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NYLACRON™ WHEELS
(NY/MD, NY/HSB, NY/MC, NY/GF)



SOLID ELASTOMER
(SE)

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www.acornindprod.com



EXTREME SOLID ELASTOMER
(EX/SE)



NYLON GLASS-FILLED
(NN/GF)



NYLON GLASS-FILLED / NOISE REDUCTION
(NN/GF/NR)



HIGH-TEMP NYLON FIBERGLASS / HEATEATER
(HE)



KRYPTONIC
(KR)



PHENOLIC / TEXITE
(TM) (TH) (TL) (TS) (TR)



POLYPROPYLENE
(PB)

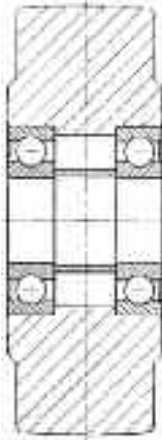


RETORT
(RT)

For Nylon (PEVOLON®) Wheels,
refer to the RAEDER-VOGEL®
Index in this section
(Section 11: Wheels)

NYLACRON™ WHEELS NY/MD AND NY/HSB

Capacity Up to 26,400 lbs.



Nylacron™ Wheel Cross Section
with pre-loaded sealed precision ball
bearings and center piece

**END CAPS PROVIDED WITH EACH
WHEEL TO FIT IN RIG WIDTH AND SIZE
OF THE AXLE**

Heavy Duty Nylacron™ Wheels are made of tough hard, highly compressed cast polyamide, MD (MoS₂) filled or heat stabilized (high temp blue) to replace Steel, Phenolic, Solid Elastomer and Urethane Wheels where very high load capacities, floor protection, low rolling resistance, impact proof, corrosive resistance and floor conditions allow. The casting process increases the load capacity compared to injection-molded nylon and has better properties in regard to tension and pressure, modulus of elasticity, thermoform stability, coefficient of friction, flow properties and absorption of humidity.

Features

- **Ergonomic:** extraordinarily easy to push - no more back aches - less power to tow.
- **wheels:** wheel dampens shock and vibration thus reducing noise.
- **High Impact Strength:** resists fracture from repeated shock loads.
- **Higher Loads:** mechanical strength supports greater weight and allows better utilization in caster rigs.
- **Higher Resilience:** wheel returns to original shape without deforming when deflected by loads or rapidly applied stresses.
- **High Caster Ratings:** higher wheel ratings allow better utilization of caster rig ratings.
- **Floor Protective:** material does not damage floors and is lighter in weight than steel.
- **Longer Life:** shows minimal wear in extended use-resists abrasion, water and many hazardous chemicals. Ideal for stainless steel rigs applications.
- **Lower Maintenance:** sealed precision bearings and minimal wheels wear greatly reduces in-plant maintenance requirements. Only one type wheel needed.
- **Hardness:** 112-120 Rockwell R
- **Temperature range:** - 30 to + 220 ° F Continuous - 30 to + 4000 ° F Continuous NY/HT (3" to 8")
- **Chemical Resistance:** See chart for wide range of chemical resistance.

Applications

- | | |
|-------------------|----------------------|
| • Aerospace | • Fisheries |
| • AGV | • Food |
| • Amusement Rides | • Meat Processing |
| • Automotive | • Monorail Conveyors |
| • Bakeries | • Pharmaceutical |
| • Chemical Plants | • Retrieval Systems |
| • Conveyor | • Storage Racks |
| • Crane | • Towlines |
| • Dairy | • Turning Platforms |

All information is based on Acorn's over 10 years experience working with the producers of the cast polyamides to successfully provide Nylacron™ wheels for the industries where the properties of this material offers many benefits.

Nylacron Wheels can be made in any size to fit any caster rig or wheel application and replace any type wheel

NYLACRON™ WHEELS ARE ALSO AVAILABLE IN FLANGED / V-Groove AND CUSTOM SIZES TO 51" DIAMETER TO MEET JOB REQUIREMENTS.

