

FEATURES

- Hand clamp requires no tools on standard pressure models.
- 2. Top access to basket for easy cleaning.
- 3. Threaded, flanged, weld-end, or special ports available.
- Drain connection on basket chamber.
- Interchangeable, low cost strainer, filter and double element baskets.
- Bodies individually pressure tested to U.L. specifications.
- 7. Spring handle holds basket on seat.



OTHER STRAINERS & FILTERS

Our lines of cast iron, bronze, steel, and stainless steel simplex and duplex models are covered in other bulletins. For larger sizes and other materials, consult factory.

Bulletin No. A1882A (9706)

KRAISSL SIMPLEX STRAINERS AND FILTERS MODEL 72 & 72H SERIES PRESSURE RANGE 200 TO 600 PSIG



PURPOSE

Kraissl pipeline strainers and filters protect pumps, nozzles, valves, heat exchangers and other expensive pipeline equipment from harmful flow contamination by catching dirt and debris.

APPLICATION

Kraissl Model 72 Series <u>simplex strainers</u> and filters provide a simple cost-effective way to separate particle impurities from fluid flow systems. Simplex models described in this bulletin are designed for applications where temporary interruption of a batch process can be permitted for basket cleaning. Where continuous, uninterrupted flow is required, our <u>duplex</u> strainers and filters described in other bulletins should be used. Kraissl strainers are listed by Underwriter's Laboratories, Inc. (U.L.) for fuel and flammable liquid service through size 4 inch, and are individually tested to U.L. quality control specifications. These cast pipeline strainers are designed and manufactured according to international standard A.S.T.M. F-1199 for use in marine and industrial applications.

DESIGN SPECIFICATIONS

Kraissl <u>Model 72</u> series simplex strainers are supplied with quick-opening hand-clamp closure for pressure up to <u>200 psig</u> in sizes up to six inch inclusive. Yoke closures permit easy access without use of tools. The basket is held on its seat by the cover against a spring basket handle. For higher pressure and larger sizes, our <u>Model 72H</u> series with stud and nut closures are available.

Strainer <u>baskets</u> are fabricated from perforated metal. The smallest common perforation size is 1/64 inch in brass and 1/32 inch in stainless steel or monel. Filter baskets are manufactured with fine mesh wire cloth over supporting perforated metal. Optional patented <u>double element baskets</u> provide greatly increased separating area in the same space, and are easily disassembled for cleaning. Interchangeable strainer, filter and double element baskets provide a wide range of operating choices. Baskets are also available with <u>magnet</u> inserts to help eliminate fine metallic ferrous particles.

Internal channels in the Model 72 and 72H Series are 100% full flow, having the same cross sectional area as the equivalent pipe size to avoid flow restriction. Normal flow is through the interior of the basket which contains the collected debris when lifted out for cleaning. Where reverse flow is desired, the fluid travels from the outside to the inside of the basket, and debris collects on the basket exterior.

Both threaded-NPT port and A.N.S.I. flanged port connections are available, as well as metric flanges and other special ports. Drain plugs are furnished on all sizes. Backwash and gage taps can be installed. Weld-end ports and steam-jacketed steel models can also be provided.

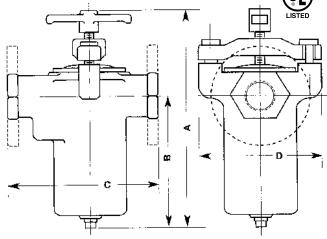
THE KRAISSL COMPANY INC.

299 Williams Avenue., Hackensack, N.J. 07601-5225 Tel: (201) 342-0008 • Fax: (201) 342-0025

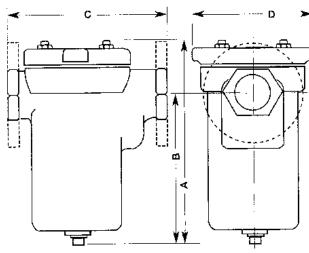


SIZES AND DIMENSIONSSimplex Strainers and Filters

MODEL 72 - STANDARD PRESSURE SERIES YOKE CLOSURE



MODEL 72H - HIGH PRESSURE SERIES STUD AND NUT CLOSURE



SINGLE ELEMENT BASKETS

The open area ratios of two common perforated metal sizes are given in the accompanying table. Strainer baskets are available in many other standard perforations and meshes. Basket materials include brass, stainless steel, carbon steel, monel, and other special alloys.

