## Fisher Sort

To supplant a Fisher part with a RegO replacement. Please Note: This chart does not show an exact equivalent. For complete specifications refer to Manufacturer catalogs such as RegO L-500 or L-102.

| Fisher | RegO | Product Description |
|---|---|---|
| 318 | 970 | Standard POL Connector |
| 9174 | 3131-10 | Pipe -Away Adapter |
| 118203 | 1224WA | Needle Vlv, Brs, 1/4 x 1/4" |
| 200 P48 | 6579C | Dbl Chk Fill Vlv, 1 1/4 MN x 1 3/4 Ac |
| 3349PDLG-402 | NA | Type I OPD Valve |
| 3349PDLG-404 | NA | Type I OPD Valve |
| 3349PDLG-406 | NA | Type I OPD Valve |
| 3349PDLG-408 | NA | Type I OPD Valve |
| 404-24-40 | A3217FR410 | Internal Vlv, Flg, 3" Right |
| 50P-2 | 2434A | Low Pressure Test Set |
| 50P-2 | 1212KIT | Manometer Kit |
| 50P-5 | 2434A-2 | Dual Gauge, 1/4 Srt Stl |
| 521-8 | A5765E | Adapter, 1 3/4 Ac x 1 MN |
| 64/222 | 1586MH | HP Regulator, 45-125 |
| 64/33 | 1584MN | HP Regulator, 3-30 |
| 64/35 | 1584ML | HP Regulator, 25-50 |
| 64/35 | 1586MN | HP Regulator, 3-30 |
| 64/36 | 1586ML | HP Regulator, 25-50 |
| 64/36 & 64/222 | 1584MH | HP Regulator, 45-125 |
| 642DFP | LV4403B66RA | Right Angle 2nd Stage Reg. |
| 64KB/33 & 64KB/34 | AA1584MW | HP Regulator, NH3, 3-25 |
| 64KB/35 | AA1584ML | HP Regulator, NH3, 20-50 |
| 64KB/35 | AA1582MK | HP Regulator, NH3, 3-25 |
| 64KB/35 | AA1586MW | HP Regulator, NH3, 3-25 |
| 64KB/36 | AA1582ML | HP Regulator, NH3, 20-50 |
| 64KB/36 | AA1586ML | HP Regulator, NH3, 20-50 |
| 64KB/36 & 64KB/222 | AA1584MH | HP Regulator, NH3, 45-125 |
| 67CD/102 | 597FC | HP Regulator, 20-45 psig |
| 67CH/742 | 597FD | HP Regulator, 40-100 psig |
| 67CH/743 | 597FB | HP Regulator, 10-30 psig |
| 67CH-751 | 597FA | HP Regulator, 1-15 psig |
| 912/101 & 912/104 | 302 | Single Stage Regulator |
| 912/101 & 912/104 | LV2302A2 | Single Stage Regulator |
| B602H | 9106CO | Cylinder Vlv, 312 Relief |
| B650H | 9107K8A | Cylinder Vlv w/DT |
| C403-24-25 | A3217DFR260 | Internal Vlv, Dbl Flg, 3" Right |
| C403-24-250 | A3217DFL260 | Internal Vlv, Dbl Flg, 3" Left |
| C403-24-400 | A3217DFL410 | Internal Vlv, Dbl Flg, 3" Left |
| C403-24-400 | A3217DFR410 | Internal Vlv, Dbl Flg, 3" Right |
| C404-24-15 | A3217FR160 | Internal Vlv, Flg, 3" Right |
| C404-24-25 | A3217FR260 | Internal Vlv, Flg, 3" Right |
| C404-24-250 | A3217FL260 | Internal Vlv, Flg, 3" Left |
| C404-24-400 | A3217FL410 | Internal Vlv, Flg, 3" Left |
| C404-32 | A3217FLPA | Pneumatic Actuator for A3217FL |
| C404A32 | A3219FPA | Pneumatic Actuator for A3219F |
| C404M-32-600 | A3219FA600L | Internal Vlv, Flg, 4" |
| C407-10-05 | A3209D050 | Internal Vlv, 1 1/4", Straight - new # after 6-2007 |
| C407-10-05 | A3209R050 | Internal Vlv, 1 1/4", Straight - # until 6-2007 |
| C407-10-08 | A3209D080 | Internal Vlv, 1 1/4", Straight - new # after 2-2007 |
| C407-10-08 | A3209R080 | Internal Vlv, 1 1/4", Straight - # until 2-2007 |

| Fisher | RegO | Product Description |
|---|---|---|
| C421-16-10 | A3212RT105 | Internal Valve, 2" Threaded |
| C421-16-15 | A3212RT175 | Internal Valve, 2" Threaded |
| C421-16-25 | A3212RT250 | Internal Valve, 2" Threaded |
| C421-24-15 | A3213RT150 | Internal Vlv, 3" Tee Body |
| C421-24-20 | A3213RT200 | Internal Vlv, 3" Tee Body |
| C421-24-25 | A3213RT300 | Internal Vlv, 3" Tee Body |
| C421-24-40 | A3213RT400 | Internal Vlv, 3" Tee Body |
| C427-16-10 | A3212R105 | Internal Valve, 2" Threaded |
| C427-16-10 | A3212R175 | Internal Valve, 2" Threaded |
| C427-16-25 | A3212R250 | Internal Valve, 2" Threaded |
| C427-24-15 | A3213R150 | Internal Valve, 3" Threaded |
| C427-24-20 | A3213R200 | Internal Valve, 3" Threaded |
| C427-24-25 | A3213R300 | Internal Valve, 3" Threaded |
| C427-24-40 | A3213R400 | Internal Valve, 3" Threaded |
| C600H | 9101C1 | Service Vlv, 3/4 MN x 1/4 FP |
| C630-33 | 9101H5 | MF Serv Vlv w/XsFlw, 3.6 GPM |
| C631-33 | 9101Y5H | Service Vlv, Angle, 3.6 GPM |
| C632-26 | 9101P5H | FL Serv Vlv w/XsFlw, 2.5 GPM |
| C632-26 | 9101P6H | FL Serv Vlv w/XsFlw, 2.5 GPM |
| CM404-32-400 | A3219FA400L | Internal Vlv, Flg, 4" |
| D138 | 6584C | Dbl Chk Fill Vlv, 2 MN x 21/4 Ac |
| D139 | 3194C | Dbl Chk Fill Vlv, 3 MN x 31/4 Ac |
| D141 | 3197C | Dbl Chk Fill Vlv, 3" |
| D200 | 6579 | Dbl Chk Fill Vlv, 1 1/4 MN x 1 3/4 Ac |
| D200 | 7579 | Dbl Chk Fill Vlv, 1 1/4 MN x 1 3/4 Ac |
| D215-P147 | 7647SC | Dbl Chk Fill Vlv, 3/4 MN x 1 3/4 Ac w/LG Wrench Flats |
| D216 | 7647DC | Dbl Chk Fill Vlv, 3/4 MN x 1 3/4 Ac |
| E125 | 3183AC | Vapor Eqlz Vlv, 1 1/4 MN x 1 3/4 Ac |
| E202 | 3170 | Vapor Eqlz Vlv, Single Chk |
| F100 | 3272E | Excess Flow Vlv, 3/4" |
| F101 | 3272F | Excess Flow Vlv, 3/4" |
| F101 | 3272G | Excess Flow Vlv, 3/4" |
| F102 | 3282A | Excess Flow Vlv, 1 1/4" |
| F102 | 3282B | Excess Flow Vlv, 1 1/4" |
| F105 | 3282C | Excess Flow Vlv, 1 1/4" |
| F106 | 3292A | Excess Flow Vlv, 2" |
| F107 | 1519C4 | Excess Flow Vlv, 2" |
| F107 | 3292B | Excess Flow Vlv, 2" |
| F120B | 3195-50 | Wrenches for Acme Cplg |
| F130 | 1519A2 | Excess Flow Vlv, 1" |
| F131 | 7574 | Excess Flow Vlv, 1 1/2" |
| F131 | 1519A3 | Excess Flow Vlv, 1 1/2" |
| F132 | 1519A4 | Excess Flow Vlv, 2" |
| F132 | A3292B | Excess Flow Vlv, 2" |
| F133 | 1519B4 | Excess Flow Vlv, 2" |
| F133 | A7537P4 | Excess Flow Vlv, 2" |
| F133 | A7537P4F | Excess Flow Vlv, Full Cplg, 2" |
| F134 | 1519C2 | Excess Flow Vlv, 1 1/2" x 1" |
| F171 | 7550P | Angle Transfer Vlv, 3/4" |
| F171 | 7572FC | Order 7590U |
| F181 | 3199W | Hard Nose POL w/XSFlw, 1/4" |





Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Fisher Sort - Continued

| Fisher | RegO | Product Description |
|---|---|---|
| F186 06-1 | 12472 | Excess Flow Valve, 3/4” |
| F190 | A2137 | Excess Flow Vlv, 2” |
| F190 | A3292A | Excess Flow Vlv, 2” |
| F190 | A3500L4 | Excess Flow Vlv, 2” |
| F190 | A7537L4 | Excess Flow Vlv, 2” |
| F190 | A7537L4F | Excess Flow Vlv, Full Cplg 2” |
| F191 | A2137A | Excess Flow Vlv, 2” |
| F191 | A3292C | Excess Flow Vlv, 2” |
| F191 | A3500N4 | Excess Flow Vlv, 2” |
| F191 | A3500P4 | Excess Flow Vlv, 2” |
| F191 | A7537N4 | Excess Flow Vlv, 2” |
| F191 | A7537N4F | Excess Flow Vlv, Full Cplg, 2” |
| F194 | A3500R6 | Excess Flow Vlv, 3” |
| F194 | A7539R6 | Excess Flow Vlv, 3” |
| F194 | A7539R6F | Excess Flow Vlv, Full Cplg, 3” |
| F195 | A3500T6 | Excess Flow Vlv, 3” |
| F198 | 2139 | Excess Flow Vlv, 3” |
| F198 | A1519A6 | Excess Flow Vlv, 3” |
| F198 | A7539T6 | Excess Flow Vlv, 3” |
| F198 | A7539T6F | Excess Flow Vlv, Full Cplg, 3” |
| F199 | 2139A | Excess Flow Vlv, 3” |
| F199 | A3500V6 | Excess Flow Vlv, 3” |
| F199 | A7539V6 | Excess Flow Vlv, 3” |
| F199 | A7539V6F | Excess Flow Vlv, Full Cplg, 3” |
| F210 | 7580FC | Order 7591U |
| F73 | 3188A | XSFlw Vlv, 0.95 GPM |
| F81 | 3188B | XSFlw Vlv, 1.90 GPM |
| G100 | A3146 | Back Prs Chk Vlv, 3/4” |
| G101 | 3176 | Back Prs Chk Vlv, 1 1/4” |
| G104 | A3196 | Back Prs Chk Vlv, 3” |
| G104 | A3400L6 | Back Prs Chk Vlv, 3” |
| G105 | A3187S | Back Prs Chk Vlv, 2” Soft Seat |
| G112 | A3186 | Back Prs Chk Vlv, 2 Stl |
| G201-16 | A7794 | Sight Flow Indicator, 2” |
| H110-250 | 3127G | Relief Vlv, 250, 1/4” |
| H110-312 | 3127T | Relief Vlv, 312, 1/4” |
| H123 | 3127K | Hydro Relief Vlv, 375, 1/4” |
| H124 | 3127L | Hydro Relief Vlv, 400, 1/4” |
| H124 | 3127U | Hydro Relief Vlv, 450, 1/4” |
| H124 | SS8001U | Hydro Relief Vlv, 450, 1/4” |
| H135-250 | 3129G | Relief Vlv, 250, 1/2” |
| H144 | 3129U | Hydro Relief Vlv, 450, 1/2” |
| H144 | SS8002U | Hydro Relief Vlv, 450, 1/2” |
| H148 | 3129K | Hydro Relief Vlv, 375, 1/2” |
| H160-275 | 3131GC | Relief Valve, 275, 3/4” |
| H185-250 | T3131G | Relief Valve, 250 |
| H185-250 | 3131G | Relief Valve, 250, 3/4” |
| H185-250 | M3131G | Relief Vlv for Multivlv, 250 |
| H225-250 | 7583G | Relief Valve, 250, 3/4” |
| H250-250 | 8684G | Relief Valve, 250, 1” |
| H250-275 | 8684GC | Relief Valve, 275, 1” |
| H275-250 | 8685G | Relief Valve, 250, 1 1/4” |
| H275-275 | 8685GC | Relief Valve, 275, 1 1/4” |

| Fisher | RegO | Product Description |
|---|---|---|
| H280-275 | 7534G | Relief Valve, 250, 2” |
| H282-275 | 7534GC | Relief Valve, 275, 2” |
| H349 | 8545AK | Relief Valve, 375, 3/4” |
| H365-312 | 8544T | Relief Valve, 312, 1” |
| H365-375 | 8544K | Relief Valve, 375, 1” |
| H385-250 | 8544G | Relief Valve, 250, 1” |
| H385-250 | 8543G | Relief Valve, 250, 1 1/4” |
| H385-312 | 8543T | Relief Valve, 312, 1 1/4” |
| H500-250 | A8574G | Multiport, 250, 4”, UL |
| H510-250 | A8564G | Multiport, 250, 3”, UL |
| H722-250 | A8434G | LPG Relief Vlv, 250, 2” |
| H722-265 | A8434N | NH3 Relief Vlv, 265, 2” |
| H732-250 | A8436G | LPG Relief Vlv, 250, 3” |
| H732-265 | A8436N | NH3 Relief Vlv, 265, 3” |
| HSRL-CFC | LV5503B6 | 2nd Stage LPG Reg, Lge Capacity |
| HSRL-CFC | LV5503B8 | 2nd Stage LPG Reg, Lge Capacity |
| J31L-1 | A9091R | Rotogage, 1” |
| J31L-1 | A9092R | Rotogage, 1” |
| J31L-1 | A9093RS | Rotogage, 1” |
| J31L-1 | A9094RS | Rotogage, 1” |
| J31L-1 | A9095RS | Rotogage, 1” |
| J31S-1 | A9091-18L | Rotogage Dial, LPG |
| J400 | 3165C | Vent Valve, 1/4”, Knurled |
| J402S | TSS3169 | Vent Valve, 1/4, Stn/Tfe |
| J410-120 | 3165CF12.0 | 3165C w/12.0” Tube |
| J410-120 | 3165CP | Vent Valve w/Warning Plate |
| J410-120 | 3165SC | Vent Valve, 1/4”, Slotted |
| J411-120 | TA3169F12.0 | Vent Valve, 1/4, Stn/Tfe |
| J415 | A8020D | Angle Valve, 1 1/4 MN x 1FN |
| J415 | A2805C | CombinationValve, Stl |
| J501 | 2411 | Gauge, 2 Brs. 0-30 |
| J502 | 5575 | Gauge, 2 Brs, 0-60 |
| J502 | 5547 | Gauge, 2 Stl, 0-60 |
| J504 | 5576 | Gauge, 2 Brs, 0-100 |
| J504 | 1286 | Gauge, 2 Stl, 0-100 |
| J506 | 948 | Gauge, 2 Brs, 0-300 |
| J506 | 948B | Gauge, 2 Stl, 0-300 |
| J542 | A8400 | Gauge, 2 1/2 Stl, 0-400 |
| J595 | 1494-1 | Gauge Adapter |
| J600 | 2962 | Test Adapter w/948B Gauge |
| K160 | 912FA20 | Pigtail, 1/4 x 1 1/8 x 20 |
| K161 | 912PS30 | Pigtail, 7/8 x 7/8 x 30 |
| K162 | 912PS36 | Pigtail, 7/8 x 7/8 x 36 |
| K200 | 913PS20 | 3/8 Pigtail, 7/8 x 7/8 x 20 |
| K200 | 912PS20 | Pigtail, 7/8 x 7/8 x 20 |
| K241 | 912FS30 | Pigtail, 1/4 x 7/8 x 30 |
| K249 | 912FS36 | Pigtail, 1/4 x 7/8 x 36 |
| K280 | 912JS20 | Pigtail, 1/4 x 7/8 x 20 |
| L196-116 | 8555D10.6 | Multivalve, Vapor w/DT, 3/4” |
| L196-116 | 8555D11.6 | Multivalve, Vapor w/DT, 3/4” |
| L680-120-1 | 7556VR12.0 | Multivalve, 3/4 MN w/DT |
| M104 | 1300 | Bushing, Brs |
| M108 | 3144-91 | Cap & Chain w/Ring, 1 1/4 AC |



Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Fisher Sort - Continued

| Fisher | RegO | Product Description |
|---|---|---|
| M108 | 3144-9P | Cap, 1 1/4" Ac for LPG |
| M109 | 3174-9P | Cap |
| M109 | 3174-91 | Cap & Chain w/Ring, 1 3/4 Ac |
| M109 | 3174-93 | Cap & Chain w/Ring, 1 3/4 Ac |
| M109 | A8016-9P | Cap, 1 3/4 Ac |
| M110 | 3175B | Hose Cplg, 1/2 MN x 1 3/4 Ac |
| M111 | 3175 | Hose Cplg, 3/4 MN x 1 3/4 Ac |
| M112 | 3175A | Hose Cplg, 1 MN x 1 3/4 Ac |
| M120 | 3185 | Hose Cplg, 1 1/4 MN x 2 1/4 Ac |
| M121 | A3185 | Hose Cplg, 1 1/4 MN x 2 1/4 Ac |
| M130 | 3195 | Hose Cplg, 2 MN x 3 1/4 Ac |
| M133 | A3195 | Hose Cplg, 2 MN x 3 1/4 Ac |
| M140 | 3171 | Vapor Hose Cplg, 3/8 MN x 1 1/4 Ac |
| M141 | 3171A | Vapor Hose Cplg, 1/2 MN x 1 1/4 Ac |
| M150 | 3181 | Vapor Hose Cplg, 3/4 MN x 1 3/4 Ac |
| M151 | 3181A | Vapor Hose Cplg, 1 MN x 1 3/4 Ac |
| M160 | 3191 | Hose Cplg, 1 1/4 MN x 2 1/4 Ac |
| M178 | C5763N | Plug w/Chain & Ring, 1 1/4" |
| M179 | C5765N | Plug w/Chain & Ring 1 3/4" |
| M180 | C5767N | Plug w/Chain & Ring, 2 1/4 |
| M181 | C5769N | Plug w /Chain & Ring, 3 1/4" |
| M210 | 5764A | Adapter, 1 3/4 Ac x 1/4 FN |
| M211 | 5764B | Adapter, 1 3/4 Ac x 3/8 FN |
| M212 | 5764C | Adapter, 1 3/4 Ac x 1/2 FN |
| M213 | 5764D | Adapter, 1 3/4 Ac x 3/4 FN |
| M215 | 5765D | Adapter, 1 3/4 Ac x 3/4 MN |
| M216 | 5764E | Adapter, 1 3/4 Ac x 1 FN |
| M216 | 5765E | Adapter, 1 3/4 Ac x 1 MN |
| M217 | 5765F | Adapter, 1 3/4 Ac x 1 1/4 MN |
| M220 | 7141M | Safety Chk Conn, 3/8 FN x 11 /4 Ac |
| M220F | 7141F | Safety Chk Conn, 1 1/4 Ac x 1/4 FN |
| M229 | 3175P | 1 3/4" Acme Coupling |
| M233 | 5767F | Adapter, 2 1/4 Ac x 1 1/4 MN |
| M236 | A5767F | Adapter, 2 1/4 Ac x 1 1/4 MN |
| M239 | A5764W | Plug, 1 3/4 Ac |
| M252 | 5768H | Adapter, 3 1/4 Ac x 2 FN |
| M262 | 5769K | Adapter, 3 1/4 Ac x 3 MN |
| M263 | A5769H | Adapter, 3 1/4 Ac x 2 MN |
| M273 | 5765M | Coupling, 1 3/4 Ac x 1 3/4 Ac |
| M284 | 5761A | Adapter, FP x 1/4 MN |
| M285 | 5761B | Adapter, FP x 3/8 MN |
| M286 | 5761C | Adapter, FP x 1/2 MN |
| M287 | 5761D | Adapter, FP x 3/4 MN |
| M301 | 5760A | Adapter, FP x 1/4 FN |
| M303 | 5760C | Adapter, FP x 1/2 FN |
| M306 | 12982 | Adapter, Swivel, 1/4" |
| M318A | 970AXS | Soft Nose 970AX |
| M318AW | 970S | Soft Nose POL w/Wrench Nut |
| M319 | 970AX | Hard Nose POL w/XSFlw |
| M319 | 970AS | Soft Nose POL w/Wrench Nut |
| M353 | 2906F | Adapter, MP x 3/8 SF |
| M355 | 2906E | Adapter, MP x 1/2 SF |
| M357 | 2906G | Adapter, MP x 1/2 FN |

