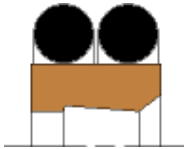


PT 1 MERKEL PT 1 Low Friction Wiper

Low friction wiper consisting of one profile ring with a sealing edge and a wiper edge, as well as two O-Rings as pre-load components. A wiper for improvement of overall tightness, PT 1 is fitted preferably in combination with our rod seals. We recommend a bore hold for relieving pressure. No pressure release is needed for these seals with a good pump-back action. Where there is a combination of seals without sufficient pump-back capability a pressure-relieving hole is required.

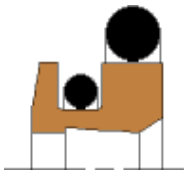


Max. Temp (F°): 212

Speed (ft/s): 16

PT 2 MERKEL PT 2 Low Friction Wiper

Low friction wiper consisting of one profile ring with a sealing edge and a wiper edge, as well as two O-Rings as sealing and pre-load components. A wiper for improvement of overall tightness. PT 2 is fitted mainly in combination with our rod seals OMS-S. A pressure relieving hold provided between seal and wiper.

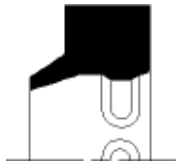


Max. Temp (F°): 212

Speed (ft/s): 15

P 6 MERKEL P 6 Wiper

Single-acting elastomeric rod wiper with support components. NBR rod wiper which finds its main use with large diameters.



Max. Temp (F°): 212

Speed (ft/s): 6

P 7 Wiper MERKEL P7 Wiper

Single-acting rod wiper made from Polyurethane with integrated metal retainer. PUR wiper for axial-accessible housings.



Max. Temp (F°): 212

Speed (ft/s): 6

PU 7 MERKEL PU 7 Press Fit Wiper

Polyurethane rod wiper with integrated metal retainer designed for axial-accessible housings.



Max. Temp (F°): 230

Speed (ft/s): 6

PU 10 MERKEL PU 10 Wiper

Single-acting rod wiper made from Polyurethane with integrated metal retainer.



Max. Temp (F°): 230

Speed (ft/s): 1.5

MERKEL PU 5 Wiper

PU 5



Rod wiper with additional static sealing lip and support components; sealing edge of wiping lip lightly chamfered. The PU 5 is a single-acting wiper, use even in standardized housings according to ISO 6195 Type A.

Max. Temp (F°): 230
Speed (ft/s): 6



PU 11



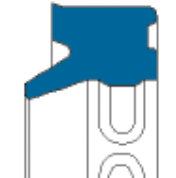
MERKEL PU 11 Double Acting Wiper

The PU 11 double acting wiper is designed for improvement of overall tightness and has dimensions even for standardized housings; according to ISO 6195 type C. The PU 11 is fitted preferably in combination with our rod seals OMS-MR. The double-lipped wiper can take pressures up to 1.6 MPa. The lightly rounded sealing edge wipes dirt away safely and leaves a residual oil film on the retracting rod. Tightness, working life and friction behavior of the entire system are affected positively.

Max. Temp (F°): 230
Speed (ft/s): 6



PU 6



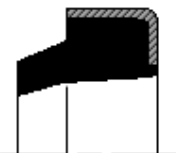
MERKEL PU 6 Wiper

Single-acting wiper with static sealing edge on the outer diameter. The rod wiper has support components on the heel of the wiper, and lightly chamfered wiper lip.

Max. Temp (F°): 230
Speed (ft/s): 6



AS



SIMRIT Rod Wiper with Metal Casing

This is a single-acting wiper with metal casing and wiper lip protruding. Designed for protection of cylinders against ingress of dirt for use mainly in standardised housings. For new designs we recommend the modern design series.

Max. Temp (F°): 212
Speed (ft/s): 6



ASOB



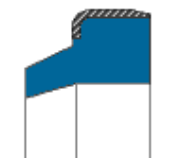
SIMRIT Rod Wiper with Protruding Wiper Lip

Single-acting wiper for protection of cylinders against ingress of dirt. For new designs we recommend modern design series

Max. Temp (F°): 212
Speed (ft/s): 6



AUAS



SIMRIT Rod Wiper with Metal Casing

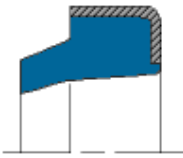
Rod wiper with metal casing, wiper lip protruding and sharp, cut sealing edge. Single-acting wiper for protection of cylinders against ingress of dirt, use in standardized housings, amongst others, according to ISO 6195 Type B.

Max. Temp (F°): 230
Speed (ft/s): 6



AUAS R

SIMRIT Rod Wiper with Metal Casing



AUAS R (radius) rod wiper with metal casing, wiper lip protruding and lightly chamfered sealing edge. Single-acting wiper for protection of cylinders against ingress of dirt, use in standardized housings, amongst others, according to ISO 6195 Type B.

Max. Temp (F°): 230

Speed (ft/s): 6



AUPS



SIMRIT Rod Wiper with Metal Casing

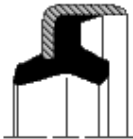
Single-acting wiper for protection of cylinders against ingress of dirt as well as a protective component and sealing component for pivoting mountings.

Max. Temp (F°): 230

Speed (ft/s): 6



DKB



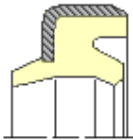
NOK Double Acting Press Fit Dirt Wiper

This seal prevents entry of dust to protect equipment, and maintains sealing performance of packings. This is a double-lip wiper that prevents oil from scraping off.

Max. Temp (F°): 212



DKBI



NOK Double Acting Press Fit Polyurethane Wiper

This seal prevents entry of dust to protect equipment, and maintains sealing performance of packings. The double-lip wiper prevents oil from scraping off.

Max. Temp (F°): 212



DKBY

NOK Seal Type DKBY

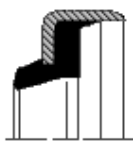
Pressure (PSI): 5

Max. Temp (F°):

Speed (ft/s):



DKH



NOK Press Fit Dirt Wiper

This single-lip seal prevents entry of dust to protect equipment, and maintains sealing performance of packings.

Max. Temp (F°): 212



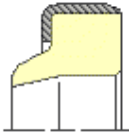
DKI

NOK Press Fit Polyurethane Dirt Wiper

This seal prevents entry of dust to protect equipment, and maintains sealing performance of packings. It's a standard type of wiper, with a high dust-proof performance.

Max. Temp (F°): 212



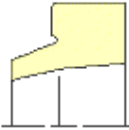


DSI

NOK Snap-In Polyurethane Dirt Wiper

This seal prevents entry of dust, and protects equipment by maintaining sealing performance of the packing. It can be fitted into an integrated groove. This is a single-lip all rubber wiper seal.

Max. Temp (F°): 212

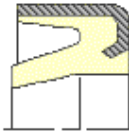


DWI

NOK Press Fit Polyurethane Dirt Wiper

This seal prevents entry of dust to protect equipment, and maintains sealing performance of packings. The wiper serves under severe dust conditions such as construction equipment.

Max. Temp (F°): 212

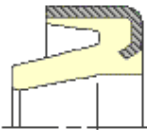


DWIR

NOK Press Fit Polyurethane Dirt Wiper

This seal prevents entry of dust to protect equipment, and maintains sealing performance of packings. The wiper is excellent in preventing oil scraping off, and in follow-ability to the eccentricity.

Max. Temp (F°): 212



LBH

NOK Snap-In Double Acting NBR Dirt Wiper

This seal prevents entry of dust, and protects equipment by maintaining sealing performance of the packing. It can be fitted into an integrated groove. It's a double-lip all rubber wiper seal that prevents oil scraping off.