| Dia. (in.) | Width (in.) | Capacity (lbs.) | Hub Length (in.) | Axle Bore (in.) | Wheel Part Number* |
|-------------------|--------------------|------------------------|-------------------------|------------------------|---------------------------|
| 3 | 1-1/4 | 440 | 1-1/2 | 3/8 | NY/MD-P-0312-06 |
| 4 | 1-1/4 | 550 | 1-1/2 | 3/8 | NY/MD-P-0412-06 |
| 5 | 1-1/4 | 660 | 1-1/2 | 3/8 | NY/MD-P-0512-06 |
| 6 | 1-1/4 | 770 | 1-1/2 | 3/8 | NY/MD-P-0612-06 |
| 3 | 2 | 1000 | 2-3/16 | 1/2 | NY/MD-P-0320-08 |
| 4 | 2 | 2000 | 2-3/16 | 1/2 | NY/MD-P-0420-08 |
| 5 | 2 | 2000 | 2-3/16 | 1/2 | NY/MD-P-0520-08 |
| 6 | 2 | 2000 | 2-3/16 | 1/2 | NY/MD-P-0620-08 |
| 8 | 2 | 2400 | 2-3/16 | 1/2 | NY/MD-P-0820-08 |
| 6 | 2-1/2 | 5000 | 2-3/4 | 1/2 | NY/MD-P-0625-08 |
| 6 | 2-1/2 | 7200 | 3-1/4 | 3/4 | NY/MD-P-0625-12 |
| 6 | 3 | 10,000 | 3-1/2 | 3/4 | NY/MD-P-0630-12 |
| 8 | 2-1/2 | 7000 | 3 | 1/2 | NY/MD-P-0825-08 |
| 8 | 2-1/2 | 7200 | 3-1/4 | 3/4 | NY/MD-P-0825-12 |
| 8 | 3 | 10,000 | 3-1/2 | 3/4 | NY/MD-P-0830-12 |
| 8 | 3 | 10,000 | 3-1/2 | 1 | NY/MD-P-0830-16 |
| 8 | 4 | 10,000 | 4-1/2 | 1-1/4 | NY/MD-P-0840-20 |
| 10 | 2-1/2 | 7200 | 2-3/4 | 1/2 | NY/MD-P-1025-08 |
| 10 | 2-1/2 | 7200 | 3 | 3/4 | NY/MD-P-1025-08 |
| 10 | 3 | 10,000 | 3-1/2 | 3/4 | NY/MD-P-1030-12 |
| 10 | 4 | 12,000 | 4-1/2 | 1 | NY/MD-P-1040-16 |
| 10 | 4 | 12,000 | 4-1/2 | 1-1/4 | NY/MD-P-1040-20 |
| 12 | 2-1/2 | 8000 | 3 | 3/4 | NY/MD-P-1225-12 |
| 12 | 3 | 11,000 | 3-1/2 | 3/4 | NY/MD-P-1230-12 |
| 12 | 4 | 14,000 | 4-1/2 | 1 | NY/MD-P-1240-16 |
| 12 | 4 | 14,000 | 4-1/2 | 1-1/4 | NY/MD-P-1240-20 |
| 12 | 5 | 18,000 | 3 | 1-1/4 | NY/MD-P-1250-20 |

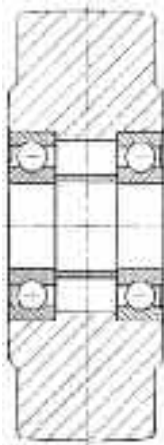
*Change NY/MD in the Wheel Part Number to NY/HSB for High Temp

Capacities can be increased by increasing the size of the precision bearings or by providing double row precision bearings.

End Caps provided with each wheel to fit in rig width and size of the Axle

NYLACRON™ MC (NY/MC)

Capacity Up to 26,400 lbs.



Nylacron™ Wheel Cross Section
with pre-loaded sealed precision ball bearings and center piece

END CAPS PROVIDED WITH EACH WHEEL TO FIT IN RIG WIDTH AND SIZE OF THE AXLE

Nylacron™ Monocast (NY/MC) Natural Wheels are an unfilled cast type 6 nylon developed on proven in the field for FDA application requirements. Wheels are straight sided and precision machined on CNC equipment to exacting tolerances and comply with section 177.1500 of food additive regulations. Stainless steel precision ball bearings are available for every wheel. Other than the type material, loadings and other characteristics are similar to Nylacron™.

Features

- **Ergonomic:** extraordinarily easy to push. No more back aches - less power to tow.
- **Quiet:** wheel dampens shock and vibration thus reducing noise.
- **High Impact Strength:** resists fracture from repeated shock loads.
- **Higher Loads:** mechanical strength supports greater weight and allows better utilization in caster rigs.
- **Higher Resilience:** wheel returns to original shape without deforming when deflected by loads or rapidly applied stresses.
- **High Caster Ratings:** higher wheel ratings allow better utilization of caster rig ratings.
- **Floor Protective:** material does not damage floors and is lighter in weight than steel.
- **Longer Life:** shows minimal wear in extended use. Resists abrasion, water and many hazardous chemicals. Ideal for stainless steel rigs applications.
- **Lower Maintenance:** sealed precision bearings and minimal wheels wear greatly reduces in-plant maintenance requirements. Only one type wheel needed.
- **Hardness:** 112-120 Rockwell R
- **Temperature range:** - 30 to + 220 ° F Continuous
- **Chemical Resistance:** See chart for wide range of chemical resistance.