| Fisher | RegO | Product Description |
|---|---|---|
| M388 | 970AW | Soft Nose POL w/Handwheel |
| M388 | 970HT | Soft Nose POL w/Handwheel |
| M390 | 7193D-10 | Fill Connector, Soft Nose |
| M394 | A7571LB | Hose Cplg, Vapor, 3/4" |
| M412 | 3705RC | Plug w/Chain, POL |
| M412P | 10538P | POL Plug |
| M412P | N970P | POL Plug, Nylon w/Lanyard |
| M420 | 1708C | POL Cap & Chain |
| M431 | 3184-90 | Cap & Chain w/Ring, 2 1/4 Ac |
| M432 | A3184-90 | Cap & Chain w/Ring, Ac |
| M441 | 3194-90 | Cap & Chain w/Ring, 3 1/4 Ac |
| M443 | A3194-90 | Cap & Chain w/Ring, 3 1/4 Ac |
| M450A | 3120 | Unloading Adapter, Angle |
| M450A | 3121 | Unloading Adapter, Angle |
| M455 | 7572C-15A | Chek-Lok Adapter, 3/4 MN |
| M460-40 | A7571LA | Hose Cplg, Vapor, 1/2" |
| M470 | 7577V | Fill Hose Adapter, 1 3/4 Ac |
| M498-6/3 | 5763D | Adapter, 1 1/4 Ac x 3/4 MN |
| M502-12/8 | 5766E | Adapter, 2 1/4 Ac x 1 FN |
| M502-12/8 | 5767G | Adapter, 2 1/4 Ac x 1 1/2 MN |
| M502-16/10 | 5766F | Adapter, 2 1/4 Ac x 1 1/4 FN |
| M502-16/10 | 5767H | Adapter, 2 1/4 Ac x 2 MN |
| M503-16 | 5769H | Adapter, 3 1/4 Ac x 2 MN |
| M521-10 | A5765F | Adapter, 1 3/4 Ac x 1 1/4 MN |
| M521-4 | A5765C | Adapter, 1 3/4 Ac x 1/2 MN |
| M521-6 | A5764D | Adapter, 1 3/4 Ac x 3/4 FN |
| M521-6 | A5765D | Adapter, 1 3/4 Ac x 3/4 MN |
| M521-8 | A5764E | Adapter, 1 3/4 Ac x 1 FN |
| M523-24 | A5769K | Adapter, 3 1/4 Ac x 3 MN |
| M528-16 | A5768H | Adapter, 3 1/4 Ac x 2 FN |
| M536-18 | 5767M | Coupling, 2 1/4 Ac x 2 1/4 Ac |
| M570 | 3179B | Fill Hose Adapter, 1 3/4 Ac |
| M570 | 3179A | Order 3179B |
| M612 | 5776 | Reducer Coupling |
| M622 | A5776 | Reducer Cplg, 3 1/4 Ac to 1 3/4 Ac |
| M631-6 | A3175 | Hose Cplg, 3/4 MN x 1 3/4 Ac |
| M631-8 | A3175A | Hose Cplg, 1 MN x 1 3/4 Ac |
| M635-6 | A7575L3 | Hose Cplg, Liquid, 3/4" |
| M635-8 | A7575L4 | Hose Cplg, Liquid, 1" |
| N120 06-3 | 3146 | Back Prs Chk Vlv, 3/4" |
| N201 | 7177 | Automatic Control Vlv |
| N201 | 7194MD | Loading Hose Asm, Fairbanks |
| N201 | 7194HD | Loading Hose Asm, Howe |
| N201 | 7188 | Master Cylinder |
| N201 | 7188HS | Master Cylinder, Howe Scales |
| N301-04 | 7704P | Globe Valve, 1/2" |
| N301-06 | 7705P | Globe Valve, 3/4" |
| N301-06 | A7505AP | Globe Valve, 3/4" |
| N301-08 | A7507AP | Globe Valve, 1" |
| N310-10 | A7509BP | Globe Valve, 1 1/4" |
| N310-12 | A7511AP | Globe Valve, 1 1/2" |
| N310-16 | A7513AP | Globe Valve, 2" |
| N310-24 | A7517AP | Globe Valve, 3" |





Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Fisher Sort - Continued

| Fisher | RegO | Product Description |
|---|---|---|
| N310-24T | TA7517AP | Globe Valve, Tfe Seat, 3” |
| N310F-24 | A7517FP | Globe Valve, Flg, 3” |
| N310F-24T | TA7517FP | Globe Valve, Flg, Tfe Seat, 3” |
| N350-04 | A7704P | Globe Valve, 1/2” |
| N350-06 | A7705P | Globe Valve, 3/4” |
| N401-04 | 7704LP | Angle Valve, 1/2” |
| N401-06 | 7706P | Angle Valve, 3/4” |
| N401-06 | A7506AP | Angle Valve, 3/4” |
| N401-08 | A7508AP | Angle Valve, 1” |
| N410-10 | A7510BP | Angle Valve, 1 1/4” |
| N410-12 | A7512AP | Angle Valve, 1 1/2” |
| N410-16 | A7514AP | Angle Valve, 2” |
| N410-24 | A7518AP | Angle Valve, 3” |
| N450-04 | A7704LP | Angle Valve, 1/2” |
| N450-06 | A7706P | Angle Valve, 3/4” |
| N456 | 7572C-14A | Chek-Lok Adapter, 3/4 FN |
| N550-10 | 6010 | Emergency Shut-Off Vlv, 1 1/4” |
| N550-16 | 6016 | Emergency Shut-Off Vlv, 2” |
| N550-16 | 7605B | Order 6016 |
| N550-16 | A7605B | Order AA6016 |
| N550-24 | 6024 | Emergency Shut-Off Vlv, 3” |
| P100A | 2503-19 | Regulator Bracket, Alm |
| P100A | 2302-31 | Steel Bracket for LV2302 Series |
| P102A | 2503-22 | Regulator Bracket, Stl |
| P104-24 | 7534-20 | Pipeaway Adapter, 2” |
| P137 | 7545-12 | Elbow Adapter, 90° |
| P138 | 7545-14 | Elbow Adapter, 45° |
| P148 | A8016-93 | Cap & Chain w/Ring, 1 3/4 Ac |
| P163A | 3200C | Remote Cable Kit |
| P164B | 7606RM | Remote Manual Cable Release Kit |
| P164B | 006016-60D | Vlv, Remote Release Kit Man/Pneu |
| P174 | 3129-10 | Pipe-Away Adapter |
| P174 | 3132-10 | Pipe-Away Adapter |
| P174 | 3131-40 | Protective Cap |
| P176 | 7544-11A | Pipeaway Adapter, 1” |
| P205 | 7545-40 | Protective Cap |
| P206 | 3129-40P | Cap for 3129 Series |
| P297 | 7543-40C | Protective Cap |
| P297 | A8434-11B | Protective Cap |
| P298 | A8436-11B | Protective Cap |
| P323 | A9091-18LX | Rotogage Dial, LPG, Over 1200 gal |
| P326 | A3213PA | Pneumatic Actuator for A3212R/A3213A |
| P327D | 006016-60C | Vlv, Kit, Pneu Act: ESV |
| P327TD | 6016-60C | Pneumatic Actuator for 6016 |
| P327TD | 6016-60D | Remote Release Kit for 6016 |
| P331 | 2302-55 | Reg Cover for LV404B23, LV2302 |
| P341 | A3219RT | Remote Thermal Release |
| P341 | A3212TL | Thermal Latch For A3212A |
| P341 | A3213TL | Thermal Latch for A3213A |
| P389 | A3209PA | Pneumatic Actuator for A3209A050 |

