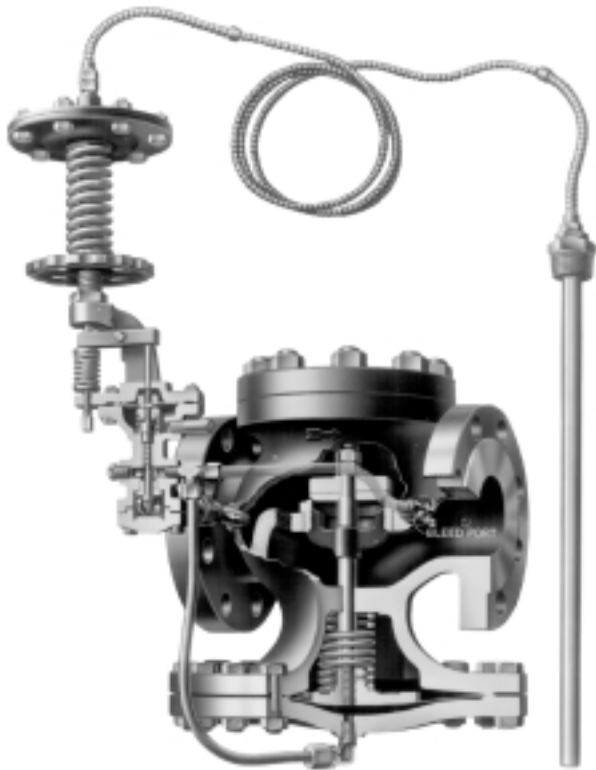


TYPE ET124/ET134 & E2T134 TEMPERATURE & PRESSURE REGULATOR

CAST IRON or STEEL



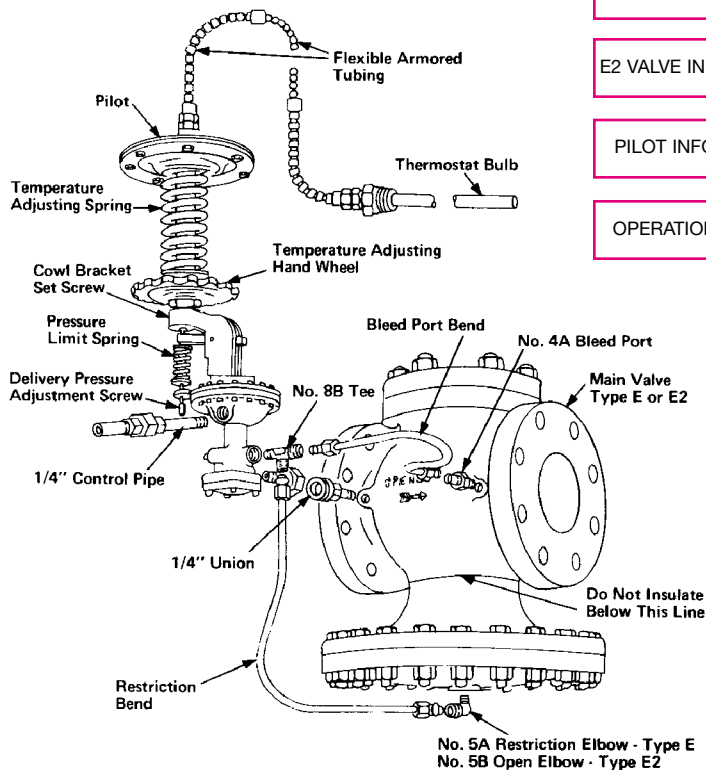
APPLICATION DATA

- Instantaneous Heaters
- Jacketed Kettles
- Storage Heaters
- Oil Heaters
- Batch Heating
- Process Heaters
- Vats
- Driers
- Ovens

MODELS

- ET124 for heater operating pressures between 20 and 125 psi.
- ET134 for heater operating pressures up to 20 psi.
- E2T134 for heater operating pressures up to 15 psi.

