Ατκο<u>ΜΑΤΙ</u>

30400 Series

Bronze, Semi-direct Lift, Pressure 0 to 1500 psig (104 bar) Medium Pressure Valve, Configurable for a Variety of Fluid Applications



Features

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|--|---|
| Semi-direct lift action for operation down to zero pressure differential | Removable 316 stainless steel body inserts (stainless steel trim) |
| Operation up to 1500 psig (104 bar) Media temperatures from -423° F to +500° F (-253° C | |
| to +260° C) Will handle fluids with viscosity up to 150 SUS | Available in normally open configuration from ¼" to 1½" NPT ports |
| Bronze valve material (naval M bronze) Suitable for use with wide variety of fluid including: | British BSPT ports available Full ported valves |
| air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and fluids not harmful to bronze | Normally closed Cv from 2.7 to 71 Normally open Cv from 2.7 to 21 |
| Heaviest duty and most rugged construction | Class H coils are standard |
| Optional seat materials of PTFE, PCTFE, Buna N, Viton[®], EPR, or metal (316 stainless steel pilot and/ or brass piston seat) depending on fluid type and | Coil housings available in NEMA 1 (standard), NEMA 4 (waterproof), NEMA 7 (explosion-proof for hazardous locations), and combination NEMA 4 & 7 |
| pressure Body seal materials of PTFE, Viton[®], Buna N, or EPR | Manual opening and throttling devices are available as options (requires aluminum piston on 2¹/₂" & 3") |
| · | Valve position indicator option is available |
| | |

Circle Seal Controls

30400 Series

Operational Pressures (No minimum pressure differential)

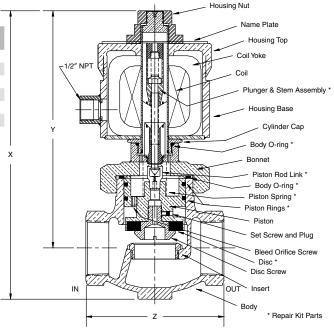
| • | | • | mmun | Jessureu | merential | | |
|---|-------------|-------------------|---------------------|---------------------|-----------|-------|-----|
| Normally | closed, 1/4 | - 11/2 | | | | | |
| GASES | | LIQUIDS TO 40 SUS | | LIQUIDS OVER 40 SUS | | STEAM | |
| AC | DC | AC | DC | AC | DC | AC | DC |
| 1500 | 1000 | 1500 | 1000 | 1500 | 1000 | 200 | 200 |
| | | | | | | | |
| Normally closed, 2 ["] -3 ["] | | | | | | | |
| GASES | | LIQUIDS TO 40 SUS | | LIQUIDS OVER 40 SUS | | STEAM | |
| AC | DC | AC | DC | AC | DC | AC | DC |
| 500 | 500 | 500 | 350 | 500 | 350 | 200 | 100 |
| | | | | | | | |
| Normally open, $\frac{1}{2}$ | | | | | | | |
| GASES LIQUIDS TO 4 | | TO 40 SUS | LIQUIDS OVER 40 SUS | | STEAM | | |
| AC | DC | AC | DC | AC | DC | AC | DC |
| | | | | | | | |

NOTE 1: Normally open valves are rated for intermittent duty only on 30000 Series valves and are not recommended for cryogenic service above 50 psig.

NOTE 2: Buna N, Viton[®] and EPR seats are limited to 500 psig (34.5 barg).

Dimensions, Shipping Weights, and Cv Flow Factors

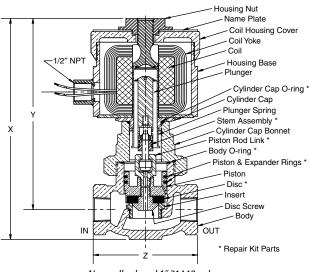
| 30400 Series Normally Open Bronze | | | | | | | |
|-----------------------------------|-----------|----------------------|------|----------------------|--------|---------------------------------|------|
| CATALOG NUM. PREFIX | PIPE SIZE | MAIN SEAT ORIFICE | х | Y | z | SHIPPING WEIGHT <i>(Ibs)</i> | Cv |
| 32400 | 1⁄4″ | ⅔″ | 8%″ | 7¾″ | 2¹¾6″ | 10 | 1.4 |
| 32410 | ⅔″ | 3∕8″ | 8%″ | 7¾″ | 2¹¼6″ | 10 | 2.7 |
| 32420 | 1⁄2″ | 1⁄2″ | 8¾″ | 7 ¹ 3⁄16″ | 3″ | 10 | 3.5 |
| 32430 | 3⁄4″ | 1″ | 9%″ | 81⁄16″ | 4″ | 12 | 8.4 |
| 32440 | 1″ | 1″ | 9%″ | 81⁄16″ | 4″ | 12 | 9.5 |
| 32450 | 11⁄4″ | 11⁄2″ | 10½″ | 8%″ | 51⁄16″ | 26 | 19.5 |
| 32460 | 11⁄2″ | 1½″ | 10½″ | 8%″ | 51⁄16″ | 26 | 21.0 |