| Fisher | RegO | Product Description |
|---|---|---|
| P400 | 1350E | Tee Block Manifold |
| P410 | 1450E | Tee Block Manifold |
| P413 | 1350R | Tee Check Manifold |
| P414 | 1450R | Tee Check Manifold |
| P650 | 3200L | Operating Lever |
| R122H-AAJ | LV3403TR | 1st Stage HP Regulator w/ Int Rlf Vlv. |
| R122H-AAJXB | LV3403TRV9 | Above w/ vent at 9 o’clock. |
| R232BBF | LV404B23 | Compact Twin Stage Reg, 1/4 x 1/2 |
| R232BBFXA | LV404B23V9 | LV404B23 w/Vents at 9 o’clock |
| R232HBF | LV404B29 | Twin Stage Regulator, F.POL x 1/2 |
| R232HBFXA | LV404B29V9 | LV404B29 w/Vents at 9 o’clock |
| R332-41 | 5832 | LV404B23V9, 912JS12 |
| R622-BCF | LV4403B4 | 2nd Stage LPG Regulator |
| R622-BCFPA | 5807 | LV4403TR9, LV4403B4, 2503-22, 913PS12 |
| R622-CFF | LV4403B46 | 2nd Stage LPG Regulator |
| R622-CFFPA | 5808 | LV4403TR9, LV4403B46R, 913PS12 |
| R622-CFGXA | LV5503B4 | 2nd Stage LPG Reg, Lge Capacity |
| R622-CFGXA | LV5503G4 | 2nd Stage LPG Reg, Lge Capacity |
| R622-DFF | LV4403B66 | 2nd Stage LPG Regulator |
| R622E-BCH | LV4403Y4 | 2nd Stage Reg for 2 PSI Systems |
| R622E-BCH | LV4403Y46R | 2nd Stage Reg for 2 PSI Systems |
| R622E-DCH | LV5503Y6 | 2nd Stage Reg for 2 PSI Systems |
| R622E-DCH | LV3403TR | LV3403TR |
| R622H-BGJ | LV4403TR4 | 1st Stage HP Reg w/Internal Rlf Vlv |
| R622H-BGK | LV4403SR4 | 1st Stage HP Reg w/Internal Rlf Vlv |
| R622H-HGJ | LV4403TR9 | 1st Stage HP Reg w/Internal Rlf Vlv |
| R622H-HGK | LV4403SR9 | 1st Stage HP Reg w/Internal Rlf Vlv |
| R622H-JGJ | LV4403TR96 | 1st Stage HP Reg w/Internal Rlf Vlv |
| R622H-JGK | LV4403SR96 | 1st Stage HP Reg w/Internal Rlf Vlv |
| R632-BCF | 5828 | LV404B4, 912JS12 |
| R632-BCF | LV404B4 | Twin Stage Regulator, 1/4 x 1/2 |
| R632BCFXA | LV404B4V9 | LV404B4 w/Vents at 9 o’clock |
| R632-CFF | 5839 | LV404B9V9, 912PS12 |
| R632-CFF | LV404B46 | Twin Stage Regulator, 1/4 x 3/4 |
| R632CFFXA | LV404B46V9 | LV404B46 w/Vents at 9 o’clock |
| R632-HCF | LV404B9 | Twin Stage Regulator, F. POL x 1/2 |
| R632HFXA | LV404B9V9 | LV404B9 w/Vents at 9 o’clock |
| R632HFXA | LV404B96V9 | LV404B96 w/Vents at 9 o’clock |
| R632-JFF | LV404B96 | Twin Stage Regulator, F. POL x 3/4 |
| R652-DFF | LV4403B46R | Backmount 2nd Stage LPG Reg. |
| R652-DFF | LV4403B66R | Backmount 2nd Stage LPG Reg. |
| R652-DFFPA | 5820 | LV4403TR96, LV4403B66R, 913PS12 |
| R962-31 | 7525B4 | Auto Changeover Reg, 500,000 BTU |
| R962-31 | 5754B4 | Auto Changeover Reg. Outfit, 500,000 BTU |
| R962-31 | 5755B4 | Auto Changeover Reg. Outfit, 500,000 BTU |
| R966/150 | 7525B23 | Auto Changeover Reg, 180,000 BTU |
| R966/150 | 5726B23 | Auto Changeover Reg. Outfit, 180,000 BTU |
| R966/150 | 5727B23 | Auto Changeover Reg. Outfit, 180,000 BTU |
| S302G-KMC | LV6503B14 | 2nd Stage LPG Reg, Lge Capacity |
| S302G-SMC & S202G-BNC | LV6503B16 | 2nd Stage LPG Reg, Lge Capacity |



Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Sherwood Sort

To supplant a Sherwood part with a RegO replacement. Please Note: This chart does not show an exact equivalent. For complete specifications refer to Manufacturer catalogs such as RegO L-500 or L-102.

| Sherwood | RegO | Product Description |
|---|---|---|
| 920 | LV404B4 | Twin Stage Regulator, 1/4 x 1/2 |
| 921 | LV404B23 | Compact Twin Stage Reg, 1/4 x 1/2 |
| 921 | LV404B9 | Twin Stage Regulator, F. POL x 1/2 |
| 921 | LV404B29 | Twin Stage Regulator, F.POL x 1/2 |
| 3329 | 901C1 | Service Valve |
| 5136 | 7590U | New Style Chek-Lok, 3/4" |
| 5137 | 7591U | New Syle Chek-Lok, 1 1/4" |
| 10BD | 3165CP | Vent Valve w/Warning Plate |
| 10F | 3165SC | Vent Valve, 1/4", Slotted |
| 1447BMF | 9101P5H | FL Serv Vlv w/XsFlw, 2.5 GPM |
| 1447BMF | 9101Y5H | Service Vlv, Angle, 3.6 GPM |
| 1776AFD1 | 7525B23 | Auto Changeover Reg, 180,000 BTU |
| 1776AFD1 | 7525B4 | Auto Changeover Reg, 500,000 BTU |
| 203 A250 | 6542A12.0 | Multivalve, 1 MN, 250 w/DT |
| 2095A | G8475RV | G8475 w/MultiBonnet |
| 2341A | 7551P | Angle Tfr Vlv, 3/4 MN x 1/2 FN |
| 3329D7X | 901C5 | Service Vlv w/XSFlw 2.6 gpm |
| 433-45A | 7585-40X | Protective Cap |
| 433AM | 8684G | Relief Valve, 250, 1" |
| 433AM | 7583G | Relief Valve, 250, 3/4" |
| 435-45 | 7545-14 | Elbow Adapter, 45° |
| 435-45C | 7545-40 | Protective Cap |
| 435-90 | 7545-12 | Elbow Adapter, 90° |
| 435A | 8545AK | Relief Valve, 375, 3/4" |
| 440AL | 7901TA | Quick Acting Vlv, 3/8" |
| 440BL | 7901TB | Quick Acting Vlv, 1/4 FN x 1/2 FN |
| 440C | 7901TC | Quick Acting Vlv, 1/2" |
| 440T | 7901T | Quick Acting Vlv, 1/4" |
| 445AM | 8544G | Relief Valve, 250, 1" |
| 445AR | 8544T | Relief Valve, 312, 1" |
| 445AT | 8544K | Relief Valve, 375, 1" |
| 453AM | 8685G | Relief Valve, 250, 1 1/4" |
| 750MP | LV4403Y4 | 2nd Stage Reg for 2 PSI Systems |
| 800HC | LV4403B4 | 2nd Stage LPG Regulator |
| 800HPS1 | LV4403TR9 | 1st Stage HP Reg w/Internal Rlf Vlv |
| 800HPS3 | LV4403TR96 | 1st Stage HP Reg w/Internal Rlf Vlv |
| 800JBC | LV4403B46R | Backmount 2nd Stage LPG Reg. |
| 800JC | LV4403B46 | 2nd Stage LPG Regulator |
| 800NBC | LV4403B66R | Backmount 2nd Stage LPG Reg. |
| 800NBC | LV4403B66RA | Right Angle 2nd Stage Reg. |
| 800NC | LV4403B66 | 2nd Stage LPG Regulator |
| 901B | 3179A | Order 3179B |
| 920A | LV404B46 | Twin Stage Regulator, 1/4 x 3/4 |
| 921A | LV404B96 | Twin Stage Regulator, F. POL x 3/4 |
| LV440 | A7553A | Quick Acting Vlv, 1/4" |
| LV440BL | 7554LAV | Quick Act Vlv, Lock Lever, 1/2" |
| PA1428F | 7141F | Safety Chk Conn, 1 1/4 Ac x 1/4 FN |
| PA1428M | 7141M | Safety Chk Conn, 3/8 FN x 1 1/4 Ac |
| PA5133 | 7572C-14A | Chek-Lok Adapter, 3/4 FN |
| PA5133M | 7572C-15A | Chek-Lok Adapter, 3/4 MN |
| PA5138 | 7590U-10 | Adapter for 7590U |
| PA901B | 7577V | Fill Hose Adapter, 1 3/4 Ac |
| PA901H | 7193T-10 | Fill Adt, F.POL x 15/16" Acme, Type I |
| POL-PLUG | N970P | POL Plug, Nylon w/Lanyard |