| Basket | Pipe | Pipe Area | Basket | Basket | Scrn.Area | Open Sc | rn. Area | Strainin | g Ratio |
|---------------------|-------|-----------|---------|---------|-----------|---------|----------|----------|---------|
| Mod. No. | Size | Sq. In. | O. D. | Length | Sq. In. | 1/16* | 1/32t | 1/16* | 1/32t |
| 72-1 & 2 | 3/8 | .191 | 1 1/2 | 2 7/8 | 15.3 | 6.1 | 4.3 | 31.9:1 | 22.5:1 |
| 72-3 & 4 | 1/2 | .304 | 1 1/2 | 2 7/8 | 15.3 | 6.1 | 4.3 | 20.1:1 | 14.1:1 |
| 72-5 & 6 | 3/4 | .533 | 1 15/16 | 3 15/16 | 26.9 | 10.8 | 7.5 | 20.3:1 | 14.1:1 |
| 72-7 & 8 | 1 | .864 | 1 15/16 | 3 15/16 | 26.9 | 10.8 | 7.5 | 12.5:1 | 8.7:1 |
| 72-9 & 10 | 1 1/4 | 1.495 | 2 9/16 | 3 3/4 | 35.3 | 14.1 | 9.9 | 9.4:7 | 6.6:1 |
| 72-11 & 12 | 1 1/2 | 2.036 | 2 9/16 | 5 | 45.4 | 18.2 | 12.7 | 8.9:1 | 6.2:1 |
| 72-13 & 14 | 2 | 3.355 | 3 1/2 | 5 1/8 | 66.0 | 26.4 | 18.5 | 7.9:1 | 5.5:1 |
| 72-15 | 2 1/2 | 4.788 | 4 1/8 | 6 1/4 | 94.4 | 37.8 | 26.4 | 7.9:1 | 5.5:1 |
| 72-15L, FL, 16L, FL | 2 1/2 | 4.788 | 3 1/2 | 7 | 86.6 | 34.6 | 24.2 | 7.2:1 | 5.1:1 |
| 72-17F | 3 | 7.393 | 4 1/8 | 6 3/4 | 101 | 40.4 | 28.3 | 5.5:1 | 3.8:1 |
| 72-17L, FL, 18L, FL | 3 | 7.393 | 3 1/2 | 8 1/2 | 103 | 41.2 | 28.8 | 5.6:1 | 3.9:1 |
| 72-21F & 22F | 4 | 12.73 | 4 1/8 | 10 1/2 | 149 | 59.6 | 41.7 | 4.7:1 | 3.3:1 |
| 72-23F & 24F | 5 | 20.01 | 6 7/8 | 9 1/4 | 237 | 94.8 | 66.4 | 4.7:1 | 3.3:1 |
| 72-25F & 26F | 6 | 28.89 | 6 7/8 | 12 | 296 | 118 | 82.9 | 4.4:1 | 2.9:1 |
| 72-27F & 28F | 8 | 50.03 | 9 | 16 | 516 | 206 | 144 | 4.1:1 | 2.9:1 |

All DIMENSIONS IN INCHES, APPROXIMATE

* Perforated - Based on 40% open area t Perforated - Based on 28% open area

| Model 72 - | Threaded. | NPT Ports - | 200 PSIG | May | Droceuro |
|------------|-------------|----------------|----------|--------|----------|
| Wodel /2 - | · imsaueu · | · NF FUILS - | 200 F310 | IVIAX. | riessuie |

| CAST IRON | CAST STEEL | STAIINLESS STEEL | BRONZE | PIPE SIZE | Α | В | С | D | NET WT. LBS. |
|--------------|---------------|---------------------|--------|--------------|---------|---------|---------|-------|-----------------|
| 72-1 | 72-1S | 72-1SS | 72-2 | 3/8 | 7 3/16 | 4 9/16 | 3 13/16 | 3 1/2 | 4 |
| 72-3 | 72-3S | 72-3SS | 72-4 | 1/2 | 7 3/16 | 4 9/16 | 3 13/16 | 3 1/2 | 4 |
| 72-5 | 72-5S | 72-5SS | 72-6 | 3/4 | 9 5/8 | 5 11/16 | 5 3/8 | 5 | 8 |
| 72-7 | 72-7S | 72-7SS | 72-8 | 1 | 9 5/8 | 5 11/16 | 5 3/8 | 5 | 8 |
| 72-9 | 72-9S | 72-9SS | 72-10 | 1 1/4 | 10 1/2 | 5 15/16 | 7 | 5 7/8 | 15 |
| 72-11 | 72-11S | 72-11SS | 72-12 | 1 1/2 | 12 | 7 7 /16 | 7 | 5 7/8 | 16 |
| 72-13 | 72-13S | 72-13SS | 72-14 | 2 | 13 3/4 | 7 13/16 | 9 | 8 5/8 | 34 |
| 72-15 | | | 72-16 | 2 1/2 | 15 9/16 | 9 5/8 | 11 1/4 | 9 5/8 | 51 |
| 72-15L | 72-15LS | 72-15LSS | 72-16L | 2 1/2 | 16 | 10 5/16 | 9 1/4 | 8 5/8 | 42 |
| 72-17L | 72-17LS | 72-17LSS | 72-18L | 3 | 17 9/16 | 11 1/2 | 11 1/4 | 8 5/8 | 50 |