Applications

- Aerospace
- AGV
- Amusement Rides
- Automotive
- Bakeries
- Chemical Plants
- Conveyor
- Crane
- Dairy
- Fisheries
- Food
- Meat Processing
- Monorail Conveyors
- Pharmaceutical
- Retrieval Systems
- Storage Racks
- Towlines
- Turning Platforms

All information is based on Acorn's over 10 years experience working with the producers of the cast Polyamides to successfully provide Nylacron™ wheels for the industries where the properties of this material offers many benefits.

Natural Wheels are also available in Flanged / V-Groove and custom sizes to 51 in. diameter to meet job requirements.

| Dia. (in.) | Width (in.) | Capacity (lbs.) | Hub Length (in.) | Axle Bore (in.) | Wt. (lbs.) | Wheel Part Number |
|------------|-------------|-----------------|------------------|-----------------|------------|-------------------|
| 3 | 1-1/4 | 440 | 1-1/2 | 3/8 | 1 | NY/MC-P-0325-06 |
| 4 | 1-1/4 | 550 | 1-1/2 | 3/8 | 1.5 | NY/MC-P-0425-06 |
| 5 | 1-1/4 | 660 | 1-1/2 | 3/8 | 2 | NY/MC-P-0525-06 |
| 6 | 1-1/4 | 770 | 1-1/2 | 3/8 | 3 | NY/MC-P-0625-06 |
| 3 | 2 | 1000 | 2-3/16 | 1/2 | 1.5 | NY/MC-P-0320-08 |
| 4 | 2 | 2000 | 2-3/16 | 1/2 | 2 | NY/MC-P-0420-08 |
| 5 | 2 | 2000 | 2-3/16 | 1/2 | 3 | NY/MC-P-0520-08 |
| 6 | 2 | 2000 | 2-3/16 | 1/2 | 4 | NY/MC-P-0620-08 |
| 8 | 2 | 2400 | 2-3/16 | 1/2 | 5 | NY/MC-P-0820-08 |
| 6 | 2-1/2 | 5000 | 2-3/4 | 1/2 | 5 | NY/MC-P-0625-08 |
| 6 | 2-1/2 | 7200 | 3-1/4 | 3/4 | 5 | NY/MC-P-0625-12 |
| 6 | 3 | 10,000 | 3-1/2 | 3/4 | 6 | NY/MC-P-0630-12 |
| 8 | 2-1/2 | 7000 | 3 | 1/2 | 6 | NY/MC-P-0825-08 |
| 8 | 2-1/2 | 7200 | 3-1/4 | 3/4 | 6 | NY/MC-P-0825-12 |
| 8 | 3 | 10,000 | 3-1/2 | 3/4 | 8 | NY/MC-P-0830-12 |
| 8 | 3 | 10,000 | 3-1/2 | 1 | 8 | NY/MC-P-0830-16 |
| 8 | 4 | 10,000 | 4-1/2 | 1-1/4 | 9 | NY/MC-P-0840-20 |
| 10 | 2-1/2 | 7200 | 2-3/4 | 1/2 | 7 | NY/MC-P-1025-08 |
| 10 | 2-1/2 | 7200 | 3 | 3/4 | 7 | NY/MC-P-1025-12 |
| 10 | 3 | 10,000 | 3-1/2 | 3/4 | 8 | NY/MC-P-1030-12 |
| 10 | 4 | 12,000 | 4-1/2 | 1 | 9 | NY/MC-P-1040-16 |
| 10 | 4 | 12,000 | 4-1/2 | 1-1/4 | 9 | NY/MC-P-1040-20 |
| 12 | 2-1/2 | 8000 | 3 | 3/4 | 8 | NY/MC-P-1225-12 |
| 12 | 3 | 11,000 | 3-1/2 | 3/4 | 9 | NY/MC-P-1230-12 |
| 12 | 4 | 14,000 | 4-1/2 | 1 | 10 | NY/MC-P-1240-16 |
| 12 | 4 | 14,000 | 4-1/2 | 1-1/4 | 10 | NY/MC-P-1240-20 |
| 12 | 5 | 18,000 | 3 | 1-1/4 | 11 | NY/MC-P-1250-20 |

CAPACITIES CAN BE INCREASED BY INCREASING THE SIZE OF THE PRECISION BEARINGS OR BY PROVIDING DOUBLE ROW PRECISION BEARINGS.

END CAPS PROVIDED WITH EACH WHEEL TO FIT IN RIG WIDTH AND SIZE OF THE AXLE

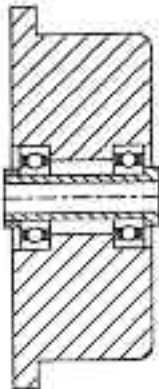
NYLACRON™ MD / FLANGED - NY/NL & NY/ND

Capacity Up to 3000 lbs.

