

# 940 Series Heavy Duty Control Valve

CONTROL VALVES

Actuator  
(shown with  
optional  
positioner)



Valve  
Body

- ▶ Diaphragm Actuated
- ▶ 14" & 17"  
Actuator Sizes
- ▶ Heavy Duty Die Cast  
Housing and Yoke
- ▶ 1/2" - 8" Valve Sizes

The Trerice **940 Series** Pneumatic Control Valve offers extreme quality and maximum valve performance. The Series 940 is available in a variety of 2-way and 3-way valve styles for industrial, demanding HVAC and commercial process applications. The 940 Actuator can be furnished with a 14" or 17" diaphragm and includes a rugged, die cast aluminum diaphragm chamber.

For optimal performance, the service conditions (medium, flow, temperature, inlet and outlet pressures) of the application must be considered when selecting a valve. Please refer to the Valve Selection Section of this catalog. Consult the Valve Selection tables for the capabilities of a particular valve/actuator assembly. A positioner may be required to maximize the close-off capability of the valve. Improper application may cause failure of the valve, resulting in possible personal injury or property damage.

For replacement or service parts please see Accessories and Replacement Parts in the Regulators and Control Valves section of the list price sheet.

940B shown

## HOW TO ORDER

Sample Order Number: **940B-K84-760P**

Actuator Models	Valve Body Number	Positioner Model
940B 940C	Refer to pages 250-257	760P Pneumatic 760E Electropneumatic Omit if None

1. **Determine** the valve size, style and material required by the application.
2. **Consult** the Valve Selection table to determine the required Valve Model.
3. **Refer** to the maximum close-off pressure columns to determine the Actuator (with or without positioner) needed to provide the close-off pressure required by your application.
4. **Specify** the Actuator Model.
5. **Specify** the Valve Body Number.
6. **Specify** the Positioner Model (if required).

All dimensions are nominal. Dimensions in [ ] are in millimeters.

### Valve & Actuator Specifications

Actuator Models	Diaphragm Size
940B	14"
940C	17"

#### Construction

Aluminum yoke and diaphragm chamber, acrylic enamel finish

#### Pressure Plate

Aluminum

#### Diaphragm Material

Nylon reinforced Buna-N

#### Input Signal

3-15 psi  
9-15: Single Seat - Fail Closed only

#### Air Pressure to Diaphragm

30 psig maximum

#### Air Pressure Connection

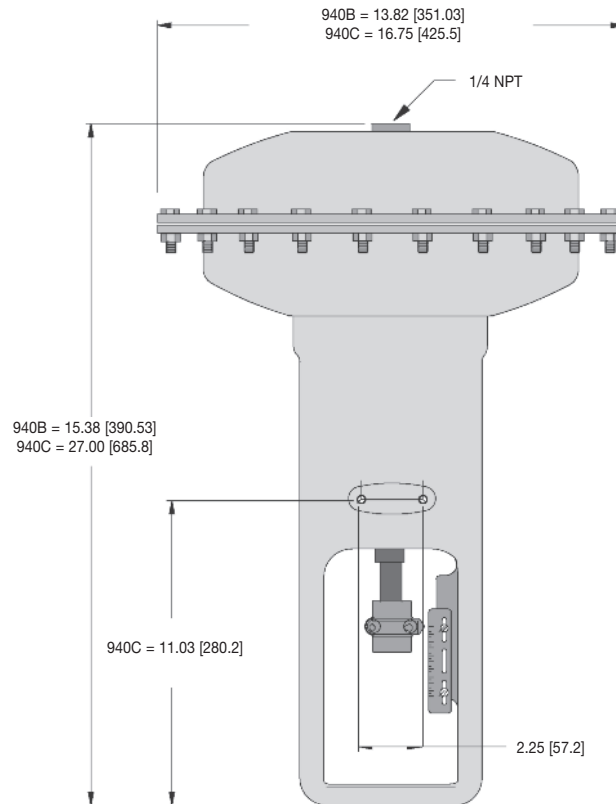
1/4 NPT Female

#### Operating Temperature

Ambient:  
-40°F (-40°C) to 180°F (82°C)  
  
Process Flow:  
-40°F (-40°C) to 410°F (210°C)

#### Approximate Shipping Weight

940B: 45 lbs [20 kg]  
940C: 86 lbs [39 kg]



The Trerice TA987 Air Filter/Regulator is recommended for filtering and regulating the pressure of plant compressed air and delivering clean, dry air at the proper pressure to pneumatic control devices.