Model 72F - Flanged Ports - 200 PSIG Max. Pressure

| ╣ | CAST IRON | CAST STEEL | STAIINLESS STEEL | BRONZE | PIPE SIZE | Α | В | С | D | NET WT. LBS. |
|-------|--------------|---------------|---------------------|---------|--------------|---------|---------|---------|--------|-----------------|
| | 72-7F | 72-7FS | 72-7FSS | 72-8F | 1 | 9 5/8 | 5 11/16 | 7 1/4 | 5 | 11 |
| 4 | 72-11F | 72-11FS | 72-11FSS | 72-12F | 1 1/2 | 12 | 7 7/16 | 8 3/8 | 5 7/8 | 21 |
| | 72-13F | 72-13FS | 72-13FSS | 72-14F | 2 | 13 3/4 | 7 13/16 | 10 1/8 | 8 5/8 | 39 |
| ' | 72-15FL | 72-15FLS | 72-15FSS | 72-16FL | 2 1/2 | 16 | 10 5/16 | 11 | 8 5/8 | 57 |
| | 72-15F | | | | 2 1/2 | 15 9/16 | 9 5/8 | 13 | 9 5/8 | 66 |
| | 72-17FL | 72-17FLS | 72-17FLSS | 72-18FL | 3 | 17 9/16 | 11 1/2 | 12 \$/8 | 8 5/8 | 67 |
| • | 72-17F | | | | 3 | 16 1/4 | 10 1/8 | 17 3/4 | 9 5/8 | 81 |
| ' | 72-21F | 72-21FS | 72-21FSS | 72-22F | 4 | 21 3/8 | 14 7/8 | 17 3/4 | 9 5/8 | 115 |
| | 72-23F | 72-23FS | 72-23FSS | 72-24F | 5 | 22 | 13 1/4 | 18 3/4 | 10 7/8 | 172 |
| | 72-25F | 72-25FS | 72-25FSS | 72-26F | 6 | 26 | 16 1/2 | 19 1/2 | 11 | 220 |
| | 72-27FH | 72-27FHS | 72-27FHSS | 72-28FH | 8 | 34 | 21 | 25 3/8 | 14 1/2 | 615 |

Mode! 72H - Cast Iron - 400 PSIG Max. Pressure

| CAST IRON | PIPE SIZE | PORT | Α | В | С | D | NET WT. LBS. |
|--------------|--------------|-------------------|----------|---------|---------|---------|-----------------|
| 72-1H | 3/8 | THREADED - NPT | 5 7/8 | 4 9/16 | 3 13/16 | 3 3/4 | 4 |
| 72-3H | 1/2 | THREADED - NPT | 5 7/8 | 4 9/16 | 3 13/16 | 3 3/4 | 4 |
| 72-5H | 3/4 | THREADED - NPT | 17 15/16 | 5 13/16 | 5 3/8 | 4 13/16 | 13 |
| 72-7H | 1 | THREADED - NPT | 17 15/16 | 5 13/16 | 5 3/8 | 4 13/16 | 13 |
| 72-9H | 1 1/4 | THREADED - NPT | 9 13/16 | 7 9 /16 | 7 | 5 3/8 | 16 |
| 72-11H | 1 1/2 | THREADED - NPT | 9 13/16 | 7 9/16 | 7 | 5 3/8 | 16 |
| 72-13H | 2 | THREADED - NPT | 11 1/8 | 7 15/16 | 9 | 6 13/16 | 34 |
| 72-15H | 2 1/2 | THREADED - NPT | 12 15/16 | 9 3/4 | 11 1/4 | 9 | 51 |
| 72-15FH | 3 | CLASS 250 FLANGED | 14 1/4 | 10 1/8 | 17 3/4 | 9 | 94 |
| 72-21FH | 4 | CLASS 250 FLANGED | 19 7/8 | 14 7/8 | 17 3/4 | 9 | 134 |

