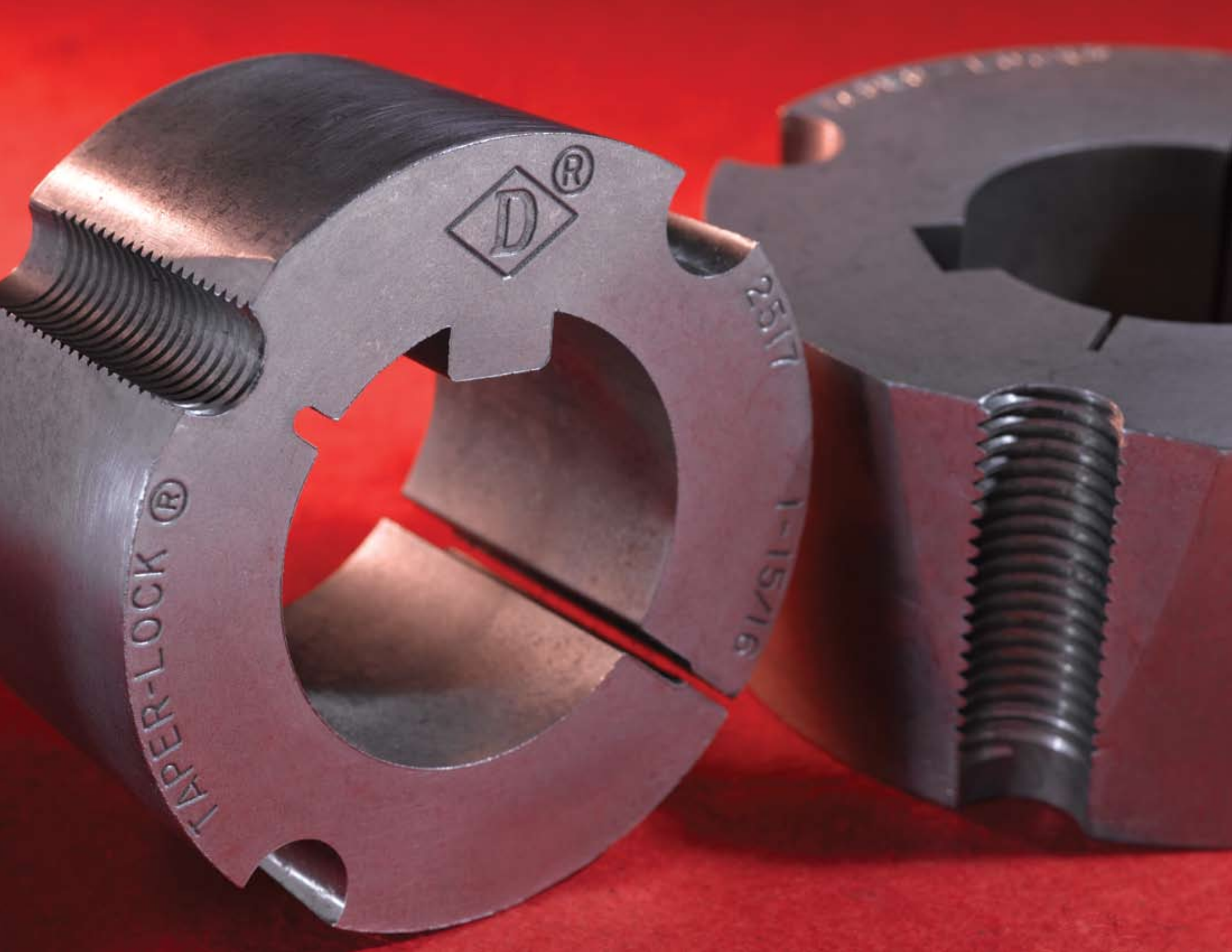


# DRIVE COMPONENTS

**DODGE**

**BALDOR**  
BALDOR • DODGE • RELIANCE



TAPER-LOCK®



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## DODGE® Drive Components

# PERFORMANCE-PROVEN SOLUTIONS

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For decades, the DODGE® brand of power transmission products has advanced the standard for progress in industry – affecting and improving the way the world transmits power.

Essential elements of this power transmission cycle are DODGE mechanical drive components: V-belt drives, synchronous drives and roller chain drives. These rugged products not only connect one driven shaft to another, but they isolate shock load and vibration, correct minor misalignment and synchronize movement between shafts.

DODGE V-belt drives are quiet, high-quality, low-cost products that require very little maintenance. They have the ability to slip upon overload, thus protecting more expensive equipment from load surges.