Max. Temp (F°): 212

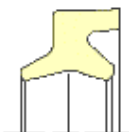


LBI

NOK Snap-In Double Acting Poly Dirt Wiper

This seal prevents entry of dust, and protects equipment by maintaining sealing performance of the packing. It can be fitted into an integrated groove. It's a double-lip all rubber wiper seal that prevents oil scraping off.

Max. Temp (F°): 212



SNAP IN

DISOGRIN Closed Housing Rod Wiper with Snap In Mounting
























SNAP IN series Rod Wiper for medium duty applications and simple snap in installation. DISOGRIN 9250 Material with outstanding wear and tear resistance, ensuring maximum service life.

Max. Temp (F°): 300

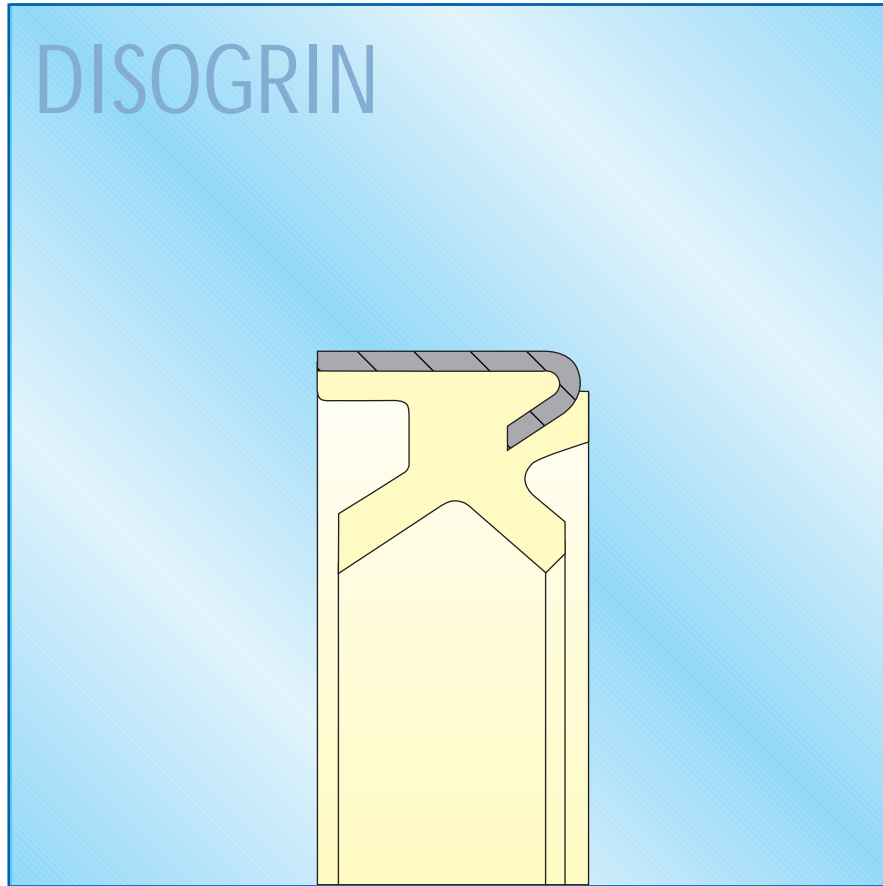
Speed (ft/s): 3



Images Description

Image		Image	Description
	Bull Dozer		Manipulators
	Fork Lift		Buffer Seal
	Tractor		Valves
	Stabiliser		Shears
	Hydraulic Presses		Hydraulic Jacks
	Mobile Arms		Forging
	General Cylinder		Heavy Duty Construction
	Injection Molding		Heavy Duty Applications
	Mobile Lifts		Rolling Mills
	Steel Mill		Rotary Seal
	Compression Molding		Cranes
	Marine Applications		CNC Machines

DISOGRIN DMRW Rod Wiper



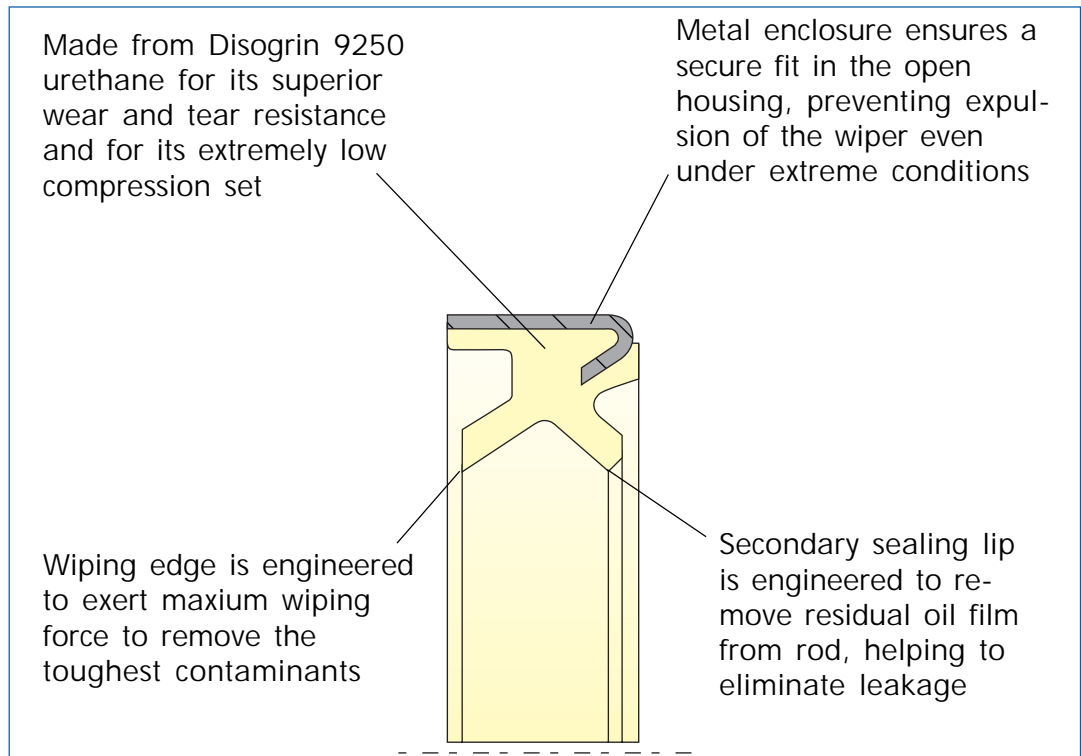
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DISOGRIN DMRW Rod Wiper

Features & Benefits



Features & Benefits

- ◆ The DMRW Wiper is a high performance wiper designed for use in the toughest applications.
- ◆ The wiping edge of the DMRW Wiper is engineered to remove the toughest dirt and grime from the rod, thereby keeping your system running clean and at its peak performance.
- ◆ Secondary sealing edge prevents residual oil film from escaping, helping the sealing system achieve zero leakage performance.
- ◆ The DMRW Wiper is made from DISOGRIN 9250, world renowned for its resistance to wear and tear and for its very low compression set. The result is superior performance and longer operating life than other urethane wipers.
- ◆ Press-fit design allows easy installation in an open housing.
- ◆ Metal enclosure ensures a secure fit in the open housing, preventing expulsion of the wiper even under harsh conditions. The metal enclosure is bonded to the DISOGRIN 9250 through our proprietary process to prevent separation.
- ◆ No adhesion effect on sliding surface, even after a long standstill.
- ◆ Superior performance over a wide range of temperatures and hydraulic fluids.