| Sherwood | RegO | Product Description |
|---|---|---|
| PV10A | 3165C | Vent Valve, 1/4", Knurled |
| PV10ARF | 3165CO | 3165 w/#54 orifice |
| PV10B | 3165CF12.0 | 3165C w/12.0" Tube |
| PV10BD | 3165SFC120 | 3165 w/12.0" Tube |
| PV1427B | 9101P5 | FL Serv Vlv w/XsFlw, 1.5 GPM |
| PV1447B | 9101H6 | MF Serv Vlv w/XsFlw, 2.6 GPM |
| PV1447B | 9101H5 | MF Serv Vlv w/XsFlw, 3.6 GPM |
| PV1855D-30 | 7647SA | 300 Dbl Chk Fill Vlv |
| PV1855D-30 | 7647DC | Dbl Chk Fill Vlv, 3/4 MN x 1 3/4 Ac |
| PV1855D-30 | 7647SC | Dbl Chk Fill Vlv, 3/4 MN x 1 3/4 Ac w/LG Wrench Flats |
| PV1855SD-30 | 3181 | Vapor Hose Cplg, 3/4 MN x 1 3/4 Ac |
| PV1855VFD | 7647H | Dbl Chk Fill Vlv, 3/4 MN x 1/2 FN |
| PV1876 | 3180C | Vapor Eqlz Vlv, 1 1/4 MN x 1 3/4 Ac |
| PV2030BC | 8555D10.6 | Multivalve, Vapor w/DT, 3/4" |
| PV2030BC | 8555D11.6 | Multivalve, Vapor w/DT, 3/4" |
| PV2030BC | 6555R10.6 | Multivalve, Vapor, w/MultiBonnet |
| PV2030BC | 6555R12.0 | Multivalve, Vapor, w/MultiBonnet |
| PV2033CL | 7556VR12.0 | Multivalve, 3/4 MN w/DT |
| PV2033CLDB | 7556R12.0 | 7556VR12.0 w/MultiBonnet |
| PV2034CL | 9300R12.0 | Multivalve, 3/4, MNPT |
| PV2035A | 6533A10.5 | Multivalve, 3/4 MN, 375 w/DT |
| PV2035A | 6533A11.7 | Multivalve, 3/4 MN, 375 w/DT |
| PV2035A-250 | 6532A12.0 | Multivalve, 3/4 MN, 250 w/DT |
| PV2341 | 7550P | Angle Transfer Vlv, 3/4" |
| PV2341X | 7550PX | 7550P w/XSFlw |
| PV3250A-375 | 9107K8A | Cylinder Vlv w/DT |
| PV3250ALG | 9103D10.6 | Cylinder Vlv 3/4 MN x FP w/DT |
| PV3250ALG | 9103D11.6 | Cylinder Vlv 3/4 MN x FP w/DT |
| PV3250ALG | 9103DO4.2 | Cylinder Vlv 3/4 MN x FP w/DT |
| PV3250ALG7 | 9101D11.1 | Service Vlv w/Dip Tube |
| PV3250ALG7 | 9101D11.7 | Service Vlv w/Dip Tube |
| PV3250ALG7 | 9101C1 | Service Vlv, 3/4 MN x 1/4 FP |
| PV3250ALM-375 | 8555DL11.6 | Multivalve, Liquid w/Dt, 3/4" |
| PV3250BC-312 | 9106CO | Cylinder Vlv, 312 Relief |
| PV3865 | 3125L | Hydro Relief Vlv, 400, 1/4" |
| PV3865 | 3127L | Hydro Relief Vlv, 400, 1/4" |
| PV5133S | 7572FC | Order 7590U |
| PV5133S | 7580FC | Order 7591U |
| PV623B | 7579 | Dbl Chk Fill Vlv, 1 1/4 MN x 1 3/4 Ac |
| PV623B | 3174C | Single Chk Fill Vlv, 1 1/4 MN x 1 3/4 Ac |
| PV623B | 3183AC | Vapor Eqlz Vlv, 1 1/4 MN x 1 3/4 Ac |
| PV902A | 3121 | Unloading Adapter, Angle |
| PV903A | 3120 | Unloading Adapter, Angle |
| PVE1876 | 7573D | Vapor Eqlz Vlv, 3/4 MN x 1 1/4 Ac |
| PVE3349PDLG-402 | NA | Type I OPD Valve |
| PVE3349PDLG-404 | NA | Type I OPD Valve |
| PVE3349PDLG-406 | NA | Type I OPD Valve |
| PVE3349PDLG-408 | NA | Type I OPD Valve |
| U33-45A | 8684-40 | Relief Valve Rain Cap |
| UV443AC | 8684GC | Relief Valve, 275, 1" |
| UV453AM | 8543G | Relief Valve, 250, 1 1/4" |
| UV453AR | 8543T | Relief Valve, 312, 1 1/4" |
| UX453AC | 8685GC | Relief Valve, 275, 1 1/4" |





Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## LP-Gas Properties

Based on commercial quality. Figures represent average values.

| | Propane | Butane |
|---|---|---|
| Formula | C3H8 | C4H10 |
| Boiling point F. | -44° | 32° |
| Specific gravity - gas (air = 1.00) | 1.53 | 2.00 |
| Specific gravity - liquid (water = 1.00) | 0.51 | 0.58 |
| Lbs./gallon - liquid @ 60°F. | 4.24 | 4.81 |
| BTU/gallon - gas @ 60°F. | 91690 | 102032 |
| BTU/lb. - gas | 21591 | 21221 |
| BTU/ft.$^3$- gas @ 60°F. | 2516 | 3280 |
| Ft.$^3$ of vapor @ 60°F./gal. of liquid @ 60°F. | 36.39 | 31.26 |
| Ft.$^3$ of vapor @ 60°F./lb. of liquid @ 60°F. | 8.547 | 6.506 |
| Latent heat of vaporization @ boiling point BTU/gal. | 785.0 | 808.0 |
| Combustion data: | | |
| Ft.$^3$ air required to burn 1 ft.$^3$ gas | 23.86 | 31.02 |
| Flash point, F. | -156 | N.A. |
| Ignition temperature in air, F. | 920-1020 | 900-1000 |
| Maximum flame temperature in air, F. | 3595 | 3615 |
| Limits of inflammability % of gas in air mixture:<br>At lower limit - %<br>At upper limit - % | <br>2.4<br>9.6 | <br>1.9<br>8.6 |
| Octane number (ISO-octane=100) | 100+ | 92 |

## Converting Volumes of Gas

**(CFH to CFH or CFM to CFM)**

| Multiply Flow of | By | To Obtain Flow Of |
|---|---|---|
| Air | .707<br>1.290.808 | Butane<br>Natural Gas<br>Propane |
| Butane | 1.414<br>1.826<br>1.140 | Air<br>Natural Gas<br>Propane |
| Natural Gas | .775<br>.547.625 | Air<br>Butane<br>Propane |
| Propane | 1.237<br>.874<br>1.598 | Air<br>Butane<br>Natural Gas |

## Conversion Units

| Multiply | By | To Obtain |
|---|---|---|
| **Pressure** | | |
| Atmospheres | 14.70 | pounds per square inch |
| Atmospheres | 407.14 | inches water |
| Inches of mercury | 1.133 | feet of water |
| Inches of mercury | .4912 | pounds per square inch |
| Inches of water | .0735 | inches of mercury |
| Inches of water | 5.204 | pounds per square foot |
| Inches of water | .0361 | pounds per square inch |
| Inches of water | .5781 | ounces per square inch |
| Pounds per square inch | 06804 | atmospheres |
| Pounds per square inch | 2.036 | inches of mercury |
| Pounds per square inch | 2.307 | feet of water |
| Pounds per square inch | 27.67 | inches of water |
| **Metric** | | |
| Atmospheres | 1.0332 | kilograms per sq. centimeter |
| Grams per sq. centimeter | .0142 | pounds per square inch |
| Kilograms per sq. centimeter | 14.22 | pounds per square inch |
| Kilograms per square meter | .2048 | pounds per square foot |
| Pounds per square inch | .07031 | kilograms per sq. centimeter |

## Vapor Pressures of LP-Gas

| | Approximate Pressure (PSIG) | |
|---|---|---|
| Temp (°F) | Propane | Butane |
| -40 | 3.6 | |
| -30 | 8.0 | |
| -20 | 13.5 | |
| -10 | 20.0 | |
| 0 | 28.0 | |
| 10 | 37.0 | |
| 20 | 47.0 | |
| 30 | 58.0 | |
| 40 | 72.0 | 3.0 |
| 50 | 86.0 | 6.9 |
| 60 | 102.0 | 11.5 |
| 70 | 120.0 | 16.5 |
| 80 | 140.0 | 22.0 |
| 90 | 165.0 | 29.0 |
| 100 | 190.0 | 37.0 |
| 110 | 220.0 | 46.0 |

## Vaporization Rate

This chart shows the vaporization rate of 100 Lb. propane cylinders in terms of the temperature of the liquid and the wet surface area of the container. When the temperature is lower or the container has less liquid in it, vaporization rate is lower.

| Lbs. Of Propane | Maximum Continuous Draw in BTU/Hr. | | | | |
|---|---|---|---|---|---|
| | 0° F. | 20° F. | 40° F. | 60° F. | 70° F. |
| 100 | 113,000 | 167,000 | 214,000 | 277,000 | 300,000 |
| 90 | 104,000 | 152,000 | 200,000 | 247,000 | 277,000 |
| 80 | 94,000 | 137,000 | 180,000 | 214,000 | 236,000 |
| 70 | 83,000 | 122,000 | 160,000 | 199,000 | 214,000 |
| 60 | 75,000 | 109,000 | 140,000 | 176,000 | 192,000 |

| Lbs. Of Propane | Maximum Continuous Draw in BTU/Hr. | | | | |
|---|---|---|---|---|---|
| | 0° F. | 20° F. | 40° F. | 60° F. | 70° F. |
| 50 | 64,000 | 94,000 | 125,000 | 154,000 | 167,000 |
| 40 | 55,000 | 79,000 | 105,000 | 131,000 | 141,000 |
| 30 | 45,000 | 66,000 | 85,000 | 107,000 | 118,000 |
| 20 | 36,000 | 51,000 | 68,000 | 83,000 | 92,000 |
| 10 | 28,000 | 38,000 | 49,000 | 60,000 | 66,000 |



Prices subject to change without notice. Some items may not be in stock at all warehouses or may be special order. Please check with TEECO.



Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Pressure Relief Valves

**Inspection, Testing and Replacement**

All relief valves should regularly be inspected to check for contamination and corrosion. If any debris in the valve cannot be totally removed or there is evidence of contamination, the valve must be replaced. Always wear eye protection when examining relief valves under pressure. Never look directly into a relief valve under pressure. NFPA Pamphlet 58, Appendix D, recommends that relief valves on containers of more that 2000 gallons water capacity be tested at approximately 10 year intervals.

Small relief valves used on small DOT cylinders and small ASME tanks should be inspected each time the container is filled and be replaced at least every 10 years. The compact design, high pressure settings, and aging of the synthetic rubber seat discs could result in erratic operation of the valve after a number of years.

**Protective Caps**

All relief valves must be continuously protected by proper fitting protective caps. Ice, mud, debris and contamination can prevent the valve from opening or, if the valve opens, can prevent the valve from resealing properly. NFPA Pamphlet 58 requires the continuous use of protective caps.

**Flow Rate Restriction**

Flow rates in the charts are for bare relief valves. The addition of deflectors, pipe-away adapters and piping will restrict the flow. To properly protect any container, the total system flow must be sufficient to relieve pressure at the pressure setting of the relief valve in accordance with the codes.

Short adapters and deflectors designed by RegO®for use with specific valves will restrict the flow only 2 to 5%. **Use only RegO adapters on RegO valves.**

Adapters with sharp 90° turns will reduce flow dramatically. These should never be used because they can cause the relief valves to chatter and eventually destroy themselves. Long pipeaways with several changes of direction can reduce flow substantially. For more information consult Teeco.

## Excess Flow Valves

**Periodical Inspections for Excess Flow Valves**

Excess flow valves should be tested and proven at the time of installation and at periodic intervals not to exceed one year. **CAUTION**: Testing an excess flow valve in the summer when tank pressures are high will not prove that the same valve will also function under low pressure conditions in the winter. Once a year testing should be conducted during the winter. The tests should include a simulated break in the line by the quick opening of a shut-off valve at the farthest point in the piping the excess flow valve is intended to protect. If the excess flow valve closes under these conditions, it is reasonable to assume that it will close in the event of accidental breakage (clean break) of the piping at any point closer to the excess flow valve.