### Positioner Specifications\*

Models	Air Requirements	Connections	Ambient Temperature
760P (Pneumatic) 760E (Electropneumatic)	Clean, oil-free, dry air  Maximum Supply Pressure: 30 psig  Air Consumption: 0.28 SCFH (760P), 0.38 SCFH (760E), typical  Flow Rate: 9.0 SCFM	Pneumatic: 1/4 NPT  Gauge: 1/8 NPT  Electrical: 3/4 NPT  Exhaust: 1/4 NPT	-40°F (-40°C) to 185°F (85°C)
<b>Action</b> Direct			<b>Weight</b> 10 lbs [4.55 kg]
<b>Input Signal Ranges</b> 760P: 3 to 15 psig 760E: 4 to 20 mA		<b>Enclosure</b> NEMA 4X, IP65	

Valves with positioners operate on a control signal of 3-15 psig or 4-20mA and utilize an internal 9-15 psig range spring.

# Valve Body Selection

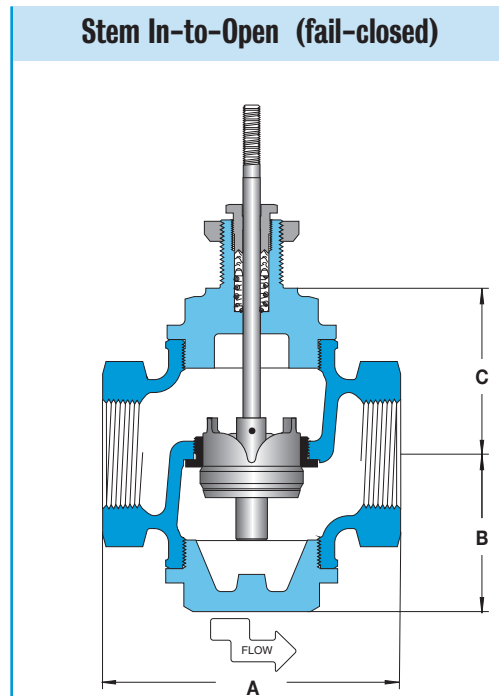
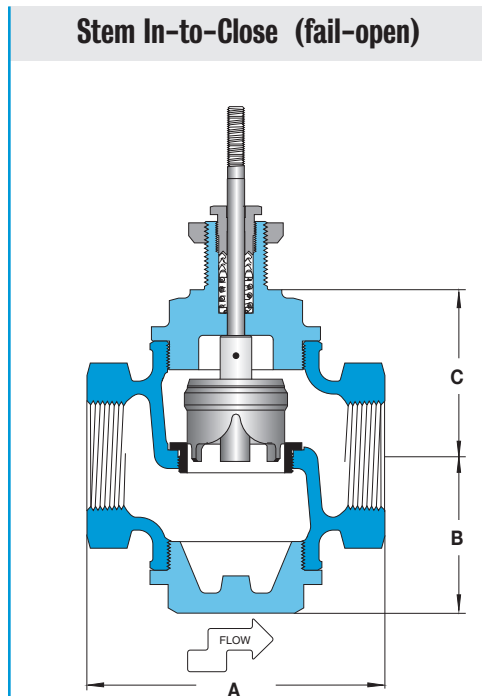
(for 940 Series Heavy Duty Control Valve)

# BRONZE

## Single Seat • 1/2" – 2"

All dimensions are nominal. Dimensions in [ ] are in millimeters.

CONTROL VALVES



### Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Bronze	Stainless steel	Equal percentage	Class IV	Threaded	335 PSI @ 300°F (149°C)

### Valve Body Selection

In-To-Close (fail-open)				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size Connection (NPT)	Nominal Port	C <sub>v</sub>	940B	940B w/Positioner	A	B	C	
J14	1/2	1/2"	4.9	335	335	4.9 [124]	2.6 [66]	2.8 [71]	9 lbs [4.1 kg]
J19	3/4	3/4"	7.2	154	335	4.9 [124]	2.6 [66]	2.8 [71]	9 lbs [4.1 kg]
J26	1	1"	10.0	78	335	4.9 [124]	2.6 [66]	2.8 [71]	9 lbs [4.1 kg]
J36	1 1/4	1 1/4"	22.2	35	335	5.8 [147]	3.1 [79]	3.4 [87]	15 lbs [6.8 kg]
J47	1 1/2	1 1/2"	24	19	335	5.8 [147]	3.1 [79]	3.4 [87]	15 lbs [6.8 kg]
J58	2	2"	40	4	312	6.5 [165]	3.4 [86]	3.8 [97]	19 lbs [8.6 kg]

