

**W** **ossner**<sup>®</sup>  
HIGH PERFORMANCE PISTONS  
RESEARCH & DEVELOPMENT  
Manufacturer of forged pistons



**BIKE  
CATALOGUE  
2021**



# WÖSSNER GROUP



**WE ARE THE INNOVATIVE  
SPECIALISTS FOR HIGH  
PERFORMANCE PISTONS,  
CONRODS, GASKETS  
AND VALVES.**

Our products are to be found in engines operating at the highest levels of motorsport, in competition and, of course, in everyday use – in fact, anywhere, where longevity, highest performance and operational noise are important factors. Wössner products are the source of the superior power behind the success of well known motorsport teams at national and international race meets, and with distribution points and warehouses in Europe, North America and Asia our products are just a phonecall away.



# FORGING GROUP MONALE



Forging Group Monale was born in July 2009 when Mr. Wössner (owner of Wössner GmbH) bought an Italian aluminum forging company.

Considering equipment's presses and knowledge, we decided to enter in every field where forged parts are needed. We supply more than 50% abroad. We are a small company; this allowed us to give to our customers a very good service in term of reactivity, flexibility, competitiveness and quality.

We are certified ISO 9001:2015 and we adopted, from many years, the Organization Model 231.

We buy raw material in according to the Certify 3.1 and, when requested, raw material checked by Ultrasonic Test class "A" and "AA".

Alloys that we normally forge are 2014, 2024, 2618, 4032, 6060, 6082, 7003, 7020, 7022, 7055 and 7075.

We are able to produce raw parts with the complete forging process, it means that in FGM we can saw billets and below provide for pre heating, forging, trimming, heat treatment, tumbling and pickling. Quality department support the production with the Scan Laser for the dimensional check, with the automatic Crack Test equipment, with the Spectrometer and hardness equipment. We certify our forged parts and we guarantee traceability.

FGM can offer also machined and assembled parts, machining, anodizing and shot blasting. External suppliers make these. We are able to forge very small parts (few grams) as well as big parts (10/12 Kg).

Our forging presses are as follows:

- N° 3 hydraulic presses 1.000 Tons/each
- N° 1 Screw press 300 Tons
- N° 1 Screw press 600 Tons
- N° 1 Screw press 800 Tons
- N° 2 Screw presses 1.400 Tons

Every press has his pre heating oven. We have also mechanical presses from 60 Tons to 200 Tons for trimming.



# 70s FOUNDATION OF WÖSSNER

At the end of the 70s, Eckart Wössner starts by importing pistons into Germany.



## 1994

### OWN PISTONS

The in-house production of forging pistons took place in the 1990s, in 1994 the foundation stone for Wössner GmbH was laid.

## 2003

### GROWTH DEMAND

Wössner's expansive development requires an increase in the production area to fourfold in early 2003.

## 2005

### FOUNDATION OF WÖSSNER USA WEST COAST DIVISION

Wössner Group USA expands in 2005 with the founding of Wössner USA Inc. in California.

## 2009

### FORWARD IN MONALE

Wössner acquires its own smithy and thereby secures the quality of its metals: FGM Forging Group Monale now belongs to the Wössner Group.

## 2011

### FOUNDATION OF WÖSSNER ITALIA

The growing demand for high-performance forging pistons led to the founding of Wössner Italia Srl. in Monale.





## 2015

### FOUNDATION OF WÖSSNER ASIA

Headquartered in Taichung. Wössner pistons are still produced exclusively in Germany.

## 2016

### START OF CONSTRUCTION OF THE NEW COMPANY CENTER WÖSSNER LTD.

Located at Dreispitz in Haltingen / Weil am Rhein. It was completed in February 2018.

## 2017

### RESTRUCTURING OF WÖSSNER USA TO WÖSSNER N.A. INC

Wössner USA has been restructured with the creation of Wössner N.A. Inc with all locations being consolidated to Wössner N.A. Inc Corporate Headquarters in Willoughby, Ohio Division in Ohio.

## 2018

### COMPLETION AND MOVE INTO THE NEW HEADQUARTERS OF WÖSSNER GMBH

Wössner GmbH moves to the new headquarters in Haltingen / Weil am Rhein, significantly increasing production.

## 2019

### 40TH ANNIVERSARY

One year after moving into the new headquarters, Wössner celebrates its 40th anniversary in March 2019. What began as a one-man business developed over decades into a globally operating company, which is constantly expanding.



## 2020 FOUNDATION OF WÖSSNER UK

Wössner UK is founded and moves into a new facility, increasing stock and reducing lead times on deliveries.



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# APRILIA

## 2-STROKE

| MODEL        | YEARS      | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|--------------|------------|---------------|------------------|-------------|----------|----------|--------|
| RS 125       | 1992-2010  | 8027DA        | 2                | 53.95mm     | STD      | RSB5400  | 54.5mm |
| AF1          | 1988-1992  | 8027DB        | 2                | 53.96mm     | +0.01mm  | RSB5400  |        |
| MX 125       | 2004-2006  | 8027DC        | 2                | 53.97mm     | +0.02mm  | RSB5400  |        |
| Pegaso 125   | 1989-1994  | 8027DD        | 2                | 53.98mm     | +0.03mm  | RSB5400  |        |
| Red Rose 125 | 1987-1994  | 8027DE        | 2                | 53.99mm     | +0.04mm  | RSB5400  |        |
| Europe 125   | 1990-1991  | 8027D025      | 2                | 54.2mm      | +0.25mm  | RSB5425  |        |
| Tuono 125    | 2003-2004  | 8027D050      | 2                | 54.45mm     | +0.5mm   | RSB5450  |        |
| Sintesi      | 1988-1992  | 8027D075      | 2                | 54.7mm      | +0.75mm  | RSB5475  |        |
| Futura       | 1988-1992  | 8027D100      | 2                | 54.95mm     | +1.0mm   | RSB5500  |        |
| RX 125       | 1989-1998  |               |                  |             |          |          |        |
| RS 125       | 1992-2010  | 8253DA        | 2                | 53.95mm     | STD      | RSB5400  | 54.5mm |
| AF1          | 1988-1992  | 8253DB        | 2                | 53.96mm     | +0.01mm  | RSB5400  |        |
| MX 125       | 2004-2006  | 8253DC        | 2                | 53.97mm     | +0.02mm  | RSB5400  |        |
| Pegaso 125   | 1989-1994  |               |                  |             |          |          |        |
| Red Rose 125 | 1987-1994  |               |                  |             |          |          |        |
| Europe 125   | 1990-1991  |               |                  |             |          |          |        |
| Tuono 125    | 2003-2004  |               |                  |             |          |          |        |
| Sintesi      | 1988-1992  |               |                  |             |          |          |        |
| Futura       | 1988-1992  |               |                  |             |          |          |        |
| RX 125       | 1989-1998  |               |                  |             |          |          |        |
| RS 250       | Up to 2003 | 8039DA        | 2                | 55.95mm     | STD      | RSB5600  | 50.6mm |
| AF1          |            | 8039DB        | 2                | 55.96mm     | +0.01mm  | RSB5600  |        |
|              |            | 8039DC        | 2                | 55.97mm     | +0.02mm  | RSB5600  |        |
|              |            | 8039D050      | 2                | 56.45mm     | +0.5mm   | RSB5650  |        |
|              |            | 8039D100      | 2                | 56.95mm     | +1.0mm   | RSB5700  |        |



| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS              | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|-----------------------------|-----------------|--------------------|----------------|--------------|
| 29mm               | WP032      | CW15 | DUAL RING – 1MM FLAT RING   | N1010           |                    | P2051          |              |
| 29mm               | WP032      | CW15 | SINGLE RING – 1MM FLAT RING | N1010           |                    | P2051          |              |
| 28.5mm             | WP036      | CW16 | SINGLE RING – 1MM FLAT RING |                 |                    |                |              |



# BMW

## 4-STROKE

| MODEL                 | YEARS     | PISTON PART # | CR          | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|-----------------------|-----------|---------------|-------------|--------|------------------|-------------|----------|
| 1100 RS               | ALL YEARS | K8543DA-2     | 10.7:1      | 10.7:1 | 9                | 98.96mm     | STD      |
| 1100 GS               |           | K8543D200-2   |             |        | 9                | 100.96mm    | +2.0mm   |
| 1100 RT               |           |               |             |        |                  |             |          |
| 1100 S                |           |               |             |        |                  |             |          |
| 1100 R                |           |               |             |        |                  |             |          |
| 1150 RS               |           |               |             |        |                  |             |          |
| 1150 GS               |           |               |             |        |                  |             |          |
| 1150 RT               |           |               |             |        |                  |             |          |
| 1150 R                |           |               |             |        |                  |             |          |
| 1150 S                |           |               |             |        |                  |             |          |
| 1100 RS               |           | ALL YEARS     | K8711D200-2 | 12.5:1 | 10.7:1           | 9           | 100.96mm |
| 1100 GS               |           |               |             |        |                  |             |          |
| 1100 RT               |           |               |             |        |                  |             |          |
| 1100 S                |           |               |             |        |                  |             |          |
| 1100 R                |           |               |             |        |                  |             |          |
| 1150 RS               |           |               |             |        |                  |             |          |
| 1150 GS               |           |               |             |        |                  |             |          |
| 1150 RT               |           |               |             |        |                  |             |          |
| 1150 R                |           |               |             |        |                  |             |          |
| 1150 S                |           |               |             |        |                  |             |          |
| 1200 ST               | ALL YEARS |               | K8544DA-2   | 10.0:1 | 10.0:1           | 9           | 100.96mm |
| 1200 C                |           |               |             |        |                  |             |          |
| 1200 CL Cruiser Welle |           |               |             |        |                  |             |          |
| R1200 GS              | 2005-2009 | K8658DA-2     | 12.0:1      | 12.0:1 | 9                | 100.96mm    | STD      |
| R1200 S               |           |               |             |        |                  |             |          |
| R1200 ST              |           |               |             |        |                  |             |          |
| R1200 R               |           |               |             |        |                  |             |          |

| RING SET              | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP    | PISTON DETAILS   | GASKET | CONNECTING ROD | ACCESSORIES |
|-----------------------|--------|--------------------|------------|---------|--|--------|----------------|-------------|
| 990XSY-3<br>1010XSY-3 | 70.5mm | 32.1mm             | WP009-SP   | C22x1.6 | SLIPPER STYLE  |        |                |             |
| 1010XSY-3             | 70.5mm | 29mm               | WP009-SP   | C22x1.6 | PRO SERIES –<br>SLIPPER STYLE<br>– LONGER ROD<br>(128MM) |        | KPM001-2       |             |
| 1010XSY-3             | 73mm   | 30.7mm             | WP009-SP   | C22x1.6 | SLIPPER STYLE  |        |                |             |
| 1010XSY-3             | 73mm   | 30.9mm             | WP009-SP   | C22x1.6 | SLIPPER STYLE  |        |                |             |





# BMW

## 4-STROKE

| MODEL    | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|----------|-----------|---------------|--------|--------|------------------|-------------|----------|
| R1200 GS | 2005-2009 | K8695DA-2     | 12.7:1 | 12.0:1 | 9                | 100.96mm    | STD      |
| R1200 S  |           |               |        |        |                  |             |          |
| R1200 ST |           |               |        |        |                  |             |          |
| R1200 R  |           |               |        |        |                  |             |          |
| R1200 GS | 2005-2009 | K8710DA-2     | 12.7:1 | 12.0:1 | 9                | 100.96mm    | STD      |
| R1200 S  |           |               |        |        |                  |             |          |
| R1200 ST |           |               |        |        |                  |             |          |
| R1200 R  |           |               |        |        |                  |             |          |
| R1200 GS | 2010-2012 | K8788DA-2     | 12.5:1 | 12.0:1 | 9                | 100.96mm    | STD      |
| R1200 RT |           |               |        |        |                  |             |          |
| R1200 R  |           |               |        |        |                  |             |          |
| R1200 GS | 2010-2012 | K8789DA-2     | 12.5:1 | 12.0:1 | 9                | 100.96mm    | STD      |
| R1200 RT |           |               |        |        |                  |             |          |
| R1200 R  |           |               |        |        |                  |             |          |

| RING SET                            | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP    | PISTON DETAILS   | GASKET | CONNECTING ROD | ACCESSORIES |
|-------------------------------------|--------|--------------------|------------|---------|--|--------|----------------|-------------|
| 1010XSY-3                           | 73mm   | 30.9mm             | WP009-SP   | C22x1.6 | PRO SERIES –<br>SLIPPER STYLE  |        |                |             |
| 1010XSY-3<br>1030XSU-3              | 73mm   | 27.9mm             | WP009-SP   | C22x1.6 | PRO SERIES –<br>SLIPPER STYLE<br>– LONGER ROD<br>(128MM)                                     |        | KPM001-2       |             |
| 1010XSY-3                           | 73mm   | 31mm               | WP069-SP   | OEM     | PRO SERIES –<br>SLIPPER STYLE<br>– DOHC RADIAL<br>HEAD – OEM<br>CLIP                         |        |                |             |
| 1010XSY-3<br>1045XSU-3<br>1050XSU-3 | 73mm   | 28mm               | WP069-SP   | OEM     | PRO SERIES –<br>SLIPPER STYLE<br>– DOHC RADIAL<br>HEAD – OEM<br>CLIP – LONGER<br>ROD (128MM) |        | KPM001-2       |             |



# CAGIVA

## 2-STROKE

| MODEL         | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|---------------|-----------|---------------|------------------|-------------|----------|----------|--------|
| Mito 125      | 2000-2012 | 8018DA        | 2                | 55.95mm     | STD      | RSB5600  | 50.6mm |
| W8            |           | 8018DB        | 2                | 55.96mm     | +0.01mm  | RSB5600  |        |
| Supercity 125 |           | 8018DC        | 2                | 55.97mm     | +0.02mm  | RSB5600  |        |
| Raptor 125    |           | 8018D050      | 2                | 56.45mm     | +0.50mm  | RSB5650  |        |
| Planet 125    |           | 8018D100      | 2                | 56.95mm     | +1.00mm  | RSB5700  |        |
| Mito 125      | 2000-2012 | 8053DA        | 2                | 55.95mm     | STD      | RSB5600  | 50.6mm |
| W8            |           | 8053DB        | 2                | 55.96mm     | +0.01mm  | RSB5600  |        |
| Supercity 125 |           | 8053DC        | 2                | 55.97mm     | +0.02mm  | RSB5600  |        |
| Raptor 125    |           | 8053D050      | 2                | 56.45mm     | +0.50mm  | RSB5650  |        |
| Planet 125    |           | 8053D100      | 2                | 56.95mm     | +1.00mm  | RSB5700  |        |





| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                                | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|---|-----------------|--------------------|----------------|--------------|
| 25mm               | WP036      | CW16 | DUAL RING –<br>1.0mm FLAT RING                | N1014           |                    | P2076          |              |
| 25mm               | WP036      | CW16 | DUAL RING –<br>1.0mm FLAT RING<br>– FLAT DOME | N1014           |                    | P2076          |              |





# DUCATI

## 4-STROKE

| MODEL                    | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|--------------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| 900 SS                   | 1983      | K8545DA-2     | 13.5:1 | 9.2:1  | 24               | 91.94mm     | STD      |
|                          |           | K8545D200-2   |        |        | 24               | 93.94mm     | +2.00mm  |
|                          |           | K8545D300-2   |        |        | 24               | 94.94mm     | +3.00mm  |
|                          |           | K8545D400-2   |        |        | 24               | 95.94mm     | +4.00mm  |
| 998 Testa Stretta Racing | ALL YEARS | K8758DA-2     | 13.5:1 | 11.4:1 | 24               | 99.94mm     | STD      |
| 999 S                    |           |               |        |        |                  |             |          |
| 999 RS                   | 2003-2006 | K8764DA-2     | 13.5:1 | 12.5:1 | 24               | 103.93mm    | STD      |
| 1098 RS                  | 2007-2008 |               |        |        |                  |             |          |
| 1098 R                   | 2009-2011 | K8763DA-2     | 13.5:1 | 12.8:1 | 24               | 105.93mm    | STD      |
| 1098 SP                  | ALL YEARS |               |        |        |                  |             |          |
| Monster 1200 S           | 2017-2021 |               |        |        |                  |             |          |
| Monster 1200 R           | 2016-2021 |               |        |        |                  |             |          |
| Multistrada 1200         | 2012-2015 |               |        |        |                  |             |          |
| Diavel 1200              | 2011-2017 |               |        |        |                  |             |          |
| 1198S                    | 2009-2011 | K8833D200-2   | 13.5:1 | 12.8:1 | 10               | 105.93mm    | STD      |

| RING SET                                     | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                | GASKET                    | CONNECTING ROD | ACCESSORIES |
|--|--------|--------------------|------------|------|-------------------------------|---------------------------|----------------|-------------|
| 920XSY-3<br>940XSY-3<br>950XSY-3<br>960XSY-3 | 68mm   | 28.6mm             | WP018-SP   | CW19 | PRO SERIES –<br>SLIPPER STYLE |                           |                |             |
| 1000XSY-3                                    | 63.5mm | 26.8mm             | WP038-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE |                           |                |             |
| 1040XSU-3                                    | 58.5mm | 26.8mm             | WP038-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE | C8807 – 103MM<br>.027 MLS |                |             |
| 1060XSU-3                                    | 67.9mm | 26mm               | WP038-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE | C8808 – 106MM<br>.027 MLS |                |             |
| 1060XSU-3                                    | 67.9mm | 26.5mm             | WP038-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE | C8808 – 106MM<br>.027 MLS |                |             |





