| Models: | <i>721,</i> | 722 |
|---------|-------------|------------|
|---------|-------------|------------|

| Job Name | Contractor |
|--------------|-----------------------|
| Job Location | Approval |
| Engineer | Contractor's P.O. No. |
| Approval | Representative |

LEAD FREE*

Cast Iron & Ductile Iron Flanged End CONTROL CHEK® Valves

Models: 721, 722

Sizes: 2" - 14"

| PRESSURE/TEMPERATURE-NON-SHOCK | | | | | | |
|--------------------------------|----------|----------------|--|--|--|--|
| MODEL | SIZES | RATING CWP | | | | |
| | | 200psi @ 150°F | | | | |
| 721 | 2"-12 | 14 bar @ 66°C | | | | |
| | | 165psi @ 300°F | | | | |
| | | 50psi @ 150°F | | | | |
| | 14" | 10 bar @ 66°C | | | | |
| | | 110psi @ 300°F | | | | |
| 722 | | 640psi @ 100°F | | | | |
| | 2" – 12" | 44 bar @ 38°C | | | | |
| | | 565psi @ 300°F | | | | |
| | | 500psi @ 100°F | | | | |
| | 14" | 34 bar @ 38°C | | | | |
| | | 400psi @ 300°F | | | | |

Max. temp can be limited by gasket material. Consult factory.

721 Class 125 722 Class 300

Typical Service

The CONTROL CHEK® valve is designed for installation in pump discharge piping where it performs triple duty. It acts as a spring loaded silent check valve, a shutoff valve, and a balancing valve. Used in conjunction with the Mueller Steam Specialty Suction Diffuser, it constitutes a compact and effective complete pump protection and isolation package.



Models 721, 722

Operation

- Disc is spring loaded to close the valve prior to flow reversal, protecting the pump and guarding against water hammer.
- Disc opens at .25psi
- Disc opens a 1/3" for each inch of line size, allowing greater flow than similar products
- Disc is fully guided with external threaded stem.
- Threaded stem allows flow adjustment from bubble tight shutoff to full flow.

Features

- Position indicator ensures accurate and repeatable balancing through disc positioningin throttling service.
- Stem and yoke are external unwetted parts so are not subject to corrosion or erosion by line fluids. This is a design feature unique to the Mueller Steam Specialty CONTROL CHEK®.
- Field servicing is easy and requires no special tools.
- NPT drain plug at location "C" is standard. See next page.
- Gauge taps are available at both inlet and outlet ends.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Mueller Steam Specialty product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Mueller Steam Specialty Technical Service. Mueller Steam Specialty reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Mueller Steam Specialty products previously or subsequently sold.



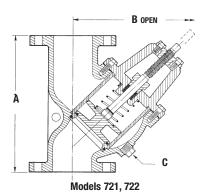
Materials

| | 721 | 722 | | |
|---------------|---------------------------------|---------------------------------|--|--|
| Body and Yoke | Cast Iron ASTM A126-B | Ductile Iron ASTM A536 | | |
| Disc | Aluminum Bronze ASTM B148, C952 | Aluminum Bronze ASTM B148, C952 | | |
| Stem | 316 SS | 316 SS | | |
| Seat Guide | Bronze ASTM B584, C844 | Bronze ASTM B584, C844 | | |
| Gland Flange | Cast Iron ASTM A126-B | Cast Iron ASTM A126-B | | |
| Packing | Compressed Fiber | Compressed Fiber | | |
| Spring | 302 Stainless Steel | 302 Stainless Steel | | |
| Stem Guide | Ductile Iron ASTM A536 | Ductile Iron ASTM A536 | | |
| 0-Rings | EPDM | EPDM | | |

