

Features:

- Machined from MTC1 composite
- Compressive strength of 50,000 psi
- Dimensionally stable in water-based fluids
- Low friction
- Easy to install



MATERIAL

The 847 Series Guide Band is made from TC1, a thermoset polyester resin reinforced with a synthetic fabric.

Material	Code
Polyester Resin Fabric (shown in photo)	MTC1

OPERATING PARAMETERS

Temperature	MTC1	
	°C	°F
hydraulic oil	-40...+120	-40...+248
water oil emulsions (HFA)	+5...+60	+41...+140
water-glycol fluids (HFC)	-40...+60	-40...+140
polyol esters (HFD)	-40...+100	-40...+140
water	+5...+60	+41...+140
max speed (FPM)	1 m/s (3.3 ft/sec)	
load	<50 n/mm (<7,250 psi)	

Note: For other materials or fluids please contact our engineering department.

DESCRIPTION

The 847 Series is a low-friction guide band made from MTC1, a high-compressive strength composite. This guide band is substantially stronger than nylon-based materials and offers considerably lower water absorption. This new composite provides more accurate piston and rod guidance inside the cylinder under widely varying load conditions. Reduced bushing deformation allows the seals and wipers to perform at maximum efficiency, while minimizing the risk of scoring and abrasion.

PRODUCT BENEFITS

- Easily manufactured to accommodate oversized conditions during rework
- Very accurate and precise guidance of the cylinder components
- Withstands very high side loads during operation
- Maximizes efficiency of the dynamic seals
- Wide temperature range

APPLICATIONS

The 847 Series Guide Band is the ideal solutions where high side loads and deflections are present.

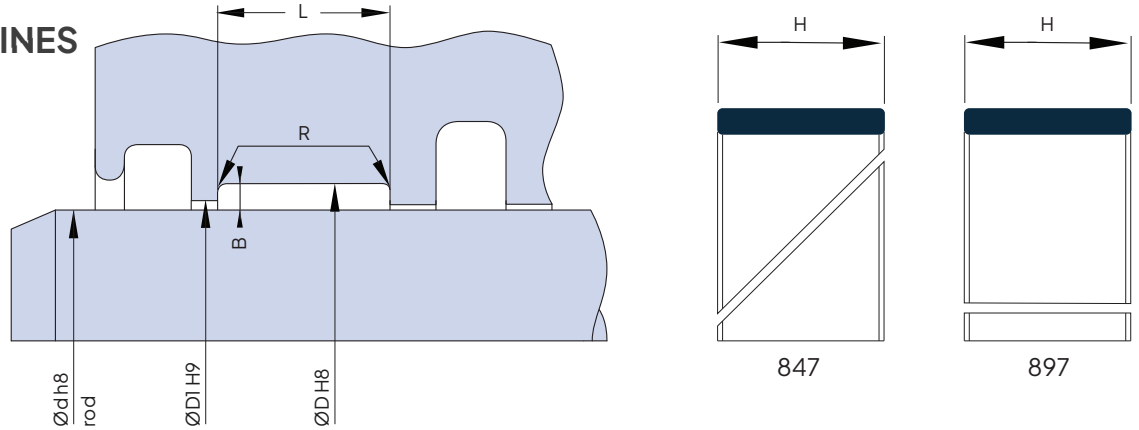
Typical applications include:

- Leg jack cylinders
- Base lift cylinders
- Tip jack cylinders
- Face ram cylinders
- Tailgate tensioning cylinders



Above: Installation Drawing

DESIGN GUIDELINES



METRIC SERIES

Rod Guide Bands (Metric)							
Groove Dimensions & Tolerances					Guide Band Dimensions		
	Nominal	L	Ød (rod)	ØD	ØD1*	section (cs)	height (H)
Series 1	1.5 x 5.6	5.60 +0.20	tol f8	d+3.0 H8	d+1.0 H9	1.42 ±0.03	5.30 ±0.10
Series 2	1.5 x 9.7	9.70 +0.20	tol f8	d+3.0 H8	d+1.0 H9	1.42 ±0.03	9.40 ±0.10
Series 3	1.5 x 15.0	15.00 +0.20	tol f8	d+3.0 H8	d+1.0 H9	1.42 ±0.03	14.70 ±0.10
Series 4	2.5 x 5.6	5.60 +0.20	tol f8	d+5.0 H8	d+1.6 H9	2.42 ±0.03	5.30 ±0.10
Series 5	2.5 x 9.7	9.70 +0.20	tol f8	d+5.0 H8	d+1.6 H9	2.42 ±0.03	9.40 ±0.10
Series 6	2.5 x 15.0	15.00 +0.20	tol f8	d+5.0 H8	d+1.6 H9	2.42 ±0.03	14.70 ±0.10
Series 7	2.5 x 20.0	20.00 +0.20	tol f8	d+5.0 H8	d+1.6 H9	2.42 ±0.03	19.65 ±0.15
Series 8	2.5 x 25.0	25.00 +0.20	tol f8	d+5.0 H8	d+1.6 H9	2.42 ±0.03	24.65 ±0.15
Series 9	4.0 x 25.0	25.00 +0.20	tol f8	d+8.0 H8	d+2.3 H9	3.92 ±0.03	24.65 ±0.15
Series 10	4.0 x 30.0	30.00 +0.20	tol f8	d+8.0 H8	d+2.3 H9	3.92 ±0.03	29.60 ±0.20

INCH SERIES

Rod Guide Bands (Inch)							
Groove Dimensions & Tolerances					Guide Band Dimensions		
	Nominal	L	Ød (rod)	ØD	ØD1*	section (cs)	height (H)
Series 1	1/16 x 1/4	0.260 +0.010	tol h8	d+0.127	d+0.040	0.061 ±0.001	0.250 ±0.004
Series 2	1/16 x 3/8	0.385 +0.010	tol h8	d+0.127	d+0.040	0.061 ±0.001	0.375 ±0.004
Series 3	1/8 x 1/4	0.260 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	0.250 ±0.004
Series 4	1/8 x 3/8	0.385 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	0.375 ±0.004
Series 5	1/8 x 1/2	0.510 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	0.500 ±0.004
Series 6	1/8 x 3/4	0.760 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	0.750 ±0.004
Series 7	1/8 x 1	1.010 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	1.000 ±0.004
Series 8	1/8 x 1-1/4	1.260 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	1.250 ±0.004
Series 9	1/8 x 1-1/2	1.510 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	1.500 ±0.004
Series 10	1/8 x 2	2.010 +0.010	tol h8	d+0.252	d+0.063	0.123 ±0.001	2.000 ±0.004