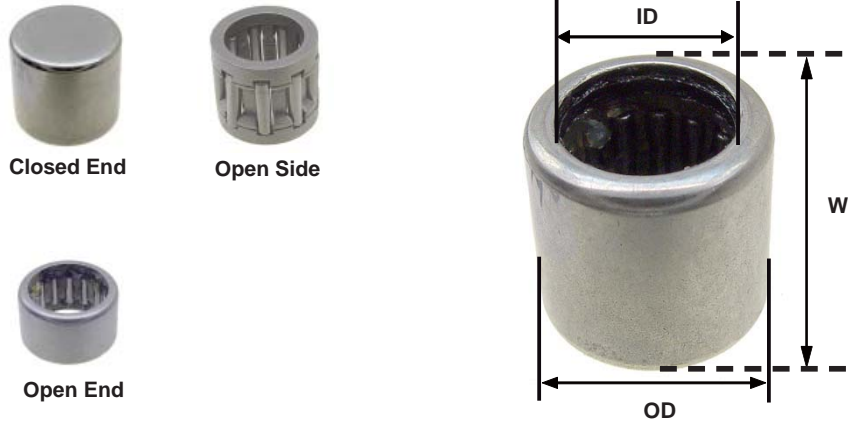


Needle Bearings & Tolerance Ring



Metro Auto Industrial Inc.
Toll Free: **1-800-263-8761**

Dimension Reference



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Needle Bearing by ID Size

| Metro# | ID | OD | Width | Page |
|----------|-------|-------|-------|------|
| 8-061008 | 6.45 | 10.04 | 7.80 | 7 |
| 8-081207 | 8.40 | 12.00 | 7.70 | 7 |
| 8-081410 | 8.40 | 13.98 | 9.90 | 7 |
| 8-091214 | 9.05 | 11.75 | 13.65 | 7 |
| 8-091213 | 9.40 | 11.75 | 12.60 | 7 |
| 8-091408 | 9.88 | 14.30 | 7.72 | 7 |
| 8-101413 | 10.25 | 13.80 | 12.63 | 8 |
| 8-111514 | 11.00 | 15.50 | 14.30 | 8 |
| 8-111613 | 11.35 | 15.95 | 12.60 | 8 |
| 8-121610 | 12.35 | 16.04 | 9.90 | 8 |
| 8-142020 | 14.50 | 20.00 | 19.88 | 8 |
| 8-141817 | 14.65 | 18.00 | 16.89 | 8 |
| 8-152116 | 15.20 | 21.00 | 15.88 | 9 |
| 8-152112 | 15.60 | 21.03 | 11.85 | 9 |
| 8-172417 | 17.00 | 23.80 | 17.48 | 9 |
| 8-172431 | 17.00 | 23.89 | 31.67 | 9 |

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Needle Bearing by OD Size

| Metro# | OD | ID | Width | Page |
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TOLERANCE RING INDEX

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| 46-82247 | 13 |
| 46-91001 | 12 |
| 46-91002 | 12 |
| 46-91003 | 12 |
| 46-91013 | 14 |
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| 46-944007 | 14 |

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Needle Bearing



**8-061008
Needle Bearing
Open End**

For: Bosch 108 Series PMGR; Ford
PMGR Starters-Planetary Gear

ID: 6.45mm

OD: 10.04mm

Width: 7.80mm

Replaces:

Ref: 8-203, 1000-8203, 130-05016

Lester: 16956, 16956, 16956, 16976,
16980, 16980, 16980, 17011,
17013, 17023, 17039, 17039,
17124, 17135, 17140, 17148,
17163, 17163, 17164, 17210,

Note:



**8-081207
Needle Bearing
Open End**

For: Delco PG100 & PG150-Drive
Shaft

ID: 8.40mm

OD: 12mm

Width: 7.70mm

Replaces:

Ref: 8-125, 1000-8125, 130-05041

Lester: 17972, 30210, 30368, 31247,
33308, 33356, 6401, 6401,
6432, 6433

Note: Delco 10465021, 10465022,
10465067, 21020892,
21020893, 21021366,
21021648, 88927881,
9000751, 9000758, 9000785,
9000791, 9000802

