

Features:

High-performance wiping ability

Low-friction PTFE-filled scraper ring

Excellent wear resistance

Available in large diameter up to 2100 mm



MATERIAL

The 315 Series wiper consists of a custom-blended PTFE-filled compound that provides ultra-low friction and high-speed performance with minimal wear. The standard compound is PTFE with Bronze filler. The temperature range of the wiper can be increased by selecting an FPM energizer in place of the standard NBR energizer.

Material	Code
PTFE-Bronze compound + NBR o-ring (shown in photo)	MT23
PTFE-Bronze compound + FPM o-ring	MT26

OPERATING PARAMETERS

Temperature	MT23		MT26	
	°C	°F	°C	°F
hydraulic oil	-30... +100	-22... +212	-10... +200	-15... +392
water oil emulsions (HFA)	-	-	-	-
water-glycol fluids (HFC)	-	-	-	-
polyol esters (HFD)	-	-	-	-
water	-	-	-10... +200	-15... +392
speed	5 m/s (16.5 ft/sec)			
pressure	-			

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

DESCRIPTION

The 315 Series Heavy-Duty, Double-Acting Wiper is one of the most popular heavy-duty wipers. It includes a reinforced PTFE filled scraper ring and one energizing O-ring. The design incorporates a wiping lip to prevent contamination from entering the cylinder and an inner sealing lip to remove any oil film from the rod as it cycles. The O-ring energizes the two wiper lips. In most applications, a pressure relief port between the wiper and the rod seal is recommended.

PRODUCT BENEFITS

- Protects the hydraulic cylinder internals
- Self-lubricating
- Works in short stroke applications
- Works in high-temperature environments

APPLICATIONS

The 315 Series Wiper prevents contamination ingress in harsh environments, while maintaining low friction.

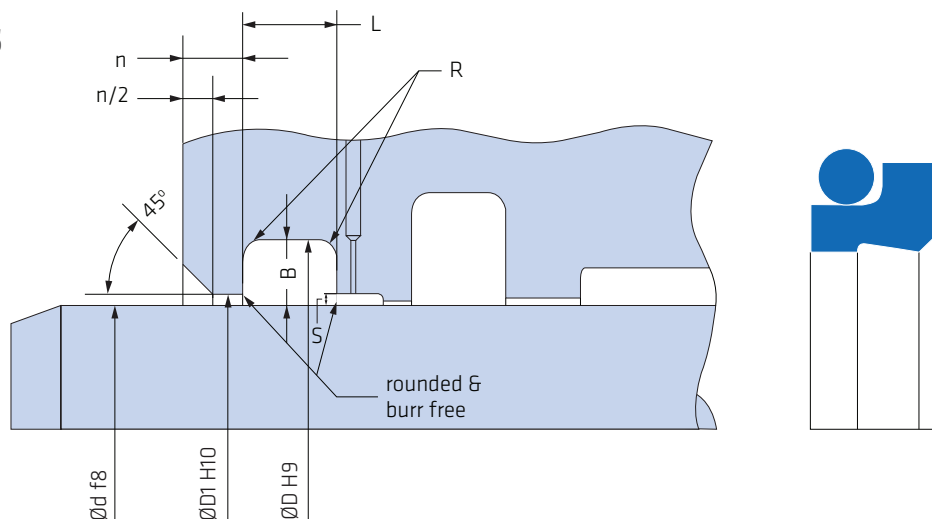
Typical applications include:

- Forging Presses
- Extrusion Presses
- Stamping Presses
- Steel and Aluminum Mills
- Injection Molding Machines
- Cold and Hot Strip Mills



Above: Installation Drawing

DESIGN GUIDELINES



METRIC SERIES

	Rod Diameter $\text{Ø}d$	B	$\text{Ø}D$	$\text{Ø}D1$	$L^{+0.20}$	R	n	S
Series 1	up to 45.00 mm	3.80	$d+7.60$	$d+1.00$	4.20	0.40	4.00	2.50
Series 2	up to 70.00 mm	4.40	$d+8.80$	$d+1.50$	6.30	1.20	4.00	2.50
Series 3	up to 140.00 mm	6.10	$d+12.20$	$d+2.00$	8.10	2.00	4.00	2.50
Series 4	up to 400.00 mm	8.00	$d+16.00$	$d+2.00$	11.50	2.00	4.00	2.50
Series 5	up to 650.00 mm	12.00	$d+24.00$	$d+2.50$	15.50	2.00	4.00	2.50
Series 6	up to 1,000.00 mm	13.65	$d+27.30$	$d+2.50$	18.00	2.00	5.00	2.50

INCH SERIES

	Rod Diameter $\text{Ø}d$	B	$\text{Ø}D$	$\text{Ø}D1$	$L^{+0.008}$	R	n	S
Series 1	up to 1.750 in	0.150	$d+0.300$	$d+0.040$	0.165	0.015	0.160	0.100
Series 2	up to 2.750 in	0.173	$d+0.346$	$d+0.060$	0.248	0.050	0.160	0.100
Series 3	up to 5.500 in	0.240	$d+0.480$	$d+0.080$	0.319	0.080	0.160	0.100
Series 4	up to 15.750 in	0.315	$d+0.630$	$d+0.080$	0.453	0.080	0.160	0.100
Series 5	up to 25.500 in	0.472	$d+0.944$	$d+0.100$	0.610	0.080	0.160	0.100
Series 6	up to 40.000 in	0.537	$d+1.074$	$d+0.100$	0.709	0.080	0.200	0.100

Note: for a complete list of available sizes please refer to the System Seals online product catalogue at www.systemseals.com.

SURFACE FINISH

Surface roughness	Ra	Rt	RMS
Sliding surface	$\leq 0.3 \mu\text{m}$	$\leq 3 \mu\text{m}$	8 RMS
Surface of groove I.D.	$\leq 1.8 \mu\text{m}$	$\leq 10 \mu\text{m}$	64 RMS
Sides of groove	$\leq 3 \mu\text{m}$	$\leq 16 \mu\text{m}$	125 RMS