# HONDA

## 2-STROKE

| MODEL    | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|----------|-----------|---------------|------------------|-------------|----------|----------|--------|
| RS125 GP | 1992-1994 | 8162DA        | 21               | 53.93mm     | STD      | RSA5400  | 54.5mm |
|          |           | 8162DB        | 21               | 53.94mm     | +0.01mm  | RSA5400  |        |
| RS125 GP | 2003-2007 | 8244DA        | 21               | 53.94mm     | STD      | RSA5400  | 54.5mm |
| RS125 GP | 2003-2007 | 8245DA        | 21               | 53.94mm     | STD      | RSA5400  | 54.5mm |
| NSR125 R | 1989-2003 | 8019DA        | 2                | 53.94mm     | STD      | RSB5400  | 54.5mm |
|          |           | 8019DB        | 2                | 53.95mm     | +0.01mm  | RSB5400  |        |
|          |           | 8019DC        | 2                | 53.96mm     | +0.02mm  | RSB5400  |        |
|          |           | 8019D050      | 2                | 54.44mm     | +0.50mm  | RSB5450  |        |
|          |           | 8019D100      | 2                | 54.94mm     | +1.00mm  | RSB5500  |        |
| MBX125 R | 1983-1987 | 8024DA        | 2                | 55.94mm     | STD      | RSB5600  | 50.6mm |
|          |           | 8024D050      | 2                | 56.44mm     | +0.50mm  | RSB5650  |        |
|          |           | 8024D100      | 2                | 56.94mm     | +1.00mm  | RSB5700  |        |
|          |           | 8024D150      | 2                | 57.44mm     | +1.50mm  | RSB5750  |        |



| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                              | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|---|-----------------|--------------------|----------------|--------------|
| 30mm               | WP025      | CW14 | SINGLE RING –<br>0.8MM FLAT RING<br>– DOMED | N1010           |                    |                |              |
| 29mm               | WP067      | CW15 | SINGLE RING –<br>0.8MM FLAT RING<br>– DOMED |                 |                    |                |              |
| 29mm               | WP067      | CW15 | SINGLE RING –<br>0.8MM FLAT RING<br>– FLAT  |                 |                    |                |              |
| 30mm               | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED   |                 |                    |                |              |
| 30.4mm             | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED   |                 |                    |                |              |





# HONDA

## 4-STROKE

| MODEL             | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|-------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| CBR 400 R-NC23    | 1987-1989 | K4042D100-4   | 12.3:1 | 11.0:1 | 10/1             | 55.94mm     | +1.00mm  |
| CBR 400 RR-NC-29  | 1990-1999 | K4042D300-4   | 13.0:1 |        |                  | 57.94mm     | +2.00mm  |
| CB4 00 SF         | 1992-2015 |               |        |        |                  |             |          |
| CB-1              | 1989-1991 |               |        |        |                  |             |          |
| CB 360            | 1974-1976 |               | 10.5:1 | 9.3:1  |                  | 67.44mm     | STD      |
| CL 360            | 1974-1975 |               |        |        |                  | 67.94mm     | +0.50mm  |
| CJ 360            | 1976-1977 |               |        |        |                  |             |          |
| CB 350            | 1968-1973 |               | 10.5:1 | 9.5:1  |                  | 64.94mm     | +1.00mm  |
| CL 350            |           |               |        |        |                  | 65.44mm     | +1.50mm  |
|                   |           |               |        |        |                  | 65.94mm     | +2.00mm  |
| CB 450            | 1965-1974 |               | 10.0:1 | 8.5:1  |                  | 70.44mm     | +0.50mm  |
| CL 450            | 1967-1974 |               |        |        |                  | 70.94mm     | +1.00mm  |
| CB 500 K          | 1974-1978 |               | 10.0:1 | 9.0:1  |                  | 58.44mm     | STD      |
| CB 500 F          |           |               |        |        |                  | 58.94mm     | +0.50mm  |
| CB 500 R          | 1993-2002 | K4015DA-2     | 12.7:1 | 10.5:1 | 9                | 72.94mm     | STD      |
| CB 500 T          |           | K4015D050-2   | 13.0:1 |        | 9                | 73.44mm     | +0.50mm  |
| CB 500 V          |           |               |        |        |                  |             |          |
| CB 500 W          |           |               |        |        |                  |             |          |
| CB 500 X          |           |               |        |        |                  |             |          |
| CB 500 Y          |           |               |        |        |                  |             |          |
| CB 500 F          | 2013-2017 |               | 12.0:1 | 10.7:1 |                  | 66.94mm     | STD      |
| CB 500 X          |           |               |        |        |                  | 67.44mm     | +0.50mm  |
| CB 500 R          |           |               |        |        |                  |             |          |
| CMX 500           | 2017      |               |        |        |                  |             |          |
| CBR 600 F2        | 1990-1998 |               | 13.0:1 | 11.5:1 |                  | 66.94mm     | +2.00mm  |
| CBR 600 F3        |           |               |        |        |                  |             |          |
| CBR 600 SF HORNET | 1998-2004 |               |        |        |                  |             |          |
| CBR 600 F4        | 1999-2006 |               | 13.0:1 | 12.0:1 |                  | 66.94mm     | STD      |

| RING SET                         | STROKE  | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                                | GASKET   | CONNECTING ROD | ACCESSORIES |
|----------------------------------|---------|--------------------|------------|------|---|--|----------------|-------------|
| 560XKS-3                         | 42.00mm | 19.80mm            | WP063-SP   | CW14 | PRO SERIES –<br>ROUND STYLE                   |  |                |             |
| 675XKS-3<br>680XKS-3             | 50.60mm |                    |            | CW16 | PRO SERIES –<br>ROUND STYLE                   |  |                |             |
| 650XKS-3<br>655XKS-3<br>660XKS-3 | 50.60mm |                    |            | CW15 | PRO SERIES –<br>ROUND STYLE                   |  |                |             |
| 705XDS-3<br>710XDS-3             | 57.80mm |                    |            | CW17 | PRO SERIES –<br>ROUND STYLE                   |  |                |             |
| 585XKS-3<br>590XKS-3             | 50.60mm |                    |            | CW15 | PRO SERIES –<br>ROUND STYLE                   |  |                |             |
| 730XDS-3<br>735XDS-3             | 59.60mm | 24.10mm            | WP083-SP   | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– THREE RING |  |                |             |
| 670XKS-3<br>675XKS-3             | 66.80mm |                    |            | CW16 | PRO SERIES –<br>ROUND STYLE                   |  |                |             |
| 670XKS-3                         | 45.20mm |                    |            | CW17 | PRO SERIES –<br>ROUND STYLE                   | C8265-018 –<br>67MM .018 MLS<br><br>C8265 – 67MM<br>.030 MLS |                |             |
| 670XKS-3                         | 42.50mm |                    |            | CW17 | PRO SERIES –<br>ROUND STYLE                   | C8272-018 –<br>67MM .018 MLS<br><br>C8272 – 67MM<br>.030 MLS |                |             |





# HONDA

## 4-STROKE

| MODEL                                       | YEARS                  | PISTON PART #              | CR      | OEM CR | PISTON PRICECODE | PISTON SIZE        | OVERSIZE           |
|---|------------------------|----------------------------|---------|--------|------------------|--------------------|--------------------|
| Hawk 650 NT Twin                            | 1989-1991              |                            | 11.0:1  | 9.2:1  |                  | 81.94mm            | +3.00mm            |
| CBR 650 R                                   | 2019-2021              | K8996DA-4                  | 12.0:1  | 11.6:1 | 10               | 66.95mm            | STD                |
| CB 750 F<br>CB 750 K<br>2V SOHC             | 1969-1978              |                            | 10.25:1 | 9.0:1  |                  | 64.94mm            | +4.00mm            |
| CB 750 F<br>CB 750 K<br>CB 750 C<br>4V DOHC | 1979-1982              | K8834D300-4<br>K8834D550-4 | 10.25:1 | 9.0:1  | 10<br>10         | 64.94mm<br>67.44mm | +3.00mm<br>+5.50mm |
| CB 900 F                                    | 1981-1982              |                            | 10.25:1 | 8.8:1  |                  | 67.44mm            | +3.00mm            |
| CBR 919 RR SC33                             | 1996-1999              |                            | 12.0:1  | 11.1:1 |                  | 72.94mm            | +2.00mm            |
| CBR 954 RR SC50                             | 2002-2004              | K8804DA-4<br>K8804D100-4   | 13.0:1  | 11.5:1 | 10<br>10         | 74.94mm<br>75.94mm | STD<br>+1.00mm     |
| CBX 1000                                    | 1979-1982              |                            | 10.25:1 | 9.3:1  |                  | 67.44mm            | +3.00mm            |
| CBR 1000 F<br>CBR 1000 Big One              | 1987-1991<br>1993-1996 |                            | 12.0:1  | 10.5:1 |                  | 78.94mm            | +2.00mm            |
| CBR 1000 RR                                 | 2002-2007              | K8742DA-4                  | 13.5:1  | 12.2:1 | 10/1             | 74.95mm            | STD                |

| RING SET             | STROKE  | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                                       | GASKET   | CONNECTING ROD | ACCESSORIES |
|----------------------|---------|--------------------|------------|------|--|--|----------------|-------------|
| 820XSY-3             | 66.00mm |                    |            | CW20 |  | C8207-010 – 82MM .010 MLS                                |                |             |
| 670XKS-3             | 46.00mm | 22.60mm            | WP059-SP   | CW16 | PRO SERIES – ROUND STYLE – THREE RING                |  |                |             |
| 650XKS-3             | 63.00mm |                    |            | CW15 | PRO SERIES – ROUND STYLE                             | C8801-045 – 65MM .045 MLS                                |                |             |
| 650XKS-3<br>675XKS-3 | 62.00mm | 24.00mm            | WP102-SP   | CW15 | PRO SERIES – ROUND STYLE – THREE RING                | C8803-043 – 65MM .043 MLS                                |                |             |
| 675XKS-3             | 68.80mm |                    |            | CW15 | PRO SERIES – ROUND STYLE                             |  |                |             |
| 730XDS-3             | 58.00mm |                    |            | CW17 | PRO SERIES – ROUND STYLE                             | C8401-018 – 73MM .018 MLS<br>C8401 – 73MM .040 MLS       |                |             |
| 750XKS-3<br>760XDS-3 | 54mm    | 23.5mm             | WP083-SP   | CW17 | PRO SERIES – SLIPPER STYLE – THREE RING              | C8568-018 – 76MM .018 MLS<br>C8568-030 – 76MM .030 MLS – |                |             |
| 675XKS-3             | 53.4mm  |                    |            | CW15 | PRO SERIES – ROUND STYLE –                           |  |                |             |
| 790XDS-3             | 53.6mm  |                    |            | CW20 | PRO SERIES – SLIPPER STYLE –                         |  |                |             |
| RIK75.00L            | 56.5mm  | 23.5mm             | WP083-SP   | CW17 | PRO SERIES – SLIPPER STYLE – RIKEN RING – THREE RING | C8702-018 – 75MM .018 MLS<br>C8702-027 – 75MM .027 MLS   |                |             |



# HONDA

## 4-STROKE

| MODEL       | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|-------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| CBR 1000 RR | 2008-2015 | K8743DA-4     | 13.5:1 | 12.3:1 | 10/1             | 75.96mm     | STD      |
|             |           | K8743D200-4   |        |        | 10/1             | 77.96mm     | +2.00mm  |
| CB 1100 F   | 1982-1984 | K8561DA-4     | 10.0:1 | 9.7:1  | 10               | 69.94mm     | STD      |
| CB 1100 R   |           | K8561D200-4   |        |        | 10/1             | 71.94mm     | +2.00mm  |
| CBR 1100 XX | 1997-2003 |               | 11.5:1 | 11.0:1 |                  | 80.94mm     | +2.00mm  |
| CB 1300 SF  | 1998-2021 | K4029DA-4     | 10.5:1 | 9.6:1  | 10/1             | 77.95mm     | STD      |

| RING SET              | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS  | GASKET   | CONNECTING ROD | ACCESSORIES |
|-----------------------|--------|--------------------|------------|------|---|--|----------------|-------------|
| RIK76.00C<br>RIK78.00 | 55.1mm | 23.5mm             | WP083-SP   | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING |  |                |             |
| 700XDS-3<br>720XDS-3  | 69.1mm | 24.4mm             | WP083-SP   | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                   |  |                |             |
| RIK81.00A             | 58mm   |                    |            | CW19 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING | C8499-018 –<br>81MM .018 MLS<br><br>C8499-030 –<br>81MM .030 MLS |                |             |
| RIK78.00              | 67.2mm | 24.5mm             | WP037-SP   | CW19 | PRO SERIES –<br>ROUND STYLE<br>– RIKEN RING –<br>THREE RING   |  |                |             |





# KTM

## 4-STROKE

| MODEL    | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|----------|-----------|---------------|--------|--------|------------------|-------------|----------|
| Duke 125 | 2013-2021 | 4036DA        | 13.5:1 | 12.6:1 | 4/1              | 57.96mm     | STD      |
| RC 125   |           |               |        |        |                  |             |          |
| Duke 390 | 2013-2021 | 4012DA        | 13.2:1 | 12.6:1 | 7                | 88.94mm     | STD      |
| RC 390   | 2014-2021 |               |        |        |                  |             |          |



| RING SET | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET                       | CONNECTING ROD | ACCESSORIES |
|----------|--------|--------------------|------------|------|--|------------------------------|----------------|-------------|
| 580XKS-3 | 47.2mm | 19.5mm             | WP110-SP   | CW15 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                    |                              |                |             |
| 890XSY-3 | 60mm   | 26mm               | WP028-SP   | CW19 | PRO SERIES –<br>SLIPPER STYLE<br>– GAS PORTING<br>– THREE RING | C8897-027 –<br>89MM .027 MLS |                |             |





# KAWASAKI

## 2-STROKE

| MODEL           | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|-----------------|-----------|---------------|------------------|-------------|----------|----------|--------|
| KR 1 S          | 1989-1993 | 8043DA        | 2                | 55.94mm     | STD      | RSB5600  | 50.6mm |
|                 |           | 8043D050      | 3                | 56.44mm     | +0.50mm  | RSB5650  |        |
| 350 S2 MACH II  | 1971      | K8255DA-3     | 29               | 52.94mm     | STD      | RSB5300  | 52.3mm |
|                 |           | K8255D050-3   | 29               | 53.44mm     | +0.50mm  | RSB5350  |        |
|                 |           | K8255D100-3   | 29               | 53.94mm     | +1.00mm  | RSB5400  |        |
|                 |           | K8255D150-3   | 29               | 54.44mm     | +1.50mm  | RSB5450  |        |
| 400 S3          | 1973-1975 | K8275DA-3     | 29               | 56.94mm     | STD      | RSB5700  | 52.3mm |
| KH 400          | 1976-1979 | K8275D050-3   | 29               | 57.44mm     | +0.50mm  | RSB5750  |        |
|                 |           | K8275D100-3   | 29               | 57.94mm     | +1.00mm  | RSB5800  |        |
|                 |           | K8275D150-3   | 29               | 58.44mm     | +1.50mm  | RSB5850  |        |
|                 |           | K8275D200-3   | 29               | 58.94mm     | +2.00mm  | RSB5900  |        |
| 500 H1 MACH III | 1969-1976 | K8247DA-3     | 29               | 59.93mm     | STD      | RSB6000  | 58.8mm |
| KH 500          |           | K8247D050-3   | 29               | 60.43mm     | +0.50mm  | RSB6050  |        |
| 500 S           |           | K8247D100-3   | 29               | 60.93mm     | +1.00mm  | RSB6100  |        |
|                 |           | K8247D150-3   | 29               | 61.43mm     | +1.50mm  | RSB6150  |        |
|                 |           | K8247D200-3   | 29               | 61.93mm     | +2.00mm  | RSB6200  |        |
| 750 MACH IV     | 1972-1975 | K8248DA-3     | 30               | 70.93mm     | STD      | RSB7100  | 63mm   |
| 750 H2          |           | K8248D050-3   | 30               | 71.43mm     | +0.50mm  | RSB7150  |        |
|                 |           | K8248D100-3   | 30               | 71.93mm     | +1.00mm  | RSB7200  |        |
|                 |           | K8248D150-3   | 30               | 72.43mm     | +1.50mm  | RSB7250  |        |
|                 |           | K8248D200-3   | 30               | 72.93mm     | +2.00mm  | RSB7300  |        |
|                 |           | K8248D250-3   | 30               | 73.43mm     | +2.50mm  | RSB7350  |        |

| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                            | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|---|-----------------|--------------------|----------------|--------------|
| 29.5mm             | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED |                 |                    |                |              |
| 28.5mm             | WP032      | CW15 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED |                 |                    |                |              |
| 28.5mm             | WP032      | CW15 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED |                 |                    |                |              |
| 31.9mm             | WP041      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED | N1014           |                    |                |              |
| 32mm               | WP027      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED | N1017           |                    |                |              |