TYPE ET124 TEMPERATURE & PRESSURE REGULATOR



E VALVE INFO

E2 VALVE INFO

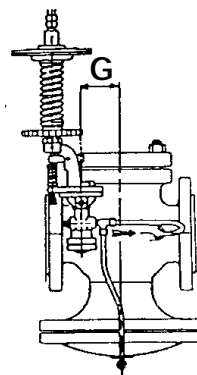
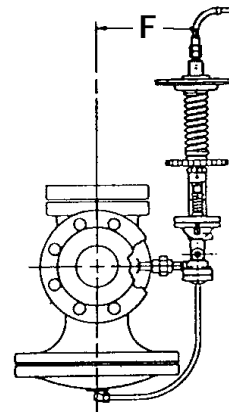
PILOT INFO

OPERATION

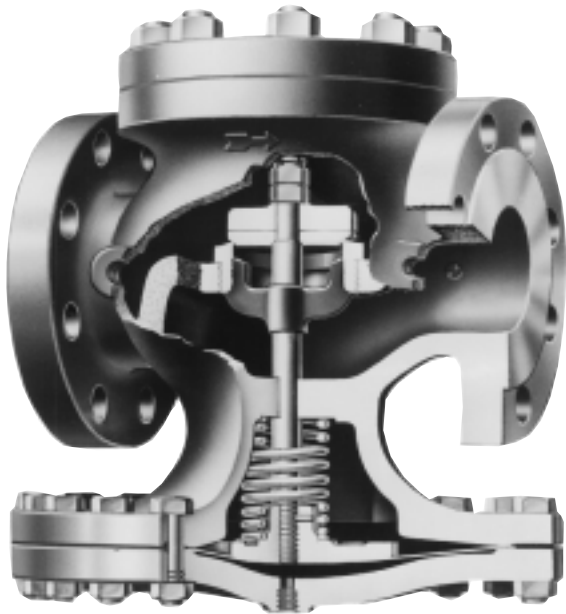
DIMENSIONS

inches (mm)

SIZE	F	G	
		E	E2
3/8 (10)	5 3/8 (136)	1 1/4 (32)	—
1/2 (15)	5 3/8 (136)	1 1/4 (32)	—
3/4 (20)	5 5/8 (143)	1 3/8 (35)	1 3/8 (35)
1 (25)	5 3/4 (146)	1 1/2 (38)	1 1/2 (38)
1 1/4 (32)	6 (152)	1 7/8 (48)	1 7/8 (48)
1 1/2 (40)	6 1/4 (159)	2 (51)	2 (51)
2 (50)	6 5/8 (168)	2 1/8 (54)	2 1/8 (54)
2 1/2 (65)	6 3/4 (171)	2 3/8 (60)	2 3/8 (60)
3 (80)	7 1/4 (184)	2 3/4 (70)	2 3/4 (70)
4 (100)	8 (203)	3 1/2 (89)	3 1/2 (89)
5 (125)	9 (229)	3 1/2 (89)	3 1/2 (89)
6 (150)	9 7/8 (251)	4 (102)	4 (102)
8 (200)	10 1/2 (267)	6 1/4 (159)	6 1/4 (159)
10 (250)	12 1/2 (318)	6 (152)	6 (152)
12 (300)	14 (356)	8 1/2 (216)	7 1/4 (184)



Valve is tapped so that Pilot may be mounted on either side.



TYPE E MAIN VALVE

TYPE E MAIN VALVE

SIZES 3/8" – 12"

PRESSURES to 600 PSIG at 750°F

- Normally Closed
- Single Seat
- Balanced Metal Diaphragms
- Protected Main Spring
- Fluid, Gas & Vapor Applications
- Accurate Regulation Unaffected by Service Conditions
- ANSI/FCI 70-2 Class IV Shutoff
- Virtually Frictionless for Long Service Life
- Packless Construction
- Easy In-line Maintenance
- Wide Variety of Pilots for Many Applications
- Minimum Operating ΔP 10 psi (.7 bar)
- Lifetime Warranty against Wiredrawing of Seat & Disc*

APPLICATION DATA

- Pressure Regulating for Steam Distribution
- Regulating for Process Control (Temperature or Pressure)
- Maintain Back Pressure or Differential Pressure
- For use with Self-contained, Pneumatic or Electronic Pilots
- Single Point or Multiple Use Applications
- Slow Start-up or Shutdown