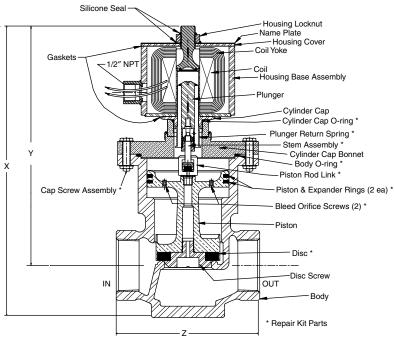
Normally open 1½" 32460 valve, shown with explosion-proof NEMA 7 coil, housing and AC coil.

30400 Series

Dimensions, Shipping Weights, and Cv Flow Factors



Normally closed 1" 31440 valve, shown with explosion-proof NEMA 7 coil. Housing an AC coil, and a soft pilot seat.



Normally closed 2[~] 31570 valve, shown with NEMA 4 coil. Housing an AC coil, and a soft pilot seat.

30400 Series Normally Closed Bronze

| CATALOG NUM. PREFIX | PIPE SIZE | MAIN SEAT ORIFICE | х | Y | z | SHIPPING WEIGHT <i>(Ibs)</i> | Cv |
|------------------------|-----------|----------------------|-------|---------|--------|---------------------------------|------|
| 31400 | 1⁄4″ | ¾″ | 7%″ | 7″ | 2¹¾6″ | 10 | 1.4 |
| 31410 | ∛8″ | ¾″ | 7%″ | 7″ | 2¹¾6″ | 10 | 2.7 |
| 31420 | 1⁄2″ | 1⁄2″ | 8″ | 7½6″ | 3″ | 10 | 3.5 |
| 31430 | 3⁄4″ | 1″ | 8%″ | 7%″ | 4″ | 12 | 8.4 |
| 31440 | 1″ | 1″ | 8%″ | 7%″ | 4″ | 12 | 9.5 |
| 31450 | 1¼″ | 11⁄2″ | 10%″ | 8¼″ | 51⁄16″ | 26 | 19.5 |
| 31460 | 11⁄2″ | 11⁄2″ | 10%″ | 8¼″ | 51⁄16″ | 26 | 21.0 |
| 31570 | 2″ | 2″ | 13¾6″ | 105⁄16″ | 6%″ | 38 | 43.0 |
| 31580 | 21⁄2″ | 3″ | 14¼″ | 10%″ | 81⁄2″ | 76 | 63.0 |
| 31590 | 3″ | 3″ | 14¼″ | 10%″ | 81⁄2″ | 76 | 71.0 |

30400 Series

How to Order

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|---|--|
| NORMAL POSITION OF VALVE (DE-ENERGIZED) 1 Normally closed 2 Normally open VALVE MATERIAL & CYLINDER CAP STYLE 4 Bronze & threaded cylinder cap 5 Bronze & flanged cylinder cap 5 Bronze & flanged cylinder cap 0 ¼″ 1 ¾″ 4 1″ 7 2″ 2 ½″ 5 1¼″ 8 2½″ 3 ¾″ 6 1½″ 9 3″ VOLTAGE AC/60 Hz 0 AC/50 Hz or DC voltage 1 100 VAC 3 200 VAC 5 460 VAC 2 115 VAC 4 230 VAC | OPTIONS P Position indicator M Manual opening T Manual throttling COIL HOUSING E Explosion-proof S Standard W Waterproof C Combined water- & explosion-proof FLUID MEDIA TYPE 1 Gas 2 Liquid up to 40 SUS 3 Liquid from 41 SUS to 150 SUS 4 Steam 5 Cryogenic SEAL MATERIAL A PTFE B Buna N C Viton® D EPR |
| 0 AC/60 Hz or DC voltage 1 110 VAC 2 220 VAC | SEAT/PILOT MATERIAL A TFE pilot & TFE disc B Buna N pilot & Buna N disc |
| VOLTAGE DC 0 AC voltage 1 12 VDC 3 48 VDC 5 250 VDC 2 24 VDC 4 125 VDC | C Viton[®] pilot & Viton[®] disc D EPR pilot & EPR disc E PCTFE pilot & PCTFE disc F Metal pilot & metal disc |
| CONNECTION TYPE P NPT J British pipe thread | G Metal pilot & TFE disc H Metal pilot & Buna N disc I Metal pilot & Viton[®] disc |
| MAX. OPERATING PRESSURE (psig) A 75 E 250 I 750 B 100 F 300 J 1000 C 150 G 350 K 1,200 D 200 H 500 L 1500 | J Metal pilot & EPR disc K Metal pilot & PCTFE disc |

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Viton[®] is a registered trademark of DuPont Dow Elastomers. PTFE is a registered trademark of DuPont.