# KAWASAKI

## 4-STROKE

| MODEL  | YEARS                  | PISTON PART #              | CR                | OEM CR           | PISTON PRICECODE | PISTON SIZE        | OVERSIZE           |
|--|------------------------|----------------------------|-------------------|------------------|------------------|--------------------|--------------------|
| GPZ 550<br>KZ 550<br>ZX 550                                | 1982-1995              |                            | 10.25:1           | 10.0:1           |                  | 60.94mm            | +3.00mm            |
| ZX 6 R NINJA   | 1995-1999              |                            | 12.5:1            | 11.8:1           |                  | 66.94mm            | +1.00mm            |
| ER 650 NINJA   | 2006-2016              | K8696DA-2                  | 12.6:1            | 11.3:1           | 9/1              | 82.95mm            | STD                |
| ER 650 NINJA   | 2006-2016              | K8697DA-2                  | 12.6:1            | 11.3:1           | 9                | 82.95mm            | STD                |
| Z 650<br>KZ 650  | 1976-1983              |                            | 9.5:1             | 10.25:1          |                  | 63.94mm            | +2.00mm            |
| GPZ 750<br>KZ 750 R1<br>ZN 750<br>ZX 750 E1 Turbo<br>Z 750 | 1982-1985              | K4010D250-4<br>K4010D300-4 | 10.7:1<br>10.85:1 | 9.5:1            | 10<br>10         | 68.44mm<br>68.94mm | +2.50mm<br>+3.00mm |
| ZX 750<br>ZX 750R<br>ZX 7                                  | 1991-1995              |                            | 12.0:1            | 10.8:1           |                  | 71.94mm            | +1.00mm            |
| ZX 7 R<br>ZX 7 RR  | 1996-2003              |                            | 13.0:1            | 11.5:1           |                  | 72.94mm<br>74.44mm | STD<br>+1.50mm     |
| ZX 9 R   | 1994-1997              |                            | 13.0:1            | 11.5:1           |                  | 74.94mm            | +2.00mm            |
| ZX 9 R<br>ZX 9 R   | 1998-1999<br>2000-2003 |                            | 13.0:1            | 11.5:1<br>12.2:1 |                  | 75.94mm            | +1.00mm            |

| RING SET             | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                                     | GASKET   | CONNECTING ROD | ACCESSORIES |
|----------------------|--------|--------------------|------------|------|--|--|----------------|-------------|
| 610XKS-3             | 52.4mm |                    |            | CW14 | ROUND STYLE – THREE RING                           |  |                |             |
| 670XKS-3             | 43.8mm |                    |            | CW16 | PRO SERIES – ROUND STYLE – THREE RING              |  |                |             |
| 13008-1196           | 60mm   | 23.6mm             | WP028-SP   | CW19 | PRO SERIES – SLIPPER STYLE – OEM RING – THREE RING |  |                |             |
| 830XSY-2             | 60mm   | 23.6mm             | WP028-SP   | CW19 | PRO SERIES – SLIPPER STYLE                         |  |                |             |
| 640XKS-3             | 54.4mm |                    |            | CW15 | PRO SERIES – ROUND STYLE                           |  |                |             |
| 685XKS-3<br>690XKS-3 | 54.1mm | 24.5mm             | WP102-SP   | CW15 | PRO SERIES – ROUND STYLE                           | C8012-043 – 69MM .043 MLS                              |                |             |
| 720XDS-3             | 47.2mm |                    |            | CW18 | PRO SERIES – ROUND STYLE                           | C8274-018 – 72MM .018 MLS<br>C8274-043 – 72MM .043 MLS |                |             |
| 730XDS-3<br>745XDS-3 | 49.7mm |                    |            | CW18 | PRO SERIES – ROUND STYLE – THREE RING              | C8428-018 – 73MM .018 MLS<br>C8274-030 – 72MM .030 MLS |                |             |
| 750XDS-3             | 53.7mm |                    |            | CW18 | PRO SERIES – ROUND STYLE – THREE RING              | C8272-030 – 75MM .030 MLS                              |                |             |
| RIK76.00C            | 50.9mm |                    |            | CW18 | PRO SERIES – SLIPPER STYLE – RIKEN RING            |  |                |             |



# KAWASAKI

## 4-STROKE

| MODEL                                  | YEARS                               | PISTON PART #   | CR                          | OEM CR | PISTON PRICECODE                 | PISTON SIZE  | OVERSIZE  |
|--|-------------------------------------|---|-----------------------------|--------|----------------------------------|--|---|
| Z 900<br>Z 900 RS                      | 2018-2021                           | K4041DA-4   | 12.0:1                      | 11.8:1 | 10/2                             | 73.35mm  | STD   |
| GPZ 900 R NINJA<br>GP 700 R ELIMINATOR | 1984-2003                           | K4025D250-4<br>K4025D300-4  | 11.0:1                      | 11.0:1 | 10                               | 74.94mm<br>75.44mm   | +2.50mm<br>+3.00mm  |
| ZX 10 R                                | 2004-2010                           | K8746DA-4<br>K8746D200-4<br>K8746D300-4   | 13.4:1<br>14.06:1<br>14.4:1 | 12.7:1 | 10/1<br>10/1<br>10/1             | 75.94mm<br>77.94mm<br>78.94mm                                  | STD<br>+2.00mm<br>+3.00mm                                       |
| ZX 10 R TURBO                          | 2004-2010                           | K8767DA-4<br>K8767D200-4  | 10.0:1                      | 12.7:1 | 10/1<br>10/1                     | 75.94mm<br>77.94mm   | STD<br>+2.00mm  |
| ZX 10 R                                | 2011-2021                           | K8832DA-4<br>K8832D200-4<br>K8832D300-4   | 13.5:1<br>13.7:1<br>14.0:1  | 13.0:1 | 10<br>10<br>10                   | 75.94mm<br>77.94mm<br>78.94mm                                  | STD<br>+2.00mm<br>+3.00mm                                       |
| ZX 10 R TURBO                          | 2011-2021                           | K4002DA-4<br>K4002D200-4  | 10.5:1                      | 13.0:1 | 10/1<br>10/1                     | 75.94mm<br>77.94mm   | STD<br>+2.00mm  |
| ZX 10 R TURBO                          | 2011-2021                           | K4003DA-4<br>K4003D200-4  | 9.5:1<br>10.0:1             | 13.0:1 | 10/1<br>10/1                     | 75.94mm<br>77.94mm   | STD<br>+2.00mm  |
| KZ 1000 J<br>KZ 1000 R                 | 1981-1983                           | K8796D250-4<br>K8796D350-4  | 10.25:1                     | 9.2:1  | 10<br>10                         | 71.94mm<br>72.94mm   | +2.50mm<br>+3.50mm  |
| GPZ 1000 RX<br>NINJA<br>GTR 1000       | 1986-1987<br><br>1986-2000          | K4059D150-4   | 11.0:1                      | 10.2:1 | 10                               | 75.44mm  | +1.50mm   |
| Z 1<br>KZ 900<br>KZ 1000<br>Z 1 R      | 1973-1975<br>1976-1977<br>1977-1980 | K4026D400-4<br>K4026D500-4<br>K4026D600-4<br>K4026D700-4<br>K4026D800-4<br>K4026D1000-4 | 10.25:1<br>10.5:1           | 8.5:1  | 10<br>10<br>10<br>10<br>10<br>10 | 69.94mm<br>70.94mm<br>71.94mm<br>72.94mm<br>73.94mm<br>75.94mm | +4.00mm<br>+5.00mm<br>+6.00mm<br>+7.00mm<br>+8.00mm<br>+10.00mm |

| RING SET   | STROKE | COMPRESSION HEIGHT | PISTON PIN                       | CLIP | PISTON DETAILS   | GASKET | CONNECTING ROD | ACCESSORIES |
|--|--------|--------------------|----------------------------------|------|--|--------|----------------|-------------|
| RIK73.40   | 56mm   | 22.7mm             | WP083-SP                         | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>GAS PORTING     |        |                |             |
| RIK75.00L<br>755XDS-3  | 55mm   | 26mm               | WP133-SP                         | CW18 | ROUND STYLE –<br>RIKEN RING  |        |                |             |
| RIK76.00C<br>RIK78.00<br>RIK79.00D3                                  | 55mm   | 22.7mm             | WP109-SP<br>WP083-SP<br>WP083-SP | CW17 | PRO SERIES<br>– DOUBLE<br>BRIDGED –<br>RIKEN RING –<br>GAS PORTING |        |                |             |
| RIK76.00C<br>RIK78.00  | 55mm   | 22.7mm             | WP090-SP                         | CW17 | ROUND STYLE<br>– RIKEN RING –<br>THREE RING                        |        |                |             |
| TPR76.00L<br>RIK78.00<br>RIK79.00D3                                  | 55.1mm | 22.7mm             | WP083-SP                         | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING      |        |                |             |
| TPR76.00L<br>RIK78.00  | 55.1mm | 22.7mm             | WP149-SP<br>WP083-SP             | CW17 | SLIPPER STYLE<br>– RIKEN RING<br>– THREE RING –<br>GAS PORTING     |        |                |             |
| TPR76.00L<br>RIK78.00  | 55.1mm | 22.7mm             | WP149-SP                         | CW17 | SLIPPER STYLE<br>– RIKEN RING<br>– THREE RING –<br>GAS PORTING     |        |                |             |
| 720XDS-3<br>730XDS-3   | 66mm   | 25.3mm             | WP083-SP                         | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                        |        |                |             |
| 755XDS-3   | 58mm   |                    |                                  | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                        |        |                |             |
| 700XDS-3<br>710XDS-3<br>720XDS-3<br>730XDS-3<br>740XDS-3<br>760XDS-3 | 66mm   | 24.2mm             | WP090-SP                         | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                        |        |                |             |





# KAWASAKI

## 4-STROKE

| MODEL         | YEARS     | PISTON PART # | CR      | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|---------------|-----------|---------------|---------|--------|------------------|-------------|----------|
| Z1            | 1973-1975 | K4020D600-4   | 12.5:1  | 8.5:1  | 10               | 71.94mm     | +6.00mm  |
| KZ 900        | 1976-1977 |               |         |        |                  |             |          |
| KZ 1000       | 1977-1980 |               |         |        |                  |             |          |
| Z1 R          | 1977-1980 |               |         |        |                  |             |          |
| Z1            | 1973-1975 | K4021D1700-4  | 13.5:1  | 8.5:1  | 10               | 82.94mm     | +17.00mm |
| KZ 900        | 1976-1977 |               |         |        |                  |             |          |
| KZ 1000       | 1977-1980 |               |         |        |                  |             |          |
| Z1 R          |           |               |         |        |                  |             |          |
| KZ 1000       | 1980      | K8797D100-4   | 10.0:1  | 8.7:1  | 10               | 70.94mm     | +1.00mm  |
| KZ 1000 ST    |           | K8797D200-4   |         |        | 10               | 71.94mm     | +2.00mm  |
| Z1 R          | 1977-1980 |               |         |        |                  |             |          |
| Z2 R          |           |               |         |        |                  |             |          |
| KZ            | ALL YEARS |               | 13.5:1  | 8.5:1  |                  | 84.95mm     | +19.00mm |
| GPZ           |           |               |         |        |                  |             |          |
| PRO STOCK     |           |               |         |        |                  |             |          |
| ZX 10         | 1988-1989 | K4053D150-4   | 11.5:1  | 11.0:1 | 10/1             | 75.44mm     | +1.50mm  |
| ZX 1000 NINJA |           |               |         |        |                  |             |          |
| TOM CAT       |           |               |         |        |                  |             |          |
| GPZ 1000      | 1981-1982 | K8819D150-4   | 10.25:1 | 8.9:1  | 10               | 73.94mm     | +1.50mm  |
| (17mm Pin)    |           | K8819D250-4   | 10.5:1  |        | 10               | 74.94mm     | +2.50mm  |
| KZ 1100       | 1983-1984 | K8798D250-4   | 10.3:1  | 9.5:1  | 10               | 74.94mm     | +2.50mm  |
| GPZ 1100      |           | K8798D550-4   | 11.0:1  |        | 10               | 77.94mm     | +5.50mm  |
| GPZX 1100     |           |               |         |        |                  |             |          |
| ZX 1100       |           |               |         |        |                  |             |          |
| (18mm Pin)    |           |               |         |        |                  |             |          |
| ZX 11 C-1     | 1990-1994 | K8800D200-4   | 11.8:1  | 10.1:1 | 10               | 77.94mm     | +2.00mm  |
| ZX 11 D-1     | 1993-2001 |               |         |        |                  |             |          |
| ZZR 1100      | 1990-2001 |               |         |        |                  |             |          |
| ZRX 1100      | 1997-2001 |               |         |        |                  |             |          |
| GPZ 1100      | 1995-1997 |               |         |        |                  |             |          |

| RING SET             | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET   | CONNECTING ROD | ACCESSORIES |
|----------------------|--------|--------------------|------------|------|--|--|----------------|-------------|
| 720XDS-3             | 66mm   | 24.2mm             | WP090-SP   | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                  |  |                |             |
| 830XDS-3             | 66mm   | 24.2mm             | WP089-SP   | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING –<br>GAS PORTING | C8160-043 –<br>83MM .043 MLS                                     |                |             |
| 710XDS-3<br>720XDS-3 | 66mm   | 24.7mm             | WP083-SP   | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                  |  |                |             |
| 850XDS-3             | 66mm   | 24.2mm             | WP089-SP   | CW17 | PRO SERIES   |  |                |             |
| 755XDS-3             | 58mm   | 25.1mm             | WP039      | CW18 | PRO SERIES –<br>ROUND STYLE                                  |  |                |             |
| 740XDS-3<br>750XDS-3 | 66mm   | 25.3mm             | WP083-SP   | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                  |  |                |             |
| 750XDS-3<br>780XDS-3 | 66.2mm | 25.6mm             | WP031-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                  |  |                |             |
| RIK78.00             | 58mm   | 24.4mm             | WP099-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– RIKEN RING –<br>THREE RING  | C8273-018 –<br>78MM .018 MLS<br><br>C8273-043 –<br>78MM .043 MLS |                |             |



# KAWASAKI

## 4-STROKE

| MODEL             | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|-------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| ZX 11             | 1990-2001 | K8801D100-4   | 12.0:1 | 11.0:1 | 10               | 76.95mm     | +1.00mm  |
|                   |           | K8801D200-4   |        |        | 10               | 77.95mm     | +2.00mm  |
| ZX 12 R TURBO     | 2000-2005 | K8779DA-4     | 9.8:1  | 12.2:1 | 10/1             | 82.93mm     | STD      |
|                   |           | K8779D200-4   |        |        | 10/1             | 84.93mm     | +2.00mm  |
| ZX 12 R           | 2000-2005 | K4009DA-4     | 13.5:1 | 12.2:1 | 10               | 82.93mm     | STD      |
|                   |           | K4009D200-4   |        |        | 10               | 84.93mm     | +2.00mm  |
| ZX 14 NINJA       | 2006-2021 | K8785DA-4     | 13.5:1 | 12.0:1 | 10/1             | 83.93mm     | STD      |
|                   |           | K8785D150-4   | 13.8:1 |        | 10/1             | 85.45mm     | +1.50mm  |
|                   |           | K8785D200-4   | 14.1:1 |        | 10/1             | 85.93mm     | +2.00mm  |
|                   |           | K8785D300-4   | 14.3:1 |        | 10/1             | 86.93mm     | +3.00mm  |
| ZX 14 NINJA TURBO | 2006-2021 | K8780DA-4     | 9.0:1  | 12.0:1 | 10/1             | 83.93mm     | STD      |
|                   |           | K8780D200-4   |        |        | 10/1             | 85.93mm     | +2.00mm  |
|                   |           | K8780D300-4   |        |        | 10/1             | 86.93mm     | +3.00mm  |

| RING SET                                      | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET   | CONNECTING ROD   | ACCESSORIES |
|---|--------|--------------------|------------|------|--|--|--|-------------|
| RIK77.00D3<br>RIK78.00                        | 58mm   | 25mm               | WP031-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– RIKEN RING –<br>THREE RING    |  |  |             |
| 830XDS-3<br>850XDS-3                          | 55.4mm | 25mm               | WP092-SP   | CW21 | ROUND STYLE –<br>THREE RING                                    | C8642-018 –<br>83MM .018 MLS<br><br>C8642-043 –<br>83MM .043 MLS<br><br>C8643-018 –<br>85MM .018 MLS<br><br>C8643-043 –<br>85MM .043 MLS |  |             |
| RIK83.00A<br>850XDS-3                         | 55.4mm | 25mm               | WP013-SP   | CW21 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING  | C8642-018 –<br>83MM .018 MLS<br><br>C8642-043 –<br>83MM .043 MLS<br><br>C8643-018 –<br>85MM .018 MLS<br><br>C8643-043 –<br>85MM .043 MLS |  |             |
| RIK84.00B<br>855XDS-3<br>860XDS-3<br>870XDS-3 | 65mm   | 24.5mm             | WP038-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>GAS PORTING | C8460-018 –<br>84MM .018 MLS<br><br>C8621-018 –<br>86MM .018 MLS<br><br>C8622-018 –<br>87MM .018 MLS                                     | KPM007 – (2006<br>– 2011)<br><br>KPM011 – (2012<br>– 2021) |             |
| RIK84.00B<br>860XDS-3<br>870XDS-3             | 65mm   | 24.5mm             | WP065-SP   | CW20 | ROUND STYLE<br>– RIKEN RING –<br>GAS PORTING                   | C8460-018 –<br>84MM .018 MLS<br><br>C8621-018 –<br>86MM .018 MLS<br><br>C8622-018 –<br>87MM .018 MLS                                     | KPM007 – (2006<br>– 2011)<br><br>KPM011 – (2012<br>– 2021) |             |