SIZING INFO

VALVE RATINGS

Valve Ends ASME/ANSI	Pressure PSIG (bar)	Temperature °F (°C)
-------------------------	------------------------	------------------------

CAST IRON

Class 250 NPT	250 (17.2)	@ 450 (232)
B16.1 Class 125 Flanged	125 (8.6)	@ 450 (232)
B16.1 Class 250 Flanged	250 (17.2)	@ 450 (232)

CAST STEEL

B16.34 Class 300 NPT	300 (21.0)	@ 600 (315)†
B16.34 Class 150 Flanged	150 (10.3)	@ 500 (260)†
B16.34 Class 300 Flanged	300 (21.0)	@ 600 (315)†
B16.34 Class 600 Flanged	600 (41.4)	@ 600 (315)†

†750°F (400°C) construction available on request.
 Other pressure/temperature ratings available; consult factory.
 Maximum downstream pressure is 300 psi.
 Canadian Registration # OC 0591.9C

Installation Tip: Add EZ Connections for ease of maintenance

OPTIONS

- Composition Disc
- Parabolic Disc
- Balanced Construction
- Integral Mount Pilot
- Insulcap Insulating Jacket
- Secoweld
- High Temperature Construction
- Dashpot
- Low ΔP (LP) Main Spring
- EZ Connections

TYPICAL CONFIGURATIONS

- PRESSURE REDUCINGTYPE ED SERIES
- AIR ADJUSTEDTYPE EA SERIES
- BACK PRESSURETYPE EQ SERIES
- PUMP GOVERNORTYPE EP SERIES
- LOAD ALLOCATINGTYPE EFD
- AIR CONTROLLEDTYPE EAP60
- ELECTRONIC SLOW STARTTYPE ED208D
- SOLENOID CONTROLLEDTYPE EMD
- SOLENOID ACTUATEDTYPE EM
- DIFFERENTIALTYPE EN
- TEMPERATURE CONTROLTYPE ET SERIES

RATED FLOW COEFFICIENTS (Cv)

SEAT FACTOR	REGULATOR SIZE															
	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	
Full	1.5	2.8	5.4	8.8	14.1	19.8	31	44	74	109	169	248	444	706	1113	
Full 75 %	—	2.1	4.0	6.6	10.6	14.8	23.3	33	56	82	127	186	333	530	835	
Full 50 %	—	1.4	2.7	4.4	7.0	9.9	15.5	22	37	55	85	124	222	353	557	
Normal	.65	1.5	4.8	7.5	10.4	14.6	17.6	24	43	78	115	151	249	377	631	
Normal 75 %	—	—	—	—	—	—	—	18	33	59	87	114	187	283	474	
Normal 50 %	—	—	—	—	—	—	—	12	22	39	58	76	125	189	316	

* When installed according to factory specifications.

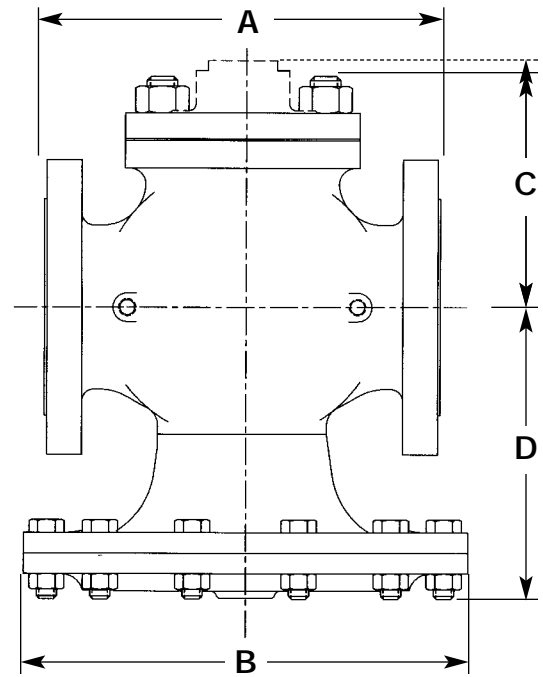
TYPE E MAIN VALVE

SPECIFICATION

The valve shall be self-operated, external pilot type, single seated, metal diaphragm actuated, normally closed design. The valve will function quickly and shut tight on dead end service. Internal parts including seats, discs, stems and diaphragms shall be of stainless steel. There shall be no springs in the steam space and no stuffing box. The valve shall be easy to maintain with all parts accessible without removal from the line.