DISOGRIN DMRW Rod Wiper Specification Sheet



Materials

Wiping Element

Material	Polyurethane
Designation	DISOGRIN D92S
Hardness	92 Shore A

Metal Enclosure

Material	Low Carbon Steel
Coating	Rust Inhibitor

Application Limits

Pressure	Not Applicable
Speed	100 FPM (0.5 m/s)

Medium/Temperature	DISOGRIN D92S
Hydraulic Oil, HL, HLP	-40°F to +230°F* (-40°C to +110°C)
HFA, HFB Fluids	+41°F to +122°F (+5°C to +50°C)
HFC Fluid	-22°F to +104°F (-30°C to +40°C)
HFD Fluid	--
Water	+41°F to +104°F (+5°C to +40°C)
HETG (Rape Seed Oil)	-40°F to +230°F* (-40°C to +110°C)
HEES (Synth. Ester)	-22°F to +140°F (-30°C to +60°C)
HEPG (Glycol)	--
Mineral Oil	-40°F to +230°F* (-40°C to +110°C)

*Capable of operating from -65°F to +300°F in these fluids. Please consult our engineering group for details.

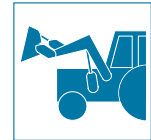
Examples of Applications



Earthmoving Equipment



Forklift



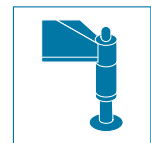
Agriculture Equipment



Cranes

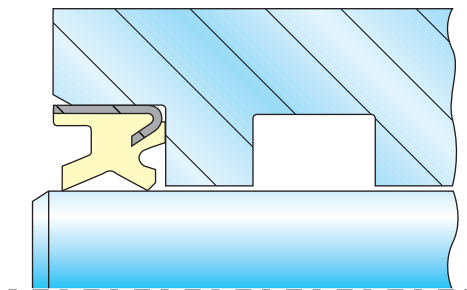


Std. Hydraulic Cylinders



Stabilizers

Installed Seal

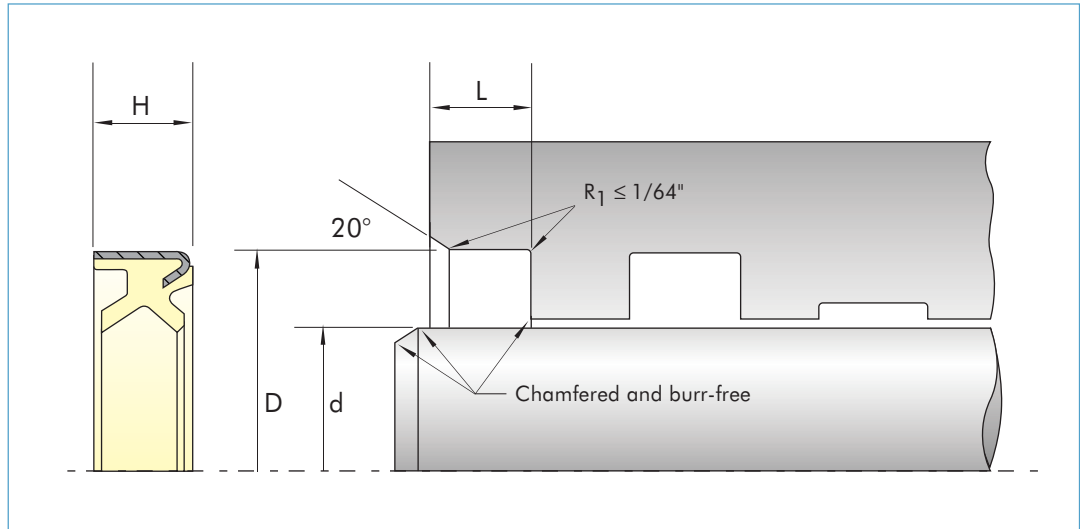


Important Notes

The technical information provided on this specification sheet is for general guidance only and values may vary with the specific parameters and other variables of an application. For a sealing recommendation specific to your application, please contact our Engineering Department.

DISOGRIN DMRW Rod Wiper

Design Details



Surface Finish

Recommended Surface Finish		
Surface	Rmax	Ra
Sliding Surface	≤ 100 μ inch	≤ 12 μ inch
Groove Bottom	≤ 252 μ inch	≤ 64 μ inch
Groove Sides	≤ 600 μ inch	≤ 120 μ inch

Lead-in Chamfer "C"

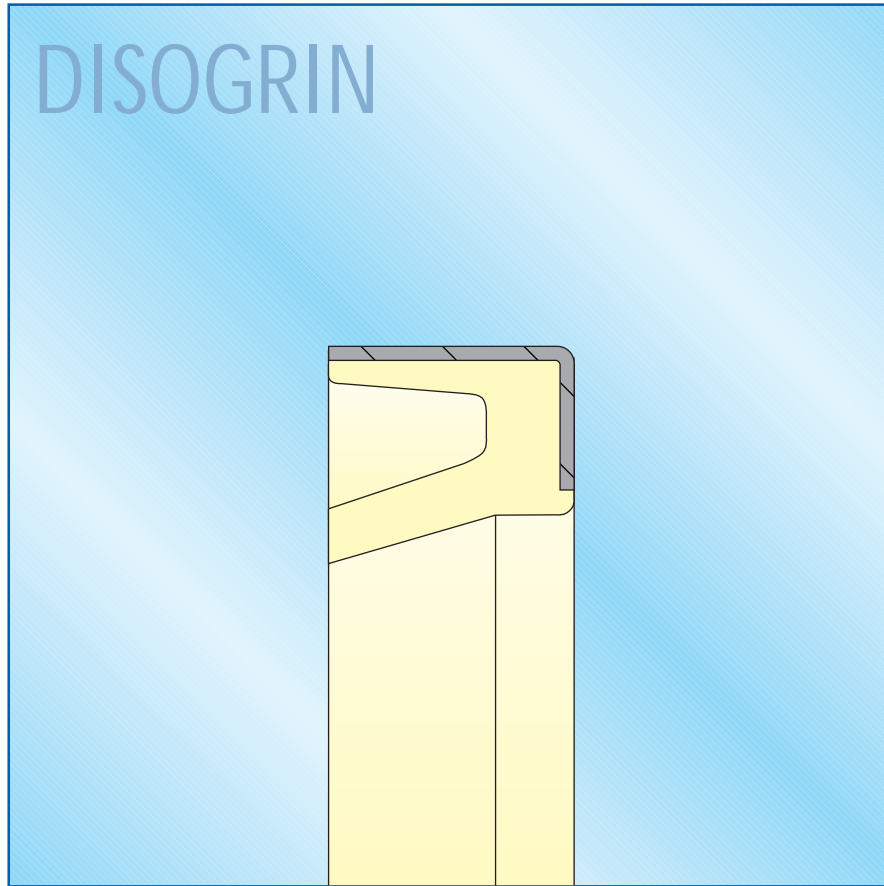
The lead-in chamfer "C" is determined by the rod seal chosen. Please use the values recommended per the rod seal.

Tolerances

Tolerances for each diameter based on diameter. Please see size listing for dimensions for each part. Please see "Design Tolerance" section for complete details on machine tolerances.