Dimensions and Weights

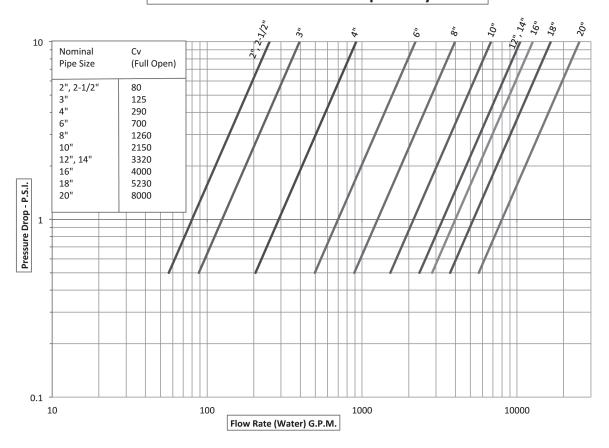
| SIZE | DIMENSIONS | | | | | | | WEIGHT | | |
|-------|------------|-----|--------|-----|-----|-----|------|--------|--|--|
| | A | \ | В | | | С | | | | |
| | | | | | (NI | PT) | | | | |
| in. | in. | mm | in. | mm | in. | mm | lbs. | kgs. | | |
| 721 | | | | | | | | | | |
| 2 | 83//8 | 213 | 95/8 | 244 | 1/2 | 15 | 34 | 15 | | |
| 21/2" | 87//8 | 225 | 95/8 | 244 | 1/2 | 15 | 40 | 18 | | |
| 3 | 10 | 254 | 101//8 | 257 | 1/2 | 15 | 50 | 27 | | |
| 4 | 141/2 | 368 | 12% | 321 | 1/2 | 15 | 100 | 45.4 | | |
| 5 | 16 | 406 | 12% | 321 | 1/2 | 15 | 155 | 70 | | |
| 6 | 18 | 457 | 17½ | 445 | 3/4 | 20 | 200 | 90 | | |
| 8 | 21½ | 546 | 18 | 457 | 3/4 | 20 | 350 | 159 | | |
| 10 | 25½ | 648 | 213/4 | 552 | 1 | 25 | 480 | 218 | | |
| 12 | 30 | 762 | 241/2 | 616 | 1 | 25 | 660 | 300 | | |
| 14 | 30% | 772 | 241/2 | 622 | 1 | 25 | 790 | 359 | | |
| 722 | | | | | | | | | | |
| 2 | 93//8 | 238 | 95/8 | 244 | 1/2 | 15 | 39 | 17 | | |
| 21/2" | 101/4 | 260 | 95/8 | 244 | 1/2 | 15 | 47 | 21 | | |
| 3 | 1111/4 | 286 | 10½ | 257 | 1/2 | 15 | 64 | 29 | | |
| 4 | 15% | 397 | 125/8 | 321 | 1/2 | 15 | 120 | 54.5 | | |
| 5 | 16% | 422 | 12% | 321 | 1/2 | 15 | 173 | 78 | | |
| 6 | 19¾ | 501 | 17½ | 445 | 3/4 | 20 | 230 | 104 | | |
| 8 | 235/8 | 600 | 18 | 457 | 3/4 | 20 | 410 | 186 | | |
| 10 | 28 | 711 | 213/4 | 552 | 1 | 25 | 550 | 250 | | |
| 12 | 31% | 803 | 241/2 | 616 | 1 | 25 | 730 | 331 | | |
| 14 | 33 ½ | 851 | 241/2 | 622 | 1 | 25 | 920 | 417 | | |





Other materials available on request.
*722G grooved end CONTROL CHEK® available. See the LOCXEND® section of the Mueller Steam Specialty Engineering binder.

Mueller Model 721 & 722 Triple Duty Valves



| ESTIMATED CV RATING VS. PERCENTAGE OF STEM RISE | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|
| % of STEM RISE | | | | | | | | | |
| Size | 100% | 90% | 80% | 70% | 60% | 50% | 40% | 30% | 20% |
| 2" | 80 | - | - | - | - | - | - | - | - |
| 2-1/2" | 80 | - | - | - | - | - | - | - | - |
| 3" | 125 | 120 | 112 | 100 | 88 | 75 | 60 | 46 | 30 |
| 4" | 290 | 278 | 261 | 231 | 204 | 174 | 140 | 106 | 69 |
| 6" | 700 | 670 | 629 | 558 | 492 | 421 | 338 | 255 | 166 |
| 8" | 1260 | 1207 | 1132 | 1004 | 886 | 758 | 609 | 459 | 299 |
| 10" | 2150 | 2059 | 1931 | 1713 | 1512 | 1294 | 1039 | 783 | 510 |
| 12" | 3320 | 3179 | 2982 | 2645 | 2335 | 1998 | 1604 | 1210 | 788 |
| 14" | 3320 | 3179 | 2982 | 2645 | 2335 | 1998 | 1604 | 1210 | 788 |
| 16" | 4000 | 3831 | 3593 | 3186 | 2814 | 2407 | 1932 | 1458 | 949 |
| 18" | 5230 | 5008 | 4698 | 4166 | 3679 | 3147 | 2526 | 1906 | 1241 |
| 20" | 8000 | 7661 | 7186 | 6373 | 5627 | 4814 | 3864 | 2915 | 1898 |

Note: For size selection and estimating purposes only. 2" and $2-\frac{1}{2}"$ - Data not available

Limited Warranty: Mueller Steam Specialty warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge. This shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misapplication or improper installation of the product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Any implied warranties that are imposed by law are limited in duration to one year.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights.