National LP-Gas Association Safety Bulletin Number 113-78 States: “In order to test an excess flow valve in a piping system, the flow through the valve must be made to exceed the valve’s closing rating. This testing should only be attempted by trained personnel familiar with the process. If no one at the facility has experience in proper testing, outside expert help should be obtained. The exact procedure used may vary with the installation, advisability of gas discharge and availability of equipment. ”In general, most testing makes use of the fact that excess flow valves are ‘surge sensitive’ and will close quicker under sudden, flow surge than under steady flow. A sufficient surge can often be created by using a quick open/close valve to control sudden, momentary flow into a tank or piping section containing very low pressure. An audible click from the excess flow valve (and corresponding stoppage of flow) indicates its closure.

“A test involving venting gas to the atmosphere is hazardous and may be impractical or illegal.

“Any test of any excess flow valve will not prove that the valve will close in an emergency situation. This test will only check the valve’s condition and the flow rate sizing for those test conditions.”

**An Explanation and Warning**

An excess flow valve is a spring-loaded check valve which will close only when the flow of fluid through the valve generates sufficient force, or differential pressure, to overcome the power of the spring holding it open. Each valve has a closing rating in gallons per minute and CFH/air.

The selection of a proper closing rating is critical. It requires a technical understanding of the flow characteristics of the piping system, including restrictions of the piping and other valves and fittings downstream of the excess flow valve.

System designers and operating people must understand why an excess flow valve, which remains open in normal operations, may fail to close when an accident occurs. **Warning**: A downstream break in piping or hoses may not result in sufficient flow to close the valve.

**Proper Installation**

Since excess flow valves depend on flow in order to close, the line downstream of the excess flow valve should be large enough not to excessively restrict the flow. If he piping is too small, unusually long, or restricted by too many elbows, tees and other fittings, consideration should be given to the use of larger size pipe fittings.

An excess flow valve in a pump suction line cannot be expected to close in the case of a clean break in the line beyond the pump, as the pump constitutes too great a restriction, even if running.

Good piping practice dictates the selection of an excess flow valve with a rated closing flow of approximately 50 percent greater than the anticipated normal flow. This is important because valves which have a rated closing flow very close to the normal flow may chatter or slug closed when surges in the line occur during normal operation, or due to the rapid opening of a control valve.

All installations must be in accordance with NFPA standards 54 and 58, as well as state, provincial and local regulations.

## Ducting

### Furnace Selection and Extended Plenum Duct Sizing

The size of the extended plenum (use standard duct) is as shown when the furnace is located:

| Heat Load (BTU) | Located One End of Building | Building Divided 1/3 and 2/3 | Furnace Middle Of Building |
|---|---|---|---|
| 0-56,000 | 14 x 8 | 10 x 8 & 10 x 8 | (2) 10 x 8 |
| 57-80,000 | 16 x 8 | 10 x 8 & 12 x 8 | (2) 10 x 8 |
| 81-108,000 | 22 x 8 | 10 x 8 & 14 x 8 | (2) 12 x 8 |
| 109-132,000 | 26 x 8 | 10 x 8 & 16 x 8 | (2) 16 x 8 |
| 133-160,000 | 30 x 8 | 12 x 8 & 22 x 8 | (2) 16 x 8 |
| **NOTE**: If air conditioning is to be used at the present or in the future, the cooling load must be computed and duct size selected on the basis of the larger size indicated, shown below. | | | |

### Maximum Applicable Cooling Unit

The size of the extended plenum in inches is as shown when the cooling unit is located:

| Cooling Load | Blower Capacity (CFM) | Located One End of Building | Building Divided 1/3 and 2/3 | Located Middle Of Building |
|---|---|---|---|---|
| 0 - 24,000 | 2 Ton (720) | 16 x 8 | 10 x 8 & 12 x 8 | (2) 10 x 8 |
| 25-36,000 | 3 Ton (1080) | 22 x 8 | 10 x 8 & 14 x 8 | (2) 12 x 8 |
| 37-60,000 | 5 Ton (1800) | 30 x 8 | 12 x 8 & 22 x 8 | (2) 16 x 8 |

### Return Grille and Return Duct Sizing

Single return. Use **one** of size shown.

| Furnace Output (BTU) | Grill Size in Free Area | Duct Size |
|---|---|---|
| to 56,000 | 216 sq. in. | 16" x 8" or 1 joist space |
| to 80,000 | 270 sq. in. | 16" x 8" or 2 joist spaces |
| to 108,000 | 405 sq. in. | 26" x 8" & 10" x 8" or 2 joist spaces |
| to 132,000 | 450 sq. in. | 30" x 8" or 2 joist spaces |
| to 160,000 | 540 sq. in. | (2) 20" x 8" or 3 joist spaces |

Two returns. Use **two** of size shown.

| Furnace Output (BTU) | Grill Size in Free Area | Duct Size |
|---|---|---|
| to 56,000 | 108 sq. in. | 16" x 8" or 1 joist space |
| to 80,000 | 162 sq. in. | 16" x 8" or 2 joist spaces |
| to 108,000 | 216 sq. in. | 26" x 8" or 2 joist spaces |
| to 132,000 | 244 sq. in. | 30" x 8" or 2 joist spaces |
| to 160,000 | 285 sq. in. | (2) 20" x 8" or 3 joist spaces |
| **NOTE**: When multiple returns are used, a preferred return system provides for a return from each room (except that air usually is not returned from the kitchen or bathrooms).<br>In the return system maintain air volume equal to or greater than air volume of the supply duct system, and use same duct sizing as for single or two-return system. | | |

## Orifice Capacities for LP-Gas

An orifice chart can only be a guide because of varying temperatures and barometric pressures from day to day in various localities. From the below drill sizes, it may be necessary to make adjustments for the most satisfactory operating conditions.
Rates based on 2500 BTU/ft.³, manifold pressure 10.5" water column.

| Wire Gauge Drill Size | Rate Ft.³/hr. | |
|---|---|---|
| 80 | .49 | 1250 |
| 79 | .57 | 1454 |
| 78 | .69 | 1760 |
| 77 | .87 | 2219 |
| 76 | 1.06 | 2703 |
| 75 | 1.20 | 3060 |
| 74 | 1.37 | 3494 |
| 73 | 1.56 | 3978 |
| 72 | 1.70 | 4335 |
| 71 | 1.83 | 4667 |
| 70 | 2.14 | 5457 |
| 69 | 2.31 | 5891 |
| 68 | 2.60 | 6630 |
| 67 | 2.78 | 7089 |
| 66 | 2.97 | 7574 |
| 65 | 3.35 | 8543 |
| 64 | 3.52 | 8976 |
| 63 | 3.72 | 9486 |
| 62 | 3.92 | 9996 |

| Wire Gauge Drill Size | Rate Ft.³/hr. | |
|---|---|---|
| 61 | 4.15 | 10,583 |
| 60 | 4.35 | 11,093 |
| 59 | 4.57 | 11,654 |
| 58 | 4.80 | 12,240 |
| 57 | 5.08 | 12,954 |
| 56 | 5.90 | 15,045 |
| 55 | 7.37 | 18,794 |
| 54 | 8.23 | 20,987 |
| 53 | 9.61 | 24,506 |
| 52 | 10.92 | 27,835 |
| 51 | 12.23 | 31,187 |
| 50 | 13.32 | 33,966 |
| 49 | 14.45 | 36,848 |
| 48 | 15.70 | 40,035 |
| 47 | 16.78 | 42,789 |
| 46 | 17.75 | 45,263 |
| 45 | 18.31 | 46,961 |
| 44 | 20.10 | 51,255 |
| 43 | 21.55 | 54,953 |

| Wire Gauge Drill Size | Rate Ft.³/hr. | |
|---|---|---|
| 42 | 23.87 | 60,869 |
| 41 | 25.00 | 63,750 |
| 40 | 26.10 | 66,555 |
| 39 | | 72,600 |
| 38 | | 79,775 |
| 37 | | 85,900 |
| 36 | | 98,650 |
| 35 | | 110,560 |
| 34 | | 117,850 |
| 33 | | 124,440 |
| 32 | | 132,500 |
| 31 | | 137,370 |
| 30 | | 144,540 |
| 29 | | 155,000 |
| 28 | | 177,600 |
| 27 | | 198,000 |
| 26 | | 212,160 |
| 25 | | 223,200 |
| 24 | | 232,560 |

| Wire Gauge Drill Size | Rate Ft.³/hr. | |
|---|---|---|
| 23 | | 240,520 |
| 22 | | 248,640 |
| 21 | | 255,200 |
| 20 | | 265,240 |

### Altitude Corrections

The specifications shown on this chart for orifice sizes are pressures from sea level to approximately 3500 ft. above sea level. For altitudes from 3500 ft. to 5000 ft., use one drill size larger, (approximately .002" dia.). From 5000 ft. to 6500 ft., use two drill sizes larger, (approximately 004" dia.). Above 6500 ft., use two or three drill sizes larger.



Prices subject to change without notice. Some items may not be in stock at all warehouses or may be special order. Please check with TEECO.



Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Paint Specifications

**Coverage Data**

Square foot coverage varies because of difference in the solids content of each product required to obtain necessary dry film thickness.

Surface protection is directly related to care in preparation before painting and the dry film thickness of coating. A minimum of 4.5 mils on exterior of tanks and spreaders is required.

Excessive "sweating" of tanks and unusual damp environment requires greater depth of the paint film to retard water in the form of vapor from reaching the surface beneath.

LP-Gas Tanks

Allow for paint lost or wasted during spray application, usually 15%. Products and amounts required shown in gallons.