Dimension	Range	Tolerance
d	< 3"	+0.000 - 0.003
	≥ 3" and < 7"	+0.000 - 0.004
	≥ 7" and < 10"	+0.000 - 0.005
	≥ 10" and < 15"	+0.000 - 0.006
D	< 1.5"	+0.001 - 0.001
	≥ 1.5" and < 2"	+0.001 - 0.001
	≥ 2 and < 3.25"	+0.001 - 0.001
	≥ 3.25" and < 5"	+0.001 - 0.001
	≥ 5" and < 7"	+0.001 - 0.001
	≥ 7" and < 9"	+0.001 - 0.001
L	≤ 1"	+0.020 - 0.020

DISOGRIN MRW Rod Wiper



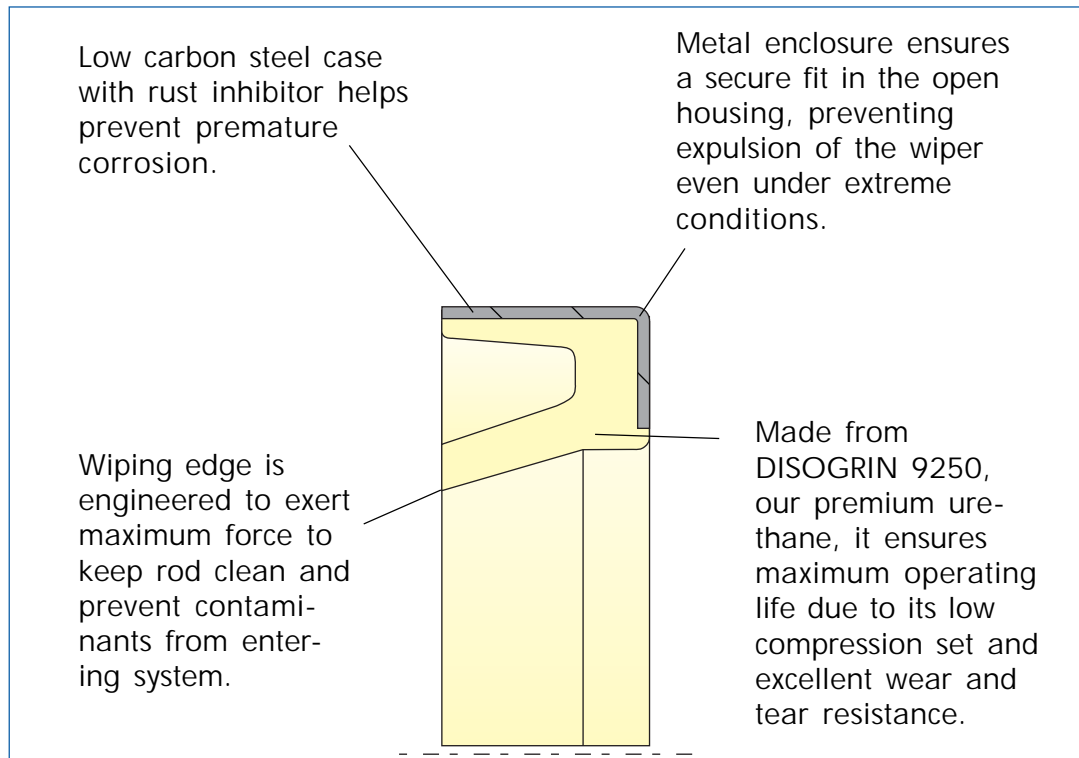
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Freudenberg-NOK



DISOGRIN MRW Rod Wiper

Features & Benefits



Features & Benefits

- ◆ The MRW is our premium wiper for use with open housings.
- ◆ Wiper edge is engineered to remove even the toughest dirt and contaminants from the rod, thereby keeping your system running clean and at its peak performance.
- ◆ Superior abrasion and wear resistance of DISOGRIN 9250 ensures longer operating life than other urethane wipers.
- ◆ No adhesion effect on sliding surface, even after long standstill.
- ◆ Metal enclosure is designed to securely fit the MRW in an open housing and prevent expulsion of the wiper under harsh working conditions.
- ◆ Low compression set of DISOGRIN 9250 means cycle after tough cycle, the MRW Dirt Wiper will continue to remove contaminants and dirt from the rod.
- ◆ Effective performance over a wide range of temperatures and fluids.
- ◆ Can be used effectively in sub-zero environments. Some sizes may be used as link pin seals.
- ◆ Available in standards inch sizes, up to 8" (150mm) in diameter

DISOGRIN MRW Rod Wiper

Specification Sheet



Materials

Wiping Element

Material	Polyurethane
Designation	DISOGRIN D92S
Hardness	92 Shore A

Metal Enclosure

Material	Low Carbon Steel
Coating	Rust Inhibitor

Application Limits

Pressure	Not Applicable
Speed	100 FPM (0.5 m/s)

Medium/Temperature	DISOGRIN D92S
Hydraulic Oil, HL, HLP	-40°F to +230°F* (-40°C to +110°C)
HFA, HFB Fluids	+41°F to +122°F (+5°C to +50°C)
HFC Fluid	-22°F to +104°F (-30°C to +40°C)
HFD Fluid	--
Water	+41°F to +104°F (+5°C to +40°C)
HETG (Rape Seed Oil)	-40°F to +230°F* (-40°C to +110°C)
HEES (Synth. Ester)	-22°F to +140°F (-30°C to +60°C)
HEPG (Glycol)	--
Mineral Oil	-40°F to +230°F* (-40°C to +110°C)

*Capable of operating from -65°F to +300°F in these fluids. Please consult our engineering group for details.

Examples of Applications



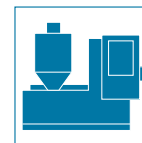
Earthmoving Equipment



Forklift



Agriculture Equipment



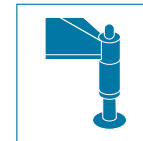
Injection Molding Machines



Std. Hydraulic Cylinders

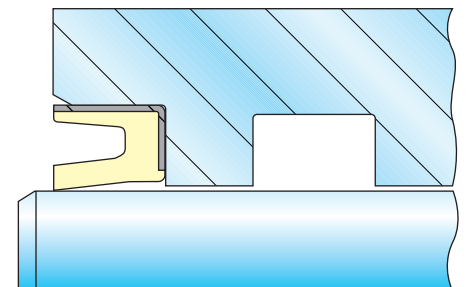


Cranes



Stabilizer

Installed Seal

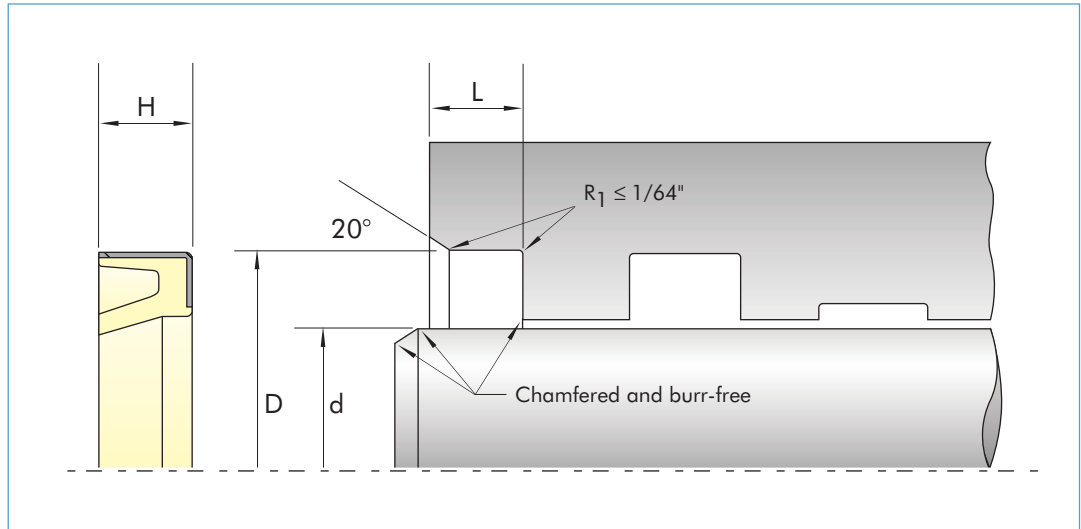


Important Notes

The technical information provided on this specification sheet is for general guidance only and values may vary with the specific parameters and other variables of an application. For a sealing recommendation specific to your application, please contact our Engineering Department.