## SACHS

### 2-STROKE

| MODEL   | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|---------|-----------|---------------|------------------|-------------|----------|----------|--------|
| 125 / 6 | ALL YEARS | 8286D050      | 2/2              | 54.44mm     | +0.50mm  | RSB5450  | 54mm   |
|         |           | 8286D100      | 2/2              | 54.94mm     | +1.00mm  | RSB5500  |        |
|         |           | 8286D150      | 2/2              | 55.44mm     | +1.50mm  | RSB5550  |        |
|         |           | 8286D200      | 2/2              | 55.94mm     | +2.00mm  | RSB5600  |        |
| 125 / 7 | ALL YEARS | 8287D050      | 2/2              | 54.19mm     | +0.50mm  | RSB5425  | 54mm   |
|         |           | 8287D100      | 2/2              | 54.69mm     | +1.00mm  | RSB5475  |        |
|         |           | 8287D150      | 2/2              | 55.19mm     | +1.50mm  | RSB5525  |        |
|         |           | 8287D200      | 2/2              | 55.69mm     | +2.00mm  | RSB5575  |        |





| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|--|-----------------|--------------------|----------------|--------------|
| 38mm               | WP032      | CW15 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED<br><br>DOMED |                 |                    |                |              |
| 38mm               | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– FLAT               |                 |                    |                |              |







## BULTACO

### 2-STROKE

| MODEL  | YEARS | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|--------|-------|---------------|------------------|-------------|----------|----------|--------|
| TS 250 | 1970  | 8291DA        | 3                | 71.94mm     | STD      | RSB7200  | 60mm   |
|        |       | 8291D050      | 3                | 72.44mm     | +0.50mm  | RSB7250  |        |
|        |       | 8291D100      | 3                | 72.94mm     | +1.00mm  | RSB7300  |        |
|        |       | 8291D150      | 3                | 73.44mm     | +1.50mm  | RSB7350  |        |
|        |       | 8291D200      | 3                | 73.94mm     | +2.00mm  | RSB7400  |        |





| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                              | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|---|-----------------|--------------------|----------------|--------------|
| 29mm               | WP027      | CW16 | SINGLE RING –<br>1.0MM FLAT RING<br>– DOMED |                 |                    |                |              |





# SUZUKI

## 2-STROKE

| MODEL       | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|-------------|-----------|---------------|------------------|-------------|----------|----------|--------|
| RGV 250     | 1989-1995 | 8039DA        | 2                | 55.95mm     | STD      | RSB5600  | 50.6mm |
|             |           | 8039DB        | 2                | 55.96mm     | +0.01mm  | RSB5600  |        |
|             |           | 8039DC        | 2                | 55.97mm     | +0.02mm  | RSB5600  |        |
|             |           | 8039D050      | 2                | 56.45mm     | +0.50mm  | RSB5650  |        |
|             |           | 8039D100      | 2                | 56.95mm     | +1.00mm  | RSB5700  |        |
| T 500       | 1969-1975 | K8276DA-2     | 3/2K             | 69.91mm     | STD      | RSB7000  | 64mm   |
| T 500 TITAN | 1968-1976 | K8276D050-2   | 3/2K             | 70.41mm     | +0.50mm  | RSB7050  |        |
|             |           | K8276D100-2   | 3/2K             | 70.91mm     | +1.00mm  | RSB7100  |        |
|             |           | K8276D150-2   | 3/2K             | 71.41mm     | +1.50mm  | RSB7150  |        |
|             |           | K8276D200-2   | 3/2K             | 72.91mm     | +2.00mm  | RSB7200  |        |
| GT 750      | 1972-1977 | K8276DA-3     | 3/3K             | 69.91mm     | STD      | RSB7000  | 64mm   |
|             |           | K8276D050-3   | 3/3K             | 70.41mm     | +0.50mm  | RSB7050  |        |
|             |           | K8276D100-3   | 3/3K             | 70.91mm     | +1.00mm  | RSB7100  |        |
|             |           | K8276D150-3   | 3/3K             | 71.41mm     | +1.50mm  | RSB7150  |        |
|             |           | K8276D200-3   | 3/3K             | 72.91mm     | +2.00mm  | RSB7200  |        |

| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                             | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|--|-----------------|--------------------|----------------|--------------|
| 28.5mm             | WP036      | CW16 | SINGLE RING –<br>1.0MM FLAT RING<br>– FLAT |                 |                    |                |              |
| 31.8mm             | WP033      | CW18 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED  |                 |                    |                |              |
| 31.8mm             | WP033      | CW18 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED  |                 |                    |                |              |





# SUZUKI

## 4-STROKE

| MODEL                                   | YEARS                  | PISTON PART # | CR      | OEM CR | PISTON PRICECODE | PISTON SIZE        | OVERSIZE           |
|---|------------------------|---------------|---------|--------|------------------|--------------------|--------------------|
| GSXR600                                 | 1997-2000              | K4054DA-4     | 13.0:1  | 12.0:1 | 10               | 65.44mm            | STD                |
|   |                        | K4054D200-4   |         |        |                  | 67.44mm            | +2.00mm            |
| SV 650                                  | 1999-2010              | K4045DA-2     | 12.5:1  | 11.5:1 | 9/2              | 80.94mm            | STD                |
| SV 650 X                                | 2016-2021              | K4045D200-2   |         |        |                  | 82.94mm            | +2.00mm            |
| DL 650 V-STORM                          | 2004-2019              | K4045D300-2   |         |        |                  | 83.94mm            | +3.00mm            |
| GS 750<br>(2 Valve DOHC)                | 1977-1979              |               | 10.25:1 | 8.7:1  |                  | 68.94mm            | +4.00mm            |
| GS 750<br>(4 Valve DOHC)                | 1980-1984              | K4050D300-4   | 10.25:1 | 9.4:1  | 10               | 69.94mm            | +3.00mm            |
| GSXR 750                                | 1986-1987              | K8836D100-4   | 13.0:1  | 9.8:1  | 10               | 70.94mm            | +1.00mm            |
| GSXR 750<br>GSXR 750 F KATANA 1989-1997 | 1988-1989<br>1989-1997 | K8817D100-4   | 11.7:1  | 10.9:1 | 10               | 73.94mm            | +1.00mm            |
| GSXR 750                                | 1990-1991              | K8837D100-4   | 13.0:1  | 10.9:1 | 10               | 70.94mm            | +1.00mm            |
| GSXR 750                                | 1996-1999              |               | 13.0:1  | 11.8:1 |                  | 71.94mm            | STDmm              |
| GS 1000                                 | 1978-1981              |               | 10.25:1 | 9.2:1  |                  | 72.94mm<br>73.44mm | +3.00mm<br>+3.50mm |
| TL 1000 R                               | 1998-2003              | K4004DA-2     | 12.5:1  | 11.7:1 | 9/2              | 97.94mm            | STD                |
| GSXR 1100                               | 1993-1998              |               | 12.0:1  | 11.2:1 |                  | 76.94mm            | +1.50mm            |
| GSXR 1100                               | 1980-1983              | K8838D200-4   | 10.25:1 | 9.5:1  | 10               | 73.94mm            | +2.00mm            |
| GSX 1100 E                              |                        | K8838D300-4   | 10.5:1  |        | 10               | 74.94mm            | +3.00mm            |

| RING SET                            | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS  | GASKET   | CONNECTING ROD | ACCESSORIES |
|-------------------------------------|--------|--------------------|------------|------|---|--|----------------|-------------|
| 655XKS-3<br>675XKS-3                | 44.5mm | 21.8mm             | WP067      | CW15 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8413-030 –<br>65.5MM .030<br>MLS  |                |             |
| RIK81.00A<br>RIK83.00A<br>RIK84.00B | 62.6mm | 24.8mm             | WP029-SP   | CW20 | PRO SERIES<br>– RIKEN RING –<br>THREE RING                              | C8600-030 –<br>83MM .030 MLS<br><br>C8593-018 –<br>84MM .018 MLS<br><br>C8593-030 –<br>84MM .030 MLS |                |             |
| 690XKS-3                            | 56.4mm |                    |            | CW16 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8028-043 –<br>69MM .043 CFM   |                |             |
| 700XDS-3                            | 53mm   | 27mm               | WP039      | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8027-043 –<br>70MM .043 CFM   |                |             |
| 710XDS-3                            | 48.7mm | 23.6mm             | WP054-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8466-043 –<br>71MM .043 MLS   |                |             |
| 740XAS-3                            | 44.7mm | 23.8mm             | WP028-SP   | CW19 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8415 – 74MM<br>MLS  |                |             |
| 710XDS-3                            | 48.7mm |                    |            | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             |  |                |             |
| 720XDS-3                            | 46mm   |                    |            | CW16 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8422-030 –<br>72MM .030 MLS   |                |             |
| 730XDS-3<br>735XDS-3                | 64.8mm |                    |            | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             | C8030-043 –<br>73.5MM .043<br>FIBER  |                |             |
| GNH98.00                            | 66mm   | 29.00              | WP122-SP   | CW20 | PRO SERIES –<br>ROUND STYLE<br>– SECOND<br>NAPPIER RING –<br>THREE RING |  |                |             |
| 770XDS-3                            | 60mm   |                    |            | CW20 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING           |  |                |             |
| 740XDS-3<br>750XDS-3                | 66mm   | 27.2mm             | WP054-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                             |  |                |             |



# SUZUKI

## 4-STROKE

| MODEL              | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|--------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| GSXR 1100          | 1986-1988 | K8530D200-4   | 12.5:1 | 10.0:1 | 10               | 79.94mm     | +2.00mm  |
| GSF 1200 BANDIT    | 1989-1992 | K8530D300-4   |        |        | 10               | 80.94mm     | +3.00mm  |
| GSXR 1100 F KATANA |           | K8530D400-4   |        |        | 10               | 81.94mm     | +4.00mm  |
|                    |           | K8530D500-4   |        |        | 10               | 82.94mm     | +5.00mm  |
|                    |           | K8530D700-4   |        |        | 10               | 84.94mm     | +7.00mm  |
| GSXR 1000          | 2001-2004 | K8754DA-4     | 14.0:1 | 12.0:1 | 10               | 72.96mm     | STD      |
| GSXR 1000 TURBO    | 2001-2004 | K8755DA-4     | 10.0:1 | 12.0:1 | 10               | 72.96mm     | STD      |
|                    |           | K8755D200-4   |        |        | 10               | 74.96mm     | +2.00mm  |
| GSXR 1000          | 2005-2008 | K8700DA-4     | 14.0:1 | 12.0:1 | 10               | 73.36mm     | STD      |
|                    |           | K8700D160-4   | 14.6:1 |        | 10               | 74.96mm     | +1.60mm  |
|                    |           | K8700D260-4   | 14.9:1 |        | 10               | 75.96mm     | +2.60mm  |
| GSXR 1000 TURBO    | 2005-2008 | K8747DA-4     | 10.0:1 | 12.0:1 | 10               | 73.36mm     | STD      |
|                    |           | K8747D160-4   |        |        | 10               | 74.96mm     | +1.60mm  |
| GSXR 1000          | 2009-2016 | K8790DA-4     | 14.0:1 | 12.8:1 | 10               | 74.46mm     | STD      |
| GSXR 1000 TURBO    | 2009-2016 | K8794DA-4     | 14.0:1 | 12.8:1 | 10               | 74.46mm     | STD      |

| RING SET   | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET  | CONNECTING ROD | ACCESSORIES |
|--|--------|--------------------|------------|------|--|---|----------------|-------------|
| 800XDS-3<br>810XSY-3<br>820XSY-3<br>830XSY-3<br>850XSY-3 | 58mm   | 25.3mm             | WP029-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE<br>– THREE RING                                  | C8279-030 –<br>81MM .030 MLS  |                |             |
| RIK73.00F  | 59mm   | 22.55mm            | WP059-SP   | CW16 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING<br>– GAS PORTING<br>– THREE RING |   | KPM005         |             |
| RIK73.00F<br>RIK75.00L                                   | 59mm   | 22.55mm            | WP059-SP   | CW16 | SLIPPER STYLE<br>– RIKEN RING –<br>GAS PORTING<br>– THREE RING                 |   | KPM005         |             |
| RIK73.40L<br>RIK75.00L<br>RIK76.00L                      | 59mm   | 22.55mm            | WP011-SP   | CW15 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING<br>– GAS PORTING<br>– THREE RING | C8214-030 –<br>75MM .030<br>MLS –<br>C8214-018 –<br>75MM .018<br>MLS –<br>C8214-027 –<br>75MM .027<br>MLS – | KPM006         |             |
| RIK73.40L<br>RIK75.00L                                   | 59mm   | 22.55mm            | WP011-SP   | CW15 | SLIPPER STYLE<br>– RIKEN RING –<br>GAS PORTING<br>– THREE RING                 | C8214-030 –<br>75MM .030<br>MLS –<br>C8214-018 –<br>75MM .018<br>MLS –<br>C8214-027 –<br>75MM .027<br>MLS – | KPM006         |             |
| 12140-47H00  | 57.3mm | 22.35mm            | WP011-SP   | CW15 | PRO SERIES –<br>SLIPPER STYLE<br>– OEM RING<br>– GAS PORTING<br>– THREE RING   |   | KPM006         |             |
| 12140-47H00  | 57.3mm | 22.35mm            | WP011-SP   | CW15 | SLIPPER STYLE<br>– OEM RING –<br>GAS PORTING<br>– THREE RING                   |   | KPM006         |             |



# SUZUKI

## 4-STROKE

| MODEL                     | YEARS     | PISTON PART # | CR      | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|---------------------------|-----------|---------------|---------|--------|------------------|-------------|----------|
| GSXR 1000                 | 2017-2021 | K4038DA-4     | 13.4:1  | 13.2:1 | 10/5             | 75.95mm     | STD      |
|                           |           | K4038D200-4   | 14.05:1 |        | 10/5             | 77.95mm     | +2.00mm  |
| GSXR 1000 TURBO           | 2017-2021 | K4028DA-4     | 10.5:1  | 13.2:1 | 10/1             | 75.95mm     | STD      |
|                           |           | K4028D200-4   |         |        | 10/1             | 77.95mm     | +2.00mm  |
| GSXR 1000 TURBO           | 2017-2021 | K4039DA-4     | 9.5:1   | 13.2:1 | 10/1             | 75.95mm     | STD      |
|                           |           | K4039D200-4   |         |        | 10/1             | 77.95mm     | +2.00mm  |
| GS 1150                   | 1983-1986 |               | 10.25:1 | 9.7:1  |                  | 75.94mm     | +2.00mm  |
| GSF 1200 SX BANDIT        | 1996-2005 |               | 11.0:1  | 9.5:1  |                  | 80.94mm     | +2.00mm  |
| GSX 1300 R HAYABUSA       | 1999-2007 | K8730DA-4     | 13.5:1  | 11.0:1 | 10               | 80.95mm     | STD      |
|                           |           | K8730D200-4   |         |        | 10               | 82.95mm     | +2.00mm  |
|                           |           | K8730D300-4   |         |        | 10               | 83.95mm     | +3.00mm  |
|                           |           | K8730D400-4   |         |        | 10               | 84.95mm     | +4.00mm  |
| GSX 1300 R HAYABUSA TURBO | 1999-2007 | K8734DA-4     | 9.0:1   | 11.0:1 | 10               | 80.93mm     | STD      |
|                           |           | K8734D200-4   |         |        | 10               | 82.93mm     | +2.00mm  |



| RING SET  | STROKE  | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET  | CONNECTING ROD | ACCESSORIES  |
|---|---------|--------------------|------------|------|--|---|----------------|--|
| RIK76.00L<br>RIK78.00                           | 55.1mm  | 22.2mm             | WP059-SP   | CW16 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING<br>– GAS PORTING<br>– THREE RING<br>– 3D DOME MILL |   |                |  |
| RIK76.00L<br>RIK78.00                           | 55.1mm  | 22.2mm             | WP059-SP   | CW16 | ROUND STYLE<br>– RIKEN RING –<br>GAS PORTING<br>– THREE RING<br>– 3D DOME MILL                   |   |                |  |
| RIK76.00L<br>RIK78.00                           | 55.1mm  | 22.2mm             | WP059-SP   | CW16 | ROUND STYLE<br>– RIKEN RING –<br>GAS PORTING<br>– THREE RING                                     |   |                |  |
| 760XDS-3  | 65.95mm |                    |            | CW20 | PRO SERIES   |   |                |  |
| 810XDS-3  | 59mm    |                    |            | CW20 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING                                    | C8279-030<br>– 81MM .030<br>MLS –   | KPMXXXX        |  |
| RIK81.00A<br>RIK83.00A<br>RIK84.00B<br>850XDS-3 | 63mm    | 25.25mm            | WP029-SP   | CW20 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING<br>– GAS PORTING<br>– THREE RING                   | C8656-030 –<br>81MM .030 MLS<br>– C8656-018<br><br>C8656-018 –<br>81MM .018 MLS<br>– C8657-030<br><br>C8657-030 –<br>83MM .030 MLS<br>– C8657-018<br><br>C8657-018 –<br>83MM .018 MLS<br>– C8658-030<br><br>C8658-030<br>– 84MM .030<br>MLS – | KPM002         | WBB-81mm<br>– 81MM<br>CYLINDER<br><br>WBB-83mm<br>– 83MM<br>CYLINDER<br><br>WBB-84mm<br>– 84MM<br>CYLINDER<br><br>WBB-85mm<br>– 85MM<br>CYLINDER |
| RIK81.00A<br>RIK83.00A                          | 63mm    | 26.8mm             | WP065-SP   | CW20 | ROUND STYLE<br>– RIKEN RING –<br>GAS PORTING<br>– THREE RING                                     | C8656-030 –<br>81MM .030 MLS<br>– C8656-018<br><br>C8656-018 –<br>81MM .018 MLS<br>– C8657-030<br><br>C8657-030 –<br>83MM .030 MLS<br>– C8657-018<br><br>C8657-018<br>– 83MM .018<br>MLS –  | KPM002         | WBB-81mm<br>– 81MM<br>CYLINDER<br><br>WBB-83mm<br>– 83MM<br>CYLINDER<br><br>WBB-84mm<br>– 84MM<br>CYLINDER<br><br>WBB-85mm<br>– 85MM<br>CYLINDER |