Needle Bearing



**8-081410
Needle Bearing
Open End**

For:

ID: 8.40mm

OD: 13.98mm

Width: 9.90mm

Replaces:

Ref: HK081410

Lester:

Note:



**8-091213
Needle Bearing
Open Side**

For:

ID: 9.40mm

OD: 11.75mm

Width: 12.60mm

Replaces:

Ref: K091213

Lester:

Note:

Needle Bearing



**8-091214
Needle Bearing
Open Side**

For:

ID: 9.05mm

OD: 11.75mm

Width: 13.65mm

Replaces:

Ref: K091214

Lester:

Note:



**8-091408
Needle Bearing
Open End**

For: Delco PG100, PG150,
PG150S, PG200 & PG250

ID: 9.88mm

OD: 14.30mm

Width: 7.72mm

Replaces: Delco 9440920

Ref: 8-113, 1000-8113, 130-05007

Lester: 32505

Note:

Needle Bearing



**8-101413
Needle Bearing
Open Side**

For:
ID: 10.25mm
OD: 13.80mm
Width: 12.63mm
Replaces:
Ref: K101413
Lester:
Note:



**8-111514
Needle Bearing
Closed End**

For: Denso DD, PLGR; Hitachi DD Starters - DE Housing
ID: 11.00mm
OD: 15.50mm
Width: 14.30mm
Replaces:
Ref: 8-8200, 130-05031
Lester: 17057, 17142, 17203, 17252,
Note: 17253, 17604, 17679, 17680,
17703, 17805, 17806, 17850,
17957, 18011, 18152, 18184,
18414, 18417, 18426, 18427,
18512, 18982, 18985, 19615,
19749, 19786, 19787, 30492,
30580, 30765, 30982, 31345,
32451, 32452, 6744

Needle Bearing



**8-111613
Needle Bearing
Open End**

For: Delco 5MT, SD250, SD255,
SD260 Series DD Starters
ID: 11.35mm
OD: 15.95mm
Width: 12.60mm
Replaces: Delco 10469066, 9441607
Ref: 8-118, 130-05012
Lester: 6308, 6331, 6473
Note:



**8-121610
Needle Bearing
Open End**

For: Bosch PLGR, PMGR; Delco
PMGR; Ford 4 in. Mod, 4-1/2
in. Mod, OSGR, PMGR Start-
ers
ID: 12.35mm
OD: 16.04mm
Width: 9.90mm
Replaces:
Ref: 8-201, 1000-8201, 130-05014
Lester:
Note:

Needle Bearing



**8-141817
Needle Bearing
Closed End**

For:
ID: 14.65mm
OD: 18.00mm
Width: 16.89mm
Replaces:
Ref: BK141817RS (277)
Lester:
Note:



**8-142020
Needle Bearing
Closed End**

For:
ID: 14.50mm
OD: 20.00mm
Width: 19.88mm
Replaces:
Ref: BK14020RS (273)
Lester:
Note:

Needle Bearing



**8-152112
Needle Bearing
Open End**

For:

ID: 15.60mm

OD: 21.03mm

Width: 11.85mm

Replaces:

Ref: HK1512, 130-05019

Lester:

Note:

Needle Bearing



**8-172417
Needle Bearing
Closed End**

For:

ID: 17.00mm

OD: 23.80mm

Width: 17.48mm

Replaces: Chrysler 3755184; Delco
9436831; Ford D2OZ-10-
A304-A

Ref: 8-101, 130-05000

Lester:

Note:

Needle Bearing



**8-152116
Needle Bearing
Closed End**

For:

ID: 15.20mm

OD: 21.00mm

Width: 15.88mm

Replaces:

Ref: BK152116RS (275)

Lester:

Note:



**8-172431
Needle Bearing
Closed End**

For: Delco 20SI, 21SI, 22SI, 27SI/
Type 200, 29SI, 40SI Series
IR/EF Alternators

ID: 17.00mm

OD: 23.89mm

Width: 31.67mm

Replaces: Delco 7451782, 9437171

Ref: 8-109, 130-05003

Lester:

Note:

| Needle Bearing | Needle Bearing | Needle Bearing |
|-----------------------|-----------------------|-----------------------|
| | | |

Manufacturers and Supplier names and their part numbers are for reference use only.