DISOGRIN MRW Rod Wiper

Design Details



Surface Finish

Recommended Surface Finish		
Surface	Rmax	Ra
Sliding Surface	≤ 100 μ inch	≤ 12 μ inch
Groove Bottom	≤ 252 μ inch	≤ 64 μ inch
Groove Sides	≤ 600 μ inch	≤ 120 μ inch

Lead-in Chamfer "C"

The lead-in chamfer "C" is determined by the rod seal chosen. Please use the values recommended per the rod seal.

Tolerances

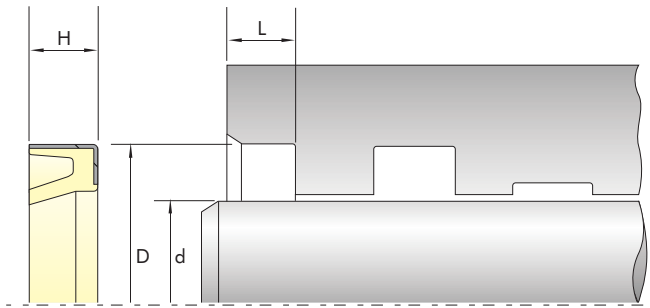
Tolerances for each diameter based on diameter. Please see size listing for dimensions for each part. Please see "Design Tolerance" section for complete details on machine tolerances.

Dimension	Range	Tolerance
d	< 3"	+0.000 - 0.003
	≥ 3" and < 7"	+0.000 - 0.004
	≥ 7" and < 10"	+0.000 - 0.005
	≥ 10" and < 15"	+0.000 - 0.006
D	< 1.5"	+0.001 - 0.001
	≥ 1.5" and < 2"	+0.001 - 0.001
	≥ 2 and < 3.25"	+0.001 - 0.001
	≥ 3.25" and < 5"	+0.001 - 0.001
	≥ 5" and < 7"	+0.001 - 0.001
	≥ 7" and < 9"	+0.001 - 0.001
L	≤ 1"	+0.015 - 0.000

DISOGRIN MRW Rod Wiper

Standard Range

Inch Sizes

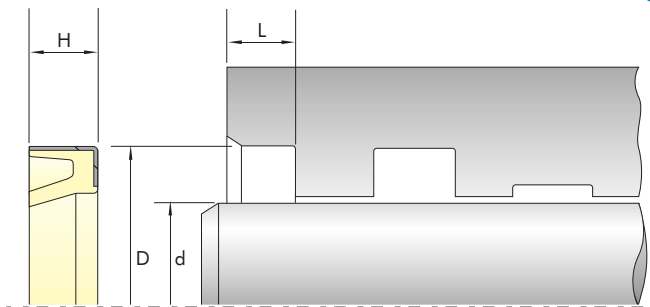


Nominal Dims. (inch)			d (inch)	D (inch)	L (inch)	Part No.
d	D	H				
3/8	11/16	5/32	0.375	0.687	0.156	110-001
1/2	1	1/4	0.500	1.000	0.250	110-002 *
5/8	1-1/8	5/16	0.625	1.125	0.313	110-003 *
3/4	1-1/4	1/4	0.750	1.250	0.250	110-004
3/4	1-1/4	5/16	0.750	1.250	0.313	110-005 *
7/8	1-1/8	5/32	0.875	1.125	0.156	110-006 *
7/8	1-3/8	5/16	0.875	1.375	0.313	110-007
1	1-1/2	5/16	1.000	1.500	0.313	110-008
1-1/8	1-5/8	5/16	1.125	1.625	0.313	110-009 *
1-1/4	1-3/4	1/4	1.250	1.750	0.250	110-010
1-1/4	1-3/4	5/16	1.250	1.750	0.313	110-011 *
1-3/8	1-7/8	5/16	1.375	1.875	0.313	110-012 *
1-1/2	1-7/8	1/4	1.500	1.875	0.250	110-013
1-1/2	2	1/4	1.500	2.000	0.250	110-014
1-1/2	2	5/16	1.500	2.000	0.313	110-015 *
1-1/2	2-1/4	3/8	1.500	2.250	0.375	110-016
1-5/8	2-1/8	1/4	1.625	2.125	0.250	110-017
1-5/8	2-1/8	5/16	1.625	2.125	0.313	110-018
1-3/4	2-1/4	1/4	1.750	2.250	0.250	110-019
1-3/4	2-1/4	5/16	1.750	2.250	0.313	110-020 *
1-3/4	2-7/16	3/8	1.750	2.437	0.375	110-021
1-7/8	2-3/8	5/16	1.875	2.375	0.313	110-022
2	2-1/2	1/4	2.000	2.500	0.250	110-023
2	2-1/2	5/16	2.000	2.500	0.313	110-024 *
2	2-5/8	1/4	2.000	2.625	0.250	110-025
2	2-11/16	3/8	2.000	2.687	0.375	110-026
2-1/8	2-5/8	5/16	2.125	2.625	0.313	110-027
2-3/16	2-11/16	3/8	2.187	2.687	0.375	110-028
2-1/4	2-3/4	1/4	2.250	2.750	0.250	110-029
2-1/4	2-3/4	5/16	2.250	2.750	0.313	110-030 *
2-1/4	2-7/8	1/4	2.250	2.875	0.250	110-031
2-1/4	3	3/8	2.250	3.000	0.375	110-032
2-1/4	3-1/8	1/4	2.250	3.125	0.250	110-033
2-5/16	3-1/8	3/8	2.312	3.125	0.375	110-034

* Metal encased rod wipers which have (*) following the part number can also be used as linkage pin grease seals.

