

Features:

Machined from MTC1 composite

Compressive strength of 50,000 psi

Dimensionally stable in water-based fluids

Low friction

Easy to install

Available in large diameter
up to 2100 millimeters



MATERIAL

The 845/890 Series Guide Band is made from MTC1, a thermoset polyester resin reinforced with a synthetic fabric.

Material	Code
Polyester Resin Fabric MTC1 (shown in photo)	MTC1
Polyester Resin Fabric (mill duty)	MTC20

OPERATING PARAMETERS

Temperature	MTC1 / MTC20	
	°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 845/890 Series is a low-friction guide band made from MTC1, a high-compressive strength composite. This guide band is substantially stronger than polyamide-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. The 845 is split at a 45° angle, and the 890 is cut at a 90° angle.

PRODUCT BENEFITS

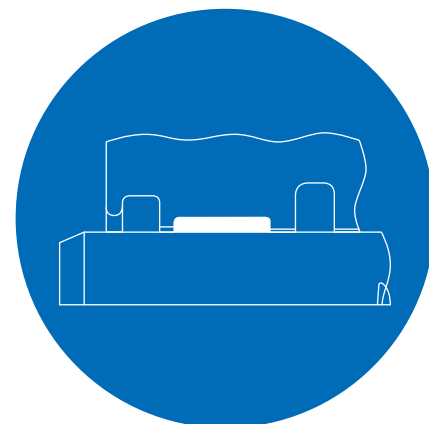
- Very accurate and precise guidance of the cylinder components
- Withstands very high side loads during operation
- Maximizes efficiency of the dynamic seals
- Wide temperature range

APPLICATIONS

The 845/890 Series Guide Band is the ideal solutions where high side loads and deflections are present.

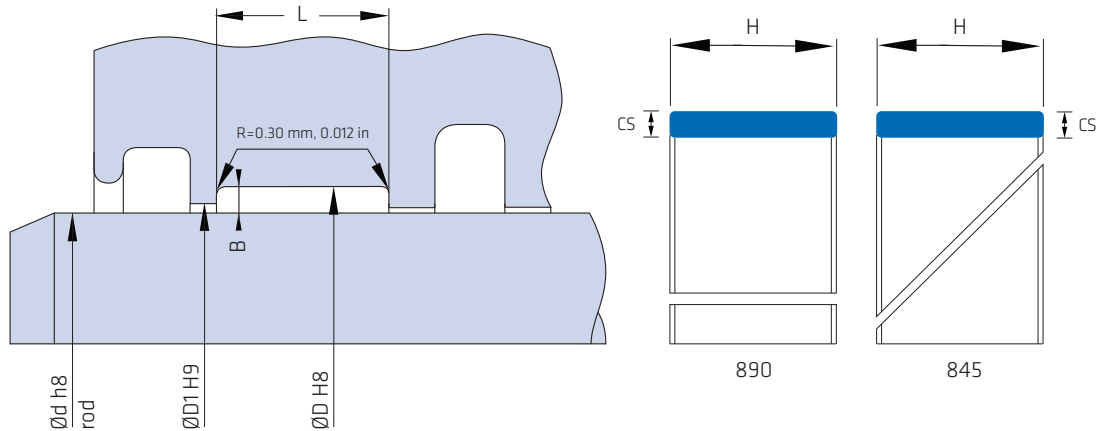
Typical applications include:

- Steel and Aluminum Processing
- Injection Molding Machines
- Mining
- Agricultural
- Construction
- Oil and Gas
- Mobile Hydraulics



Above: Installation Drawing

DESIGN GUIDELINES



METRIC SERIES

	Groove Dimensions & Tolerances					Guide Band Dimensions	
	Nominal	L	Ød (rod)	ØD	ØD1*	section (cs)	height (H)
Series 1	1.50 x 5.60	5.60 +0.20	tol f8	d+3.00 H8	d+1.00 H9	1.45 ±0.03	5.30 ±0.10
Series 2	1.50 x 9.70	9.70 +0.20	tol f8	d+3.00 H8	d+1.00 H9	1.45 ±0.03	9.40 ±0.10
Series 3	1.50 x 15.00	15.00 +0.20	tol f8	d+3.00 H8	d+1.00 H9	1.45 ±0.03	14.70 ±0.10
Series 4	2.50 x 5.60	5.60 +0.20	tol f8	d+5.00 H8	d+1.60 H9	2.45 ±0.03	5.30 ±0.10
Series 5	2.50 x 9.70	9.70 +0.20	tol f8	d+5.00 H8	d+1.60 H9	2.45 ±0.03	9.40 ±0.10
Series 6	2.50 x 15.00	15.00 +0.20	tol f8	d+5.00 H8	d+1.60 H9	2.45 ±0.03	14.70 ±0.10
Series 7	2.50 x 20.00	20.00 +0.20	tol f8	d+5.00 H8	d+1.60 H9	2.45 ±0.03	19.65 ±0.15
Series 8	2.50 x 25.00	25.00 +0.20	tol f8	d+5.00 H8	d+1.60 H9	2.45 ±0.03	24.65 ±0.15
Series 9	4.00 x 25.00	25.00 +0.20	tol f8	d+8.00 H8	d+2.30 H9	3.95 ±0.03	24.65 ±0.15
Series 10	4.00 x 30.00	30.00 +0.20	tol f8	d+8.00 H8	d+2.30 H9	3.95 ±0.03	29.60 ±0.20

INCH SERIES

	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	0.062 ±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	0.062 ±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	0.124 ±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	0.124 ±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	0.124 ±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	0.124 ±0.001	0.750 ±0.004
Series 7	1/8 x 1	1.010 +0.010	tol h8	d+0.252	d +0.063	0.124 ±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	0.124 ±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	0.124 ±0.001	1.500 ±0.004
Series 10	1/8 x 2	2.010 +0.010	tol h8	d+0.252	d +0.063	0.124 ±0.001	2.000 ±0.004

Note: if guide band is used adjacent to a primary seal, Ød & ØD1 are superseded by the primary seal extrusion gap diameter guidelines. For a complete list of available sizes please refer to the System Seals online product catalogue at www.systemseals.com.