

OSPW *evo*

CIPOLLINI

R20

RIDEA

C50710
CYCLONE

RIDEA

2022 CATALOG

RIDEA *OSPW* evo

NOT JUST BIGGER PULLEYS

More than simply larger pulleys, OSPW evo applies innovative engineering and materials into your bicycle.

COMPATIBILITY

- » SHIMANO
- » SRAM
- » CAMPAGNOLO

FORGED CARBON CAGE

- » Lighter Than Previous Gen
- » Better Flexibility
- » Integrated Bearing Shields
- » Increased Resistance



PULLEY+

- » Forged Carbon Composite
- » Feather Light
- » Wearing Resistance
- » Flexibility
- » Less Chain Bending
- » Better Chain-Pulley Grip
- » Less Noise

FULL CERAMIC BEARINGS

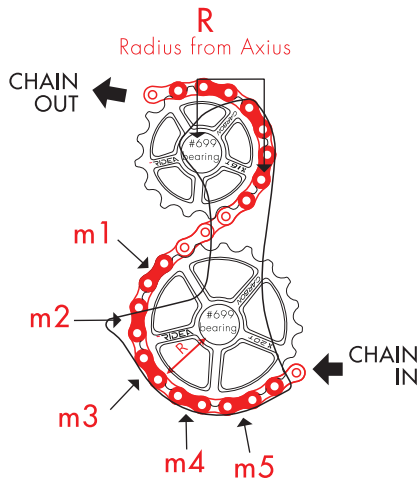
- » Smooth Rolling
- » Durable
- » Easy Maintenance
- » Light Weight

PHYSICS BEHIND PULLEY+

MASS MOMENT OF INERTIA

The mass moment of inertia "**I**" is a measure of an object's resistance to change in rotation direction. Its equation ($I=mr^2$) where "**m**" is the mass (of the chain) and "**r**" is the radius (of the pulley) shows that with a bigger pulley (i.e. radius) you also get a bigger mass of the chain interacting with the pulley, resulting in a higher mass moment of inertia than with standard size pulleys.

The higher the mass moment of inertia is, the more momentum you can create and keep while pedaling at the same intensity. Therefore, Ridea OSPW evo helps you save energy to ride faster and longer.



$$M = m1 + m2 + m3 + m4 + m5$$

Total Chain Weight on Pulley

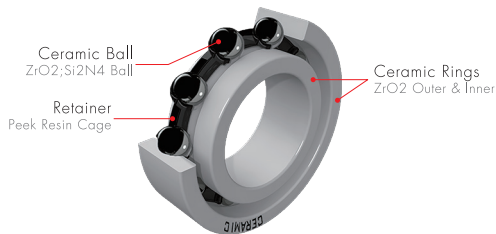
BEARINGS

#699 D20 * W6mm

16T pulleys and above

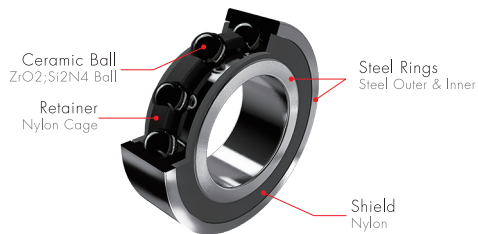
Our Pulley+ from 16T and above use #699 ceramic bearings. These bearings have bigger balls (diameter of 3.2 mm instead of 2 mm) with 4x the volume of a regular size ball, providing superior rotation stability and shifting efficiency.

Full Ceramic Weight: 5.2g



Minimum friction, high chemical corrosion resistance, simple maintenance, low weight and durable full ceramic bearings for high-end bicycle setups. (diameter of 3.2 mm instead of 2 mm) with 4x the volume of a regular size ball, providing superior rotation stability and shifting efficiency.

Ceramic Ball Weight: 6.4g



The combination of steel rings and ceramic balls offers better durability and rotation capabilities than full steel bearings, with a slightly more demanding maintenance and weight penalty when compared full ceramic bearings.

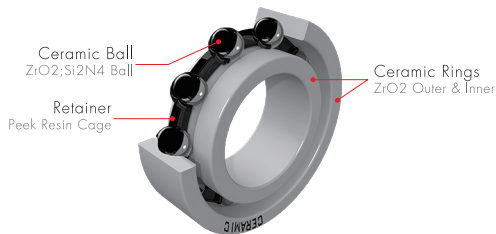
BEARINGS

#689 D17 * W5mm

15T pulleys and below

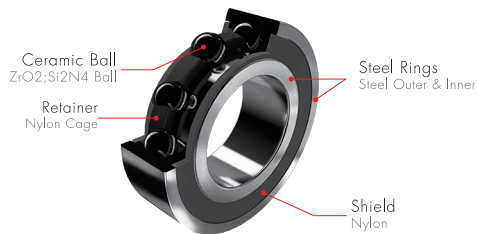
Our Pulley+ from 15T and below use #689 ceramic bearings. The smaller footprint of these bearings saves some weight and provide excellent performance for smaller pulleys.