MATERIALS OF CONSTRUCTION

Body, Cast IronASTM A126 Cl. B
 Body, Cast BronzeASTM B61 UNS C92200
 Body, Cast SteelASTM A216 WCB
 Stem303 St. Stl. ASTM A582
 Disc 3/4 - 5"420 St. Stl. ASTM A743 CA-40
 Disc 6 - 12"304 St. Stl. ASTM A167/A240
 Seat 3/4 - 5"420 St. Stl. ASTM A743 CA-40
 Seat 6 - 12"316 St. Stl. ASTM A743-79 CF-8M
 GasketNon-asbestos
 DiaphragmStainless Steel MIL-S-5059C
 SpringSteel



TYPE E MAIN VALVE

FITTINGS

DIMENSIONS inches (mm) AND WEIGHTS pounds (kg)

SIZE	FACE TO FACE DIMENSIONS					B	C					D*	APPROX. WT.			
	A						Std. Mount	Integral Mount			ANSI NPT		ANSI 125,150	ANSI 250,300	ANSI 600	
	ANSI NPT	ANSI 125,150	ANSI 250	ANSI 300	ANSI 600			ANSI 600	Cl & Brz. All	Steel						Steel 600
3/8 (10)	4 3/8 (111)	—	—	—	—	5 7/8 (149)	2 3/4 (70)	—	3 1/2 (89)	3 1/2 (89)	—	5 1/4 (133)	14 (6)	—	—	—
1/2 (12)	4 3/8 (111)	—	—	—	6 (152)	5 7/8 (149)	2 3/4 (70)	2 3/4 (70)	3 1/2 (89)	3 1/2 (89)	3 5/8 (92)	5 1/4 (133)	14 (6)	—	—	20 (9.1)
3/4 (19)	4 3/8 (111)	—	—	—	6 3/8 (162)	6 1/2 (165)	2 7/8 (73)	3 7/8 (98)	3 5/8 (92)	3 3/4 (95)	4 1/2 (114)	5 1/2 (140)	18 (8)	—	—	28 (13)
1 (25)	5 3/8 (137)	5 1/2 (140)	6 (152)	6 1/2 (165)	6 1/2 (165)	7 (178)	3 5/8 (92)	4 1/4 (108)	4 3/8 (111)	4 3/8 (111)	4 3/4 (121)	6 1/4 (159)	23 (10)	26 (12)	31 (14)	32 (15)
1 1/4 (32)	6 1/2 (165)	6 3/4 (171)	7 1/4 (184)	7 7/8 (200)	7 7/8 (200)	7 7/8 (200)	4 1/8 (105)	4 5/8 (117)	4 (102)	4 5/8 (117)	5 (127)	6 1/2 (165)	33 (15)	37 (17)	41 (19)	45 (20)
1 1/2 (38)	7 1/4 (184)	6 7/8 (175)	7 3/8 (187)	8 (203)	8 (203)	8 3/4 (222)	4 3/8 (111)	5 1/8 (130)	4 3/8 (111)	5 (127)	—	7 1/8 (181)	43 (20)	47 (21)	55 (25)	58 (26)
2 (51)	7 1/2 (191)	8 1/2 (216)	9 (229)	10 1/4 (260)	10 1/4 (260)	9 7/8 (251)	5 1/4 (133)	5 3/4 (146)	5 (127)	5 5/8 (143)	5 3/4 (146)	7 5/8 (194)	62 (28)	73 (33)	78 (35)	83 (38)
2 1/2 (64)	—	9 3/8 (238)	10 (254)	11 1/4 (286)	11 1/4 (286)	10 7/8 (276)	5 3/4 (146)	7 7/8 (200)	5 1/2 (140)	6 (152)	8 1/4 (210)	8 3/8 (213)	—	95 (43)	100 (45)	130 (59)
3 (76)	—	10 (254)	10 3/4 (273)	12 1/4 (311)	12 1/4 (311)	11 3/4 (298)	6 5/8 (168)	9 1/8 (232)	6 3/8 (162)	7 1/8 (181)	—	9 1/4 (235)	—	125 (57)	140 (64)	175 (80)
4 (102)	—	11 7/8 (302)	12 1/2 (318)	12 1/2 (318)	14 1/2 (368)	14 3/4 (375)	7 5/8 (194)	10 5/8 (270)	7 1/4 (184)	8 (203)	—	11 7/8 (302)	—	210 (95)	230 (105)	310 (141)
5 (127)	—	13 5/8 (346)	14 1/2 (368)	14 1/2 (368)	16 1/2 (419)	16 7/8 (429)	8 1/2 (216)	12 1/2 (318)	8 1/8 (206)	8 1/2 (216)	—	12 1/2 (318)	—	295 (134)	310 (141)	490 (223)
6 (152)	—	15 1/8 (384)	16 (406)	16 (406)	17 3/8 (441)	19 3/4 (502)	10 (254)	13 3/4 (349)	9 1/2 (241)	9 1/2 (241)	13 5/8 (346)	14 1/8 (359)	—	420 (191)	470 (214)	655 (298)
8 (203)	—	19 (483)	20 (508)	20 (508)	21 5/8 (549)	22 1/2 (572)	11 1/2 (292)	15 3/8 (391)	11 1/4 (286)	11 3/4 (298)	—	17 1/4 (438)	—	700 (318)	710 (323)	1070 (486)
10 (254)	—	23 5/8 (600)	25 (635)	25 (635)	—	28 (711)	13 3/4 (349)	—	—	—	—	23 3/8 (594)	—	1240 (563)	1300 (591)	—
12 (305)	—	26 1/2 (673)	28 (711)	28 (711)	—	33 (838)	15 7/8 (403)	—	—	—	—	25 1/4 (641)	—	2060 (936)	2140 (972)	—

