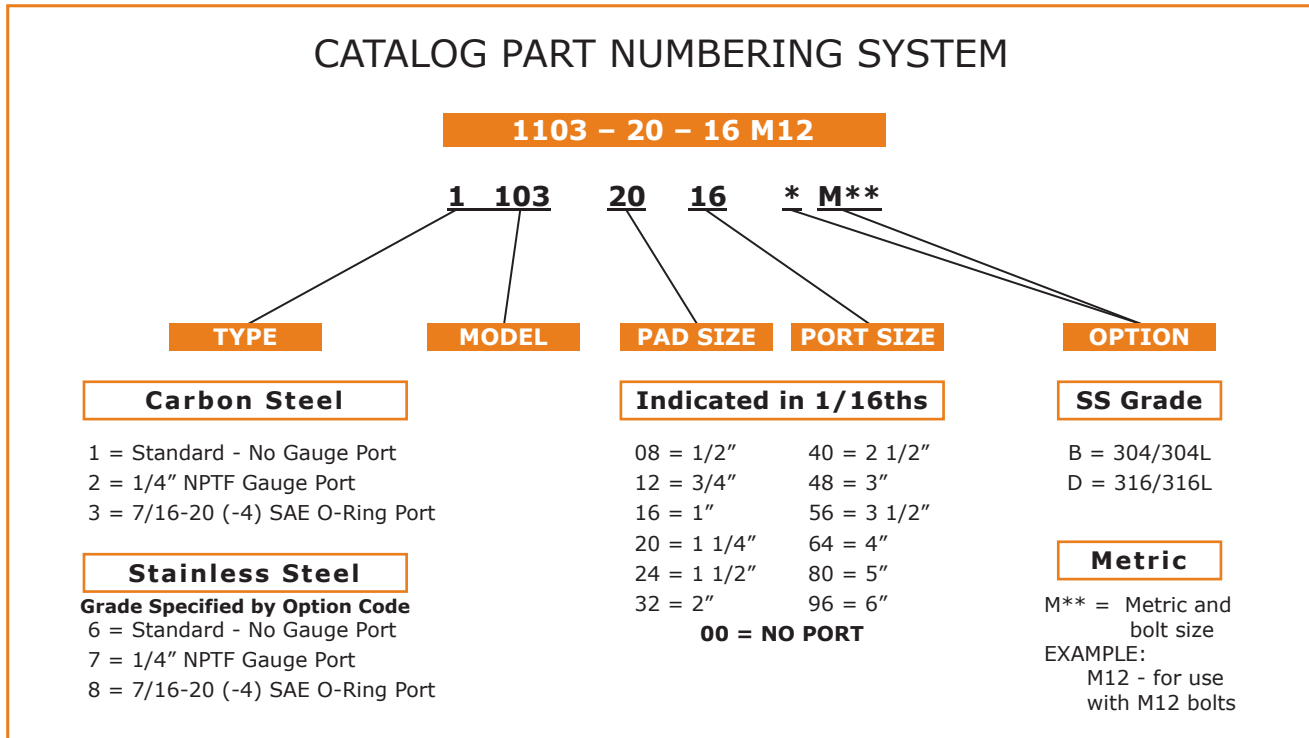


PREFACE AND ORDERING INFORMATION

Six items will normally describe a flange: PAD (pattern and bolt size), O-Ring or Flat Faced, PORT (size and type), Geometry, Material, and OPTIONS. Our way of describing these items uses **MAIN Manufacturing Products'** "Standard Catalog Part Numbering System" (some specials are numbered differently) as follows:



Currently **MAIN** has over 500 Model numbers. This catalog shows only the most popular styles. **Many other styles and patterns are in stock.** Please contact us with specific requirements.

MATERIAL SPECIFICATIONS

Most **MAIN** flanges are manufactured from steel specifically ordered from the mill with special requirements on internal soundness and surface finish. Socket and butt weld flanges are manufactured from a low carbon steel with excellent welding characteristics. Standard threaded flanges may be manufactured from a low carbon leaded or resulfurized steel for superior threading. To specify stainless steel, see above. Other materials are available. If certification is required, it must be specified in advance so that the order can be properly priced and handled.

SAE 4-BOLT HYDRAULIC FLANGES

SAE flanges are manufactured in accordance with the mounting dimensions and O-rings of SAE J518 specifications, either Code 61 or Code 62, and ISO 6162. Stock flanges include socket weld, butt weld, NPTF, and SAE straight thread connections and are available as reducers, in-line, elbows, tees and wyes. Companion (flat-faced) flanges, for unions or converting split flange connections to pipe or tubing, are available with either inch or metric threads (see above for ordering information). The stated pressures are from the SAE J518 and are not derived by **MAIN**. Connections are no stronger than the weakest link (including welds, fasteners, and fittings, especially larger straight threads).

GAUGE PORTS

Flanges are available with 1/4" NPTF or #4 SAE straight thread gauge ports for a nominal charge. Other sizes and types (BSPT, BSPP, ISO 6149) are available at a higher cost and slightly longer lead times.