Full Ceramic Weight: 3g



Minimum friction, high chemical corrosion resistance, simple maintenance, low weight and durable full ceramic bearings for high-end bicycle setups.

Ceramic Ball Weight: 4g



The combination of steel rings and ceramic balls offers better durability and rotation capabilities than full steel bearings, with a slightly more demanding maintenance and weight penalty when compared full ceramic bearings.

X-ODON

First developed by Ridea in 2010, the X-ODON technology of narrow-wide teeth is available for all Pulley+ with an even number of teeth (E60, F60 and E48 series).

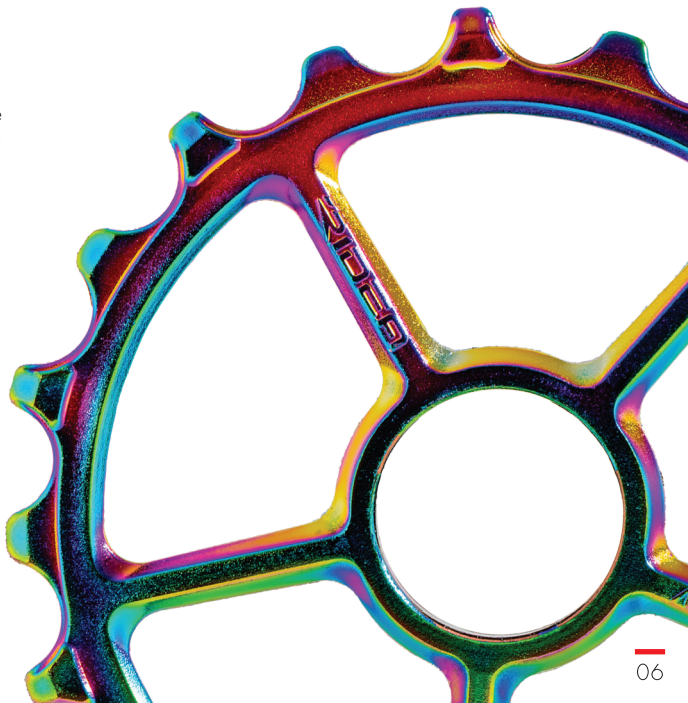
The teeth design, shaped with different lengths and angles, ensures a smooth engagement between the chain and the pulleys. Therefore, the X-ODON technology plays a fundamental role in making a rear derailleur cage with minimum play among its parts, reducing noise and increasing the overall performance of the system.



TI-CAST

Ti-cast is a surface coating offered as an option for Ridea Pulley+. It makes the surface of the pulley even more resistant to mechanical and chemical wearing, increasing the life of the pulley and making it ideal for harsh riding conditions such as mountain biking and/or wet weather.

Suffice to say, it looks gorgeous too.



NEW OSPW evo SERIES

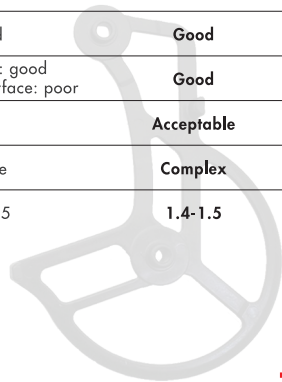
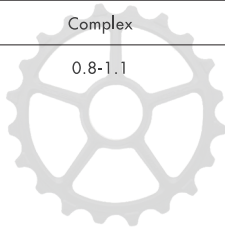
Forged Carbon has proved its performance in our Pulley+ for several years. In 2020, we introduced the evolution of our trusted OSPW: OSPW evo.

EVO series are built around full Forged Carbon cages. This material allows more complex shapes than previous generation's 3K carbon cages and it is more resistant against friction forces. Therefore, our engineers were able to design cages with variable thicknesses and shapes to increase strength and durability, while allowing greater flexibility in key zones to improve chain alignment. New cages have integrated bearing shields to reduce weight and bearing play, increasing both bearing performance and life.

As previous OSPW generation, pulleys are also made of Forged Carbon and include our exclusive ceramic bearings. The combination makes Ridea OSPW evo the most advanced and compatible oversized pulley system in the market.