*Add 65% to D dimension for stem removal clearance.

TYPE T124/134 TEMPERATURE/ PRESSURE PILOT

CONTROLS 20 to 500°F



- Precise, Rapid Response
- Vapor Tension Thermostat Spring Operated
- Self Contained
- Normally Open
- Packless Construction
- Fluid, Gas and Vapor Applications
- Strainer Screen Built-in
- Easy in-line Maintenance
- Temperature and Pressure in One Pilot

MODELS

- **TYPE T124** for heater operating pressures between 20 and 125 psi.
- **TYPE T134** for heater operating pressures up to 20 psi.

OPTIONS

- Stainless Steel Flexible Tubing
- Stainless Steel Capillary Tubing
- Tubing longer than 10'
- Thermostat Well
- Dial Thermometer
- Integral Mount
- Thermostat other than #700 (see Options Section)

TYPE T134 TEMPERATURE/PRESSURE PILOT

APPLICATION DATA

- Instantaneous Water Heaters
- Oil Heaters
- Storage Heaters
- Process Heaters
- Jacketed Kettles
- Vats
- Driers
- Ovens

RATINGS (Maximum Inlet Conditions)

Construction	Pressure PSIG (bar)	Temperature °F (°C)
Cast Iron	250 (17.2) @	450 (232)
Cast Bronze	250 (17.2) @	400 (204)
Cast Steel	600 (41.4) @	750 (400)

TEMPERATURE RANGES (°F)

20-120	150-300	300-400
50-150	170-270	330-430
70-170	250-350	400-500
120-220	290-390	

Canadian Registration # OC 0591.9C

SIZING INFO

*Cast Steel available in T134 only.