SPECIAL FLANGES

MAIN Manufacturing Products, Inc. has manufactured hundreds of special flanges which do not fit any established bolt hole spacing. We welcome the opportunity to quote on any particular flange not shown in either the catalog or on-line. With over 55 years of manufacturing, the flange you need could easily be on our shelves but not cataloged. This includes flanges to ISO 6162, ISO 6164, JIS, or DIN standards or flanges with blind, ISO 6149, BSPP, BSPT, or butt weld ports. Run tees, branch tees, wyes, and crosses are also available. **Visit MAINmfg.com for more options or call 800-521-7918.**

SPECIAL PRODUCTS and CONTRACT MACHINING

MAIN Manufacturing Products, Inc. has specialized in the production of various hydraulic components, including hydraulic flanges, adapters, cylinder end caps, and block manifolds. Our engineering staff is always available for consultation on special products, special designs or other contract machining.

MOUNTING KITS (must be ordered separately)

The part number shown DOES NOT INCLUDE the mounting kit. This allows the customer to specify the type of bolt and O-ring material required. Generally the mounting kit numbers shown in the catalog include: 4 socket head bolts, 4 hi-collar lock washers, and one Buna-N O-ring. The third digit from the right (5-8) designates the type of mounting kit.

MK 5**, MK 15**, MK 25**, MK 35** series: Socket head screws, lock washers, & Buna-N O-ring
MK 6**, MK 16**, MK 26**, MK 36** series: Socket head screws, lock washers, & Viton O-ring
MK 7**, MK 17**, MK 27**, MK 37** series: Hex head screws, lock washers, & Buna-N O-ring
MK 8**, MK 18**, MK 28**, MK 38** series: Hex head screws, lock washers, & Viton O-ring

To specify stainless bolts, add an SS at the end of the kit number (MK 533SS). **Please note that using stainless steel bolts may reduce the pressure rating of the assembly.**

LIMITED WARRANTY

The soundness of steel cannot and is not guaranteed by steel manufacturers as it is always possible that any fluid connector may leak from a pinhole or porosity in the steel, not detectable commercially. Therefore, EXCEPT FOR DIMENSIONAL ACCURACY, THE MANUFACTURER HAS MADE NO AFFIRMATION OF FACT AND HAS MADE NO PROMISE RELATING TO THE GOODS BEING SOLD, WHICH HAS BECOME PART OF THE BASIS OF THE BARGAIN MADE OR HAS CREATED OR AMOUNTED TO AN EXPRESS WARRANTY THAT THE GOODS WOULD CONFORM TO ANY SUCH AFFIRMATION OR PROMISE OTHER THAN DIMENSIONAL ACCURACY. ALSO, THE MANUFACTURER DISCLAIMS ANY WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSES AND ANY IMPLIED WARRANTY OF MERCHANTABILITY WHATSOEVER WITH RESPECT TO THE GOODS BEING SOLD AND BUYER ACKNOWLEDGES THAT HE IS NOT RELYING ON SELLER'S SKILL OR JUDGMENT TO SELECT OR FURNISH GOODS SUITABLE FOR ANY PARTICULAR PURPOSES.

LIMITATION OF REMEDY

Catalog dimensions are for reference only and subject to engineering changes as the policy of **MAIN Manufacturing Products, Inc.** is one of continuous improvement. If dimensions are critical, request certified drawings. The sole remedy for breach of this warranty will extend only to the repair or the replacement of the defective part when returned, freight prepaid, within 90 days from purchase, after receiving permission for same. Seller will not be responsible for consequential damage.

SALES TERMS AND CONDITIONS

MAIN Standard Terms and Conditions apply on all orders unless approved in writing by the SALES MANAGER or GENERAL MANAGER ONLY.

ORDERING

- A. Standard Parts:** Order by **MAIN** Part Number, with description, to assure accuracy.
- B. Special Parts:** Please furnish full information including drawings, dimensions, and system pressure if available.
- C. Confirming Orders:** These should be marked clearly as "**CONFIRMING**" orders, preferably across the order. We have several customers that use the same PO for multiple orders and we cannot be responsible for expenses incurred if an unmarked order is processed and shipped.
- D. Telephone Orders:** Telephone orders requesting shipment before receipt of confirming order will be at customer's risk.

TERMS

- E. Payment Terms:** Standard terms are Net 30 days on approved credit (OAC). The FOB Point is our plant in Grand Blanc, MI. Title and possession will pass to the customer upon delivery to the carrier.
- F. Damage in Transit:** Claims for damage in transit should be made by the customer to the carrier within the shorter of 3 days or the timeframe set by the carrier.
- G. Shortages:** Claims for shortages or other shipping errors must be made within three days of receipt.

RETURNS

- H. Qualifying:** No return of special parts, parts beyond 6 months from ship date, or parts beyond our stocking limitations.
- I. Authorized:** Returns must be authorized by obtaining our "Return Goods Authorization" (RGA) form and including a copy with the return. Unauthorized returns will be returned freight collect.
- J. Timing:** Parts must be within 6 months from ship date and returned within 20 days of RGA issuance.
- K. Credit:** Credit will be at the lower of original price or current price, less: 20% restocking, \$25.00 handling, and less any necessary repair charges.
- L. Freight:** For parts shipped due to our error, credit will be issued for ground freight charges. Credit for premium freight will not be allowed.
- M. Return Freight:** Return freight to be prepaid by customer.
- N. Cancellations:** Purchase orders canceled after production has begun or parts packed will be charged a cancellation charge.
- O. NOTICE:** **These parts are precision made parts and require careful handling and secure packaging. Parts must be received in resalable condition.**