**Anhydrous Ammonia Tanks - Exterior**

| Tank Gallons | Sq. Ft. | L-1920 | —146 | —150 |
|---|---|---|---|---|
| 30,000 | 2,000 | 8 gallons | 8 gallons | 8 gallons |
| 18,000 | 1,250 | 5 gallons | 5 gallons | 6 gallons |
| 12,000 | 1,160 | 4½ gallons | 4½ gallons | 4½ gallons |
| 1,000 | 225 | 1 gallon | 1 gallon | 1 gallon |
| 350 | 80 | 3 per gallon | 3 per gallon | 3 per gallon |
| Coverage (sq. ft./gal.) | | 300 | 315 | 300 |

**LP-Gas Tanks**

| Tank Gallons | Sq. Ft. | #5 | S-7 | —146 | —150 | 1000 | 1151 | L-122 | Equipment Enamels |
|---|---|---|---|---|---|---|---|---|---|
| 30,000 | 2,000 | 8 gallons | 8 gallons | 8 gallons | 8 gallons | 7 gallons | 7 gallons | 7 gallons | Depends upon kind of surface |
| 18,000 | 1,250 | 6 gallons | 6 gallons | 6 gallons | 6 gallons | 5 gallons | 5 gallons | 5 gallons | |
| 12,000 | 1,160 | 5 gallons | 5 gallons | 5 gallons | 5 gallons | 4 gallons | 4 gallons | 4 gallons | |
| 1,000 | 225 | 1 gallon | 1 gallon | 1 gallon | 1 gallon | 1 gallon | 1 gallon | 1 gallon | |
| 500 | 116 | 2 per gallon | 2 per gallon | 2 per gallon | 2 per gallon | 3 per gallon | 3 per gallon | 3 per gallon | |
| 250 | 56.6 | 4 per gallon | 4 per gallon | 4 per gallon | 4 per gallon | 6 per gallon | 6 per gallon | 6 per gallon | |
| 100 lb. cyl. | | 18 per gallon | 18 per gallon | | | 22 per gallon | 22 per gallon | 20 per gallon | |
| Coverage (sq. ft./gal. @ 1 mil)7 | | 755 | 755 | 800 | 660 | 645 | 585 | 855 | 862 |
| Dry film thickness (mils) | | 2.3 | 2.3 | 2.3 | 2.2 | 1.25 | 1.0 | 3.0 | 1.8-2.2 |

## Wire Sizing

This wire size diagram shows wire size requirements for given horsepower at various wire lengths and voltages for single phase circuits.

When considering 3-phase circuits, it is safe to assume that the horsepower may be increased to double the amount shown for 230 volt single phase for each wire size at the various given lengths.

| Wire Size For 115 & 230 Volt Single Phase Circuits | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Distance-Motor To Fuse Or Meter Box-Feet | | | | | | | | |
| Motor | 100 ft | | 200 ft | | 300 ft | | 500 ft | |
| HP | 115V | 230V | 115V | 230V | 115V | 230V | 115V | 230V |
| 1/4 | #14 | #14 | #10 | #12 | #8 | #10 | #6 | #8 |
| 1/3 | #12 | #14 | #10 | #12 | #6 | #10 | #4 | #8 |
| 1/2 | #10 | #12 | #8 | #10 | #6 | #8 | #4 | #6 |
| 3/4 | #10 | #12 | #6 | #10 | #4 | #8 | #2 | #6 |
| 1 | #8 | #10 | #6 | #8 | #4 | #6 | | #4 |
| 1 1/2 | #4 | #10 | #4 | #8 | | #6 | | #4 |
| 2 | | #8 | | #6 | | #4 | | #2 |
| 3 | | #8 | | #6 | | #4 | | #2 |
| 5 | | #6 | | #4 | | #2 | | #0 |





Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

# General Information

## Tap Drill Sizes

| Machine Screw Sizes | Drill |
|---|---|
| 0-80 | 3/64" |
| 1-56 | 54 |
| 1-64 | 53 |
| 1-72 | 53 |
| 2-56 | 50 |
| 2-64 | 50 |
| 3-48 | 47 |
| 3-56 | 45 |
| 4-32 | 45 |
| 4-36 | 44 |
| 4-40 | 43 |
| 4-48 | 42 |
| 5-36 | 40 |
| 5-40 | 38 |
| 5-44 | 37 |
| 6-32 | 36 |
| 6-36 | 34 |
| 6-40 | 33 |
| 7-30 | 31 |
| 7-32 | 31 |
| 7-36 | 1/8" |
| 8-30 | 30 |

| Machine Screw Sizes | Drill |
|---|---|
| 8-32 | 29 |
| 8-36 | 29 |
| 8-40 | 28 |
| 9-24 | 29 |
| 9-30 | 27 |
| 9-32 | 26 |
| 10-24 | 25 |
| 10-28 | 23 |
| 10-30 | 22 |
| 10-32 | 21 |
| 12-24 | 16 |
| 12-28 | 14 |
| 12-32 | 13 |
| 14-20 | 10 |
| 14-24 | 7 |
| 16-18 | 3 |
| 16-20 | 7/32" |
| 16-22 | 2 |
| 18-18 | B |
| 18-20 | D |
| 20-16 | G |
| 20-18 | 17/64" |

| Machine Screw Sizes | Drill |
|---|---|
| 20-20 | I |
| 22-16 | 9/32" |
| 22-18 | L |
| 24-16 | 5/16" |
| 24-18 | O |
| 26-14 | 21/64" |
| 26-16 | R |
| 28-14 | T |
| 28-16 | 23/64" |
| 30-14 | V |
| 30-16 | 25/64" |

| Bolt Threads Size | Drill |
|---|---|
| 1/16"-64 | 3/64 |
| 5/64"-60 | 1/16" |
| 3/32"-48 | 49 |
| 7/64"-48 | 43 |
| 1/8"-32 | 3/32" |
| 1/8"-40 | 38 |

| Bolt Threads Size | Drill |
|---|---|
| 9/64"-40 | 32 |
| 5/32"-32 | 1/8" |
| 11/64"-32 | 9/64" |
| 3/16"-24 | 26 |
| 3/16"-32 | 22 |
| 13/64"-24 | 20 |
| 7/32"-24 | 16 |
| 15/64"-24 | 10 |
| ¼"-20 | 7 |
| ¼"-28 | 3 |
| 5/16"-18 | F |
| 5/16"-24 | 1 |
| 3/8"-16 | 5/16" |
| 3/8"-24 | Q |
| 7/16"-14 | V |
| 7/16"-20 | 25/64" |
| 1/2"-12 | 27/64" |
| 1/2"-13 | 27/64" |
| 1/2"-20 | 29/64" |
| 9/16"-28 | 1/64" |
| 9/16"-18 | 33/64" |

| Bolt Threads Size | Drill |
|---|---|
| 5/8"-11 | 17/32" |
| 5/8"-18 | 37/64" |
| 11/16"-11 | 19/32" |
| 11/16"-16 | 5/8" |
| 3/4"-10 | 21/32" |
| 3/4"-16 | 1/16" |
| 13/16"-10 | 23/32" |
| 7/8"-9 | 49/64" |
| 7/8"-14 | 13/16" |
| 15/16"-9 | 53/64" |
| 1"-8 | 7/8" |
| 1"-14 | 15/16" |
| 11/8"-7 | 63/64" |
| 11/8"-12 | 13/64" |
| 1¼"-7 | 17/64" |
| 1¼"-12 | 111/64" |
| 13/8"-6 | 113/64" |
| 13/8"-12 | 118/64" |
| 1½"-6 | 111/32" |
| 1½"-12 | 127/64" |
| 15/8"-5½ | 127/64" |

| Bolt Threads Size | Drill |
|---|---|
| 13/4"-5 | 19/16" |
| 17/8"-5 | 111/16" |
| 2"-4½ | 125/32" |

| Pipe Thread Sizes | Drill |
|---|---|
| 1/8"-27 | 11/32" |
| ¼"-18 | 7/16" |
| 3/8"-18 | 37/64" |
| 1/2"-14 | 23/32" |
| 3/4"-14 | 59/64" |
| 1"-11½ | 15/32" |
| 1¼"-11½ | 1½" |
| 1½-11½ | 147/64" |
| 2"-11½ | 27/32" |
| 2½"-8 | 25/8" |
| 3"-8 | 3¼" |
| 3½"-8 | 3¾" |
| 4"-8 | 4¼" |

## Calculated Data

| Diameter (Inches) | Circumference | Area (Sq. Inches) |
|---|---|---|
| 2 | 6.283 | 3.141 |
| 3 | 9.424 | 7.068 |
| 4 | 12.56 | 12.566 |
| 5 | 15.70 | 19.635 |
| 6 | 18.84 | 28.274 |
| 7 | 21.99 | 38.484 |
| 8 | 25.13 | 50.265 |
| 9 | 28.27 | 63.617 |
| 10 | 31.41 | 78.539 |
| 12 | 37.69 | 113.09 |
| 14 | 43.98 | 153.93 |
| 16 | 50.26 | 201.06 |
| 18 | 56.54 | 254.46 |
| 20 | 62.83 | 314.16 |
| 22 | 69.11 | 380.13 |
| 24 | 75.39 | 452.39 |
| 26 | 81.68 | 530.93 |
| 28 | 87.96 | 615.75 |
| 30 | 94.24 | 706.86 |
| 32 | 100.5 | 804.24 |
| 34 | 106.8 | 907.92 |
| 36 | 113.0 | 1017.8 |
| 38 | 119.3 | 1134.1 |
| 40 | 125.6 | 1256.6 |

## Formulas

| |
|---|
| Diameter multiplied by 3.1416 = circumference. |
| Circumference multiplied by .3183 = diameter. |
| Radius multiplied by 6.2831 = circumference. |
| Square of the diameter multiplied by .7854 = area. |
| Diameter multiplied by .8862 = side of equal square. |
| Area of rectangle = length multiplied by breadth. |
| Doubling the diameter of a circle increases its area four times. |
| Doubling the diameter of a circle multiplies the circumference by 2. |
| Side of a square multiplied by 1.128 = diameter of a circle of equal area. |
| Surface of a sphere = diameter multiplied by 3.1416. |
| Area of a triangle equals base multiplied by one-half the altitude. |
| Area of a sector of a circle equals one-half the length of the arc multiplied by the radius of the circle. |







Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Thread Specs - Inlet Connections

**NGT and NPT Threads**

The NGT (National Gas Taper) thread is the commonly used valve-to-cylinder connection. The male thread on the valve has about two more threads at the large end than the NPT in order to provide additional fresh threads if further tightening is necessary. Additionally, the standard 3/4" NGT valve inlet provides the greater tightness at the bottom of the valve by making the valve threads slightly straighter than the standard taper of 3/4" per foot in NPT connections. In all other respects NPT and NGT threads are similar.