DISOGRIN MRW Rod Wiper

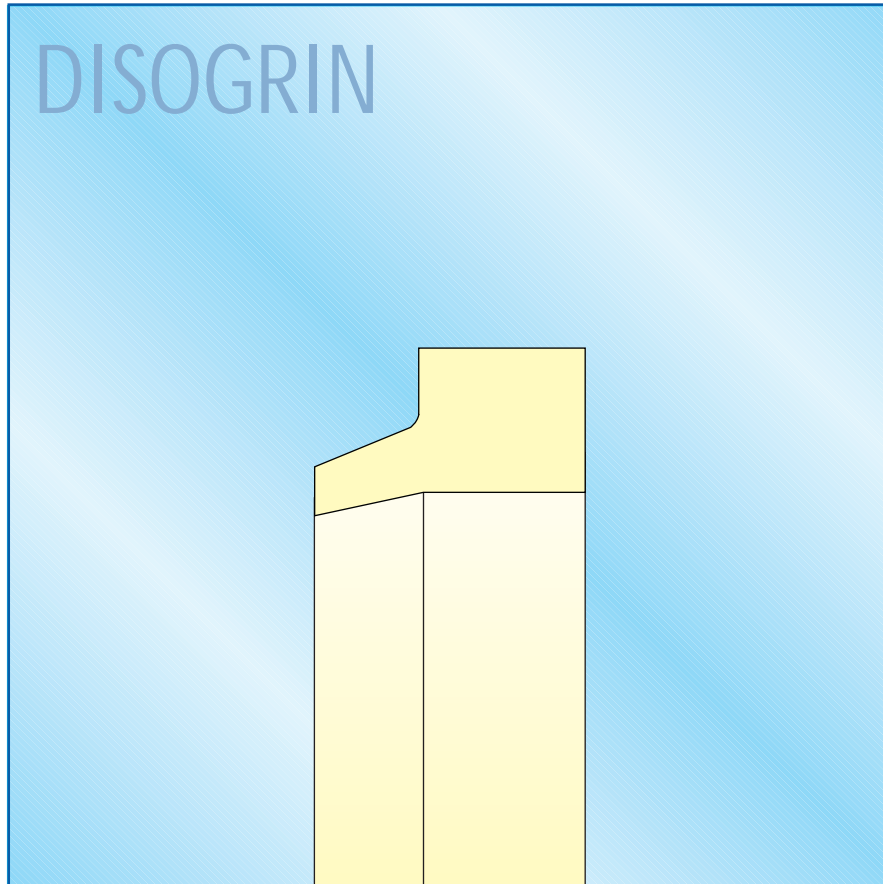
Standard Range
Inch Sizes



Nominal Dims. (inch)			d (inch)	D (inch)	L (inch)	Part No.
d	D	H				
2-3/8	2-7/8	5/16	2.375	2.875	0.313	110-035
2-3/8	3-1/8	3/8	2.375	3.125	0.375	110-036
2-1/2	3	5/16	2.500	3.000	0.313	110-037
2-1/2	3-1/4	1/4	2.500	3.250	0.250	110-038
2-1/2	3-1/4	3/8	2.500	3.250	0.375	110-039
2-5/8	3-1/8	1/4	2.625	3.125	0.250	110-040
2-5/8	3-1/8	5/16	2.625	3.125	0.313	110-041
2-3/4	3-1/4	5/16	2.750	3.250	0.313	110-042 *
2-3/4	3-1/2	1/4	2.750	3.500	0.250	110-043 *
2-3/4	3-1/2	1/2	2.750	3.500	0.500	110-044
2-3/4	3-3/4	1/2	2.750	3.750	0.500	110-045
2-7/8	3-3/8	5/16	2.875	3.375	0.313	110-046
3	3-1/2	5/16	3.000	3.500	0.313	110-047
3	3-3/4	1/4	3.000	3.750	0.250	110-048 *
3	4	1/2	3.000	4.000	0.500	110-049
3-1/8	3-3/4	5/16	3.125	3.750	0.313	110-050
3-1/4	3-3/4	3/8	3.250	3.750	0.375	110-051
3-1/4	3-7/8	5/16	3.250	3.875	0.313	110-052 *
3-1/4	4	1/4	3.250	4.000	0.250	110-053 *
3-1/4	4-1/4	1/2	3.250	4.250	0.500	110-054
3-3/8	4	5/16	3.375	4.000	0.313	110-055
3-1/2	4	5/16	3.500	4.000	0.313	110-056 *
3-1/2	4-1/8	1/4	3.500	4.125	0.250	110-057
3-1/2	4-1/8	5/16	3.500	4.125	0.313	110-058 *
3-1/2	4-1/4	1/4	3.500	4.250	0.250	110-059
3-1/2	4-1/2	1/2	3.500	4.500	0.500	110-060
3-5/8	4-1/4	5/16	3.625	4.250	0.313	110-061
3-3/4	4-1/2	5/16	3.750	4.500	0.313	110-062 *
3-3/4	4-3/8	5/16	3.750	4.375	0.313	110-063 *
3-3/4	4-3/4	1/2	3.750	4.750	0.500	110-064
3-7/8	4-1/2	5/16	3.875	4.500	0.313	110-065
4	4-5/8	5/16	4.000	4.625	0.313	110-066 *
4	4-3/4	5/16	4.000	4.750	0.313	110-067
4	5	1/2	4.000	5.000	0.500	110-068

* Metal encased rod wipers which have (*) following the part number can also be used as linkage pin grease seals.

DISOGRIN Snap-In Wiper

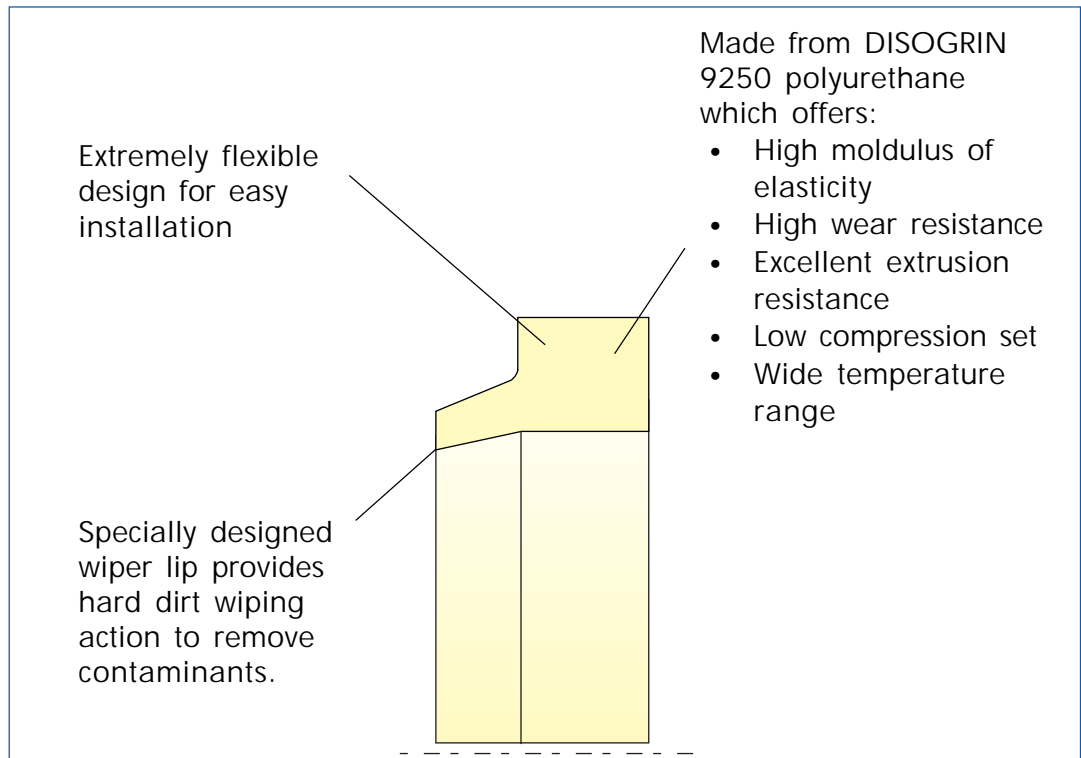


The Simrit Group
Freudenberg-NOK



DISOGRIN Snap-In Wiper

Features & Benefits



Features & Benefits

- ◆ Our Snap-In Dirt Wiper is a proven performer in preventing dirt and contaminants from entering your hydraulic system.
- ◆ Flexible, snap-in design for easy installation into closed housing.
- ◆ Superior abrasion and wear resistance of DISOGRIN 9250 urethane ensures longer operating life than other urethanes.
- ◆ Low compression set of DISOGRIN 9250 urethane provides effect wiping force, stroke after stroke.
- ◆ Effective wiping action over a wide range of temperatures and fluids.
- ◆ Specially designed wiper lip provides hard wiping action.
- ◆ Recommended for light to medium dirty applications.
- ◆ Available in standard inch sizes up to 10" (250mm) in diameter.