Delco



**46-15060
Tolerance Ring**

For: Delco CS121, CS130 Series
Alternators

Replace: 10469356

Dimension: 11.5mmL

Ref: 46-1560

Note: Fits to #6000 Bearing

Bearing Dim: 10mmIDx26mmODx8mmW

Delco



**46-15062
Tolerance Ring**

For: Delco CS130 Alternators

Replace: 10473712

Dimension: 26mmIDx28mmODx9.5mmL

Ref: 46-1562

Note: Fits to #6000 & 62000 Bear-
ing

Bearing Dim: 10mmIDx26mmODx8mmW

Delco



**46-15072
Tolerance Ring**

For: Delco AD230, AD237, AD244
Alternators

Replace: 10494485

Dimension: 35mmIDx37mmODx12.7mm
L

Ref: 46-1572

Note:

Bearing Dim:

Bosch



46-91001
Tolerance Ring

For: Bosch IR/IF Alternators
Replace: Bosch 1 120 591 076, 1 120 591 103
Dimension: 16.5mmL
Ref: 46-91552, AB-13248
Note:
Bearing Dim: 37mmIDx40mmODx12mmW

Bosch



46-91003
Tolerance Ring

For: Bosch ER/EF, IR/EF Alternators
Replace: Bosch 1 120 591 075
Dimension: 42mmL
Ref: 46-91551
Note:
Bearing Dim: 32mmIDx35mmODx42mmW

Bosch



46-91037
Tolerance Ring

For: Bosch ER/EF, IR/EF Alternators
Replace: Bosch F 00M 146 900
Dimension: 35.5mmIDx35mmBearing OD, 38mm Bore
Ref: 46-91553, AB-13295A
Note:
Bearing Dim:




46-91002
Tolerance Ring

For: Bosch ER/EF, IR/EF Alternators
Replace: Bosch 1 120 591 053, 1 120 591 082
Dimension: 18mmL
Ref: 46-91550, AB-13169
Note:
Bearing Dim: 32mmIDx35mmODx28mmW



46-91036
Tolerance Ring

For: Bosch Water Cool Alternators
Replace:
Dimension: 40mmIDx43mmODx 16.7mmW
Ref: AB-13248, W110-72, ABO2207
Note:
Bearing Dim:

| Denso | Denso | Denso |
|---|-------|-------|
|  <p>46-82247 Tolerance Ring</p> <p>For: Denso Hair Pin Alternators</p> <p>Replace:</p> <p>Dimension: 35mm ID, 37mm OD, 13mm Height (Bearing Thickness) 14mm Total Thickness</p> <p>Ref: AT-13366A</p> <p>Note: Lester 14486, 14487</p> <p>Bearing Dim:</p> | | |

Paris Rhone



46-91013
Tolerance Ring

For: Paris Rhone A13R, A14R
Alternators

Replace:

Dimension: 35mm OD

Ref: 46-94408

Note: Used on #6201 Bearing

Bearing Dim: 12mmIDx32mmODx10mmW

Paris Rhone

Paris Rhone



46-94407
Tolerance Ring-Cover

For: Paris & Valeo Alternators

Replace: Paris Rhone 105299, 590629,
Valeo 105299, 590629

Dimension: 34mm OD

Ref: 46-94407

Note: Used with #6201 Bearing

Bearing Dim: 12mmIDx32mmODx10mmW

| Valeo | Valeo | Valeo |
|--|-------|-------|
| <p data-bbox="347 422 483 470">Photo Coming Soon</p> <p data-bbox="337 611 493 659">46-944001 Tolerance Ring</p> <p data-bbox="293 680 506 703">For: Valeo Alternators</p> <p data-bbox="248 714 337 737">Replace:</p> <p data-bbox="220 745 557 802">Dimension: 35mmIDx37.3mmODx 19.3mm Height</p> <p data-bbox="293 810 435 833">Ref: 46-94435</p> <p data-bbox="282 842 586 865">Note: Used with #6202 Bearing.</p> <p data-bbox="204 873 337 896">Bearing Dim:</p> | | |



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