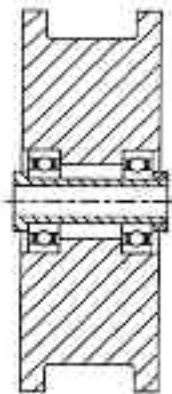


Nylacron™ Wheel

Available as Single Flanged or Double Flanged



(NL) SINGLE FLANGED NYLACRON WHEEL
Cross Sectional View



(ND) DOUBLE FLANGED NYLACRON WHEEL
Cross Sectional View

Heavy Duty Nylacron™ Flanged Wheels are straight sided and designed to operate quietly on steel track. All are precision machined on CNC equipment for concentricity and to insure proper tracking. Wheels are made of tough hard, highly compressed cast polyamide, MoS₂ filled, heat stabilized and designed to replace Steel, Phenolics, Solid Elastomers and Urethane Wheels in flanged applications where very high load capacities, low rolling resistance, impact proof, corrosive resistance and speed conditions allow. **Custom requirements to drawings available.**

Features

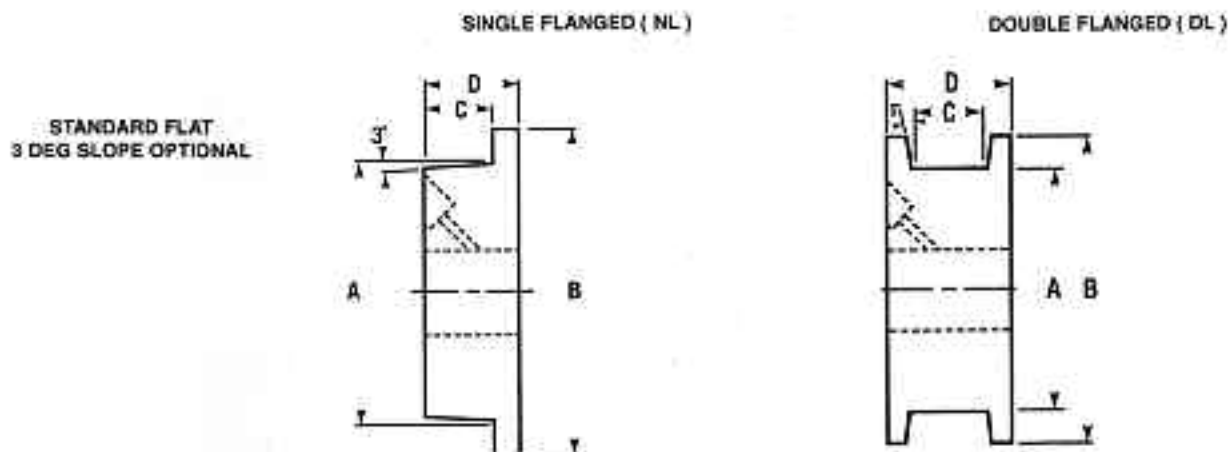
- **Ergonomic:** extraordinarily easy to push. No more back aches - less power to tow.
- **Quiet:** wheel dampens shock and vibration thus reducing noise.
- **High Impact Strength:** resists fracture from repeated shock loads.
- **Higher Loads:** mechanical strength supports greater weight and allows better utilization in caster rigs.
- **Higher Resilience:** wheel returns to original shape without deforming when deflected by loads or rapidly applied stresses.
- **High Caster Ratings:** higher wheel ratings allow better utilization of caster rig ratings.
- **Floor Protective:** material does not damage floors and is lighter in weight than steel.
- **Longer Life:** shows minimal wear in extended use-resists abrasion, water and many hazardous chemicals. Ideal for stainless steel rigs applications.
- **Lower Maintenance:** sealed precision bearings and minimal wheels wear greatly reduces in-plant maintenance requirements. Only one type wheel needed.
- **Hardness:** 112-120 Rockwell R
- **Temperature range:** - 30 to + 220 ° F Continuous
- **Chemical Resistance:** See chart for wide range of chemical resistance.

