A TKOMATIC

1000 Series

Stainless Steel, Direct Lift to 5000 psig (345 bar) Medium Pressure Valve Configurable for Variety of Fluid Applications



Features

- Direct acting valve
- Pressure to 5000 psig (345 bar) depending on fluid and orifice size
- Barstock body construction
- Compact size
- Stainless steel construction on all wetted parts: 316 for pressure containing parts and plunger material is 416 stainless that is treated for increased corrosion resistance
- Will handle fluids with viscosity up to 200 SUS
- Fluid temperatures from -423° F to +500° F (-253° C to +260° C)
- Suitable for use with wide variety of fluid including: air, gasses, liquids, hydraulic fluids, steam, cryogenic fluids, and corrosive fluids

- Optional seat materials of Teflon®, Kel-F®, Buna N, Viton®, EPR, or 316 stainless steel depending on fluid type and pressure
- Body seal materials of Teflon®, Viton®, Buna N, or EPR.
- Flow orifice sizes of $\frac{1}{16}$, $\frac{3}{32}$, $\frac{1}{8}$, and $\frac{3}{16}$
- Pipe sizes of ½" and ¼" NPT
- British BSPT ports available
- Cv from 0.093 to 0.72
- Class H coil is standard
- Can use a class H double wound coil (requires use with a relay to drop put primary coil winding after valve actuation) depending on pressure
- Coils housing is NEMA 1

Circle Seal Controls

1000 Series

Operational pressures (No minimum pressure differential)

Single Wound Coils—Series 1000–1100 Metal Seats

	GASES		LIQUIDS TO 40 SUS		LIQUIDS OV	ER 40 SUS	STEAM	
ORIFICE SIZE	AC	DC	AC	DC	AC	DC	AC	DC
1/16	2500	1500	1,800	1000	1500	500	300	300
3/32	1000	500	800	350	500	170	300	300
1/8	500	200	400	125	250	50	300	125
3/16	175	55	125	35	125	15	125	35

Single Wound Coils—Series 1002–1102 Soft Seats (Buna N, Viton®, EPR, Teflon®, and Kel-F®)*

	GA	SES	LIQUIDS TO 40 SUS		LIQUIDS OV	/ER 40 SUS	STEAM	
ORIFICE SIZE	AC	DC	AC	DC	AC	DC	AC	DC
1/16	2500	1,275	1500	765	1500	500	300	300
3/32	1000	425	675	300	425	150	300	300
1/8	425	170	350	100	200	40	300	100
3/16	150	40	100	30	100	12	110	30

Double Wound Coils—Series 1004–1104 Metal Seats

	G	GASES		LIQUIDS TO 40 SUS		VER 40 SUS	STEAM	
ORIFICE SIZI	E AC	DC	AC	DC	AC	DC	AC	DC
1/16	5000	5000	5000	3500	5000	2500	300	300
3/32	3500	2000	3000	1500	3000	1000	300	300
1/8	2000	800	1500	600	1,200	500	300	300

Double Wound Coils—Series 1009-1109 Soft Seats (Buna N, Viton®, EPR, Teflon®, and Kel-F®)*

	GA	SES	LIQUIDS TO 40 SUS		LIQUIDS O	/ER 40 SUS	STEAM	
ORIFICE SIZE	AC	DC	AC	DC	AC	DC	AC	DC
1/16	5000	4000	4500	3000	4,250	2,100	300	300
3/32	3500	2000	3000	1500	3000	1000	300	300
1/8	2000	800	1500	600	1,200	500	300	300

Note: Rubber seats are limited to 500 psi (34.5 bar)

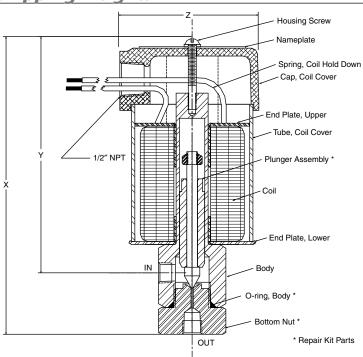
* For PED requirements, the following requirements are approved for soft seats:

Teflon® seat: 2,960 psi @ 500° F (204 bar @ +260° C)

Kel-F[®] and Viton[®] seat: 3,150 psi @ 400° F (217 bar @ +204° C)

EPR seat: 3,450 psi @ 300° F (238 bar @ +149° C) Buna N seat: 3,525 psi @ 275° F (243 bar @ +135° C)

Dimensions and Shipping Weights



1002 1/8" valve, shown with NEMA 1 coil housing and metal seat

	CATALOG N							
SINGLE WOUND COIL, METAL SEAT	SINGLE WOUND COIL, SOFT SEAT	DOUBLE WOUND COIL, METAL SEAT	DOUBLE WOUND COIL, SOFT SEAT	PIPE SIZE	X	Υ	Z	SHIPPING WEIGHT (lbs)
1000	1002	1004	1009	1/8"	5¾″	45/8"	2¾″	5
1100	1102	1104	1109	1/4″	5¾″	45/8″	2¾″	5

Cv Flow Factors

ORIFICE SIZE	Cv
1/16	0.093
3/32	0.22
1/8	0.44
3/16	0.72