Model 72HS - Cast Steel - 600 PSIG Max. Pressure

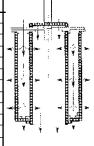
| CAST STEEL | PIPE SIZE | PORT | Α | В | С | D | NET WT. LBS. |
|---------------|--------------|-------------------|----------|---------|---------|---------|-----------------|
| 72-1HS | 3/8 | THREADED - NPT | 5 7/8 | 4 9/16 | 3 13/16 | 3 3/4 | 4 |
| 72-3HS | 1/2 | THREADED - NPT | 5 7/8 | 4 9/16 | 3 13/16 | 3 3/4 | 4 |
| 72-5HS | 3/4 | THREADED - NPT | 7 15/16 | 5 13/16 | 5 3/8 | 4 13/16 | 14 |
| 72-7HS | 1 | THREADED - NPT | 7 15/16 | 5 13/16 | 5 3/8 | 4 13/16 | 14 |
| 72-9HS | 1 1/4 | THREADED - NPT | 9 13/16 | 7 9 /16 | 7 | 5 3/8 | 18 |
| 72-11HS | 1 1/2 | THREADED - NPT | 9 13/16 | 7 9/16 | 7 | 5 3/8 | 18 |
| 72-13HS | 2 | THREADED - NPT | 11 1/8 | 7 15/16 | 9 | 6 13/16 | 34 |
| 72-13FHS | 2 | CLASS 300 FLANGED | 11 1/8 | 7 15/16 | 10 3/4 | 6 13/16 | 43 |
| 72-15HS | 2 1/2 | THREADED - NPT | 12 15/16 | 9 3/4 | 11 1/4 | 9 | 51 |
| 72-15FHS | 2 1/2 | CLASS 300 FLANGED | 13 1/2 | 9 3/4 | 11 1/4 | 9 | 73 |
| 72-17FHS | 3 | CLASS 300 FLANGED | 14 1/4 | 10 1/8 | 17 3/4 | 9 | 104 |
| 72-21FHS | 4 | CLASS 300 FLANGED | 19 7/8 | 14 7/8 | 17 3/4 | 9 | 148 |

All DIMENSIONS IN INCHES, SUBJECT TO CASTING AND PRODUCTION VARIATIONS

DOUBLE ELEMENT BASKETS

These strainers can be supplied with our patented Double Element Baskets which are easily disassembled for cleaning and provide greater straining areas in the same housing. Double Element Baskets are listed by Underwriters Laboratories, Inc. for a variety of sizes.

| ר | ng Ratio | Straini | rn. Area | Open So | Tot. Scrn. Area | | | Pipe Area | | Basket |
|-----|----------|---------|----------|---------|--------------------|---------|---------|-----------|-------|------------|
| 1 | 1/32t | 1/16* | 1/32t | 1/16* | Sq. In. | Length | O. D. | Sq. In. | Size | Mod. No. |
| Τ | 12.4:1 | 17.7:1 | 10.7 | 15.3 | 38.3 | 3 15/16 | 1 15/16 | .864 | 1 | 72-7/1 |
|] ; | 9.4:1 | 13.5:1 | 14.1 | 20.2 | 50.5 | 3 3/4 | 2 9/16 | 1.495 | 1 1/4 | 72-9/7 |
| 1 | 9.5:1 | 13.6:1 | 19.3 | 27.6 | 69.0 | 5 | 2 9/16 | 2.036 | 1 1/2 | 72-1 1/7 |
| 7- | 7.1:1 | 10.1:1 | 23.8 | 34.0 | 84.9 | 5 1/8 | 3 1/2 | 3.355 | 2 | 72-13/7 |
| 7 | 6.7:1 | 9.6:1 | 32.2 | 46.0 | 115 | 7 | 3 1/2 | 4.788 | 2 1/2 | 72-15L/7 |
|]. | 7.1:1 | 10.1:1 | 33.9 | 48.4 | 121 | 6 1/4 | 4 1/8 | 4.788 | 2 1/2 | 72-15/7 |
| ٦- | 5.3:3 | 7.6:1 | 39.2 | 56.0 | 140 | 8 1/2 | 3 1/2 | 7.393 | 3 | 72-17L/7 |
|] | 5.3:3 | 7.6:1 | 39.5 | 56.4 | 141 | 6 3/4 | 4 1/8 | 7.393 | 3 | 72-17 F/11 |
| ٦- | 4.8:1 | 6.9:1 | 61.6 | 88.0 | 220 | 10 1/2 | 4 1/8 | 12.73 | 4 | 72-21/11 |
|] | 4.2:1 | 6.0:1 | 84.0 | 120 | 300 | 9 1/8 | 6 15/16 | 20.01 | 5 | 72-23/15 |
| 7 | 3.7:1 | 5.3:1 | 108 | 154 | 386 | 11 1/2 | 6 15/16 | 28.89 | 6 | 72-25/15 |



All DIMENSIONS IN INCHES, APPROXIMATI

* Perforated - Based on 40% open area t Perforated - Based on 28% open area Bulletin No. A1882A (9709)