Applications

- Food Processing
- Dairies
- Meat Processing
- Automotive,
- Turning Platforms
- Towlines
- Bakeries,
- Fisheries
- Pharmaceutical
- Aerospace
- Amusement Rides

**END CAPS PROVIDED WITH EACH WHEEL
TO FIT IN RIG WIDTH AND SIZE OF THE AXLE**

All information is based on Acorn's over 10 years experience working with the producers of the cast Polyamides to successfully provide Nylacron™ wheels for the industries where the properties of this material offers many benefits.



| Face Dia. A | Flange OD B | Flange Width C | OAW Width D | Hub Length (in) | Material Type | Load Capacity (lbs) | Axle Size (in) | Approx Weight (lbs) | Part Number (P) Prec Ball Brg (T) Tapered Brg |
|-------------|-------------|----------------|-------------|-----------------|---------------|---------------------|----------------|---------------------|---|
| 5" | 6" | 1-3/4" | 2" | 2-3/16" | Nylacron™ | 1300 | 1/2 | 3 | NY/NL-P-0520-12 |
| 5" | 6" | 1-3/4" | 2" | 2-3/16" | Nylacron™ | 1300 | 1/2 | 3 | NY/NL-T-0520-08 |
| 5" | 6" | 1" | 1-1/2" | 2-3/16" | Nylacron™ | 1100 | 1/2 | 3 | NY/DL-P-0515-12 |
| 5" | 6" | 1" | 1-1/2" | 2-3/16" | Nylacron™ | 1100 | 1/2 | 3 | NY/DL-T-0515-08 |
| 6" | 6-3/4" | 1-3/4" | 2" | 2-3/16" | Nylacron™ | 1600 | 1/2 | 4 | NY/NL-P-0620-12 |
| 6" | 6-3/4" | 1-3/4" | 2" | 2-3/16" | Nylacron™ | 1600 | 1/2 | 4 | NY/NL-T-0620-08 |
| 8" | 9-1/2" | 2" | 2-1/2" | 2-3/4" | Nylacron™ | 2500 | 3/4 | 7 | NY/NL-P-0825-16 |
| 8" | 9-1/2" | 2" | 2-1/2" | 2-3/4" | Nylacron™ | 2500 | 3/4 | 7 | NY/NL-T-0825-12 |
| 10" | 12" | 2-5/8" | 3" | 3-1/4" | Nylacron™ | 3000 | 3/4 | 8 | NY/NL-P-1030-16 |
| 10" | 12" | 2-5/8" | 3" | 3-1/4" | Nylacron™ | 3000 | 3/4 | 8 | NY/NL-T-1030-12 |
| 10" | 12" | 2-1/4" | 3" | 3-1/4" | Nylacron™ | 2000 | 3/4 | 8 | NY/DL-P-1030-16 |
| 10" | 12" | 2-1/4" | 3" | 3-1/4" | Nylacron™ | 2000 | 3/4 | 8 | NY/DL-T-1050-12 |

**CAPACITIES CAN BE INCREASED BY INCREASING THE SIZE OF THE PRECISION BEARINGS
OR BY PROVIDING DOUBLE ROW PRECISION BEARINGS.**

Nylacron™ Wheels can be made to any steel or cast iron standard. See Flanged Wheel Section for dimensions.

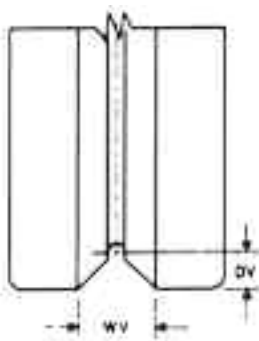
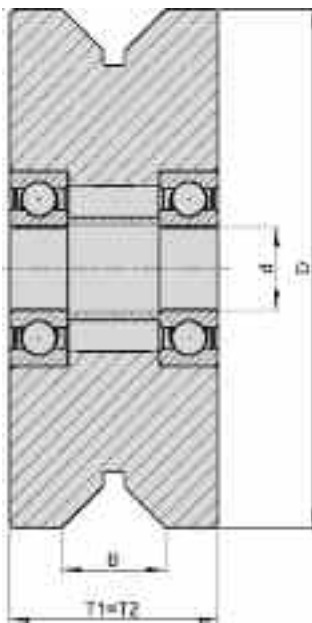
Nylacron™ Wheels are also available standard V-Groove and custom sizes to 51" diameter to meet job requirements.

NYLACRON™ MONOCAST / V-GROOVE - NY/MC/VG

Capacity Up to 26,00 lbs.



END CAPS PROVIDED WITH EACH WHEEL TO FIT IN RIG WIDTH AND SIZE OF THE AXLE



Nylacron™ Monocast (NY/MC/VG) V-Groove Wheels are straight sided and designed to operate quietly on steel track. All are precision machined on CNC equipment for concentricity and to insure proper tracking. Wheels are made of tough hard, highly compressed cast polyamide, MoS₂ filled, heat stabilized and designed to replace Steel, Phenolics, Solid Elastomers and Urethane Wheels in V-groove applications where very high load capacities, low rolling resistance, impact proof, corrosive resistance and speed conditions allow.

CUSTOM REQUIREMENTS TO DRAWINGS ARE AVAILABLE.

