WingGuard®
Strap Clamp
270

Recommended for Occupant Safety Systems

Benefits
- Safe and easy assembly
- Reliable components
- Space efficient design
- Smooth band edges
- Superior assembly system
- Expansion resistant

WingGuard®: unique winged band-locking mechanism provides high holding force and fully encloses all sharp edges

Low profile design: space efficient

Burr-free strip edges: reduced risk of component damage, before and after assembly

Large diameter range: one clamp size suits a range of application diameters while providing ample clearance for easy assembly

Easy to assemble: single step electromechanical Oetiker FAST 3000 tool = fast, economic and reliable assembly

Process reliable assembly: direct measurement of the closing force
WingGuard® Strap Clamp 270

TECHNICAL DATA
OVERVIEW

Target applications
Occupant Safety Systems: Airbag module assemblies
Other applications upon verification by Oetiker

Material
270 Band: high strength steel – HX 380 LAD + ZA 255
          Housing: stainless steel – 1.4301 / UNS S30400

Corrosion resistance according to DIN EN ISO 9227
270 ≥ 96 hours

Size range         width x thickness | maximum closing force
20 – 50 mm         7.0 x 0.8 mm        1850 N

Sizes            diameter range | part number
Size 30          20 – 30 mm          27000023
Size 37          25 – 37 mm          27000024
Size 44          32 – 44 mm          27000025
Size 50          38 – 50 mm          27000026

WingGuard®
The innovative WingGuard® feature is highly space-efficient
and provides a very low profile design.

To close the clamp, the strap is tensioned to a pre-determined
closing force. Subsequently, two wings are cut and bent to
create a permanent interlock, maintaining the precise diameter.
The remaining band is then cut completely flush with the
housing edge and the residual band is removed for recycling.

The WingGuard® Strap Clamp has a very low spring back
effect and a high residual holding force.

The wings and cut strap are fully enclosed within the housing
envelope and therefore the clamp has no exposed hooks
or edges. This results in design and installation with no risk
of damage to surroundings, e.g. sensitive airbag fabric.

Working range
The WingGuard® interlock design allows for the clamp to be lo-
cked at any diameter within the clamp diameter working range.

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TECHNICAL DATA
OVERVIEW

Clamp selection
The WingGuard® Strap Clamp can be clamped to any diameter in the diameter range as defined in the available sizes.

Overall clamp height
Equals the closed inside diameter + 5.6 mm

5.6 mm
closed inside
diameter

Radial assembly
The clamp can be opened manually for radial assembly.

Shipping condition of clamp
The clamp is supplied in pre-formed condition as shown in the picture below.

ASSEMBLY

As supplied
Band goes through housing (pre-formed).

Closing
Band is tensioned to the pre-defined closing force. Wings are cut and bent up – clamp is locked.

Cutting
Remaining band is cut flush at housing. The residual band is ejected.

Assembly recommendations
This clamp is installed using the specially designed electromechanical Fastener Assembly Stationary Tool (FAST) offered by Oetiker.

The Oetiker FAST 3000 tool incorporates a sophisticated PLC control system to set, monitor and record critical process parameters for statistical process control purposes. The FAST 3000 is available as Ethernet/IP or Profinet version.