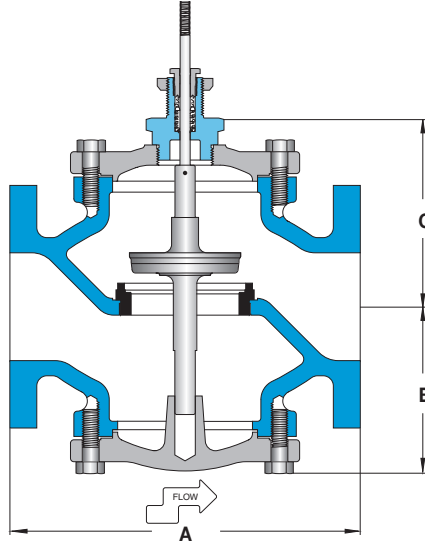
In-To-Open (fail-closed)				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size Connection (NPT)	Nominal Port	C <sub>v</sub>	940B*	940B w/Positioner	A	B	C	
J15	1/2	1/2"	4.9	335	335	4.9 [124]	2.6 [66]	2.8 [71]	9 lbs [4.1 kg]
J22	3/4	3/4"	7.2	335	335	4.9 [124]	2.6 [66]	2.8 [71]	9 lbs [4.1 kg]
J30	1	1"	10.0	335	335	4.9 [124]	2.6 [66]	2.8 [71]	9 lbs [4.1 kg]
J41	1 1/4	1 1/4"	22.2	335	335	5.8 [147]	3.1 [79]	3.4 [87]	15 lbs [6.8 kg]
J52	1 1/2	1 1/2"	24	248	286	5.8 [147]	3.1 [79]	3.4 [87]	15 lbs [6.8 kg]
J63	2	2"	40	146	170	6.5 [165]	3.4 [86]	3.8 [97]	19 lbs [8.6 kg]

\*Requires a 9-15 psi input signal.

All dimensions are nominal. Dimensions in [ ] are in millimeters.



### Stem In-to-Close (fail-open)



Size	Class 125			Class 250		
	A	B	C	A	B	C
2 1/2"	9.0 [229]	4.6 [117]	5.5 [140]	9.6 [244]	4.6 [117]	5.5 [140]
3"	10.0 [254]	5.3 [135]	6.1 [155]	10.8 [274]	5.3 [135]	6.1 [155]
4"	13.0 [330]	6.2 [157]	7.1 [180]	13.6 [345]	6.2 [157]	7.1 [180]
5"	15.8 [401]	5.6 [142]	7.8 [198]	16.6 [422]	5.6 [142]	7.8 [198]
6"	17.8 [452]	6.4 [163]	8.4 [213]	18.6 [472]	6.4 [163]	8.4 [213]

### Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Cast-iron	Stainless steel	Equal percentage	Class IV	Class 125 flanged Class 250 flanged	140 PSI @ 300°F (149°C) 310 PSI @ 300°F (149°C)

### Valve Body Selection

In-To-Close (fail-open)				Maximum Close-Off Pressure (psid)				Approximate Shipping Wt.
Valve Body Number Class 125	Size Connection (Flanged)	Nominal Port	C <sub>v</sub>	Actuator				
				940B	940B w/Positioner	940C	940C w/Positioner	
K71	2 1/2	2 1/2"	65	x	140	5	140	55 lbs [24.9 kg]
K76	3	3"	90	x	140	x	140	72 lbs [32.7 kg]
K81	4	4"	170	x	79	x	113	119 lbs [54.0 kg]
K86	5	5"	280	x	47	x	71	134 lbs [60.8 kg]
K91	6	6"	360	x	30	x	46	175 lbs [79.4 kg]

In-To-Close (fail-open)				Maximum Close-Off Pressure (psid)				Approximate Shipping Wt.
Valve Body Number Class 250	Size Connection (Flanged)	Nominal Port	C <sub>v</sub>	Actuator				
				940B	940B w/Positioner	940C	940C w/Positioner	
L71	2 1/2	2 1/2"	65	x	220	5	309	64 lbs [29.0 kg]
L76	3	3"	90	x	149	x	210	77 lbs [34.9 kg]
L81	4	4"	170	x	79	x	113	131 lbs [59.4 kg]
L86	5	5"	280	x	47	x	71	166 lbs [75.3 kg]
L91	6	6"	360	x	30	x	46	233 lbs [105.7 kg]

# Valve Body Selection

(for 940 Series Heavy Duty Control Valve)

# CAST IRON

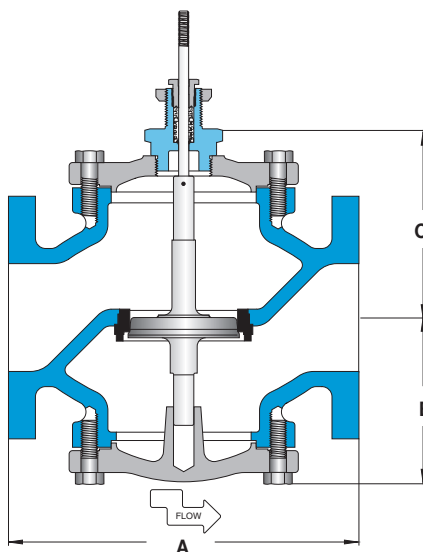
Single Seat • 2 1/2" – 6"

All dimensions are nominal. Dimensions in [ ] are in millimeters.