COMMON MATERIALS IN CYCLING INDUSTRY

| | Aluminum alloy | Plastic | Carbon fiber | Ridea's Forged Carbon |
|-----------------------------------|----------------|------------|--------------------------------------------------|-----------------------|
| Vibration reduction | Poor | Very good | Good | Very good |
| Hardness | Very hard | Soft | Hard | Hard |
| Weathering resistance | Poor | Good | Coated surface: good Non-coated surface: poor | Good |
| Tensile strength | Good | Poor | Good | Good |
| Elasticity | Very poor | Acceptable | Good | Good |
| Wearing resistance | Acceptable | Poor | Coated surface: good Non-coated surface: poor | Good |
| Manufacturing tolerance | Good | Acceptable | Poor | Acceptable |
| Attainable shapes | Complex | Complex | Simple | Complex |
| Specific gravity (less is better) | 2.7 | 0.8-1.1 | 1.4-1.5 | 1.4-1.5 |



ROAD BIKE



RD1



RD2



RD3



RD4



RD5



RD6



RD7



RD8



RD9

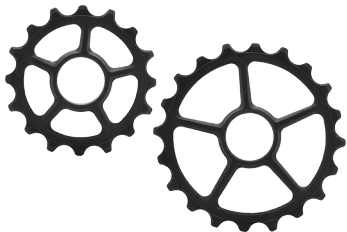


60 SERIES

inertia
X7.1

DIY
MODERATE

Forged Carbon



Ti-cast Forged Carbon



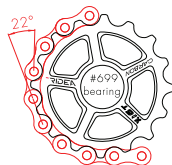
CHOOSE YOUR OSPW *evo*

RD E60 F CF
Full Ceramic Bearing

RD E60 F TR
Full Ceramic Bearing



UPPER PULLEY **16T**



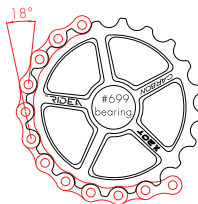
RIDEA
**16
T**

save
75%

M = 17.5g (3.5links) R = 3.25cm

I = 184.8 g/cm²

LOWER PULLEY **20T**



RIDEA
**20
T**

save
103%

M = 27.5g (5.5links) R = 4cm

I = 440 g/cm²

E60

FORGED CARBON CAGE



2022 NEW OSPW evo SERIES

4
Years
full warranty

ROAD BIKE

| Brand | | Series | Ridea model |
|------------|--------------------------------|---------------------------------|-------------|
| SHIMANO | DURA-ACE | R91XX | RD6 E60 |
| | ULTEGRA | R80XX | |
| | DURA-ACE | 7900/90XX | RD1 E60 |
| | ULTEGRA | 6700/68XX | |
| | 105 | R70XX | RD7 E60 |
| 105 | 5700/5800 | RD2 E60 | |
| TIAGRA | 4600/4700 | | |
| SRAM | RED | AXS | RD9 E60 |
| | FORCE | | |
| | RIVAL | E-TAP | RD5 E60 |
| CAMPAGNOLO | RED / RIVAL | Super Record 12x2 / Record 12x2 | RD3 E60 |
| | FORCE / APEX | | |
| | Super Record / Record / Chorus | | RD8 E60 |
| | Super Record EPS / Record EPS | | RD4 E60 |

F60

3K CARBON FULL CAGE



4
Years
full warranty

ROAD BIKE

| Brand | Series | Ridea model |
|-----------------------------|-----------------------------------------------------------------|------------------------------------------|
| SHIMANO | DURA-ACE ULTEGRA | R91XX R80XX RD6 F60 |
| | DURA-ACE ULTEGRA | 7900/90XX 6700/68XX RD1 F60 |
| | T05 | R70XX RD7 F60 |
| | T05 TIAGRA | 5700/5800 4600/4700 RD2 F60 |
| | SRAM | RED FORCE RIVAL |
| RED | | E-TAP RD5 F60 |
| RED / RIVAL FORCE / APEX | | RD3 F60 |
| CAMPAGNOLO | Super Record 12x2 / Record 12x2 | RD8 F60 |
| | Super Record / Record / Chorus Super Record EPS / Record EPS | RD4 F60 |