DODGE synchronous belt drives require no lubrication. They provide a positive engagement between a toothed belt and a toothed sprocket, and are offered with curvilinear, modified curvilinear, and trapezoidal tooth profiles.



DODGE chain drives are compact, economical and easy to install. Capable of operating in high-temperature environments, they provide no slip with no special tensioning and offer the same efficiency advantages as synchronous belt drives.

All DODGE sheaves and sprockets are readily available over a wide range of speed ratios and can be supplemented with our complete offering of DODGE bushings, hubs, belts and accessories.



# DODGE DRIVE COMPONENTS FOR ALL OF YOUR POWER

## DODGE TAPER-LOCK® AND QD STYLE BUSHINGS

For mounting power transmission components onto your shafting, Baldor offers a full line of DODGE bushings that are shaft-ready, off-the-shelf, in inch and metric sizes. Not only do these quality bushings eliminate the need for bored-to-size drive components, but they secure the component to the shaft with little or no additional length. They can drastically reduce your inventory of components and are available in stock sizes for up to 12" shaft diameters.

### BUSHING MATERIALS

- Sintered Steel
- Cast Iron
- Ductile Iron
- Steel
- Stainless Steel



## DODGE QD BUSHINGS

DODGE QD bushings (inch and metric sizes) have a flanged design and feature a 4° taper with conventional or reverse mounting. They are stocked in popular finished bore sizes and minimum plain bore for custom re boring.



## DODGE WELD-ON HUBS

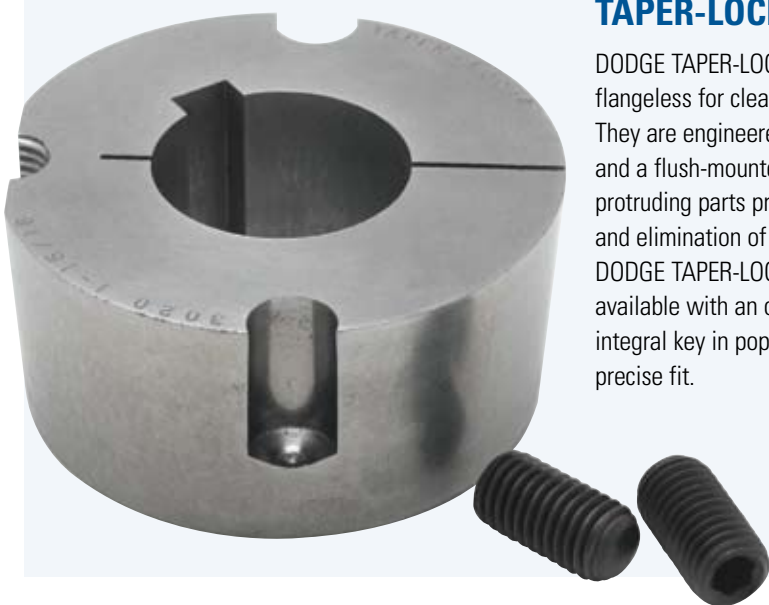
DODGE weld-on hubs are useful for welding into pulleys, fan rotors, flywheels, plate sprockets, impellers, agitators, etc. Drilled, tapped and taper-bored to receive their associated bushing, these hubs are available in both TAPER-LOCK and QD styles to suit most applications.

### TAPER-LOCK WELD-ON HUBS

- Type S TAPER-LOCK—originally designed for use in smaller sprockets, now suitable for many other lighter-duty applications
- Type W/WA TAPER-LOCK—rugged, full-length size for single-hub, heavy-duty applications
- Type F—features a larger flange diameter that can be welded into standard steel tubing to fabricate conveyor pulleys or process rolls
- Type K—more compact design, especially useful for two-hub construction, such as conveyor pulleys

## TAPER-LOCK BUSHINGS

DODGE TAPER-LOCK bushings are flangeless for clean, compact application. They are engineered with an 8° taper and a flush-mounted design with no protruding parts providing secure locking and elimination of wobble. In addition, DODGE TAPER-LOCK bushings are available with an optional Diamond D® integral key in popular sizes for a more precise fit.



## EASY-ON/EASY-OFF TAPER-LOCK INSTALLATION AND REMOVAL

### EASY ON

Insert bushing into sheave. Match holes (not threads) and put screws into holes that are farthest apart. Slip entire unit onto shaft. Set drive alignment and tighten screws.

### EASY OFF

Take both screws out entirely. Insert one screw into hole that is threaded in bushing only. Use as jackscrew to disengage bushing.