CONTROL VALVES

## Stem In-to-Open (fail-closed)



Size	Class 125			Class 250		
	A	B	C	A	B	C
2 1/2"	9.0 [229]	4.6 [117]	5.5 [140]	9.6 [244]	4.6 [117]	5.5 [140]
3"	10.0 [254]	5.3 [135]	6.1 [155]	10.8 [274]	5.3 [135]	6.1 [155]
4"	13.0 [330]	6.2 [157]	7.1 [180]	13.6 [345]	6.2 [157]	7.1 [180]
5"	15.8 [401]	7.4 [188]	5.9 [150]	16.6 [422]	7.4 [188]	5.9 [150]
6"	17.8 [452]	8.0 [203]	6.7 [170]	18.6 [472]	8.0 [203]	6.7 [170]

## Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Cast-iron	Stainless steel	Equal percentage	Class IV	Class 125 flanged Class 250 flanged	140 PSI @ 300°F (149°C) 310 PSI @ 300°F (149°C)

## Valve Body Selection

In-To-Open (fail-closed)				Maximum Close-Off Pressure (psid)				Approximate Shipping Wt.
Valve Body Number Class 125	Size Connection (Flanged)	Nominal Port	C <sub>v</sub>	Actuator				
				940B*	940B w/Positioner	940C*	940C w/Positioner	
K72	2 1/2	2 1/2"	65	101	118	140	140	55 lbs [24.9 kg]
K77	3	3"	90	65	77	96	113	72 lbs [32.7 kg]
K82	4	4"	170	32	39	49	58	119 lbs [54.0 kg]
K87	5	5"	280	17	21	28	34	134 lbs [60.8 kg]
K92	6	6"	360	10	13	17	21	175 lbs [79.4 kg]

In-To-Open (fail-closed)				Maximum Close-Off Pressure (psid)				Approximate Shipping Wt.
Valve Body Number Class 250	Size Connection (Flanged)	Nominal Port	C <sub>v</sub>	Actuator				
				940B*	940B w/Positioner	940C*	940C w/Positioner	
L72	2 1/2	2 1/2"	65	101	118	145	169	64 lbs [29.0 kg]
L77	3	3"	90	65	77	96	113	77 lbs [34.9 kg]
L82	4	4"	170	32	39	49	58	131 lbs [59.4 kg]
L87	5	5"	280	17	21	28	34	166 lbs [75.3 kg]
L92	6	6"	360	10	13	17	21	233 lbs [105.7kg]

\*Requires a 9-15 psi input signal.

# CAST IRON

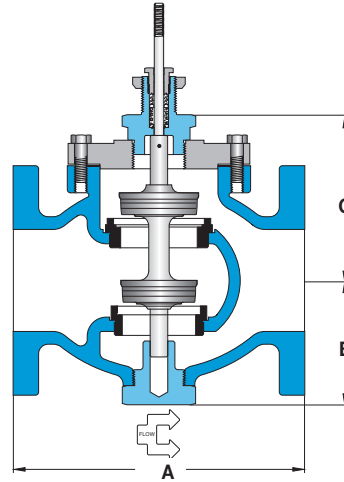
# Valve Body Selection (for 940 Series Heavy Duty Control Valve)

Double Seat • 1½" – 8"

All dimensions are nominal. Dimensions in [ ] are in millimeters.



## Stem In-to-Close (fail-open)



Note: Drawing depicts flanged connections; 1½" & 2" valves have threaded connections.

CONTROL VALVES

Size	Class 125			Class 250		
	A	B	C	A	B	C
1½"	x	x	x	7.4 [188]	3.8 [97]	4.5 [114]
2"	x	x	x	7.4 [188]	3.8 [97]	4.5 [114]
2½"	7.8 [198]	4.0 [102]	4.9 [124]	8.4 [213]	4.0 [102]	4.9 [124]
3"	9.0 [229]	4.3 [109]	5.3 [135]	9.8 [249]	4.3 [109]	5.3 [135]
4"	11.4 [290]	4.9 [124]	6.6 [168]	12.0 [305]	4.9 [124]	6.6 [168]
5"	12.0 [305]	6.7 [170]	7.6 [193]	12.9 [328]	6.7 [170]	7.6 [193]
6"	14.1 [358]	7.4 [188]	8.5 [216]	14.5 [368]	7.4 [188]	8.5 [216]
8"	16.3 [414]	8.7 [221]	9.6 [244]	16.3 [414]	8.7 [221]	9.6 [244]

## Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Cast-iron	Stainless steel	Equal percentage	Class II	1½"-2": Threaded 2½"-8": Class 125 flanged 1½"-8": Class 250 flanged	280 PSI @ 350°F (177°C) 140 PSI @ 300°F (149°C) 310 PSI @ 300°F (149°C)