# SUZUKI

## 4-STROKE

| MODEL                     | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|---------------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| GSX 1300 R HAYABUSA TURBO | 1999-2007 | K8916DA-4     | 10.0:1 | 11.0:1 | 10               | 80.93mm     | STD      |
|                           |           | K8916D200-4   |        |        | 10               | 82.93mm     | +2.00mm  |
| GSX 1300 R HAYABUSA       | 1999-2007 | K4017DA-4     | 12.0:1 | 11.0:1 | 10               | 80.95mm     | STD      |
|                           |           | K4017D200-4   | 12.3:1 |        | 10               | 82.95mm     | +2.00mm  |
|                           |           | K4017D300-4   | 12.5:1 |        | 10               | 83.95mm     | +3.00mm  |
| GSX 1300 R HAYABUSA       | 1999-2007 | K8927DA-4     | 14.0:1 | 11.0:1 | 10               | 80.95mm     | STD      |
|                           |           | K8927D200-4   |        |        | 10               | 82.95mm     | +2.00mm  |
|                           |           | K8927D300-4   |        |        | 10               | 83.95mm     | +3.00mm  |

| RING SET                            | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET   | CONNECTING ROD | ACCESSORIES  |
|-------------------------------------|--------|--------------------|------------|------|--|--|----------------|--|
| RIK81.00A<br>RIK83.00A              | 63mm   | 26.8mm             | WP065-SP   | CW20 | ROUND STYLE<br>- RIKEN RING -<br>GAS PORTING<br>- THREE RING                   | C8656-030 -<br>81MM .030 MLS<br><br>C8656-018 -<br>81MM .018 MLS<br><br>C8657-030 -<br>83MM .030 MLS<br><br>C8657-018 -<br>83MM .018 MLS                                     | KPM002         | WBB-81mm<br>- 81MM<br>CYLINDER<br><br>WBB-83mm<br>- 83MM<br>CYLINDER<br><br>WBB-84mm<br>- 84MM<br>CYLINDER<br><br>WBB-85mm<br>- 85MM<br>CYLINDER |
| RIK81.00A<br>RIK83.00A<br>RIK84.00B | 63mm   | 25.25mm            | WP029-SP   | CW20 | PRO SERIES -<br>SLIPPER STYLE<br>- RIKEN RING<br>- GAS PORTING<br>- THREE RING | C8656-030 -<br>81MM .030 MLS<br><br>C8656-018 -<br>81MM .018 MLS<br><br>C8657-030 -<br>83MM .030 MLS<br><br>C8657-018 -<br>83MM .018 MLS<br><br>C8658-030 -<br>84MM .030 MLS | KPM002         | WBB-81mm<br>- 81MM<br>CYLINDER<br><br>WBB-83mm<br>- 83MM<br>CYLINDER<br><br>WBB-84mm<br>- 84MM<br>CYLINDER<br><br>WBB-85mm<br>- 85MM<br>CYLINDER |
| RIK81.00A<br>RIK83.00A<br>RIK84.00B | 63mm   | 26.8mm             | WP073-SP   | CW20 | PRO SERIES -<br>SLIPPER STYLE<br>- RIKEN RING<br>- GAS PORTING<br>- THREE RING | C8656-030 -<br>81MM .030 MLS<br><br>C8656-018 -<br>81MM .018 MLS<br><br>C8657-030 -<br>83MM .030 MLS<br><br>C8657-018 -<br>83MM .018 MLS<br><br>C8658-030 -<br>84MM .030 MLS | KPM002         | WBB-81mm<br>- 81MM<br>CYLINDER<br><br>WBB-83mm<br>- 83MM<br>CYLINDER<br><br>WBB-84mm<br>- 84MM<br>CYLINDER<br><br>WBB-85mm<br>- 85MM<br>CYLINDER |



# SUZUKI

## 4-STROKE

| MODEL                     | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|---------------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| GSX 1300 R HAYABUSA       | 1999-2007 | K8900DA-4     | 14.0:1 | 11.0:1 | 10/2             | 80.95mm     | STD      |
|                           |           | K8900D200-4   |        |        | 10/2             | 82.95mm     | +2.00mm  |
|                           |           | K8900D300-4   |        |        | 10/2             | 83.95mm     | +3.00mm  |
| GSX 1300 R HAYABUSA TURBO | 2008-2021 | K8736DA-4     | 9.0:1  | 12.5:1 | 10               | 80.92mm     | STD      |
|                           |           | K8736D200-4   |        |        | 10               | 82.92mm     | +2.00mm  |
| GSX 1300 R HAYABUSA TURBO | 2008-2021 | K4006DA-4     | 10.0:1 | 12.5:1 | 10/1             | 80.95mm     | STD      |
|                           |           | K4006D200-4   | 10.4:1 |        | 10/1             | 82.95mm     | +2.00mm  |

| RING SET                            | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS  | GASKET   | CONNECTING ROD | ACCESSORIES  |
|-------------------------------------|--------|--------------------|------------|------|---|--|----------------|--|
| RIK81.00A<br>RIK83.00A<br>RIK84.00B | 63mm   | 25mm               | WP029-SP   | CW20 | PRO SERIES<br>- RIKEN RING<br>- GAS PORTED<br>- TALL DECK -<br>NOS - THREE RING | C8656-030 -<br>81MM .030 MLS<br><br>C8656-018 -<br>81MM .018 MLS<br><br>C8657-030 -<br>83MM .030 MLS<br><br>C8657-018 -<br>83MM .018 MLS<br><br>C8658-030 -<br>84MM .030 MLS | KPM002         | WBB-81mm<br>- 81MM<br>CYLINDER<br><br>WBB-83mm<br>- 83MM<br>CYLINDER<br><br>WBB-84mm<br>- 84MM<br>CYLINDER<br><br>WBB-85mm<br>- 85MM<br>CYLINDER |
| RIK81.00A<br>RIK83.00A              | 65mm   | 24mm               | WP064-SP   | CW18 | ROUND STYLE<br>- RIKEN RING -<br>GAS PORTING<br>- THREE RING                    | C8656-030 -<br>81MM .030 MLS<br><br>C8656-018 -<br>81MM .018 MLS<br><br>C8657-030 -<br>83MM .030 MLS<br><br>C8657-018 -<br>83MM .018 MLS                                     | KPM003         | WBB-81mm<br>- 81MM<br>CYLINDER<br><br>WBB-83mm<br>- 83MM<br>CYLINDER<br><br>WBB-84mm<br>- 84MM<br>CYLINDER<br><br>WBB-85mm<br>- 85MM<br>CYLINDER |
| RIK81.00A<br>RIK83.00A              | 65mm   | 25.8mm             | WP064-SP   | CW18 | ROUND STYLE<br>- RIKEN RING -<br>GAS PORTING<br>- TALL DECK -<br>THREE RING     | C8656-030 -<br>81MM .030 MLS<br><br>C8656-018 -<br>81MM .018 MLS<br><br>C8657-030 -<br>83MM .030 MLS<br><br>C8657-018 -<br>83MM .018 MLS                                     | KPM003         | WBB-81mm<br>- 81MM<br>CYLINDER<br><br>WBB-83mm<br>- 83MM<br>CYLINDER<br><br>WBB-84mm<br>- 84MM<br>CYLINDER<br><br>WBB-85mm<br>- 85MM<br>CYLINDER |





# SUZUKI

## 4-STROKE

| MODEL               | YEARS     | PISTON PART # | CR      | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|---------------------|-----------|---------------|---------|--------|------------------|-------------|----------|
| GSX 1300 R HAYABUSA | 2008-2021 | K8995DA-4     | 14.25:1 | 12.5:1 | 10/1             | 80.95mm     | STD      |
|                     |           | K8995D200-4   | 14.9:1  |        |                  | 82.95mm     | +2.0mm   |
| GSX 1300 R HAYABUSA | 2008-2021 | K8733DA-4     | 13.5:1  | 12.5:1 | 10               | 80.95mm     | STD      |
|                     |           | K8733D200-4   |         |        | 10               | 82.95mm     | +2.00mm  |
|                     |           | K8733D300-4   |         |        | 10               | 83.95mm     | +3.00mm  |
|                     |           | K8733D400-4   |         |        | 10               | 84.95mm     | +4.00mm  |
| GSX 1300 R HAYABUSA | 2008-2021 | K4011DA-4     | 14.0:1  | 12.5:1 | 10/1             | 80.95mm     | STD      |
|                     |           | K4011D200-4   |         |        | 10/1             | 82.95mm     | +2.00mm  |
|                     |           | K4011D300-4   |         |        | 10/1             | 83.95mm     | +3.00mm  |
|                     |           | K4011D400-4   |         |        | 10/1             | 84.95mm     | +4.00mm  |

| RING SET  | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET  | CONNECTING ROD | ACCESSORIES  |
|---|--------|--------------------|------------|------|--|---|----------------|--|
| RIK81.00A<br>RIK83.00A                          | 65mm   | 25.8mm             | WP064-SP   | CW18 |  | C8656-030 – 81MM .030 MLS<br>C8656-018 – 81MM .018 MLS<br>C8657-030 – 83MM .030 MLS<br>C8657-018 – 83MM .018 MLS                              | KPM003         | WBB-81mm – 81MM CYLINDER<br>WBB-83mm – 83MM CYLINDER<br>WBB-84mm – 84MM CYLINDER<br>WBB-85mm – 85MM CYLINDER |
| RIK81.00A<br>RIK83.00A<br>RIK84.00B<br>850XDS-3 | 65mm   | 24mm               | WP054-SP   | CW18 | PRO SERIES – SLIPPER STYLE – RIKEN RING – GAS PORTING – THREE RING | C8656-030 – 81MM .030 MLS<br>C8656-018 – 81MM .018 MLS<br>C8657-030 – 83MM .030 MLS<br>C8657-018 – 83MM .018 MLS<br>C8658-030 – 84MM .030 MLS | KPM003         | WBB-81mm – 81MM CYLINDER<br>WBB-83mm – 83MM CYLINDER<br>WBB-84mm – 84MM CYLINDER<br>WBB-85mm – 85MM CYLINDER |
| RIK81.00A<br>RIK83.00A<br>RIK84.00B<br>850XDS-3 | 65mm   | 24mm               | WP072-SP   | CW18 | PRO SERIES – SLIPPER STYLE – RIKEN RING – GAS PORTING – NOS        | C8656-030 – 81MM .030 MLS<br>C8656-018 – 81MM .018 MLS<br>C8657-030 – 83MM .030 MLS<br>C8657-018 – 83MM .018 MLS<br>C8658-030 – 84MM .030 MLS | KPM003         | WBB-81mm – 81MM CYLINDER<br>WBB-83mm – 83MM CYLINDER<br>WBB-84mm – 84MM CYLINDER<br>WBB-85mm – 85MM CYLINDER |



# YAMAHA

## 2-STROKE

| MODEL     | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|-----------|-----------|---------------|------------------|-------------|----------|----------|--------|
| RD 125 LC | ALL YEARS | 8003DA        | 2                | 55.94mm     | STD      | RSB5600  | 50.7mm |
| 125 DTMX  |           | 8003D025      | 2                | 56.19mm     | +0.25mm  | RSB5625  |        |
| 125 DTLC  |           | 8003D050      | 2                | 56.44mm     | +0.50mm  | RSB5650  |        |
| 125 DTF   |           | 8003D075      | 2                | 56.69mm     | +0.75mm  | RSB5675  |        |
|           |           | 8003D100      | 2                | 56.94mm     | +1.00mm  | RSB5700  |        |
|           |           | 8003D150      | 2                | 57.44mm     | +1.50mm  | RSB5750  |        |
| DT 125 R  | 1988-2006 | 8002DA        | 2                | 55.94mm     | STD      | RSB5600  | 50.7mm |
| DT 125 E  | 1978-1979 | 8002D025      | 2                | 56.19mm     | +0.25mm  | RSB5625  |        |
| DT 125 X  | 2005-2006 | 8002D050      | 2                | 56.44mm     | +0.50mm  | RSB5650  |        |
|           |           | 8002D075      | 2                | 56.69mm     | +0.75mm  | RSB5675  |        |
|           |           | 8002D100      | 2                | 56.94mm     | +1.00mm  | RSB5700  |        |
|           |           | 8002D125      | 2                | 57.19mm     | +1.25mm  | RSB5725  |        |
|           |           | 8002D150      | 2                | 57.44mm     | +1.50mm  | RSB5750  |        |
|           |           | 8002D200      | 2                | 57.94mm     | +2.00mm  | RSB5800  |        |
|           |           | 8002D250      | 2                | 58.44mm     | +2.50mm  | RSB5850  |        |
|           |           | 8002D300      | 2                | 58.94mm     | +3.00mm  | RSB5900  |        |
| 8002D400  | 2         | 59.94mm       | +4.00mm          | RSB6000     |          |          |        |
| 8002D500  | 2         | 60.94mm       | +5.00mm          | RSB6100     |          |          |        |
| TZR 125 R | 1992-1998 | 8006DA        | 2                | 55.94mm     | STD      | RSB5600  | 60.8mm |
| TDR 125   |           | 8006DB        | 2                | 55.95mm     | +0.01mm  | RSB5600  |        |
|           |           | 8006DC        | 2                | 55.96mm     | +0.02mm  | RSB5600  |        |
|           |           | 8006D050      | 2                | 56.44mm     | +0.50mm  | RSB5650  |        |
|           |           | 8006D100      | 2                | 56.94mm     | +1.00mm  | RSB5700  |        |
|           |           | 8006D200      | 2                | 57.94mm     | +2.00mm  | RSB5800  |        |
| RD 250 LC | 1980-1983 | 8300DA        | 6                | 53.93mm     | STD      | RSB5400  | 54mm   |
|           |           | 8300D050      | 6                | 54.43mm     | +0.50mm  | RSB5450  |        |
|           |           | 8300D100      | 6                | 54.93mm     | +1.00mm  | RSB5500  |        |
|           |           | 8300D150      | 6                | 55.43mm     | +1.50mm  | RSB5550  |        |
|           |           | 8300D200      | 6                | 55.93mm     | +2.00mm  | RSB5600  |        |
|           |           | 8300D250      | 6                | 56.43mm     | +2.50mm  | RSB5650  |        |

| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS  | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|---|-----------------|--------------------|----------------|--------------|
| 29.9mm             | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED – WITH<br>INTAKE WINDOW | N1016           |                    | P2050          |              |
| 29.9mm             | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED                         | N1016           |                    | P2050          |              |
| 29.9mm             | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED                         | N1016           |                    | P2050          |              |
| 30mm               | WP036      | CW16 | SINGLE RING –<br>1.0MM FLAT RING<br>– DOMED                       |                 |                    |                |              |