Features

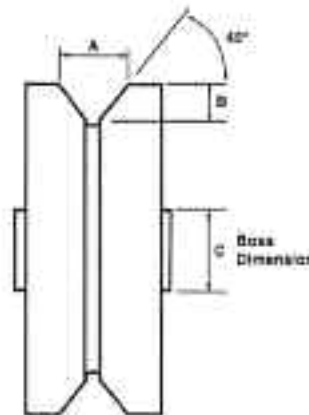
- **Ergonomic:** extraordinarily easy to push. No more back aches - less power to tow.
- **Quiet:** wheel dampens shock and vibration thus reducing noise.
- **High Impact Strength:** resists fracture from repeated shock loads.
- **Higher Loads:** mechanical strength supports greater weight and allows better utilization in caster rigs.
- **Higher Resilience:** wheel returns to original shape without deforming when deflected by loads or rapidly applied stresses.
- **High Caster Ratings:** higher wheel ratings allow better utilization of caster rig ratings.
- **Floor Protective:** material does not damage floors and is lighter in weight than steel.
- **Longer Life:** shows minimal wear in extended use-resists abrasion, water and many hazardous chemicals. Ideal for stainless steel rigs applications.
- **Lower Maintenance:** sealed precision bearings and minimal wheel wear greatly reduces in-plant maintenance requirements. Only one type wheel needed.
- **Hardness:** 112-120 Rockwell R
- **Temperature range:** - 30 to + 220 ° F Continuous
- **Chemical Resistance:** See chart for wide range of chemical resistance.

Applications

Food, Bakeries, Dairies, Fisheries, Meat Processing, Pharmaceutical, Automotive, Aerospace, Turning Platforms, Amusement Rides, Towlines

All information is based on Acorn's over 10 years experience working with the producers of the cast Polyamides to successfully provide Nylacron™ wheels for the industries where the properties of this material offers many benefits. **CAPACITIES CAN BE INCREASED BY INCREASING THE SIZE OF THE PRECISION BEARINGS OR BY PROVIDING DOUBLE ROW PRECISION BEARINGS.**

| Face Dia. A | Flange OD B | Flange Width C | OAW Width D | Hub Length (in) | Material Type | Load Capacity (lbs) | Axle Size (in) | Approx Weight (lbs) | Part Number (P) Prec Ball Brg (T) Taper Brg |
|----------------|----------------|-------------------|----------------|--------------------|----------------|------------------------|-------------------|------------------------|---|
| 4" | 2" | 7/8" | 7/16" | 2-7/16 | (NV) Nylacron™ | 1000 | 1/2 | 2 | NY/MC/VG-P-0420-12 |
| 5" | 2" | 7/8" | 7/16" | 2-7/16 | (NV) Nylacron™ | 1300 | 1/2 | 3 | NY/MC/VG-P-0520-12 |
| 6" | 2" | 7/8" | 7/16" | 2-7/16" | (NV) Nylacron™ | 1500 | 1/2 | 4 | NY/MC/VG-P-0620-12 |
| 8" | 2" | 7/8" | 7/16" | 2-7/16" | (NV) Nylacron™ | 2000 | 1/2 | 6 | NY/MC/VG-P-0820-12 |
| 8" | 2-1/2" | 7/8" | 7/16" | 2-3/4" | (NV) Nylacron™ | 2100 | 3/4 | 7 | NY/MC/VG-P-0825-16 |
| 8" | 2-1/2" | 7/8" | 7/16" | 2-3/4" | (NV) Nylacron™ | 2100 | 3/4 | 7 | NY/MC/VG-P-0825-16 |
| 10" | 2-1/2" | 7/8" | 7/16" | 2-3/4" | (NV) Nylacron™ | 2400 | 3/4 | 9 | NY/MC/VG-P-1025-16 |
| 10" | 2-1/2" | 7/8" | 7/16" | 2-3/4" | (NV) Nylacron™ | 2400 | 3/4 | 9 | NY/MC/VG-P-1025-12 |
| 8" | 3" | 1-3/8" | 11/16" | 3-1/2" | (NV) Nylacron™ | 2200 | 3/4 | 9 | NY/MC/VG-P-0830-16 |
| 8" | 3" | 1-3/8" | 11/16" | 3-1/2" | (NV) Nylacron™ | 2200 | 3/4 | 9 | NY/MC/VG-P-0830-16 |
| 10" | 3" | 1-3/8" | 11/16" | 3-1/2" | (NV) Nylacron™ | 2600 | 3/4 | 11 | NY/MC/VG-P-1030-16 |
| 10" | 3" | 1-3/8" | 11/16" | 3-1/2" | (NV) Nylacron™ | 2600 | 3/4 | 11 | NY/MC/VG-P-1030-12 |