## Valve Body Selection

In-To-Close (fail-open)				Maximum Close-Off Pressure (psid)		Approximate Shipping Wt.
Valve Body Number Class 125	Size		C <sub>v</sub>	Actuator		
	Connection (Flanged)	Nominal Port		940B	940B w/Positioner	
K73	2½"	2½"	70	140	140	32 lbs [14.5 kg]
K78	3"	3"	100	140	140	42 lbs [19.1 kg]
K83	4"	4"	200	93	140	77 lbs [34.9 kg]
K88	5"	5"	260	49	140	124 lbs [56.2 kg]
K93	6"	6"	350	18	140	169 lbs [76.7 kg]
K98	8"	8"	680	x	140	290 lbs [131.5 kg]

In-To-Close (fail-open)				Maximum Close-Off Pressure (psid)		Approximate Shipping Wt.
Valve Body Number Class 250	Size		C <sub>v</sub>	Actuator		
	Connection (Flanged)	Nominal Port		940B	940B w/Positioner	
L50	1½" NPT	1½"	30	280	280	19 lbs [8.6 kg]
L61	2 NPT	2"	42	280	280	19 lbs [8.6 kg]
L73	2½"	2½"	70	250	310	42 lbs [19.1 kg]
L78	3"	3"	100	180	310	54 lbs [24.5 kg]
L83	4"	4"	200	93	310	96 lbs [43.5 kg]
L88	5"	5"	260	49	310	162 lbs [73.5 kg]
L93	6"	6"	350	18	310	220 lbs [99.8 kg]
L98	8"	8"	680	x	310	380 lbs [172.4 kg]

# Valve Body Selection

(for 940 Series Heavy Duty Control Valve)

# CAST IRON

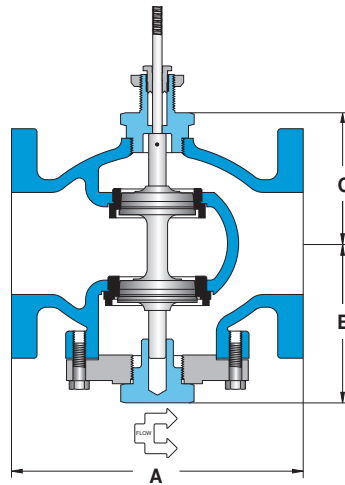
## Double Seat • 1½" – 8"

All dimensions are nominal. Dimensions in [ ] are in millimeters.



CONTROL VALVES

### Stem In-to-Open (fail-closed)



Size	Class 125			Class 250		
	A	B	C	A	B	C
1½"	x	x	x	7.4 [188]	3.8 [97]	3.9 [99]
2"	x	x	x	7.4 [188]	3.8 [97]	3.9 [99]
2½"	7.8 [198]	4.7 [119]	4.1 [104]	8.4 [213]	4.7 [119]	4.1 [104]
3"	9.0 [229]	4.9 [124]	4.4 [112]	9.8 [249]	4.9 [124]	4.4 [112]
4"	11.4 [290]	6.3 [160]	5.2 [132]	12.0 [305]	6.3 [160]	5.2 [132]
5"	12.0 [305]	6.7 [170]	7.6 [193]	12.9 [328]	6.7 [170]	7.6 [193]
6"	14.1 [358]	7.4 [188]	8.5 [216]	14.5 [368]	7.4 [188]	8.5 [216]
8"	16.3 [414]	8.7 [221]	9.6 [244]	16.3 [414]	8.7 [221]	9.6 [244]

Note: Drawing depicts flanged connections; 1½" & 2" valves have threaded connections.

### Specifications

Body Material	Trim Material	Trim Style	Close-Off	Connection	Pressure & Temperature Rating
Cast-iron	Stainless steel	Equal percentage	Class II	1½"-2": Threaded 2½"-8": Class 125 flanged 2½"-8": Class 250 flanged	280 PSI @ 350°F (177°C) 140 PSI @ 300°F (149°C) 310 PSI @ 300°F (149°C)

### Valve Body Selection

In-To-Open (fail-closed)				Maximum Close-Off Pressure (psid)		Approximate Shipping Wt.
Valve Body Number Class 125	Size		C <sub>v</sub>	Actuator		
	Connection (Flanged)	Nominal Port		940B	940B w/Positioner	
K74	2½"	2½"	70	140	140	32 lbs [14.5 kg]
K79	3"	3"	100	140	140	42 lbs [19.1 kg]
K84	4"	4"	200	93	140	77 lbs [34.9 kg]
K89	5"	5"	260	49	140	124 lbs [56.2 kg]
K94	6"	6"	350	18	140	169 lbs [76.7 kg]
K99	8"	8"	680	x	140	290 lbs [131.5 kg]