# YAMAHA

## 2-STROKE

| MODEL          | YEARS     | PISTON PART # | PISTON PRICECODE | PISTON SIZE | OVERSIZE | RING SET | STROKE |
|----------------|-----------|---------------|------------------|-------------|----------|----------|--------|
| RD 250 LC      | 1980-1983 |               |                  | 53.93mm     | STD      | RSB5400  | 54mm   |
|                |           |               |                  | 54.43mm     | +0.50mm  | RSB5450  |        |
|                |           |               |                  | 54.93mm     | +1.00mm  | RSB5500  |        |
|                |           |               |                  | 55.43mm     | +1.50mm  | RSB5550  |        |
|                |           |               |                  | 55.93mm     | +2.00mm  | RSB5600  |        |
|                |           |               |                  | 56.43mm     | +2.50mm  | RSB5650  |        |
| RD 350 LC      | 1980-1982 | 8221D025      | 8/1              | 64.18mm     | +0.25mm  | RSB6425  | 54mm   |
| RD 350 LC-YPVS | 1983-1995 | 8221D050      | 8/1              | 64.43mm     | +0.50mm  | RSB6450  |        |
| RD 400         | 1976-1979 | 8221D075      | 8/1              | 64.68mm     | +0.75mm  | RSB6475  |        |
|                |           | 8221D100      | 8/1              | 64.93mm     | +1.00mm  | RSB6500  |        |
|                |           | 8221D125      | 8/1              | 65.18mm     | +1.25mm  | RSB6525  |        |
|                |           | 8221D150      | 8/1              | 65.43mm     | +1.50mm  | RSB6550  |        |
|                |           | 8221D200      | 8/1              | 65.93mm     | +2.00mm  | RSB6600  |        |





| COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                            | TOP END BEARING | TOP END GASKET KIT | CONNECTING ROD | MAIN BEARING |
|--------------------|------------|------|---|-----------------|--------------------|----------------|--------------|
| 30mm               | WP036      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED |                 |                    |                |              |
| 36mm               | WP027      | CW16 | DUAL RING –<br>1.0MM FLAT RING<br>– DOMED | N1017           |                    |                |              |





# YAMAHA

## 4-STROKE

| MODEL           | YEARS     | PISTON PART # | CR      | OEM CR      | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|-----------------|-----------|---------------|---------|-------------|------------------|-------------|----------|
| YBR 125         | 2000-2006 | 8649DA        | 11.0:1  | 10.0:1      | 4/1              | 53.94mm     | STD      |
| XT 125 X        | 2005-2021 | 8649D050      |         |             | 4/1              | 54.44mm     | +0.50mm  |
| XT 125 R        | 2003-2021 | 8649D100      |         |             | 4/1              | 54.94mm     | +1.00mm  |
| YZF-R3          | 2015-2021 | K8999DA-2     | 11.75:1 | 10.0:1      | 9                | 67.95mm     | STD      |
| X-Max 300       | 2017-2021 | 4001DA        | 11.5:1  | 10.9:1      | 7                | 69.95mm     | STD      |
| T-Max 500       | 2001-2011 | K4016DA-2     | 13.0:1  | 10.0:1      | 9                | 65.94mm     | STD      |
|                 |           | K4016D400-2   |         | (2001-2003) | 9                | 69.94mm     | +4.00mm  |
|                 |           |               |         | 11.0:1      |                  |             |          |
|                 |           |               |         | (2004-2011) |                  |             |          |
| T-Max 500 TURBO | 2001-2011 | K4018DA-2     | 9.0:1   | 10.0:1      | 9/1              | 65.94mm     | STD      |
|                 |           | K4018D400-2   | 10.0:1  | (2001-2003) | 9/1              | 69.94mm     | +4.00mm  |
|                 |           |               |         | 11.0:1      |                  |             |          |
|                 |           |               |         | (2004-2011) |                  |             |          |
| T-Max 530 TURBO | 2012-2019 | K4022DA-2     | 10.0:1  | 10.9:1      | 9/1              | 67.96mm     | STD      |
|                 |           | K4022D200-2   |         |             | 9/1              | 69.96mm     | +2.00mm  |
| T-Max 530       | 2012-2019 | K4023DA-2     | 13.0:1  | 10.9:1      | 9/1              | 67.95mm     | STD      |
|                 |           | K4023D200-2   |         |             | 9/1              | 69.95mm     | +2.00mm  |
| FZR 600         | 1989-1999 |               | 12.75:1 | 12.0:1      |                  | 59.94mm     | +1.00mm  |
| YFZ-R6          | 2001-2005 | K8831DA-4     | 13.5:1  | 12.4:1      | 10               | 65.44mm     | STD      |
|                 |           | K8831D100-4   |         |             | 10               | 66.44mm     | +1.00mm  |
|                 |           | K8831D200-4   |         |             | 10               | 67.44mm     | +2.00mm  |
| YFZ-R6          | 2006-2014 | K8830DA-4     | 13.5:1  | 12.8:1      | 10               | 66.94mm     | STD      |
|                 |           | K8830D100-4   |         |             | 10               | 67.94mm     | +1.00mm  |
|                 |           | K8830D200-4   |         |             | 10               | 68.94mm     | +2.00mm  |
| XS 650          | 1974-1981 | K8818D150-2   | 13.0:1  | 12.8:1      | 9                | 76.44mm     | +1.50mm  |
| TX 650          |           | K8818D200-2   |         |             | 9                | 76.94mm     | +2.00mm  |
| (20mm pin)      |           | K8818D500-2   |         |             |                  | 79.94mm     | +5.00mm  |
|                 |           | K8818D700-2   |         |             |                  | 81.94mm     | +6.00mm  |

| RING SET                                     | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS                                | GASKET | CONNECTING ROD | ACCESSORIES |
|--|--------|--------------------|------------|------|---|--------|----------------|-------------|
| 540XKS-3<br>545XKS-3<br>550XKS-3             | 54mm   | 20.2mm             | WP011-SP   | CW15 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |
| 680XKS-3                                     | 54mm   | 21.2mm             | WP110-SP   | CW15 | PRO SERIES –<br>SLIPPER STYLE<br>– THREE RING |        |                |             |
| 700XDS-3                                     | 75.9mm | 22mm               | WP066-SP   | CW16 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |
| 660XKS-3<br>700XDS-3                         | 73mm   | 22.5mm             | WP102-SP   | CW15 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |
| 660XKS-3<br>700XDS-3                         | 73mm   | 22.5mm             | WP011-SP   | CW15 | ROUND STYLE –<br>THREE RING                   |        |                |             |
| 680XKS-3<br>700XDS-3                         | 73mm   | 21.8mm             | WP059-SP   | CW16 | ROUND STYLE –<br>THREE RING                   |        |                |             |
| 680XKS-3<br>700XDS-3                         | 73mm   | 21.8mm             | WP059-SP   | CW16 | PRO SERIES –<br>THREE RING                    |        |                |             |
| 600XKS-3                                     | 54.80  |                    |            | CW16 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |
| 655XKS-3<br>665XKS-3<br>675XKS-3             | 44.5mm | 20.2mm             | WP036      | CW16 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |
| 670XKS-3<br>680XKS-3<br>690XKS-3             | 42.5mm | 20.2mm             | WP011-SP   | CW15 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |
| 765XDS-3<br>770XDS-3<br>800XDS-3<br>810XDS-3 | 42.5mm | 29mm               | WP068-SP   | CW20 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING   |        |                |             |



# YAMAHA

## 4-STROKE

| MODEL                | YEARS     | PISTON PART # | CR      | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|----------------------|-----------|---------------|---------|--------|------------------|-------------|----------|
| FZ-07                | 2015-2017 | K8971DA-2     | 12.5:1  | 11.5:1 | 9                | 79.95mm     | STD      |
| MT-07                | 2018-2020 |               |         |        |                  |             |          |
| XSR 700              | 2018      |               |         |        |                  |             |          |
| TRACER 700           | 2016-2018 |               |         |        |                  |             |          |
| FZR 1000 R EXUP      | 1989-1996 | K4024DA-4     | 12.5:1  | 12.0:1 | 10/1             | 75.43mm     | STD      |
| YFZ 1000 THUNDERRACE | 1997-1998 | K4024D250-4   | 12.8:1  |        | 10/1             | 77.93mm     | +2.50mm  |
| YFZ-R1               | 1999-2003 | K8840DA-4     | 13.0:1  | 11.8:1 | 10               | 73.95mm     | STD      |
| FZ 1                 | 2001-2005 | K8840D200-4   |         |        | 10               | 75.95mm     | +2.00mm  |
| YFZ-R1               | 2004-2006 | K8752DA-4     | 13.5:1  | 12.3:1 | 10               | 76.96mm     | STD      |
|                      |           | K8752D100-4   |         |        | 10               | 77.96mm     | +1.00mm  |
| YFZ-R1               | 2007-2008 | K8753DA-4     | 13.5:1  | 12.7:1 | 10               | 76.96mm     | STD      |
| YFZ-R1               | 2009-2014 | K8812DA-4     | 13.5:1  | 12.3:1 | 10               | 77.96mm     | STD      |
| XS 1100              | 1978-1981 | K4008D250-4   | 10.25:1 | 9.2:1  | 10               | 73.94mm     | +2.50mm  |
|                      |           | K4008D300-4   | 10.37:1 |        | 10               | 74.44mm     | +3.00mm  |
| FJ 1100              | 1985      | K4027D400-4   | 12.0:1  | 9.7:1  | 10               | 77.92mm     | +4.00mm  |
| FJ 1200              | 1986-1993 | K4027D500-4   |         |        |                  | 78.92mm     | +5.00mm  |
| XJR 1200             | 1995-1999 | K4027D600-4   |         |        |                  | 79.92mm     | +6.00mm  |
| XJR 1300             | ALL YEARS | K4037DA-4     | 11.0:1  | 9.7:1  | 10/2             | 78.94mm     | STD      |
|                      |           | K4037D100-4   | 11.22:1 |        | 10/2             | 79.94mm     | +1.00mm  |

| RING SET                           | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET | CONNECTING ROD | ACCESSORIES |
|------------------------------------|--------|--------------------|------------|------|--|--------|----------------|-------------|
| GNH80.00                           | 68.6mm | 25.2mm             | WP072-SP   | CW18 | PRO SERIES –<br>SLIPPER STYLE<br>– SECOND<br>NAPPIER RING –<br>GAS PORTING                 |        |                |             |
| 755XDS-3<br>RIK78.00               | 56mm   | 23mm               | WP028-SP   | CW19 | PRO SERIES –<br>ROUND STYLE<br>– RIKEN RING –<br>THREE RING                                |        |                |             |
| GNH74.00<br>GNH76.00               | 58mm   | 22.8mm             | WP083-SP   | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– SECOND<br>NAPPIER RING<br>– GAS PORTING<br>– THREE RING |        |                |             |
| RIK77.00D3<br>RIK78.00             | 53.6mm | 22.8mm             | WP111-SP   | CW17 | PRO SERIES<br>– DOUBLE<br>BRIDGED –<br>RIKEN RING<br>– GAS PORTING<br>– THREE RING         |        |                |             |
| RIK77.00D3                         | 53.6mm | 22.8mm             | WP111-SP   | CW17 | PRO SERIES<br>– DOUBLE<br>BRIDGED –<br>RIKEN RING<br>– GAS PORTING<br>– THREE RING         |        |                |             |
| RIK78.00                           | 52.2mm | 22.8mm             | WP111-SP   | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING<br>– GAS PORTING<br>– THREE RING             |        |                |             |
| 740XDS-3<br>745XDS-3               | 68.6mm | 27mm               | WP090-SP   | CW17 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING  |        |                |             |
| RIK78.00<br>RIK79.00D3<br>GNH80.00 | 63.8mm | 26.3mm             | WP053-SP   | CW18 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING –<br>THREE RING                              |        |                |             |
| GNH79.00<br>GNH80.00               | 63.8mm | 26mm               | WP031-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– SECOND<br>NAPPIER RING –<br>THREE RING                    |        |                |             |





# TRIUMPH

## 4-STROKE

| MODEL            | YEARS     | PISTON PART # | CR     | OEM CR | PISTON PRICECODE | PISTON SIZE | OVERSIZE |
|------------------|-----------|---------------|--------|--------|------------------|-------------|----------|
| TRIDENT 750 T150 | 1968-1969 | K8809D050-3   | 10.0:1 | 9.0:1  | 26               | 67.45mm     | +0.50mm  |
|                  |           | K8809D100-3   |        |        | 26               | 67.95mm     | +1.00mm  |
| T595 DAYTONA     | 1999-2006 | K4058D200-3   | 12.5:1 | 12.0:1 | 26               | 80.95mm     | +2.00mm  |



| RING SET             | STROKE | COMPRESSION HEIGHT | PISTON PIN | CLIP | PISTON DETAILS   | GASKET | CONNECTING ROD | ACCESSORIES |
|----------------------|--------|--------------------|------------|------|--|--------|----------------|-------------|
| 675XKS-3<br>680XKS-3 | 70.5mm | 27.5mm             | WP062-SP   | CW18 | PRO SERIES –<br>ROUND STYLE<br>– THREE RING                                    |        |                |             |
| RIK81.00A            | 65mm   | 22.9mm             | WP083-SP   | CW17 | PRO SERIES –<br>SLIPPER STYLE<br>– RIKEN RING<br>– GAS PORTING<br>– THREE RING |        |                |             |





## PINS

| Ø        | PIN        | DIMENSIONS |        |        | PRICE CODE |
|----------|------------|------------|--------|--------|------------|
|          |            | ØOD        | ØID    | L      |            |
| 10       | WP105-SP   | 10mm       | 10.5mm | 33mm   | B13        |
|          | WP091-SP   | 12mm       | 10.5mm | 37.5mm | B13        |
| 12       | WP101-SP   | 12mm       | 10mm   | 33mm   | B13        |
|          | WP106-SP   | 12mm       | 10mm   | 37.5mm | B13        |
| 13       | WP088-SP   | 13mm       | 10mm   | 40mm   | B13        |
|          | WP124-SP   | 13mm       | 10mm   | 40mm   | B13        |
| 14       | WP025-SP   | 14mm       | 10mm   | 45mm   | B13        |
|          | WP058-SP   | 14mm       | 10mm   | 38.5mm | B13        |
|          | WP063-SP   | 14mm       | 10mm   | 38.5mm | B13        |
| 15       | WP011-SP   | 15mm       | 10mm   | 45mm   | B13        |
|          | WP032-SP   | 15mm       | 10mm   | 45mm   | B13        |
|          | WP067-SP   | 15mm       | 10mm   | 41mm   | B13        |
|          | WP102-SP   | 15mm       | 10mm   | 54mm   | B13        |
| 16       | WP110DLC   | 15mm       | 10mm   | 38mm   | B15        |
|          | WP027-SP   | 16mm       | 10mm   | 56.2mm | B13        |
|          | WP036-SP   | 16mm       | 10mm   | 45mm   | B13        |
|          | WP041-SP   | 16mm       | 10mm   | 51mm   | B13        |
|          | WP059-SP   | 16mm       | 10mm   | 45mm   | B13        |
|          | WP066-SP   | 16mm       | 10mm   | 42mm   | B13        |
|          | WP070-SP   | 16mm       | 10mm   | 38mm   | B13        |
|          | WP070DLC   | 16mm       | 10mm   | 38mm   | B15        |
|          | WP070TIDLC | 16mm       | 10mm   | 38mm   | B15        |
|          | WP087-SP   | 16mm       | 10mm   | 36mm   | B13        |
|          | WP112DLC   | 16mm       | 10mm   | 33mm   | B15        |
|          | WP113-SP   | 16mm       | 10mm   | 38mm   | B13        |
|          | WP113DLC   | 16mm       | 10mm   | 38mm   | B15        |
|          | WP114TIDLC | 16mm       | 11mm   | 35mm   | B15        |
| WP123DLC | 16mm       | 11mm       | 36mm   | B15    |            |
| 17       | WP045-SP   | 17mm       | 11mm   | 61mm   | B13        |
|          | WP083-SP   | 17mm       | 11mm   | 46mm   | B13        |
|          | WP089-SP   | 17mm       | 11mm   | 58mm   | B13        |
|          | WP090-SP   | 17mm       | 11mm   | 51mm   | B13        |
|          | WP109-SP   | 17mm       | 11mm   | 36mm   | B13        |
|          | WP111DLC   | 17mm       | 11mm   | 38mm   | B15        |
| 17.463   | WP062-SP   | 17.463mm   | 11mm   | 51mm   | B13        |
|          | WP146-SP   | 17.96mm    | 11mm   | 51mm   | B13        |
| 18       | WP031-SP   | 18mm       | 11mm   | 51mm   | B13        |
|          | WP033-SP   | 18mm       | 11mm   | 56.2mm | B13        |
|          | WP039-SP   | 18mm       | 11mm   | 56mm   | B13        |
|          | WP040-SP   | 18mm       | 12.5mm | 53.2mm | B13        |
|          | WP042-SP   | 18mm       | 12.5mm | 62.8mm | B13        |
|          | WP049-SP   | 18mm       | 12.5mm | 45mm   | B13        |
|          | WP053-SP   | 18mm       | 12.5mm | 51mm   | B13        |