26 SERIES

inertia
X2.4

DIY
EASY

Forged Carbon



Alloy Pulley



CHOOSE YOUR OSPW evo

RD C26 F CF
Full Ceramic Bearing

RD C26 C CF
Ceramic Balls Bearing

RD C26 F AL
Full Ceramic Bearing
Color No. _____

Carbon

CF

Forged
Carbon

Alloy Pulley

1

Black

2

Red

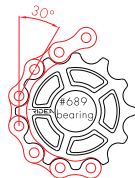
3

Gold

4

Silver

UPPER PULLEY **12T**



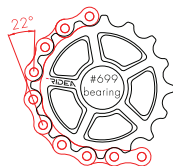
RIDEA
**12
T**

save
48%

M = 12.5g (2.5links) R = 2.4cm

I = 63 g/cm²

LOWER PULLEY **16T**



RIDEA
**16
T**

save
75%

M = 17.5g (3.5links) R = 3.25cm

I = 184.8 g/cm²

C26

3K CARBON CAGE



ROAD BIKE & MINI VELO

| Brand | | Series | Ridea model |
|---------|--------------|-----------|-------------|
| SHIMANO | DURA-ACE | R91XX | RD6 C26 |
| | ULTEGRA | R80XX | |
| | DURA-ACE | 7900/90XX | RD1 C26 |
| | ULTEGRA | 6700/68XX | |
| | 105 | R70XX | RD7 C26 |
| 105 | 5700/5800 | RD2 C26 | |
| TIAGRA | 4600/4700 | | |
| SRAM | RED / RIVAL | | RD3 C26 |
| | FORCE / APEX | | |

2
Years
full warranty

MTB & GRAVEL BIKE



MD1



MD2



MD3



MD4



MD5



MD6



MD7



MD8



CD1



CD2

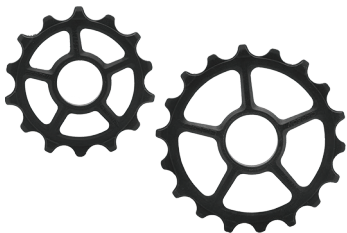


48 SERIES

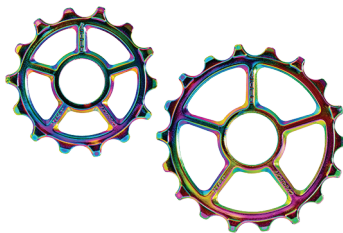
inertia
X4.34

DIY
MODERATE

Forged Carbon



Ti-cast Forged Carbon



CHOOSE YOUR OSPW evo

D E48 F CF
Full Ceramic Bearing

D E48 F TR
Full Ceramic Bearing

D E48 C CF
Ceramic Bearing

D E48 C TR
Ceramic Bearing

Carbon Titanium

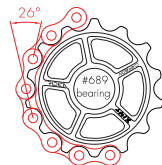
CF

Forged
Carbon

TR

Ti-Cast
Rainbow

UPPER PULLEY **14T**



RIDEA
14
T

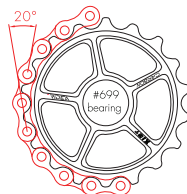
save
58%

M = 15g (3links)

R = 2.82cm

I = 119.3 g/cm²

LOWER PULLEY **18T**



RIDEA
18
T

save
88%

M = 20g (4links)

R = 3.63cm

I = 263.5 g/cm²

E48

FORGED CARBON CAGE



2022 NEW OSPW evo SERIES

2
Years
full warranty

MTB

| Brand | | Series | Ridea model |
|-----------|-------------------|-----------|-------------|
| SHIMANO | 1x12 speeds | XTR M9100 | MD6 E48 |
| | | XT M8100 | |
| | | SLX M7100 | |
| | 11 speeds | XTR M9000 | MD1 E48 |
| | | XT M8000 | |
| | | SLX M7000 | |
| 10 speeds | XTR M986 | MD2 E48 | |
| | XT M786 | | |
| | SLX M675 | | |
| SRAM | 2x12 speeds | | MD8 E48 |
| | 1x12 speeds Eagle | AXS | MD7 E48 |
| | 1x12 speeds Eagle | | MD3 E48 |
| | 1x11 speeds | | MD4 E48 |
| | 2x11 speeds | | MD5 E48 |

2022 NEW OSPW evo SERIES

2
Years
full warranty

GRAVEL BIKE

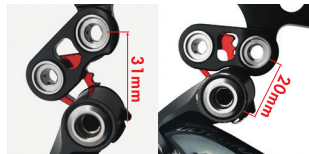
| Brand | Series | Ridea model |
|---------|----------------------------------|-------------|
| SHIMANO | ULTEGRA RX | CD1 E48 |
| | GRX 34Tmax (RD-RX810 & RD-RX815) | CD2 E48 |
| | GRX 42Tmax (RD-RX812 & RD-RX817) | MD1 E48 |
| SRAM | FORCE 1 | MD3 E48 |
| | RIVAL 1 | |
| | APEX 1 | |



ACCESSORIES

REAR DERAILLEUR BRACKET AXLE EXTENDER

Increases clearance between upper pulley and the bigger cogs. Recommendable with some gears and frame combinations



RDH L28

- › Extension: **Vertical** 28mm
- › Material: CNC Alloy
- › Color: Black
- › Compatible with: OSPW evo RD6 RD7 MD1 MD2 (optional)

RDH L22

- › Extension: **Vertical** 22mm
- › Material: CNC Alloy
- › Color: Black
- › Compatible with: OSPW evo RD1 RD2 RD3 RD4 RD5 (optional)

RDH L20

Allows the use of cogs up to 42T.