In-To-Open (fail-closed)				Maximum Close-Off Pressure (psid)		Approximate Shipping Wt.
Valve Body Number Class 250	Size		C <sub>v</sub>	Actuator		
	Connection (Flanged)	Nominal Port		940B	940B w/Positioner	
L55	1½" NPT	1½"	30	280	280	19 lbs [8.6 kg]
L66	2 NPT	2"	42	280	280	19 lbs [8.6 kg]
L74	2½"	2½"	70	250	310	42 lbs [19.1 kg]
L79	3"	3"	100	180	310	54 lbs [24.5 kg]
L84	4"	4"	200	93	310	96 lbs [43.5 kg]
L89	5"	5"	260	49	310	162 lbs [73.5 kg]
L94	6"	6"	350	18	310	220 lbs [99.8 kg]
L99	8"	8"	680	x	310	380 lbs [172.4 kg]

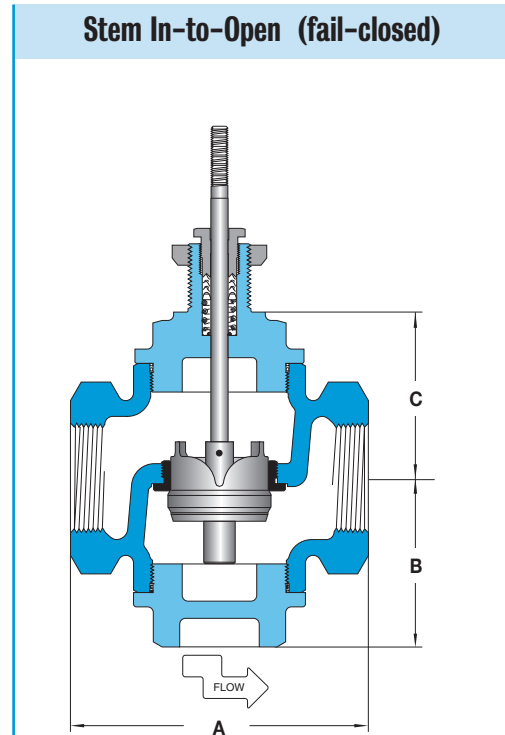
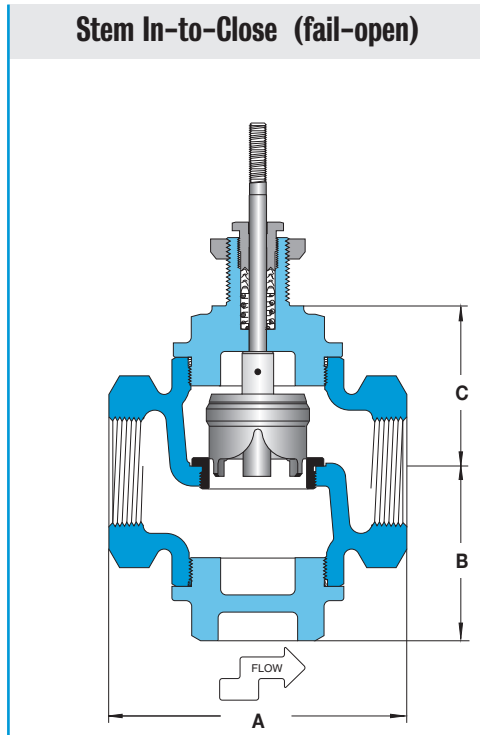
# STAINLESS STEEL

# Valve Body Selection (for 940 Series Heavy Duty Control Valve)

All dimensions are nominal. Dimensions in [ ] are in millimeters.

Single Seat • 1/2" – 2"

CONTROL VALVES



## Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Stainless steel	Stainless steel	Equal percentage	Class IV	Threaded	515 PSI @ 400°F (204°C)

## Valve Body Selection

In-To-Close (fail-open)				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size		C <sub>v</sub>	Actuator		A	B	C	
	Connection (NPT)	Nominal Port		940B	940B w/Positioner				
M14	1/2	1/2"	4.9	353	515	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M19	3/4	3/4"	7.2	154	515	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M26	1	1"	10.0	78	515	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M47	1 1/2	1 1/2"	24	19	514	6.1 [155]	3.4 [86]	3.5 [89]	16 lbs [7.3 kg]
M58	2	2"	40	4	312	6.5 [165]	3.8 [97]	3.8 [97]	19 lbs [8.6 kg]

In-To-Open (fail-closed)				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size		C <sub>v</sub>	Actuator		A	B	C	
	Connection (NPT)	Nominal Port		940B*	940B w/Positioner				
M15	1/2	1/2"	4.9	515	515	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M22	3/4	3/4"	7.2	515	515	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M30	1	1"	10	515	515	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M52	1 1/2	1 1/2"	24	248	286	6.1 [155]	3.4 [86]	3.5 [89]	16 lbs [7.3 kg]
M63	2	2"	40	146	170	6.5 [165]	3.8 [97]	3.8 [97]	19 lbs [8.6 kg]

\*Requires a 9-15 psi input signal.