| Ø        | PIN      | DIMENSIONS |        |         | PRICE CODE |     |
|----------|----------|------------|--------|---------|------------|-----|
|          |          | ØOD        | ØID    | L       |            |     |
| 18       | WP054-SP | 18mm       | 12mm   | 46mm    | B13        |     |
|          | WP054DLC | 18mm       | 12mm   | 46mm    | B15        |     |
|          | WP064-SP | 18mm       | 12mm   | 56mm    | B13        |     |
|          | WP064DLC | 18mm       | 12mm   | 56mm    | B15        |     |
|          | WP072-SP | 18mm       | 12mm   | 46mm    | B13        |     |
|          | WP072DLC | 18mm       | 12mm   | 46mm    | B15        |     |
|          | WP079-SP | 18mm       | 12mm   | 62.8mm  | B13        |     |
|          | WP099-SP | 18mm       | 12mm   | 51mm    | B13        |     |
|          | WP115DLC | 18mm       | 12mm   | 49mm    | B15        |     |
|          | WP117-SP | 18mm       | 12mm   | 45mm    | B13        |     |
|          | WP129-SP | 18mm       | 12mm   | 56.2mm  | B13        |     |
|          | WP133-SP | 18mm       | 12mm   | 56mm    | B13        |     |
|          | WP134-SP | 18mm       | 12mm   | 62.8mm  | B13        |     |
|          | WP142-SP | 18mm       | 12mm   | 62.8mm  | B13        |     |
|          | 18.5     | WP084-SP   | 18.5mm | 12mm    | 55.5mm     | B13 |
|          |          | WP018-SP   | 19mm   | 12mm    | 48mm       | B13 |
| WP019-SP |          | 19mm       | 12mm   | 61mm    | B13        |     |
| WP026-SP |          | 19mm       | 12mm   | 55.5mm  | B13        |     |
| WP028-SP |          | 19mm       | 12mm   | 46mm    | B13        |     |
| WP028DLC |          | 19mm       | 12mm   | 46mm    | B15        |     |
| WP037-SP |          | 19mm       | 12mm   | 51mm    | B13        |     |
| WP037DLC |          | 19mm       | 12mm   | 51mm    | B15        |     |
| WP044-SP |          | 19mm       | 12mm   | 56.4mm  | B13        |     |
| WP050-SP |          | 19mm       | 12mm   | 51mm    | B13        |     |
| WP050DLC |          | 19mm       | 12mm   | 51mm    | B15        |     |
| WP071-SP |          | 19mm       | 12mm   | 46mm    | B13        |     |
| WP071DLC |          | 19mm       | 12mm   | 46mm    | B15        |     |
| WP138-SP |          | 19mm       | 12mm   | 55mm    | B13        |     |
| 19.05    | WP141-SP | 19mm       | 13.5mm | 51mm    | B13        |     |
|          | WP048-SP | 19.05mm    | 13.5mm | 56mm    | B13        |     |
| 19.46    | WP035-SP | 19.46mm    | 13.5mm | 61mm    | B13        |     |
|          | WP096-SP | 19.46mm    | 13mm   | 51mm    | B13        |     |
| 19.55    | WP140-SP | 19.46mm    | 13mm   | 61mm    | B13        |     |
|          | WP118-SP | 19.55mm    | 13mm   | 73.54mm | B13        |     |
| 19.98    | WP135-SP | 19.98mm    | 13mm   | 51mm    | B13        |     |
|          | WP029-SP | 20mm       | 13mm   | 46.2mm  | B14        |     |
| 20       | WP029DLC | 20mm       | 13mm   | 46.2mm  | B16        |     |
|          | WP038-SP | 20mm       | 13mm   | 51mm    | B14        |     |
|          | WP052-SP | 20mm       | 13mm   | 55mm    | B14        |     |
|          | WP052DLC | 20mm       | 13mm   | 55mm    | B16        |     |
|          | WP061-SP | 20mm       | 13mm   | 61mm    | B14        |     |
|          | WP061DLC | 20mm       | 13mm   | 61mm    | B16        |     |
|          | WP065-SP | 20mm       | 13mm   | 55mm    | B14        |     |
|          | WP065DLC | 20mm       | 13mm   | 55mm    | B16        |     |



| Ø        | PIN      | DIMENSIONS |        |        | PRICE CODE |
|----------|----------|------------|--------|--------|------------|
|          |          | ØOD        | ØID    | L      |            |
| 20       | WP068-SP | 20mm       | 13mm   | 51mm   | B14        |
|          | WP068DLC | 20mm       | 13mm   | 51mm   | B16        |
|          | WP073-SP | 20mm       | 13mm   | 46.2mm | B14        |
|          | WP073DLC | 20mm       | 13mm   | 46.2mm | B16        |
|          | WP075-SP | 20mm       | 13mm   | 49mm   | B14        |
|          | WP076-SP | 20mm       | 13mm   | 55mm   | B14        |
|          | WP086-SP | 20mm       | 13mm   | 61mm   | B14        |
|          | WP108-SP | 20mm       | 13mm   | 70mm   | B14        |
|          | WP127-SP | 20mm       | 13mm   | 55mm   | B14        |
|          | WP128-SP | 20mm       | 13mm   | 61mm   | B14        |
| 20.117   | WP020-SP | 20.117mm   | 13mm   | 51mm   | B14        |
|          | WP021-SP | 20.117mm   | 13mm   | 56mm   | B14        |
|          | WP093-SP | 20.117mm   | 13mm   | 72mm   | B14        |
|          | WP093DLC | 20.117mm   | 13mm   | 72mm   | B16        |
| 20.538   | WP195-SP | 20.538mm   | 13mm   | 55.5mm | B14        |
| 20.638   | WP074-SP | 20.638mm   | 13mm   | 49mm   | B14        |
|          | WP095-SP | 20.638mm   | 13mm   | 55.5mm | B14        |
|          | WP144-SP | 20.638mm   | 14.3mm | 55.5mm | B14        |
|          | WP174-SP | 20.638mm   | 14.3mm | 49mm   | B14        |
|          | WP174DLC | 20.638mm   | 14mm   | 49mm   | B16        |
| 21       | WP013-SP | 21mm       | 14mm   | 46mm   | B14        |
|          | WP034-SP | 21mm       | 14mm   | 55.5mm | B14        |
|          | WP051-SP | 21mm       | 14mm   | 51mm   | B14        |
|          | WP051DLC | 21mm       | 14mm   | 51mm   | B16        |
|          | WP081-SP | 21mm       | 14mm   | 61mm   | B14        |
|          | WP092-SP | 21mm       | 14mm   | 61mm   | B14        |
|          | WP092DLC | 21mm       | 14mm   | 61mm   | B16        |
|          | WP132-SP | 21mm       | 14mm   | 61mm   | B14        |
|          | WP139-SP | 21mm       | 14mm   | 55.5mm | B14        |
|          | 22       | WP009-SP   | 22mm   | 14mm   | 51mm       |
| WP017-SP |          | 22mm       | 14mm   | 55.2mm | B14        |
| WP017DLC |          | 22mm       | 14mm   | 55.2mm | B16        |
| WP046-SP |          | 22mm       | 14mm   | 63mm   | B14        |
| WP046DLC |          | 22mm       | 15.7mm | 63mm   | B16        |
| WP055-SP |          | 22mm       | 15.9mm | 46mm   | B14        |
| WP069-SP |          | 22mm       | 15.9mm | 63mm   | B14        |
| WP077-SP |          | 22mm       | 15.9mm | 63mm   | B14        |
| WP080-SP |          | 22mm       | 15mm   | 61mm   | B14        |
| WP097-SP |          | 22mm       | 15mm   | 46mm   | B14        |
| WP098-SP |          | 22mm       | 15mm   | 51mm   | B14        |
| WP116-SP |          | 22mm       | 15mm   | 58mm   | B14        |
| WP122-SP |          | 22mm       | 16mm   | 63mm   | B14        |
| WP125-SP |          | 22mm       | 16mm   | 55.2mm | B14        |
| WP130-SP | 22mm     | 16mm       | 55.2mm | B14    |            |

| Ø        | PIN      | DIMENSIONS |          |          | PRICE CODE |
|----------|----------|------------|----------|----------|------------|
|          |          | ØOD        | ØID      | L        |            |
| 22       | WP136-SP | 22mm       | 16mm     | 55.2mm   | B14        |
| 22.225   | WP085-SP | 22.225mm   | 16mm     | 63mm     | B14        |
| 22.5     | WP120-SP | 22.5mm     | 16mm     | 56.5mm   | B14        |
|          | WP008-SP | 23mm       | 16mm     | 50.5mm   | B14        |
| 23       | WP008DLC | 23mm       | 16mm     | 50.5mm   | B16        |
|          | WP024-SP | 23mm       | 17mm     | 55.5mm   | B14        |
|          | WP047-SP | 23mm       | 3mm      | 50.5mm   | B14        |
|          | WP082-SP | 23mm       | 7mm      | 55.5mm   | B14        |
|          | WP094-SP | 23mm       | 8mm      | 61mm     | B14        |
|          | WP094DLC | 23mm       | 8mm      | 61mm     | B16        |
|          | WP126-SP | 23mm       | 8mm      | 54mm     | B14        |
|          | WP143DLC | 23mm       | 8mm      | 61mm     | B16        |
|          | WP143-SP | 23mm       | 8mm      | 61mm     | B14        |
|          | 23.546   | WP056-SP   | 23.546mm | 8mm      | 56mm       |
| WP056DLC |          | 23.546mm   | 8mm      | 56mm     | B16        |
| WP060-SP |          | 23.546mm   | 8mm      | 51mm     | B14        |
| WP100-SP |          | 23.546mm   | 8mm      | 57.15mm  | B14        |
| 23.813   | WP103-SP | 23.546mm   | 9.2mm    | 57.785mm | B14        |
|          | WP043-SP | 23.813mm   | 9.2mm    | 63mm     | B14        |
| 24       | WP022-SP | 24mm       | 9mm      | 6.5mm    | B14        |
|          | WP022DLC | 24mm       | 9mm      | 6.5mm    | B16        |
|          | WP023-SP | 24mm       | 9mm      | 51mm     | B14        |
|          | WP057-SP | 24mm       | 9mm      | 56mm     | B14        |
|          | WP078-SP | 24mm       | 9mm      | 68mm     | B14        |
|          | WP121-SP | 24mm       | 9mm      | 56mm     | B14        |
|          | WP131-SP | 24mm       | 9mm      | 68mm     | B14        |
| 25       | WP137-SP | 24mm       | 9mm      | 6.5mm    | B14        |
|          | WP107-SP | 25mm       | 9mm      | 63mm     | B14        |
| 26       | WP104-SP | 26mm       | 9mm      | 63mm     | B14        |



## RINGS

| DIAMETER | PART NUMBER | TOP RING | 2ND RING | OIL CONTROL |
|----------|-------------|----------|----------|-------------|
| 54mm     | 540XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 54.5mm   | 545XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 55mm     | 550XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 57.5mm   | 575XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 58mm     | 580XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 58.5mm   | 585XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 59mm     | 590XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 60mm     | 600XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 60.5mm   | 605XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 61mm     | 610XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 61.5mm   | 615XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 62mm     | 620ADS-3    | 1mm      | 0.8mm    | 2mm         |
| 62.5mm   | 625XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 63mm     | 630XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 63.5mm   | 635XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 65mm     | 650XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 65.5mm   | 655XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 66mm     | 660XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 66.5mm   | 665XAS-3    | 0.8mm    | 0.8mm    | 1.5mm       |
| 66.5mm   | 665XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 67mm     | 670XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 67.5mm   | 675XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 68mm     | 680XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 68.5mm   | 685XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 69mm     | 690XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 69.5mm   | 695XKS-3    | 1mm      | 0.8mm    | 2mm         |
| 70mm     | 700XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 70.5mm   | 705XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 71mm     | 710XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 71.5mm   | 715XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 72mm     | 720XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 72mm     | 720XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 72.5mm   | 725XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 72.5mm   | 725XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 73mm     | 730XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 73mm     | 730XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 73mm     | 730XTZ-3    | 1.5mm    | 1.2mm    | 2mm         |
| 73.5mm   | 735XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 73.5mm   | 735XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 74mm     | 740XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 74mm     | 740XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 74.5mm   | 745XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 74.5mm   | 745XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 74.75mm  | 747XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 75mm     | 750XAS-3    | 0.8mm    | 0.8mm    | 1.5mm       |

| DIAMETER | PART NUMBER | TOP RING | 2ND RING | OIL CONTROL |
|----------|-------------|----------|----------|-------------|
| 75mm     | 750XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 75mm     | 750XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 75mm     | 750XTZ-3    | 1.5mm    | 1.2mm    | 2mm         |
| 75.5mm   | 755XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 75.5mm   | 755XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 76mm     | 760XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 76mm     | 760XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 76mm     | 760XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 76mm     | 760XTZ-3    | 1.5mm    | 1.2mm    | 2mm         |
| 76.5mm   | 765XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 76.6mm   | 766XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 76.6mm   | 766XTZ-3    | 1.5mm    | 1.2mm    | 2mm         |
| 77mm     | 770XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 77mm     | 770XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 77.2mm   | 772XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 77.25mm  | 772XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 77.5mm   | 775XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 77.5mm   | 775XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 77.8mm   | 778XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 78mm     | 780XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 78mm     | 780XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 78.5mm   | 785XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 78.5mm   | 785XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 78.7mm   | 787XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 78.75mm  | 787XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 79mm     | 790XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 79mm     | 790XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 79.25mm  | 7925XDS-3   | 1mm      | 1.2mm    | 2mm         |
| 79.5mm   | 795XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 79.5mm   | 795XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 79.75mm  | 797XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 79.75mm  | 797XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 80mm     | 800XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 80mm     | 800XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 80.2mm   | 802XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 80.5mm   | 805XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 80.5mm   | 805XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 81mm     | 810XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 81mm     | 810XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 81mm     | 810XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 81mm     | 810XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 81.5mm   | 815XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 81.5mm   | 815XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 81.5mm   | 815XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 81.5mm   | 815XPZ      | 1.5mm    | 1.2mm    | 2mm         |



| DIAMETER | PART NUMBER | TOP RING | 2ND RING | OIL CONTROL |
|----------|-------------|----------|----------|-------------|
| 82mm     | 820XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 82mm     | 820XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 82mm     | 820XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 82.5mm   | 825XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 82.5mm   | 825XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 82.7mm   | 827XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 82.7mm   | 827XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 82.75mm  | 827XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 83mm     | 830XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 83mm     | 830XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 83mm     | 830XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 83mm     | 830XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 83.5mm   | 835XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 83.5mm   | 835XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 84mm     | 840XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 84mm     | 840XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 84mm     | 840XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 84.2mm   | 842XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 84.25mm  | 842XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 84.4mm   | 844XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 84.5mm   | 845XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 84.5mm   | 845XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 84.6mm   | 846XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 84.75mm  | 847XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 84.75mm  | 847XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 84.8mm   | 848XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 85mm     | 850XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 85mm     | 850XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 85mm     | 850XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 85mm     | 850XPZ      | 1.5mm    | 1.2mm    | 2mm         |
| 85.5mm   | 855XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 85.5mm   | 855XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 85.5mm   | 855XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 86mm     | 860XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 86mm     | 860XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 86mm     | 860XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 86.2mm   | 862XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 86.25mm  | 862XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 86.5mm   | 865XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 86.5mm   | 865XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 86.7mm   | 867XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 87mm     | 870XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 87mm     | 870XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 87mm     | 870XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 87.5mm   | 875XSY-3    | 1mm      | 1.2mm    | 2.5mm       |

| DIAMETER | PART NUMBER | TOP RING | 2ND RING | OIL CONTROL |
|----------|-------------|----------|----------|-------------|
| 87.5mm   | 875XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 88mm     | 880XSY-3-3  | 1mm      | 1.2mm    | 2.5mm       |
| 88mm     | 880XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 88.5mm   | 885XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 88.5mm   | 885XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 89mm     | 890XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 89mm     | 890XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 89.25mm  | 892XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 89.25mm  | 892XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 89.5mm   | 895XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 89.5mm   | 895XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 89.7mm   | 897XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 89.75mm  | 897XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 90mm     | 900XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 90mm     | 900XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 90mm     | 900XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 90.5mm   | 905XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 90.5mm   | 905XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 91mm     | 910XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 91mm     | 910XSU-3    | 1.2mm    | 1.5mm    | 2.5mm       |
| 91mm     | 910XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 91.2mm   | 912XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 91.25mm  | 912XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 91.5mm   | 915XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 91.5mm   | 915XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 91.75mm  | 917XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 91.75mm  | 917XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 92mm     | 920XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 92mm     | 920XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 92mm     | 920XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 92.5mm   | 925XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 92.5mm   | 925XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 93mm     | 930XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 93mm     | 930XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 93.5mm   | 935XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 93.5mm   | 935XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 93.6mm   | 936XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 93.8mm   | 938XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 94mm     | 940XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 94mm     | 940XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 94mm     | 940XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 94.2mm   | 942XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 94.25mm  | 942XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 94.5mm   | 945XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 94.5mm   | 945XPY      | 1.5mm    | 1.2mm    | 2.5mm       |



## RINGS

| DIAMETER | PART NUMBER | TOP RING | 2ND RING | OIL CONTROL |
|----------|-------------|----------|----------|-------------|
| 95mm     | 950XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 95mm     | 950XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 95mm     | 950XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 95.5mm   | 955XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 95.5mm   | 955XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 96mm     | 960XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 96mm     | 960XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 96.42mm  | 3796XSY-3   | 1mm      | 1.2mm    | 2.5mm       |
| 96.5mm   | 965XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 96.5mm   | 965XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 97mm     | 970XDS-3    | 1mm      | 1.2mm    | 2mm         |
| 97mm     | 970XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 97mm     | 970XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 97.25mm  | 972XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 97.5mm   | 975XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 98mm     | 980XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 98mm     | 980XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 98.5mm   | 985XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 98.5mm   | 985XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 98.75mm  | 987XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 99mm     | 990XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 99.2mm   | 992XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 99.25mm  | 992XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 99.5mm   | 995XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 99.5mm   | 995XPY      | 1.5mm    | 1.2mm    | 2.5mm       |
| 99.75mm  | 997XSY-3    | 1mm      | 1.2mm    | 2.5mm       |
| 100mm    | 1000XDS-3   | 1mm      | 1.2mm    | 2mm         |
| 100mm    | 1000XSY-3   | 1mm      | 1.2mm    | 2.5mm       |
| 100mm    | 1000XPY     | 1.5mm    | 1.2mm    | 2.5mm       |
| 100.5mm  | 1005XSY-3   | 1mm      | 1.2mm    | 2.5mm       |
| 100.5mm  | 1005XPY     | 1.5mm    | 1.2mm    | 2.5mm       |
| 101mm    | 1010XSY-3   | 1mm      | 1.2mm    | 2.5mm       |
| 101mm    | 1010XPY     | 1.5mm    | 1.2mm    | 2.5mm       |
| 101.5mm  | 1015XSY-3   | 1mm      | 1.2mm    | 2.5mm       |
| 101.5mm  | 1015XPY     | 1.5mm    | 1.2mm    | 2.5mm       |
| 101.6mm  | 1016XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 101.6mm  | 4000XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 101.73mm | 4005XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 101.85mm | 4010XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 102mm    | 1020XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 102.11mm | 4020XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 102.36mm | 4030XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 102.49mm | 4035XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 102.5mm  | 1025XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 102.62mm | 4040XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |

| DIAMETER | PART NUMBER | TOP RING | 2ND RING | OIL CONTROL |
|----------|-------------|----------|----------|-------------|
| 103mm    | 1030XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 103.12mm | 4060XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 103.5mm  | 1035XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 103.83mm | 4070XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 104mm    | 1040XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 104.5mm  | 1045XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 104.78mm | 4125XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 104.9mm  | 4130XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 105mm    | 1050XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 105.03mm | 4135XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 105.28mm | 4145XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 105.5mm  | 1055XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 105.54mm | 4155XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 105.79mm | 4165XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 106mm    | 1060XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |
| 106.5mm  | 1065XSU-3   | 1.2mm    | 1.5mm    | 2.5mm       |





# PISTON RING END GAP GUIDELINES

WIF.00001-A 06-04-2021



**NOTE:** Piston ring end gap guidelines are for general information only. Always refer to the OEM service manual for critical engine data. When installation is not clear, contact your Wossner dealer or professional engine builder **before** proceeding.