- › Extension: **Vertical** 20;23;27 or 31mm
- › Material: CNC Alloy
- › Color: Black & Red
- › Compatible with: OSPW evo RD1 RD2 RD3 RD4 RD5 (optional)

ACCESSORIES



REAR DERAILLEUR STOPPER



RD USRS

Saves your rear derailleur against chain sucks and other failures.

- › Material: CNC Alloy
- › Color: Red
- › Compatible with: OSPW evo RD1 RD2 RD4 (included)



REAR DERAILLEUR HANGER WASHER



RD W15

Increases spacing and changing performance on the smaller cogs. Recommendable with some gears and frame combinations.

- › Extension: **Horizontal** 1.5 mm
- › Material: CNC Alloy
- › Color: Black
- › Compatible with: OSPW evo RD3 RD5 RD6 RD7 RD8 RD9 MD3 MD4 MD5 MD6 MD7 (included)

UNIVERSAL CARBON PULLEY WHEELS



RS PYK11

UPPER PULLEY 11T
PY3L-11T
LOWER PULLEY 11T
PYCE-11T

- › Material: Forged Carbon
- › Bearing Option:
Steel / Ceramic / Full Ceramic
- › Color: Black

RS PYK13

UPPER PULLEY 11T
PY3L-11T
LOWER PULLEY 13T
PY3L-13T

- › Material: Forged Carbon
- › Bearing Option:
Steel / Ceramic / Full Ceramic
- › Color: Black

RS PYK22

UPPER PULLEY 12T
PY5L-12T
LOWER PULLEY 12T
PY5L-12T

- › Material: Forged Carbon
- › Bearing Option:
Steel / Ceramic / Full Ceramic
- › Color: Black

RS PYK24

UPPER PULLEY 12T
PY5L-12T
LOWER PULLEY 14T
PY5L-14T

- › Material: Forged Carbon
- › Bearing Option:
Steel / Ceramic / Full Ceramic
- › Color: Black

EXTRA-LONG CHAIN

The big pulleys of OSPW+ require longer chains and sometimes the standard number of links provided by chain manufacturers may not be enough with certain gear combinations, requiring two chains to do the job. Ridea can provide extra-long KMC chains (128 links) so you do not have to spend more money buying an extra chain.

Chain Models

11S: KMC X11EL (Black/Black)

12S: KMC X12 (Silver/Black)

Size: 1/2"x11/128"

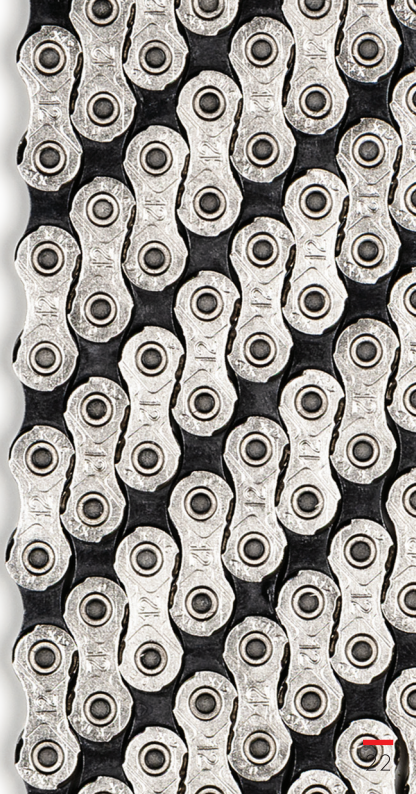
Number Of Links: 128 (Missinglink included)

Chain Manufacturer: KMC

KMC is a registered trademark of KMC Chain Industrial Co., Ltd.

CHOOSE YOUR CHAIN

11S 12S



The logo for RIDEA, featuring the word "RIDEA" in a bold, white, sans-serif font. A red horizontal line is positioned above the letter "I".

RIDEA

RIDEA CYCLING | Q

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