THERMOSTATS

700	706	731
701	708	732
702	711	740
703	712	800
704	713	801

TYPICAL CONFIGURATIONS

TEMPERATURE & PRESSURE	ET124
TEMPERATURE & PRESSURE	ET134
TEMPERATURE & PRESSURE	E2T134
TEMPERATURE & PRESSURE	E5T124

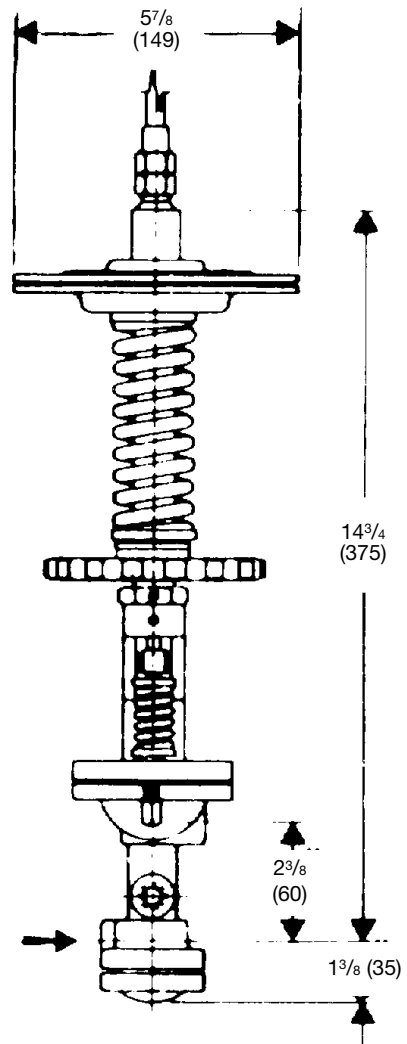
TYPE T124/134 TEMPERATURE/ PRESSURE PILOT

SPECIFICATION

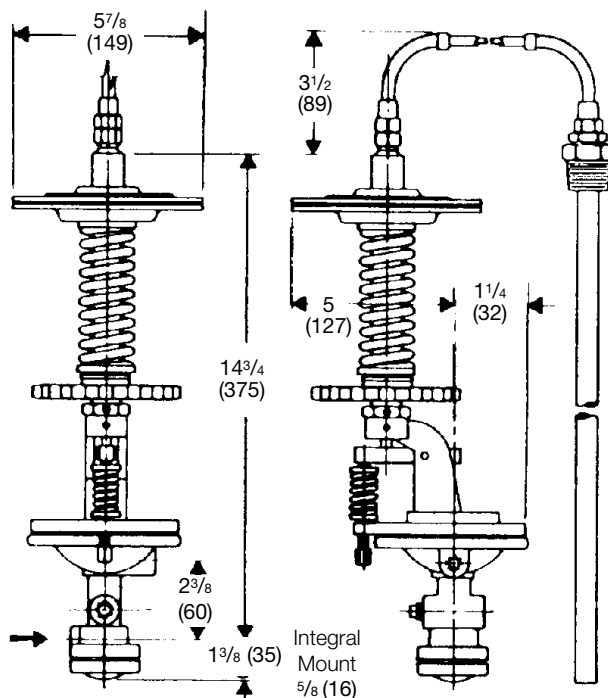
Pilot valve shall be separate from the main valve and connected to it by unions. Pilot seats shall be protected by built-in strainer screens. Pilots shall be interchangeable on all sizes of main valves. Thermal elements shall provide a 100°F (38°C) range of temperature adjustment and shall withstand 100°F (38°C) overheating without damage. Handwheel adjustment for temperature shall be standard. Unless otherwise scheduled, thermal elements shall be equipped with 10 feet of brass flexible tubing. Number 700 bronze bulb and Number 728 bronze well shall be included except with instantaneous heaters serving intermittent demand. Steel wells shall be supplied for fuel oil service on storage tank applications.

MATERIALS OF CONSTRUCTION

Body, Cast Iron	ASTM A126 CI B
Body, Cast Bronze	ASTM B61 UNS C92200
Body, Cast Steel	ASTM A216 WCB
Stem	416 St. Stl. ASTM A582-75
Disc	440 St. St. ASTM A582 COND A
Seat	420 St. Stl ASTM A582 COND A
Gasket	Graphite
Diaphragm	301 St. Stl. MIL-5-5059C
Spring	Steel



TYPE T124 PILOT
16 LBS. (7.3 KG)



TYPE T134 PILOT
18 LBS. (8.2 KG)