**NYLACRON WHEELS CAN BE MADE TO ANY STEEL OR CAST IRON STANDARD
SEE FLANGED STEEL WHEEL SECTION FOR DIMENSIONS**

| WHEEL | MPH** | MPH CORRECTION FACTOR | LOAD RATING |
|----------|--------|-----------------------|-------------|
| 4 X 2 | 0.38 * | 1.00 | 2400 |
| | 2.00 | 0.82 | 1968 |
| | 4.00 | 0.63 | 1512 |
| 5 X 2 | 0.42 * | 1.00 | 3000 |
| | 2.00 | 0.71 | 2130 |
| | 4.00 | 0.52 | 1560 |
| 6 X 2 | 0.61 * | 1.00 | 3320 |
| | 2.00 | 0.68 | 2258 |
| | 4.00 | 0.54 | 1793 |
| 8 X 2 | 0.79* | 1.00 | 3320 |
| | 2.00 | 0.75 | 2490 |
| | 4.00 | 0.64 | 2125 |
| 8 X 2.5 | 0.79* | 1.00 | 6000 |
| | 2.00 | 0.89 | 5340 |
| | 4.00 | 0.76 | 4560 |
| 10 X 2.5 | 0.98* | 1.00 | 7140 |
| | 2.00 | 0.82 | 5855 |
| | 4.00 | 0.65 | 4641 |
| 6 X 3 | 0.61* | 1.00 | 5400 |
| | 2.00 | 1.00 | 5400 |
| | 4.00 | 1.00 | 5400 |
| 8 X 3 | 0.79* | 1.00 | 7200 |
| | 2.00 | 1.00 | 7200 |
| | 4.00 | 1.00 | 7200 |
| 10 X 3 | 0.98* | 1.00 | 9000 |
| | 2.00 | 1.00 | 9000 |
| | 4.00 | 1.00 | 9000 |

* MPH @ 33-1/3 RPM

** All speeds in chart are under 500 RPM

MPH = RPM x Wheel Circumference (FT) x 60 Min/Hour x Mile / 5280

EXAMPLE:

Find MPH for 4 X 2 wheel going 33.33 RPM:

MPH = 33.33 REV/MIN x 1.04 FT/REV x 60 Min/Hour x Mile / 5280 FT = .38 MPH

Applications

Food, Bakeries, Dairies, Fisheries, Meat Processing, Pharmaceutical, Automotive, Aerospace, Turning Platforms, Amusement Rides, Towlines

The following chemicals are considered compatible with Nylacron wheels. This is a general guide only, since there are many other chemicals compatible with these wheels. Field testing is recommended to confirm these recommendations.

Call Acorn (Toll Free) for any specific Chemical Resistance Data

| | | |
|-----------------------------------|----------------------------|----------------------------------|
| Acetic acid | Ethyl alcohol | Petrol |
| Acetone | Ether | Petroleum |
| Amyl acetate | Fish glue | Sea water |
| Ammonia | Freon | Silicone oil/grease |
| Ammonia chloride | Gasoline | Sodium chloride solutions |
| Ammonia sulfate | Glycerine | Soy Bean oil |
| Beer | Glycol | Tolulene |
| Benzene | hexane | Toluol |
| Boric acid | Hydrogen sulfide | Trichloroehylene |
| Butyric acid | Hydrochloric acid | Turpentine |
| Butane | Isopropyl alcohol | Urea |
| Calcium chloride solutions | Jet fuels | Vaseline |
| Carbon dioxide | Linseed oil | Vegetable oils |
| Carbon disulphide | Lubricating oils | Vinyl chloride |
| Carbon monoxide | Lye | Water |
| Carbon tetrachloride | Mercury | Wax molten |
| Citric acid solutions | Methyl chloride | White spirit |
| Copper sulphate solutions | Methyl ethyl ketone | Wines & spirits |
| Diesel oil | Milk | Xylene |
| Edible oils | Mineral oil | Zinc chloride solutions |
| Esters | Motor oil | |
| Ethanol | Olive oil | |

Nylacron™ (Nylamid®)

