# READING **SIZES**

### SOLID RESILIENT TYRES

Resilient sizes are represented in different nomenclature. Rim width is always shown seperately. All Dimensions are nominal.

#### 6.50 x 10 / 5.00 (Resilient)



#### 23 x 9 - 10 / 6.50 (Resilient)



#### LIP TYRES



Lip tyre also called Click, Clip or Easy fit tyre eliminates the usage of end ring and lock ring

Lip tyre base is profiled for firm seating on the circumfrential ridge of the rim

Lip and regular base tyre are not inter changable





### **PRESS-ON BANDS**

Press-on sizes are represented in different nomenclature. Rim width is always shown seperately. All Dimensions are nominal.

#### 18 x 8 x 12 1/8 (Press-on)



Band Width

Outer Diameter

Measurements unspecified above are in Inches

### **INDUSTRIAL PNEUMATIC TYRES**

Industrial Pneumatics are represented in the following nomenclature Rim width is always shown seperately. All Dimensions are nominal and given in inches





### **INDUSTRIAL WHEEL RIMS**

Split Rim sizes are represented as follows All Dimensions are in Inches





### SPLIT RIM MEASUREMENTS





- A BORE DIAMETER
- B STUD or HUB HOLES
- C WHEEL BOLT HOLES
- D VALVE SLOT
- E RIM WIDTH
- F RIM OD
- **G CENTRE PLATE THICKNESS**
- H SHEET THICKNESS

- B- 1) No. OF STUD HOLES
- B- 2) STUD HOLE DIAMETER
- B- 3) STUD HOLES PCD
- **B- 4) COUNTER SUNK OUTER DIA**
- **B- 5) COUNTER SUNK DEPTH**

C- 1) No. OF WHEEL BOLT HOLES C- 2) WHEEL BOLT HOLE DIAMETER C- 3) WHEEL BOLT HOLES PCD

- D- 1) VALVE SLOT INNER (HUB SIDE) CUP
- D- 2) VALVE SLOT OUTER CUP
- D- 3) VALVE SLOT WIDTH
- D- 4) VALVE SLOT DEPTH
- E- 1) OFFSET INNER (HUB SIDE) CUP
- E- 2) OFFSET OUTER CUP



PCD = X + Y

ODD NUMBER OF HOLES

#### **Centre Bore and PCD Measurements**

- **Centre Bore** is to locate the hub pilot in a spigot mount wheels (without countersink holes)
- Stud Holes are meant to locate the studs in the hub
- Clamping Bolt Holes are meant to fasten the two halves of the split rim
- PCD (Pitch Circle Diameter) is the imaginary circle that passes through the centre of the stud holes or the clamping bolt holes
- The holes may be EVEN or ODD in numbers

#### How to measure Centre bore diameter & Pitch Circle Diameter (PCD)

- **Centre Bore Diameter** is the distance between the inside edges of the centre bore passing through the centre line
- In case of EVEN number of holes, the measurement is to be taken from the outside edge of the hole to the inside edge of the opposite hole passing through the centre
- In case of ODD number of holes, two measurements are to be taken and added to arrive at the PCD
- Measurement 'X' is taken from the inside edge of the centre bore to the inside edge of the opposite hole passing through the centre line
- Measurement 'Y' is taken from the the inside edge of the centre bore to the outer edge of the nearby hole passing through the centre line

#### Types of commonly used Fasteners for clamping Split rim halves

- Standard Hexagon Bolt with Hexagon Nut
- Standard Hexagon Bolt with Nyloc Nut
- Countersunk Bolt with Nyloc Nut
- Knurled Wheel bolt with Flange Nut

#### A typical fastener size provides the following details

- Thread Diameter (in Metric or Inches)
- Pitch of the Thread (in Metric or Inches)
- Length of the Bolt (in Metric or Inches)
- Grade of the Bolt
- Type of Bolt
- Plating Requirement (Dry, oiled, Zinc, Dacromet, etc.,)





### SPLIT RIM HOLE TYPE



#### Types of commonly used Stud Holes

- Through or Straight Hole
- Countersunk holes - Spherical
- Countersunk holes Conical





Two piece Split rim

Taper - Base rim for Lip tyre

Flat based rim for Lip tyre

Three piece rim - End ring, Lock ring

Four piece taper - Base Rim - End ring, Lock ring, Band

## **POLYURETHANE WHEELS**

#### LOAD ROLL TROLLEY WHEEL **DRIVE WHEEL** PU LINING METAL INSERT PU LINING METAL HUE W W PU lining / Base wheel width w PU lining width \_ PU lining width ..... -D Maximum outside diameter W1 Base wheel width W1 -Base wheel width --D1 ..... Base wheel diameter Maximum outside diameter Maximum outside diameter D D Bearing seating diameter D1 D1 D2 Base wheel diameter Base wheel outside diameter -Hub outside diameter Hub butting face diameter Centre bore diameter D2 D2 D3 -Bearing seating depth D3 D3 Centre bore diameter Т Bearing seating diameter D4 Centre bore diameter D4 Stud hole diameter Bearing seating depth Middle wall thickness Stud hole PCD D5 Τ1 Number of stud holes Ν CD Counter sunk depth Stud hole counter sunk diameter А Rib thickness Т Τ1 Rib offset



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