Wossner performance piston rings are generally supplied as a “drop-in” to the recommended bore diameter, unless noted for file fit applications. Ring end gap is the result of the ring manufactured tolerances, as well as the final bore diameter and geometry of the cylinder. It is possible that the final ring end gap has variation due to all of these influences.

It is important to inspect the piston ring end gap during installation, and make adjustment to the end gap if required.



Too little ring end gap can result in catastrophic engine damage! Always inspect ring end gap during the assembly process and correct this before final assembly.

As a general guideline, ring end gap that is larger than expected is less of an operational concern than too little end gap. Compression ring end gap that measures over spec by more than 30% over max, will have minimal impact on the operation and sealing of the compression ring. The condition of the cylinder, cylinder wall finish, piston ring groove, and ring interface are critical relationships to the function and sealing of the piston ring.

Inspect the piston ring end gap in your cylinder, approximately 13mm (.500”) down from the top of the cylinder. Install one piston ring at a time, use the piston to assure the ring is flat and square to the cylinder bore. Ring gap can be measured using a feeler gage.

The charts below illustrate some typical ring end gap dimensions, based on general guidelines. To calculate the ring end gap, multiply the cylinder bore diameter in inches X the end gap mentioned on the chart:

| 4 CYCLE PISTON RINGS   |          |          |           |
|------------------------|----------|----------|-----------|
| APPLICATION            | TOP RING | 2ND RING | OIL RAILS |
| NATURAL ASPERATED      | .0040    | .0050    | .015 MIN  |
| NA RACING              | .0045    | .0055    | .015 MIN  |
| FORCED INDUCTION       | .0055    | .0065    | .015 MIN  |
| HEAVY LOAD / HIGH HEAT | .0060    | .0070    | .015 MIN  |

| 2 CYCLE PISTON RINGS   |          |          |
|------------------------|----------|----------|
| APPLICATION            | TOP RING | 2ND RING |
| NATURAL ASPERATED      | .0040    | .0040    |
| NA RACING              | .0045    | .0045    |
| SNOW / MARINE          | .0050    | .0050    |
| HEAVY LOAD / HIGH HEAT | .0055    | .0055    |

The filed ring end gap must be properly aligned to the cylinder bore, and the ring ends remain parallel and even. All burrs or sharp edges must be removed to prevent damage to the ring groove and cylinder wall. Extreme care should be taken for all assembly steps, always work in a clean environment and use proper PPE when performing all operations.

**TERMS AND CONDITIONS:** Due to the nature of high performance and racing applications, Wossner components are sold without express warranty or any implied warranty of merchantability or fitness for a specific purpose. Wossner shall not, under any circumstances, be liable for any specific, incidental or consequential damages, including, but not limited to, damage, or loss of property or equipment, loss of profits or revenue(s), cost of purchased or replacement goods, or claims of customers of the purpose, which may arise and/or shall result from sale, installation or use of these parts. Installation of these parts may void vehicle manufacturers warranty coverage and/or may cause the vehicle to be illegal in some countries. Please check with local laws on the road use of your vehicle. Wossner reserves the right to make product improvements and changes without incurring liability with respect to similar products previously manufactured. By using these parts you are accepting these terms and conditions.as it reaches operating temperature.

# CYLINDER FINISH

## WTB.00005-A



Wossner pistons and rings are engineered for high performance and reliability, using premium materials and manufacturing methods. Cylinder finish and geometry are critical to the operation of the piston and piston ring / cylinder interface. The piston ring does require a break in process to have proper seal in the cylinder bore.



Always follow your OEM service manual for engine break in, as this is critical to the piston ring seal and ring service life. When in doubt, always check with your dealer or a reputable engine builder for guidelines.

Finishing the cylinder wall with a “plateau finish” is the most desirable finish for the best ring function. In simple terms, a plateau finish is a cylinder wall that can hold lubrication well, while also not having a high RA (roughness average). This is accomplished using several finishing steps for the final bore diameter. It is best to use torque plates when available to minimize distortion. Follow best practices to maintain cylinder roundness / cylindricity / taper.

The chart below explains what to expect from each finishing step for best surface finish RA values:

| STEP               | MATERIAL DISTANCE TO FINISH BORE | EXPECTED RA VALUE |
|--------------------|----------------------------------|-------------------|
| BORE TO ROUGH SIZE | -0.0050" (-0.130mm)              | 75-98             |
| FINISH STEP 1      | -0.0020" (-0.050mm)              | 30-35             |
| FINISH STEP 2      | -0.0005" (-0.013mm)              | 20-25             |
| FINAL HONE         | ZERO                             | 7-10              |

**FINISH STEP 1 and 2** will create the surface required to retain oil. The **FINAL HONE** step will remove the high peaks from the initial honing steps – this is the “plateau hone” step.

The finishes listed above can be accomplished using known honing stone grit numbers, the chart below illustrates expected RA values from common stone grit size available from Sunnen. Note that cutting pressure can greatly affect the resulting RA value:

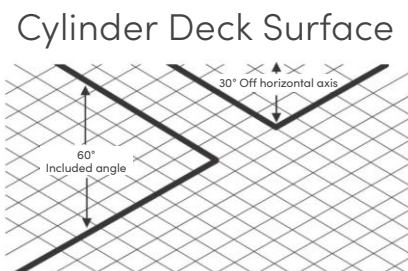
| STONE / GRIT | SUNNEN CK - CV STONE | CYLINDER MATERIAL           | APPROXIMATE RA RESULT |
|--------------|----------------------|-----------------------------|-----------------------|
| 220          | EHN-512              | FERROUS / NICKEL            | 40 – 48               |
| 220          | JHU-525              | FERROUS / NICKEL            | 30 – 35               |
| 280          | JHU-623              | ALUMINUM / FERROUS / NICKEL | 20 – 25               |
| 400          | JHU-818              | ALUMINUM / FERROUS / NICKEL | 10 – 15               |
| 600          | C30-PHT-731          | ALUMINUM / FERROUS / NICKEL | 7 – 10                |

Source: [sunnen.com](http://sunnen.com), [goodson.com](http://goodson.com), [cylinderheadsupply.com](http://cylinderheadsupply.com)



**NOTE:** Some aluminum bores require additional honing steps, stone types, and abrasives not listed here.

Cylinder cross hatch is important for **FINISH STEP 2**, as the proper cross hatch angle will provide proper oil retention on the cylinder wall, as well as ring rotation in 4-Cycle engine applications. Cross hatch angles that are too great will shed oil too quickly. Cross hatch angles that are too shallow can cause glazing (not allowing ring seating during break in), as well as slow ring rotation and reduced heat transfer:



With proper cylinder finishing you are providing the piston and ring assembly the best opportunity for performance and service.





# TERMS & CONDITIONS

## 1. General

The following conditions apply exclusively to our offers, deliveries, repair and other services. Differing terms of the customer, which we do not recognize exclusively in writing, are not binding for us, even if we do not expressly contradict you.

## 2. Contract conclusion and content

- 2.1 We reserve the right to accept contractual offers for a period of three weeks. Our offers are free.
- 2.2 Subsequent agreements, reservations, amendments or additions to this contract require their written form to be effective.

## 3. Prices and terms of payment

- 3.1 Our prices are exclusive of packaging and shipping. If the costs for our calculation are increased between contract conclusion and delivery, we are entitled to a reasonable price increase against merchants. This applies to non-merchants only if there is more than four months between contract conclusion and delivery and if the price agreed with the customer does not increase by more than 3%.
- 3.2 A cost estimate is only binding if it has been issued in writing. If no quotation is submitted to a quotation, we are entitled to charge the customer a reasonable remuneration for our work.
- 3.3 Payments are due within one week after the invoice has been issued and must be paid in German currency without any deduction.
- 3.4 When dispatching the goods, we reserve the right to deliver against advance payment or cash on delivery.
- 3.5 If we have several outstanding receivables against the customer, his payments will be charged in accordance with §§ 367 para. 1, 366 para 2 BGS.
- 3.6 In the event of a delay in payment, we shall be entitled to demand default interest at the rate of 2% above the discount rate of the Deutsche Bundesbank without prejudice to the assertion of further damage.

## 4. Delivery times and dates

- 4.1 Delivery times and working times are only binding if they have been agreed in writing.
- 4.2 If we fail to meet a bindingly agreed delivery date, the customer is entitled to set us an appropriate, at least three-week grace period with refusal to refuse acceptance. The customer can only withdraw from the contract after the expiry of this period. Cancellation and withdrawal notice must be made in writing.
- 4.3 Unauthorized performance such as force majeure, labor disputes, material supply difficulties, official interventions, etc. – even if they occur with our suppliers – lead to a reasonable extension of the delivery period. If the performance becomes impossible or unacceptable due to such obstacles, both parties may withdraw from the contract in writing. A claim for damages from the customer is excluded in such cases.

## 5. Transfer of risk and dispatch

- 5.1 When the goods are dispatched, the risk passes to the customer as soon as the goods have been handed over to the transporter or have left our company for dispatch. If the dispatch of the goods to be dispatched is delayed for reasons beyond our control, the risk passes to the customer with the indication of readiness for dispatch. Insurance of the goods to be shipped against transport damage is only made by means of special agreements and at the expense of the customer.
- 5.2 In the case of shipments to us, the customer bears the risk of transport.

## 6. Retention of title

- 6.1 The delivered goods remain our property up to their full payment as well as up to the complete settlement of all our existing, in the case of transactions with Dealers also all future arising demands against the customer.
- 6.2 If our property is subject to the reserved goods as a result of processing, the co-ownership shall be acquired in the new case in the proportion of the value of the reserved goods to the value of the third-party goods used.
- 6.3 The customer is entitled to resell the reserved goods in the ordinary course of business. In this case, he assigns to us all claims resulting from the resale. We will release these claims at the customer's request insofar as they exceed our claims against the customer by more than 20%.

## 7. Right of revocation and revocation

Consumption have the following right of revocation:

### Cancellation

### Withdrawal

You have the right to revoke this agreement within a period of fourteen days without giving reasons.

The period of revocation shall be fourteen days from the date on which you or a third party you designate, which is not the carrier, has or has taken possession of the goods.

To exercise your right of revocation, you must:

Wössner GmbH  
Konrad-Zuse-Strasse 2  
D- 79576 Weil am Rhein

Phone. +49 (0)7621 – 956649 – 0  
Fax +49 (0)7621 – 956649 – 25

[info@woessner-kolben.de](mailto:info@woessner-kolben.de)

by means of a clear statement (for example, a letter, fax or e-mail sent by mail) about your decision to revoke this contract. You can use the enclosed sample revocation form, but this is not required.

In order to keep the revocation period, it is sufficient that you send the notification of the exercise of the right of revocation before the end of the revocation period.

## Consequences of revocation

If you revoke this agreement, we will pay you all the payments we have received from you, including the delivery costs (except for the additional costs resulting from the fact that you have chosen a different type of delivery than the most favourable standard delivery offered by us ) within a period of fourteen days from the date on which the notice of revocation of this contract has been received by us. For such repayment, we will use the same means of payment as you have used in the original transaction, unless you have expressly agreed otherwise; in no case will you be charged for these repayment fees. We may refuse repayment until we have returned the goods or until you have proved that you have returned the goods, whichever is earlier.

You must return the goods to us immediately or in any case no later than fourteen days from the date on which you inform us of the revocation of this contract. The deadline is respected if you send the goods before the end of the period of 14 days. We bear the cost of returning the goods. They shall only be liable for any loss in value of the goods if this loss of value is attributable to the handling of the goods which is not necessary to check the quality, characteristics and functioning of the goods.

For returns please use the following address:

Wössner GmbH  
Konrad-Zuse-Strasse 2  
D- 79576 Weil am Rhein

Phone. +49 (0)7621 – 956649 – 0  
Fax +49 (0)7621 – 956649 – 25

[info@woessner-kolben.de](mailto:info@woessner-kolben.de)

You may make use of your return authorization if the following points are met:

- The product is in the original packaging and is in the same condition as it was shipped with its original label.
- The article is complete.

## 8. Warranty

- 8.1 Obviously defective or incomplete goods shall be reported by the customer without delay. The complaint must be received by us no later than 7 days after receipt of the goods. The further obligation to investigate and notify commercial customers is governed by statutory provisions. Any complaint about the goods shall be made in writing, accompanied by a copy of the invoice.
- 8.2 No complaint shall be deemed to constitute partial services designated as such, to which we are entitled to a reasonable extent. No defects are deviations from the agreed upon or from the advertisements or catalogues of the goods, which leave the fitness for the usual or contractual purpose untouched or improved. We reserve the right to make amendments to the listed specifications without notification.
- 8.3 Our engine, tuning and other accessories are mainly supplied without TÜV-certificate and are only intended for racing purposes. The admissibility of their use on public roads is not part of the contractual nature.
- 8.4 The warranty for delivered goods is, at our option, limited to rework or replacement delivery. In the case of failure of the repair or replacement delivery, the customer may, at his option, demand a reduction of the remuneration or cancellation of the contract. We are entitled to at least two rectification attempts.
- 8.5 If the defect that occurs is due to improper handling, repair attempts, damage or other changes of the goods by the customer or third parties, there is no warranty obligation. In particular, any warranty claims on the part of the customer are void if the installation instructions enclosed with the goods are not strictly adhered to.
- 8.6 In the case of commissioned work according to the customer's requirements, we only guarantee for proper execution of the workmanship. The customer bears the risk of technically caused malfunction or durability.
- 8.7 If we find in the case of a complaint that we are not subject to warranty, we can demand reasonable remuneration from the customer for incurred material and time expenditures.
- 8.8 The warranty period is six months.

## 9. Liability

- 9.1 Contractual pre-contractual and non-compliant claims for damages with the exception of claims for lack of assured characteristics are excluded, as long as we have not caused the damage deliberately or grossly negligently.
- 9.2 In the absence of assured characteristics, we shall not be liable for consequential damages, unless the warranty should be protected just before the occurrence of such consequential damage.
- 9.3 In addition, our liability to merchants for the reasonably foreseeable, contract-typical average damages up to ten times the purchase price b.z.w. If the customer has not informed us in writing of any extraordinary damage risks before conclusion of the contract and we have declared in writing the assumption of these risks.
- 9.4 We shall not be liable for damages resulting from non-compliance with the installation instructions (clause 7.5) or compliance with customer specifications (clause 7.6).

## 10. Final provisions

- 10.1 The place of performance is 79576 Weil am Rhein. In the case of transactions involving full-time purchasers, legal persons of public law or public special funds, the court of jurisdiction for all disputes arising in connection with this contract is 79576 Weil. The same shall apply if the client's domicile or habitual residence is unknown at the time the complaint is lodged,

Foreign countries.

- 10.2 This contract is governed by German and UK law. ECG and UN purchase rights do not apply.
- 10.3 Should individual parts of this contract be or become invalid, this does not affect the validity of the remaining contract.



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