| ACORN™ | | Mechanical Properties | | | | | | | | | | | | | | | | | | |
|-----------------|---|--|---------------------|---------|------------------|------------------|--------------------------------|--------------------------------|---------------------------|-----------------------|---------------------------|----------------------------|---|---|---|--|---|---|---------------|----------------------|
| Name | DIN 7728 ⁽¹⁰⁾ (abbreviated) | Material | Condition of Sample | Density | Tensile Strength | Tearing Strength | Module of Elasticity (Bending) | Module of Elasticity (Tensile) | Breaking Point on Bending | Impact Resistance (3) | Notch Impact Strength (8) | Ball Pressure Hardness (4) | Creep Rate Stress for 1% Elongation (6) | Creep Rate Stress for 2% Elongation (6) | Heat Stabilization at 1,8 N/mm ² (1) | Heat Stabilization at 0,46 N/mm ² (1) | Coefficient of friction (sliding against steel w/o lubrication) | Coefficient of friction (sliding against steel w/o lubrication) (2) | Friction Wear | Compressive Strength |
| Nylamid 320 | PA 6 G | Cast Polyamide, hard | dry normal | 1.15 | 100 80 | <15 | 3700 2800 | 3800 3000 | 150 70 | no break | >2,5 >12 | 175 150 | >12 >6 | >18 >10 | 120 | 210 | 0.04... 0.08 | 0.35 | 0.10 | |
| Nylamid 324/327 | PA 6 G + MoS ₂ + H | Cast Polyamide, hard, MoS ₂ -filled heat stabilized | dry normal | 1.16 | 110 80 | <15 | 3700 2800 | 3800 3000 | 150 70 | no break | >2,5 >12 | 175 150 | >12 >6 | >18 >10 | 120 | 210 | 0.04... 0.08 | 0.35 | 0.10 | |
| Nylamid 1200 | PA 12 G | Cast Polyamide, Type 12 | dry | 1.03 | 60 | <20 | 2000 | 2000 | 90 | no break | >10 | 100 | | | 190 | | | | | |

1) tested with V-notch
 2) Against hardened Steel 2162 Rough Depth Rvst=2µm;
 Surface pressure p=0.05 N/mm²; v=0.6 m/s; t=40° C at running height
 3) measured with swinging hammer 0.1 DIN 51222
 4) Hc30
 5) Practice values short term - several hours; long term - months to years

6) Stress leading to 1 - 2% stretching after 1000h
 7) appr. at 20 - 100°C
 8) ISO 180-1 valid for the materials of the lines 3-13;
 all other materials acc. to DIN 43553
 9) DIN 53473 valid for the materials of the lines 1-18; all other materials acc. to DIN 53472

10) G, H, Oil, MoS₂, RIM, 7735 and 7708 are not abbreviations acc.to DIN 7728
 11) acc. to EN 64
 12) acc. to EN 63
 13) at 1 kHz

All information is based on our latest knowledge and experience. It is intended to provide information about our products and possible applications. It is not intended to guarantee specific product properties or applications. Any patents are to be taken into consideration.

Nylacron™ (Nylamid®)

| Name | Electric Properties | | | | | | Thermal Properties | | | | | | | | Mechanical Properties | | Application |
|-------------------|---------------------|-----------------|---------------------|--------------------------------------|--------------------------------------|----------------------------|--------------------|----------------------|---------------|-------------------------------------|----------------------------|--|---------------------------------------|--|---|--|-------------|
| | Dialectric Figure | Dialectric Loss | Dialectric Strength | Penetration Resistance | Surface Resistance | Crepage/leakage Resistance | Melting point | Thermal Conductivity | Specific Heat | Coefficient of Linear Expansion (7) | Thermal Expansion per 10°C | Safe Temperature Range short periods (5) | Safe Temperature Range, permanent (5) | Moisture Absorption under normal air condition (9) | Absorption when immersed in water at 20°C | | |
| Nylamid 320 | 3.7 | 0.03 | 50 20 | 10 ¹⁵ 10 ¹² | 10 ¹² 10 ¹⁰ | KA3c KA3b | 220 | 0.25 | 1.67 | 70-80 | 0.1 | -40 120 | 2.2 | 7 | Heavy-Duty Wheels | | |
| Nylamid 324/327 | 3.7 | 0.03 | 50 20 | 10 ¹⁵ 10 ¹² | 10 ¹² 10 ¹⁰ | KA3c KA3b | 220 | .25 | 1.67 | 70-80 | 0.1 | -40 120 | 2.2 | 7 | Heavy-Duty Wheels, running speed up to 3 m/sec. | | |
| Nylamid 1200 | 3.5 | 0.04 | 35 | 10 ¹⁴ | 10 ¹² | KA3b | 190 | 0.25 | 2.5 | 80-100 | 150 | -40 120 | 0.9 | 1.4 | sprockets, chain-wheels, pulleys, wheels, slide and seal rings, curve disks, etc. | | |
| Method of Testing | DIN 53483 | DIN 53483 | DIN 53481 | DIN 53482 | DIN 53482 | DIN 53480 | ISO R 1218 | DIN 52612 | | DIN 53752 | | | DIN 53472 | ISO R 62 | | | |

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 5) Practice values short term - several hours, long term - months to years

6) Stress leading to 1 - 2% stretching after 1000h
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10) G, H, Oil, MoS2, RIM, 7735 and 7708 are not abbreviations acc. to DIN 7728
 11) acc. to EN 64
 12) acc. to EN 63
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