## Thread Specs - Outlet Connections

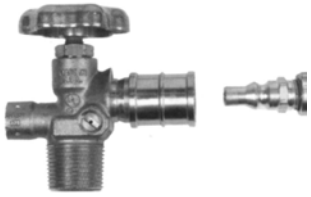
The CGA (Compressed Gas Association) outlets are standard for use with various compressed gases. The relation of one of these outlets to another is fixed so as to minimize undesirable connections. They have been so designed to prevent the interchange of connections which may result in a hazard.

**Type I Outlet**

This connection is designed to mate with either a 1-15/16" Female ACME or a Male POL (CGA510). It complies with the ANSI Z21.58 Standard for Outdoor Cooking Appliances and the Can/CGA-1.6 Standard for Container Corrections. A back check assembly in the outlet is designed to prevent gas flow until a leak free connection is made with an inlet adapter. These standards apply to barbecue grill cylinders manufactured after October, 1994.

**Type II Outlet**

This connection is designed to mate withe the Quick Connect Male plug that complies with the ANSI Z21.58 Standard for Outdoor Cooking Appliances and the Can/CGA-1.6 Standard for Container connections. A back check assembly in the outlet is designed to prevent gas flow until a leak free connection is made with the inlet adapter. These standards apply to barbecue grill cylinders manufactured after October, 1994.



**3/8"-18 NPT Thread Connection**

This connection also is used for vapor or liquid withdrawal. It has a 3/8" diameter thread, and 18 threads per inch, National Pipe Taper Outlet form.

**CGA 182, or SAE Flare**

This connection assures a leak-tight joining of copper tubing to brass parts without need for brazing or silver soldering. The common size used on LP-Gas valves and fittings is 3/8"

SAE (Society of Automotive Engineers) flare. Although this connection is referred to as a 3/8", because 3/8" O.D. tubing is used, the thread actually measured 5/8". The specifications are .625—18 UNF—2A-RH-EXT, which means .625" diameter thread, 18 threads per inch, Unified Fine Series Class 2 Tolerances, right-hand, external thread.

**CGA 555**

CGA 555 is the standard cylinder valve outlet connection for liquid withdrawal of butane and/or propane. Thread specification is .903"—14 NGO—LH—EXT, which means .903" diameter thread, 14 threads per inch, National Gas Outlet form, left-hand external thread.

**CGA 510 or POL**

Most widely used in this industry, POL is the common name for the standard CGA 510 connection. Thread specification is .885"—14 NGO-LH-INT, meaning .8852880 3450 diameter thread, 14 threads per inch, National Gas Outlet form, left-hand internal thread. RegO POL outlet connections for LP-Gases conform to this standard.

## Purging Containers

A very important step which is often overlooked by LP-Gas dealers is the importance of properly purging new LP-Gas containers. Attention to this important procedure will promote customer satisfaction and greatly reduce service calls on new installations.

Both ASME and DOT specifications require hydrostatic testing of vessels after fabrication. This is usually done with water. Also, before charging with propane, the vessel will contain the normal amount of air. Both water and air are contaminants and they seriously interfere with proper operation of the system and connected appliances. If not removed, they will result in costly service calls and needless expense far exceeding the nominal cost of proper purging.







Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660

## Container Flanged Installation

The opening in the tank flange should be machined with a 1/4"-45° chamfer at the outer edge. The thread should be tapped one or two turns large as checked by a plug gauge. This and the undersize thread on the valve should permit the valve to be installed so that its outer face is at least flush with the outer edge of the flange. The valve is screwed into this opening by fitting a1/4" flat metal piece into the slot and turning until hand tight. A lubricant may be used, but a cutting compound is not necessary since this joint does not have to be gas tight. If any difficulty is experienced in "making up" the valve to fit flush, as indicated, the thread in the tank flange can be tapped. Design and construction of tank and flange must be in accordance with the appropriate section of the ASME Pressure Vessel Code.

### Flanged Installation Dimension Specifications

| Key | Description | A3400L4 A3500L4 A3500N4 A3500P4 | A3400L6 A3500R6 3500T6 A3500V6 | A4500Y8 |
|---|---|---|---|---|
| A | Valve size (NPT) | 2" | 3" | 4" |
| B | Tank opening | 3-1/2" | 4-1/2" | 5-1/2" |
| C | Thickness (min.) | 1" | 1¼" | 1-3/8" |
| D | Outside diameter | 6-1/2" | 8¼" | 10" |
| E | Pipe Thread (NPT) | 2" | 3" | 4" |
| F | Bolt Circle Dia./# Holes | 5" (8) | 6-5/8" (8) | 7-7/8" (8) |
| G | Bolt Hole Thread | 5/8"-11NC-2 | 3/4"-10NC-2 | 3/4"-10NC-2 |
| H | Bolt Hole Depth | 3/4" | 1" | 1-1/8" |

## Discharge Chart

### Chart A — Minimum Required Rate of Discharge for LP-Gas Pressure Relief Valves Used on ASME Containers

From NFPA Pamphlet #58, Appendix D (1986).

Minimum required rate of discharge in cubic feet per minute of air at 120% of the maximum permitted start-to-discharge pressure for pressure relief valves to be used on containers other than those constructed in accordance with Interstate Commerce Commission specification.

| Surface Area Sq. Ft. | Flow Rate CFM Air | Surface Area Sq. Ft. | Flow Rate CFM Air | Surface Area Sq. Ft. | Flow Rate CFM Air | Surface Area Sq. Ft. | Flow Rate CFM Air | Surface Area Sq. Ft. | Flow Rate CFM Air | Surface Area Sq. Ft. | Flow Rate CFM Air | Surface Area Sq. Ft. | Flow Rate CFM Air |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 or less | 626 | 85 | 2050 | 150 | 3260 | 230 | 4630 | 360 | 6690 | 850 | 13540 | 1500 | 21570 |
| 25 | 751 | 90 | 2150 | 155 | 3350 | 240 | 4800 | 370 | 6840 | 900 | 14190 | 1550 | 22160 |
| 30 | 872 | 95 | 2240 | 160 | 3440 | 250 | 4960 | 380 | 7000 | 950 | 14830 | 1600 | 22740 |
| 35 | 990 | 100 | 2340 | 165 | 3530 | 260 | 5130 | 390 | 7150 | 1000 | 15470 | 1650 | 23320 |
| 40 | 1100 | 105 | 2440 | 170 | 3620 | 270 | 5290 | 400 | 7300 | 1050 | 16100 | 1700 | 23900 |
| 45 | 1220 | 110 | 2530 | 175 | 3700 | 280 | 5450 | 450 | 8040 | 1100 | 16720 | 1750 | 24470 |
| 50 | 1330 | 115 | 2630 | 180 | 3790 | 290 | 5610 | 500 | 8760 | 1150 | 17350 | 1800 | 25050 |
| 55 | 1430 | 120 | 2720 | 185 | 3880 | 300 | 5760 | 550 | 9470 | 1200 | 17960 | 1850 | 25620 |
| 60 | 1540 | 125 | 2810 | 190 | 3960 | 310 | 5920 | 600 | 10170 | 1250 | 18570 | 1900 | 26180 |
| 65 | 1640 | 130 | 2900 | 195 | 4050 | 320 | 6080 | 650 | 10860 | 1300 | 19180 | 1950 | 26750 |
| 70 | 1750 | 135 | 2990 | 200 | 4130 | 330 | 6230 | 700 | 11550 | 1350 | 19780 | 2000 | 27310 |
| 75 | 1850 | 140 | 3080 | 210 | 4300 | 340 | 6390 | 750 | 12220 | 1400 | 20380 | | |
| 80 | 1950 | 145 | 3170 | 220 | 4470 | 350 | 6540 | 800 | 12880 | 1450 | 20980 | | |

**Surface area** =Total outside surface area of container in square feet.

When the surface area is not stamped on the name plate or when the marking is not legible, the area can be calculated by using one of the following formulas:

1. Cylindrical container with hemispherical heads. Area (in sq. ft.) = overall length (ft.) x outside diameter (ft.) x 3.1416.
2. Cylindrical container with semi-ellipsoidal heads. Area (in sq. ft.) = overall length (ft.) + .3 outside diameter (ft.) x outside diameter (ft.) x 3.1416.
3. Spherical container. Area (in sq. ft.) = outside diameter (ft.) squared x 3.1416.

**Flow Rate CFM Air** = Required flow capacity in cubic feet per minute of air at standard conditions, 60ºF. and atmospheric pressure (14.7 psia).

The rate of discharge may be interpolated for intermediate values of surface area. For containers with total outside surface area greater than 2000 square feet, the required flow rate can be calculated using the formula, Flow Rate—CFM Air = 53.632 $A^{0.82}$. Where A = total outside surface area of the container in square feet.

Valves not marked "Air" have flow rate marking in cubic feet per minute of liquefied petroleum gas. These can be converted to ratings in cubic feet per minute of air by multiplying the liquefied petroleum gas ratings by the factors listed below. Air flow ratings can be converted to ratings in cubic feet per minute of liquefied petroleum gas by dividing the air ratings by the factors listed below.

**Air Conversion Factors**

| Container Type | 100 | 125 | 150 | 175 | 200 |
|---|---|---|---|---|---|
| Air Conversion Factor | 1.162 | 1.142 | 1.113 | 1.078 | 1.010 |







Order Online: www.teecoproducts.com
e-mail: info@teecoproducts.com

Sacramento, CA (800) 225-6621
Auburn, WA (800) 426-9456
Rapid City, SD (800) 843-8660