DISOGRIN Snap-In Wiper

Specification Sheet



Materials

Sealing Element

Material	Polyurethane
Designation	DISOGRIN D92S
Hardness	92 Shore A

The DISOGRIN Snap-in Wiper is typically an injection molded part. However, for limited quantities, prototypes or testing, it is also available through our SimQuick program. Please contact us for more information.

Application Limits

Pressure	Not Applicable
Speed	100 FPM (0.5 m/s)

Medium/Temperature	DISOGRIN D92S
Hydraulic Oil, HL, HLP	-40°F to +230°F* (-40°C to +110°C)
HFA, HFB Fluids	+41°F to +122°F (+5°C to +50°C)
HFC Fluid	-22°F to +104°F (-30°C to +40°C)
HFD Fluid	--
Water	+41°F to +104°F (+5°C to +40°C)
HETG (Rape Seed Oil)	-40°F to +230°F* (-40°C to +110°C)
HEES (Synth. Ester)	-22°F to +140°F (-30°C to +60°C)
HEPG (Glycol)	--
Mineral Oil	-40°F to +230°F* (-40°C to +110°C)

*Capable of operating from -65°F to +300°F in these fluids. Please consult our engineering group for details.

Examples of Applications



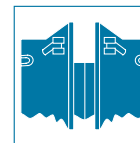
Tailgate Cylinders



Std. Hydraulic Cylinders



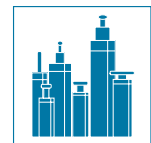
Agriculture Equipment



Civil Engineering



Machine Tools

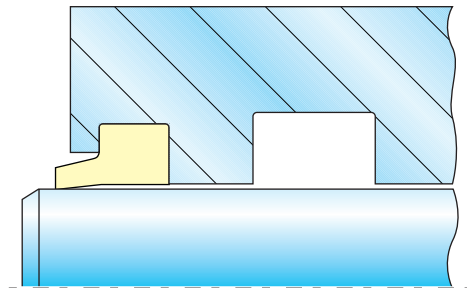


Hydraulic Jacks



Presses

Installed Seal

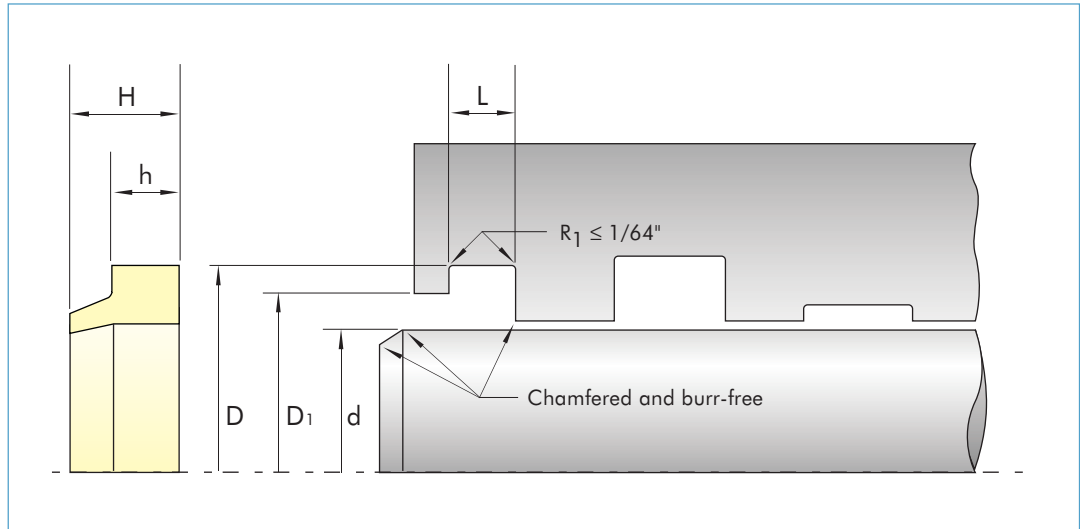


Important Notes

The technical information provided on this specification sheet is for general guidance only and values may vary with the specific parameters and other variables of an application. For a sealing recommendation specific to your application, please contact our Engineering Department.

DISOGRIN Snap-In Wiper

Design Details



Surface Finish

Recommended Surface Finish		
Surface	Rmax	Ra
Sliding Surface	$\leq 100 \mu$ inch	$\leq 12 \mu$ inch
Groove Bottom	$\leq 252 \mu$ inch	$\leq 64 \mu$ inch
Groove Sides	$\leq 600 \mu$ inch	$\leq 120 \mu$ inch

Lead-in Chamfer "C"

The lead-in chamfer "C" is determined by the rod seal chosen. Please use the values recommended per the rod seal.

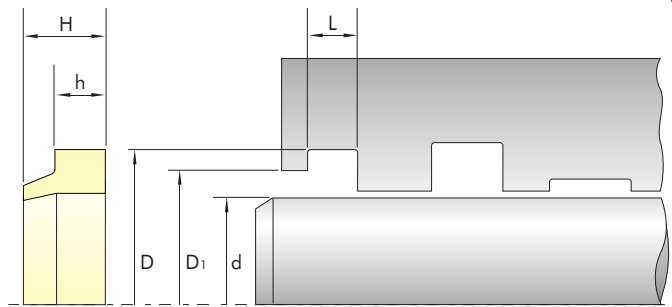
Tolerances

Tolerances for each diameter based on diameter. Please see size listing for dimensions for each part. Please see "Design Tolerance" section for complete details on machine tolerances.

Dimension	Range	Tolerance
d	< 3"	+0.000 - 0.003
	$\geq 3"$ and < 7"	+0.000 - 0.004
	$\geq 7"$ and < 10"	+0.000 - 0.005
	$\geq 10"$ and < 15"	+0.000 - 0.006
D	< 1.5"	+0.005 - 0.000
	$\geq 1.5"$ and < 2"	+0.007 - 0.000
	≥ 2 and < 3.25"	+0.008 - 0.000
	$\geq 3.25"$ and < 5"	+0.009 - 0.000
	$\geq 5"$ and < 7"	+0.010 - 0.000
	$\geq 7"$ and < 9"	+0.011 - 0.000
	$\geq 9"$ and < 15"	+0.012 - 0.000
L	$\leq 1"$	+0.015 - 0.000