# Valve Body Selection

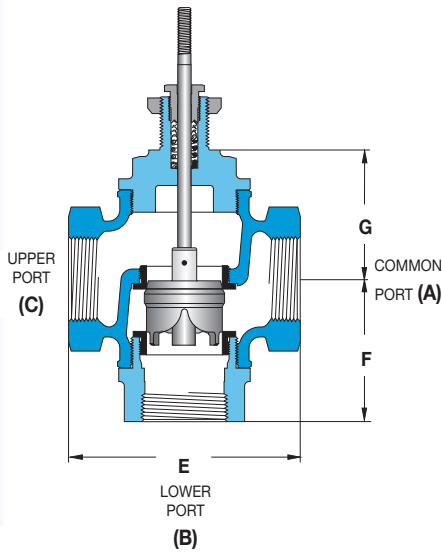
(for 940 Series Heavy Duty Control Valve)

# BRONZE

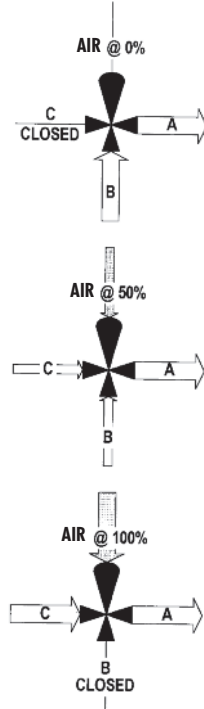
## 3-WAY • 1/2" – 2"

All dimensions are nominal. Dimensions in [ ] are in millimeters.

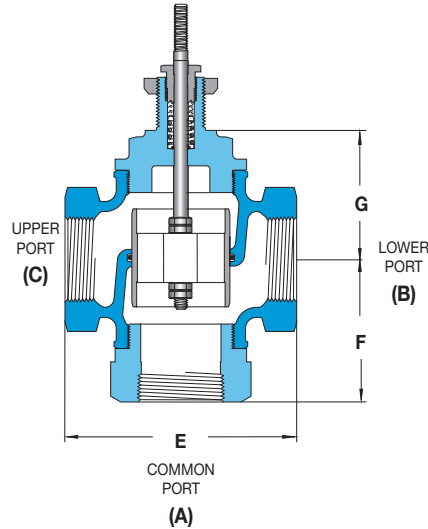
### Mixing



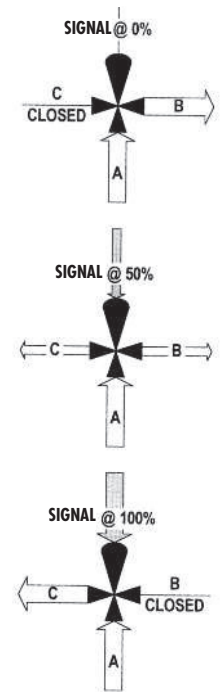
MIXING FLOW DIAGRAM



### Diverting



DIVERTING FLOW DIAGRAM



Trerice 3-Way Valves are not designed for use in steam applications.

To properly control the mixing of two flows, inlet pressures at ports B and C should be as equal as possible.

### Specifications

Action	Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Mixing	Bronze	Stainless steel	Linear	Class IV	Threaded	335 PSI @ 300°F (149°C)
Diverting	Bronze	Bronze	Linear	Class II	Threaded	335 PSI @ 300°F (149°C)

### Valve Selection

Mixing				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size		C <sub>v</sub>	Actuator		E	F	G	
	Connection (NPT)	Nominal Port		940B	940B w/Positioner				
N18	1/2	1/2"	6.3	201	335	4.9 [124]	2.7 [69]	2.8 [71]	9 lbs [4.1 kg]
N25	3/4	3/4"	8.2	81	335	4.9 [124]	2.7 [69]	2.8 [71]	9 lbs [4.1 kg]
N34	1	1"	10	33	335	4.9 [124]	2.7 [69]	2.8 [71]	9 lbs [4.0 kg]
N56	1 1/2	1 1/2"	20	x	286	5.8 [147]	3.8 [97]	3.4 [86]	16 lbs [7.3 kg]
N67	2	2"	40	x	170	6.5 [165]	4.0 [102]	3.8 [97]	20.0 lbs [9.1 kg]

Diverting				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size		C <sub>v</sub>	Actuator		E	F	G	
	Connection (NPT)	Nominal Port		940B	940B w/Positioner				
J34	1	1"	12	125	118	4.9 [124]	2.7 [69]	2.8 [72]	9 lbs [4.1 kg]
J56	1 1/2	1 1/2"	22	125	115	5.8 [147]	3.8 [97]	3.5 [89]	17 lbs [7.3 kg]
J67	2	2"	40	125	113	6.5 [165]	4.0 [102]	3.8 [97]	21 lbs [9.5 kg]