# TRANSMISSION NEEDS

## V-DRIVE SHEAVES

All DODGE V-drive sheaves are manufactured to ISO 9002 quality standards with precision machining that meets or exceeds joint RMA/MPTA industry standards for smooth operation and extended belt life.

- Feature high-quality, gray-iron construction with corrosion-resistant finish
- Offered in block, web and arm construction styles
- Balanced for rim speeds up to 6500 FPM (stock sheaves)

## V-BELT DRIVES

V-belt drives transmit power through friction that is created by a wedging action of the belt in the sheave groove. These quiet, low-cost products require little maintenance and work with speed ratios of up to 10:1.

- Ideal for applications greater than 500 RPM
- Can be designed to slip when overloaded, protecting other more expensive equipment from load surges
- Provide service life up to 25,000 hours
- Accommodate maximum misalignment of 1/2°



## DODGE VIA-VISA® SOFTWARE PROGRAM

For a fast, accurate evaluation of viable V-drive alternatives, DODGE offers its VIA-VISA® software program on-line. Simply enter the required information on the user-friendly input screen and let the computer do the rest. All significant data on drive combinations is presented: cost, RPM, shaft loading, installation tension, face width, face diameter, etc.—all in a format that allows you to select the best drive for your application.

[www.ptwizard.com](http://www.ptwizard.com)

## DODGE BELTS

### D-V WEDGE BELTS (3VX-5VX-8V)

These oil-resistant, static conducting DODGE V-belts allow compact, lighter-weight drives and feature a high-strength tension member for rated power with minimum stretch. Their molded cog construction accommodates extended belt lengths.

### S-L CLASSIC BELTS (A-B-C-D)

DODGE S-L Classic belts are oil resistant and static conducting and feature a cable-cord envelope construction that provides greater stability on long center-distance drives, as well as assures more tolerance to shock loads.

### CLASSIC COG V-BELTS (AX-BX-CX-DX)

Ensuring maximum flexibility, these DODGE Classic Cog V-belts feature a molded cog construction and an energy-saving, efficient design. They allow higher HP ratings on smaller sheaves and require fewer belts for a more compact drive.

### DOUBLE-V (HEX)

Designed for serpentine drives, DODGE Double-V hex belts transmit power from both sides. They are oil resistant and static conducting and they use standard classical groove sheaves. A variety of profiles are available, including AA, BB and CC.

### POLYBAND BELTS

DODGE Polyband belts are engineered to handle problem drives where vibration, shock loads, or misalignment abuse and lead to rollover and excessive belt whip. Two or more belts are joined on a single band permitting use of standard sheaves without alteration of the drive.

### DRIVE TENSIONERS AND IDLERS

DODGE also offers chain tensioner frames and sprockets, as well as TAPER-LOCK and QD idler bushings with a universal adjusting bracket.



# DODGE DRIVE COMPONENTS FOR ALL OF YOUR POWER

## DODGE SYNCHRONOUS BELT DRIVES

### HT200 SYNCHRONOUS BELT DRIVE SYSTEM

Built around our TAPER-LOCK bushings, the DODGE HT200 is the latest generation of products in our DODGE synchronous drive product line and it is our most powerful system. A clean, compact, cost-efficient solution, it provides HP ratings that are 200% greater than conventional HTD drives with all the benefits of a synchronous belt drive system.

- Positive, no-slip drive provides dependable performance
- Lubrication-free operation assures less maintenance and downtime
- Corrosion-resistant, abrasion-resistant materials ensure long life.
- Advanced cord technology helps to prevent backlash
- 5 mm, 8 mm, 14 mm widths available in TAPER-LOCK.
- 20 mm+ available in QD



### ADVANCED HT\* TOOTH PROFILE

Design optimizes the distribution of load forces between the belt and the sprocket for increased torque capacity and greater dynamic efficiency. This unique design also allows for a more compact and narrower drive.

### MORE UNIFORM TOOTH-FLANK CONTACT

The matched HT tooth form provides increased and more uniform tooth-flank contact, helping to increase drive horsepower capacity while improving registration and resistance to ratcheting.

### UNIQUE HT TOOTH FORM

The advanced shape of the HT tooth form offers better bottom tooth contact, which improves cord support, minimizes wear and reduces drive noise.

### HIGHER HORSEPOWER CAPABILITY

The HT200 belt design follows the same width conventions as HTD belts and is designed to run in DODGE TAPER-LOCK HT sprockets. This lets you design more power-dense drives for greater flexibility and provides an alternative to traditional V-belt or chain-driven systems.