DISOGRIN Snap-In Wiper

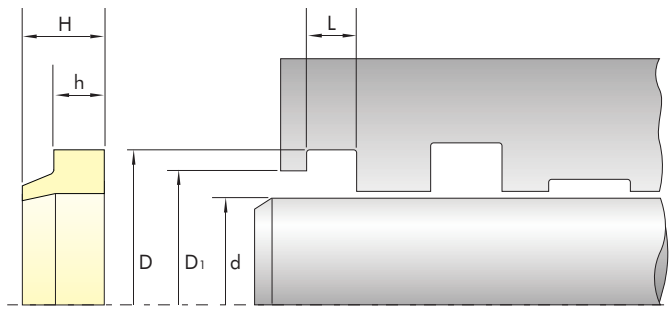
Standard Range
Inch Sizes



Nom. d	Dims. D	h	H	d (inch)	D (inch)	D1 (Inch)	L (Inch)	Part No.
1/8	3/8	1/8	3/16	0.125	0.375	0.279 ... 0.335	0.125	006-001
3/16	7/16	1/8	3/16	0.187	0.427	0.341 ... 0.397	0.125	006-002
1/4	1/2	1/8	3/16	0.250	0.500	0.404 ... 0.460	0.125	006-003
5/16	9/16	1/8	3/16	0.312	0.562	0.466 ... 0.522	0.125	006-004
3/8	5/8	1/8	3/16	0.375	0.625	0.529 ... 0.585	0.125	006-005
7/16	11/16	1/8	3/16	0.437	0.687	0.591 ... 0.647	0.125	006-006
1/2	3/4	1/8	3/16	0.500	0.750	0.654 ... 0.710	0.125	006-007
9/16	13/16	1/8	3/16	0.562	0.812	0.716 ... 0.772	0.125	006-008
5/8	7/8	1/8	3/16	0.625	0.875	0.779 ... 0.835	0.125	006-009
11/16	1-1/16	3/16	9/32	0.687	1.062	0.912 ... 1.000	0.187	006-010
3/4	1-1/8	3/16	9/32	0.750	1.125	0.975 ... 1.065	0.187	006-011
13/16	1-3/16	3/16	9/32	0.812	1.187	1.037 ... 1.127	0.187	006-012
7/8	1-1/4	3/16	9/32	0.875	1.250	1.100 ... 1.190	0.187	006-013
15/16	1-5/16	3/16	9/32	0.937	1.312	1.162 ... 1.252	0.187	006-014
1	1-3/8	3/16	9/32	1.000	1.375	1.225 ... 1.315	0.187	006-015
1-1/16	1-7/16	3/16	9/32	1.062	1.437	1.287 ... 1.377	0.187	006-016
1-1/8	1-1/2	3/16	9/32	1.125	1.500	1.350 ... 1.440	0.187	006-017
1-3/16	1-9/16	3/16	9/32	1.187	1.562	1.412 ... 1.500	0.187	006-018
1-1/4	1-5/8	3/16	9/32	1.250	1.625	1.475 ... 1.565	0.187	006-019
1-5/16	1-11/16	3/16	9/32	1.312	1.687	1.537 ... 1.627	0.187	006-020
1-3/8	1-3/4	3/16	9/32	1.375	1.750	1.600 ... 1.690	0.187	006-021
1-1/2	1-7/8	3/16	9/32	1.500	1.875	1.725 ... 1.815	0.187	006-022
1-5/8	2	3/16	9/32	1.625	2.000	1.850 ... 1.940	0.187	006-023
1-3/4	2-1/8	3/16	9/32	1.750	2.125	1.975 ... 2.065	0.187	006-024
1-7/8	2-1/4	3/16	9/32	1.875	2.250	2.100 ... 2.190	0.187	006-025
2	2-1/2	1/4	3/8	2.000	2.500	2.296 ... 2.420	0.250	006-026
2-1/8	2-5/8	1/4	3/8	2.125	2.625	2.421 ... 2.545	0.250	006-027
2-1/8	2-1/2	3/16	9/32	2.125	2.500	2.350 ... 2.440	0.187	006-072
2-1/4	2-3/4	1/4	3/8	2.250	2.750	2.546 ... 2.670	0.250	006-028
2-3/8	2-7/8	1/4	3/8	2.375	2.875	2.671 ... 2.795	0.250	006-029
2-1/2	3	1/4	3/8	2.500	3.000	2.796 ... 2.920	0.250	006-030
2-5/8	3-1/8	1/4	3/8	2.625	3.125	2.921 ... 3.045	0.250	006-031
2-3/4	3-1/4	1/4	3/8	2.750	3.250	3.046 ... 3.170	0.250	006-032
2-7/8	3-3/8	1/4	3/8	2.875	3.375	3.171 ... 3.295	0.250	006-033

DISOGRIN Snap-In Wiper

Standard Range
Inch Sizes



d	Nom. Dims. (inch) D	h	H	d (inch)	D (inch)	D1 (Inch)	L (Inch)	Part No.
3	3-1/2	1/4	3/8	3.000	3.500	3.296 ... 3.420	0.250	006-034
3-1/8	3-5/8	1/4	3/8	3.125	3.625	3.421 ... 3.545	0.250	006-035
3-1/4	3-3/4	1/4	3/8	3.250	3.750	3.546 ... 3.670	0.250	006-036
3-3/8	3-7/8	1/4	3/8	3.375	3.875	3.671 ... 3.795	0.250	006-037
3-1/2	4	1/4	3/8	3.500	4.000	3.796 ... 3.920	0.250	006-038
3-5/8	4-1/4	5/16	15/32	3.625	4.250	3.993 ... 4.150	0.312	006-039
3-3/4	4-3/8	5/16	15/32	3.750	4.375	4.118 ... 4.275	0.312	006-040
3-3/4	4-1/4	1/4	3/8	3.750	4.250	4.046 ... 4.170	0.250	006-041
3-7/8	4-1/2	5/16	15/32	3.875	4.500	4.243 ... 4.400	0.312	006-042
3-7/8	4-3/8	1/4	3/8	3.875	4.375	4.171 ... 4.295	0.250	006-073
4	4-5/8	5/16	15/32	4.000	4.625	4.368 ... 4.525	0.312	006-043
4	4-1/2	1/4	3/8	4.000	4.500	4.296 ... 4.420	0.250	006-044
4-1/8	4-3/4	5/16	15/32	4.125	4.750	4.493 ... 4.650	0.312	006-045
4-1/4	4-7/8	5/16	15/32	4.250	4.875	4.618 ... 4.775	0.312	006-046
4-1/4	4-3/4	1/4	3/8	4.250	4.750	4.546 ... 4.670	0.250	006-047
4-3/8	5	5/16	15/32	4.375	5.000	4.743 ... 4.900	0.312	006-048
4-3/8	4-7/8	1/4	3/8	4.375	4.875	4.671 ... 4.795	0.250	006-049
4-1/2	5-1/4	3/8	9/16	4.500	5.250	4.940 ... 5.130	0.375	006-050
4-5/8	5-3/8	3/8	9/16	4.625	5.375	5.065 ... 5.255	0.375	006-051
4-3/4	5-1/2	3/8	9/16	4.750	5.500	5.190 ... 5.380	0.375	006-052
4-7/8	5-5/8	3/8	9/16	4.875	5.625	5.315 ... 5.405	0.375	006-053
5	5-3/4	3/8	9/16	5.000	5.750	5.440 ... 5.630	0.375	006-054
5-1/4	6	3/8	9/16	5.250	6.000	5.690 ... 5.880	0.375	006-055
5-3/8	6-1/8	3/8	9/16	5.375	6.125	5.815 ... 6.055	0.375	006-056
5-1/2	6-1/4	3/8	9/16	5.500	6.250	5.940 ... 6.130	0.375	006-057
5-5/8	6-3/8	3/8	9/16	5.625	6.375	6.065 ... 6.255	0.375	006-058
5-3/4	6-1/2	3/8	9/16	5.750	6.500	6.190 ... 6.380	0.375	006-059
5-7/8	6-5/8	3/8	9/16	5.875	6.625	6.315 ... 6.505	0.375	006-060
6	6-3/4	3/8	9/16	6.000	6.750	6.440 ... 6.630	0.375	006-061
6-1/4	7	3/8	9/16	6.250	7.000	6.690 ... 6.880	0.375	006-062
6-1/2	7-1/4	3/8	9/16	6.500	7.250	6.940 ... 7.130	0.375	006-063
6-3/4	7-1/2	3/8	9/16	6.750	7.500	7.190 ... 7.380	0.375	006-064
7	8	1/2	3/4	7.000	8.000	7.600 ... 7.800	0.500	006-065
7-1/2	8-1/2	1/2	3/4	7.500	8.500	8.100 ... 8.300	0.500	006-066

