustment of the bearings is required and during manufacture each assembly is individually tested in a wind tunnel. This ensures that when a new impeller assembly is installed in a Kestrel instrument the accuracy of the instrument is restored to within specification.

The assembly is supplied with a retaining o-ring.

# **SPECIFICATION**

#### **Physical** Impeller diameter:

Housing diameter: Housing depth: Weight: Bearings:

## Performance

Operational range: Specification range: Accuracy: Calibration drift: 5g approx Zytel<sup>®</sup> 0.6m/s to 60m/s

0.6m/s to 60m/s 0.6m/s to 40m/s ±3% <1% after 100hrs operation at 7m/s

### Certification:

Wind speed measurements are tested during manufacture

(US Patent 5,783,753)



# **REPLACING THE IMPELLER**

Using your thumbs press FIRMLY on the impeller module to remove the entire unit.

Press only **the sides of the new impeller** when installing to avoid damaging the precision hub bearing.

Insert the impeller so that the side that has a small triangle (close to the perimeter) faces the front of the Kestrel when installed. Orient one "arm" straight up (fig.1 & fig.2). The impeller can be pushed in from either side.

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