### HT TAPER-LOCK SPROCKETS

These HT TAPER-LOCK sprockets are built around the TAPER-LOCK bushing system, allowing you to develop a more compact, cleaner drive. By combining the improved power capacity of the HT belt with the TAPER-LOCK construction of the HT sprockets, you can achieve maximum power transmission density while minimizing over-hung load.

In addition, the HT TAPER-LOCK sprockets take up less space on the shaft than a comparably rated QD or bored-to-size sprocket.

### QD HTD SPROCKETS

QD HTD sprockets are rated for the capacity of standard HTD belts.

### DYNA-SYNC® Synchronous Belt Drives

DYNA-SYNC belt drives provide synchronized, quiet, no-slip transmission. They require no lubrication and are rated 98% efficient. Available with standard Neoprene belts or dual-sided belts for serpentine drives, they represent the original "timing" belt drive and still provide a practical solution to many lower HP/torque drives.

These belts are ideal for replacement drives or for applications that are below the range of 8 mm HT150. They are offered in five pitches: XL, L, H, XH and XXH. Drive ratios of more than 6:1 are possible and horsepower capabilities range from fractional to 25 HP at 1750 RPM. Stock pulleys are flanged up to 48 teeth.



# TRANSMISSION NEEDS

## ROLLER CHAIN SPROCKETS

### DODGE TAPER-LOCK SPROCKETS

Ideal for low-speed power transmission applications. Roller chain drives have the ability to handle high shock loads and deliver dependable performance make them the drive of choice for many applications.

### SHAFT READY

DODGE TAPER-LOCK sprockets require no expensive or time-consuming re-machining.

### TRUE FIT

Their taper-bushing mount automatically compensates for variations in shaft and sprocket machining tolerances.

### HARDENED TEETH

The DODGE TAPER-LOCK sprockets' hardened teeth offer twice the wear life, thereby saving downtime and replacement costs. Plus, they assure greater resistance to abrasive wear, extending chain life. Hardened teeth are standard on #40 through #160 pitches, up to and including 25 teeth.



### COMPACT DESIGN

With DODGE TAPER-LOCK sprockets, there are no protruding flanges or screwheads to take up valuable shaft space. Their compact design provides for more power-dense packages.

### A-PLATE AND B-REBORABLE SPROCKETS

In addition to our TAPER-LOCK sprockets, DODGE also offers a complete line of A-Plate and B-Reborable sprockets. These are available in #35 – #240 pitch and are engineered for use with single- and double-strand or chain designs.



## MADE-TO-ORDER DRIVE COMPONENTS

DODGE provides a complete line of standard-design sheaves and synchronous belt sprockets in stock; however, if these do not meet your needs, we offer customized, made-to-order components in a variety of custom designs, finishes and alternative materials.

### POWER TRANSMISSION COMPONENTS & CUSTOM DESIGNS

- "V" style sheaves – "A", "B", "A/B", "C", "D", "3V", "5V", "8V", "E", deep "C", Poly-V and Crusher-Duty
- Synchronous sprockets—HT, HTD, Dyna-Sync, and a wide range curvilinear and modified curvilinear tooth profiles
- Crown pulleys
- Flat-Face pulleys
- Various hubs
- Large quantity orders can be assessed for alternate manufacturing possibilities such as Sintered Steel

### SPECIAL FINISHES

- Plain "dry-touch" finish
- Paint
- Plated (Cadmium, Nickel and more)
- Black Oxide
- Nitrocarbonized

### ALTERNATIVE FINISHES

- Sintered steel (powered metal)
- Standard Gray Iron
- Ductile Iron (strength and high speed)
- Steel (strength and high speed)
- Stainless Steel
- Aluminum

### OUTSIDE-THE-BOX MTO

DODGE can fulfill your non-power transmission made-to-order product needs:

- For pieces which do not fall into the customary power transmission components mold, Dodge's MTO production capabilities are ideally suited for manufacturing unique or unusual products
- DODGE has the capability to manufacture pieces which are generally round in shape, weigh four hundred pounds or less, and are machined primarily through drilling and turning processes
- Specific MTO part capabilities include but are not limited to the following types of components: Special V-Groove Machine Tools; Sleeves; Fly Wheels; Idlers; Bearing Bores; Snap Rings; MTO Rigid Couplings; Elevator Pulleys or Other Pulley Components which Operate Using a Cable; Splines; 'Formed' O.D.'s
- Available materials include sintered steel, cast iron, ductile iron, stainless steel, steel, and aluminum
- Plating is available given extended lead-time requirements





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