Design Engineer's Guide

CAPS AND PLUGS
DESIGNED FOR PEACE OF MIND
PROTECT VITAL PARTS FOR MORE EFFICIENT PROCESSES WITH CAPS AND PLUGS

Protect your application with caps and plugs designed to withstand just about any environment. Free samples on selected products let you try before you buy, and Free CAD downloads help you perfect your design.

While this is intended as an overview of caps and plugs that suit particular applications, you can go more in depth with our Ultimate Guide to Caps and Plugs.

Quick Release Plugs

- Suitable to plug ISO A and ISO B series
- TPE material
- For threaded or plain parts
- Pull tab for quick removal
- Service temperature range: -40°F – 203°F (-40°C – 95°C)

Threaded Protection Plugs

- Fully threaded to 13.6 mm/0.535 in
- LDPE material
- Also used in hydraulic and pneumatic industries
- Knurled head for easy grip
- Service temperature range: -40°F – 149°F (-40°C – 65°C)

Tear Tab Caps

- Suitable as NPT thread plug, and UNF
- LDPE material
- When tab is pulled, cap splits open for quick removal

EQUIPMENT MANUFACTURING

Electric cable enclosures | HVAC components | Industrial generator parts | Outdoor utility cabinet

Ensure smooth assembly and transit by protecting critical internal and external profiles from damage while maintaining quality.
METAL FABRICATION

Data cabinet | Sheet metal | Furniture

Increase customer satisfaction with a professional finish by masking holes and contact points with easy-to-fit caps and plugs.

GUARD YOUR PRODUCT’S HOLES WITH:

**HIGH-TEMPERATURE SILICONE TAPERED PLUGS**

- High temperature rating: 482°F (250°C)
- Durometer (Shore A) 55 + 5
- Excellent chemical resistance
- Reusable
- Flexibility allows slight variations in the sizes to mask
- Available as a solid plug
- Available with a hollow core to aid in compression; less material needed also makes this cost effective

**FLEXIBLE END CAP**

- Flexible to ensure a tight fitting
- High-temperature PVC: 338°F (170°C)
- Suitable for a multitude of applications

**MASKING PULL PLUGS**

- High temperature rating: 482°F (250°C)
- Durometer (Shore A) 55 + 5
- Masks threaded or non-threaded through holes
- Pull tap enables easy insertion and fast removal from tight holes

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ESSENTRACOMPONENTS.COM
VEHICLES

Cars | Trucks | Trains

Protect key components from potential debris contamination and safeguard vital threads from damage during storage and shipment to the final assembly plant.

PROTECT YOUR DESIGN WITH PRECISION:

THREADED O-RING PLUG - UNF THREADS

- Can be applied or removed by hand, hex wrench or screwdriver
- Compressing flange lip and o-ring provide water-tight seal for superior leakage protection
- Available in nylon and polypropylene; nylon withstands higher temperatures: -40°F – 266°F (-40°C - 130°C)

TAPERED CAP AND TAPERED PLUG

- Plugs multiple inner diameters
- Caps multiple outside diameters
- LDPE material
- Tapered caps and plugs made of LDPE
- Compatible cap thread sizes: BSP 3/8
- Compatible plug thread sizes: M20

FLEXIBLE PIPE CAPS

- Flexible PE material allows for easier fitting on pipes
- Operating temperature range: 32°F – 149°F (0°C – 65°C)

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Successfully protecting your products during its production cycle can be a challenge. So here’s a few points to consider to get the best results from caps and plugs at every step of the journey to your customer.

1. **CONSIDER YOUR ENVIRONMENT**
   - Is there a need for UV resistance? Are there high levels of moisture and humidity in your application? From pressure to temperature, considering the environment is key when looking to protect your part or product.

2. **UNDERSTAND YOUR APPLICATION**
   - Protection? A threaded plug will protect a profile with a threaded interior whereas an o-ring will shield against entry or escape of liquids.
   - Masking? If masking a number of holes in a high temperature environment then choose a flangeless silicone plug, which will allow a variety of hole diameters to be masked.

3. **IDENTIFY THE RIGHT MATERIAL**
   - A silicone cap will operate safely at +250°C, whereas LDPE can only operate safely up to 65°C.
   - HDPE caps are resistant to solvents and reduce potential shearing.

4. **THE PRODUCTION PROCESS**
   - Need fast hand application? Choose a push fit cap or flanged plug.
   - Tool based processes? A cross head custom cap or plug is best.

5. **CONSIDER THE REMOVAL PROCESS**
   - Production environment? An ezeplug can save time in the production schedule.
   - Customer environment? Ease of removal is essential so opt for a pull tab or flange on your cap or plug for speed and efficiency.

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**HOSES AND HYDRAULICS**

Tractors | Excavators | Mining

Minimize fluid spills and maintain hose integrity while ensuring constant machinery uptime and user safety.

**SPECIFYING THE RIGHT CAP OR PLUG**

**HEXAGONAL CAPS**

- Available in all common hydraulic coupling sizes
- Also suitable for protecting round components
- LDPE material
- Rigid design allows easy application and removal

**QUICK RELEASE CAPS**

- Female fitting suitable to protect quick release couplings series ISO A and ISO B
- Designed to remain attached to hose
- TPE material

**THREADED SEALING CAPS**

- HDPE caps are resistant to solvents and reduce potential shearing
- Protect standard threaded fittings with or without o-ring
DOWNLOAD FREE CADS
AND TRY BEFORE YOU BUY

Free CADs are available for most solutions, which you can download for free. You can also request free samples to ensure the solutions you’ve chosen are exactly what you need. If you’re not quite sure which product will work best for your application, our experts are always happy to advise you.

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