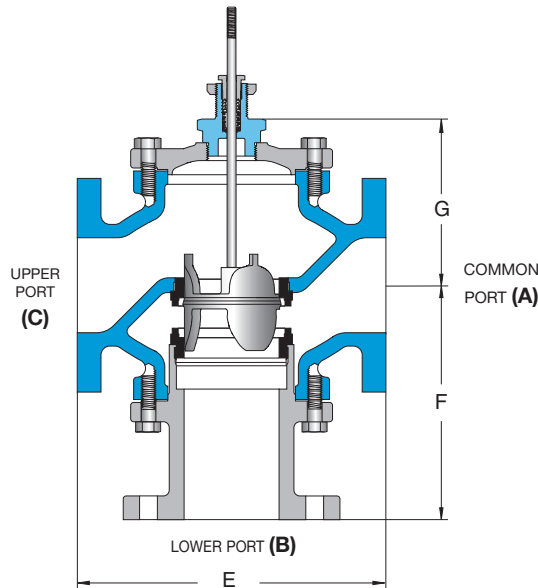
CONTROL VALVES

All dimensions are nominal. Dimensions in [ ] are in millimeters.

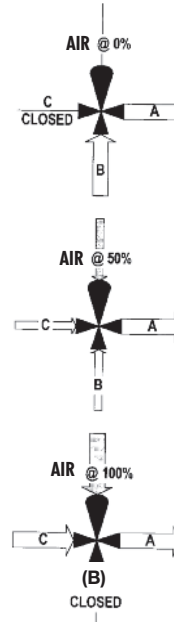


3-WAY • 2 1/2" – 8"

## Mixing



MIXING FLOW DIAGRAM



CONTROL VALVES

Mixing Size	Class 125			Class 250		
	E	F	G	E	F	G
2 1/2"	9.0 [229]	7.1 [180]	5.5 [140]	9.6 [244]	7.4 [188]	5.5 [140]
3"	10.0 [254]	7.9 [201]	6.1 [155]	10.8 [274]	8.3 [211]	6.0 [152]
4"	13.0 [330]	9.9 [251]	7.1 [180]	13.6 [345]	10.2 [259]	7.1 [180]
5"	15.8 [401]	9.3 [236]	6.0 [152]	16.6 [422]	10.4 [264]	6.0 [152]
6"	17.8 [452]	9.9 [251]	6.8 [173]	18.6 [472]	11.0 [279]	6.8 [173]
8"	21.4 [544]	14.5 [368]	8.8 [224]	22.4 [569]	14.5 [368]	8.8 [224]

**Trerice 3-Way Valves are not designed for use in steam applications.**

**To properly control the mixing of two flows, inlet pressures at ports B and C should be as equal as possible.**

## Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Cast-iron	Stainless steel	Linear	Class IV	Class 125 flanged Class 250 flanged	140 PSI @ 300°F (149°C) 310 PSI @ 300°F (149°C)

## Valve Body Selection

Mixing Valve Body Number		Size			Maximum Close-Off Pressure (psid)				Approximate Shipping Wt.	
Class 125	Class 250	Connection (Flanged)	Nominal Port	C <sub>v</sub>	940B	940B w/Positioner	940C	940C w/Positioner	Class 125	Class 250
P75	Q75	2 1/2	2 1/2"	69	x	118	x	169	64 lbs [29.0 kg]	73 lbs [33.1 kg]
P80	Q80	3	3"	86	x	77	x	113	83 lbs [37.6 kg]	94 lbs [42.6 kg]
P85	Q85	4	4"	156	x	39	x	58	139 lbs [63.0 kg]	157 lbs [71.2 kg]
P90	Q90	5	5"	270	x	21	x	34	157 lbs [71.2 kg]	211 lbs [95.7 kg]
P95	Q95	6	6"	347	x	13	x	21	202 lbs [91.6 kg]	283 lbs [128.4 kg]
P100	Q100	8	8"	450	Consult Factory				Consult Factory	

# Valve Body Selection

(for 940 Series Heavy Duty Control Valve)

# CAST IRON

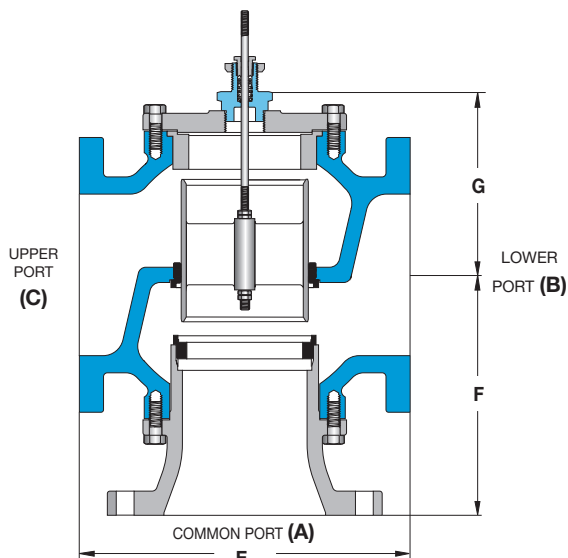
3-WAY • 2 1/2" – 8"



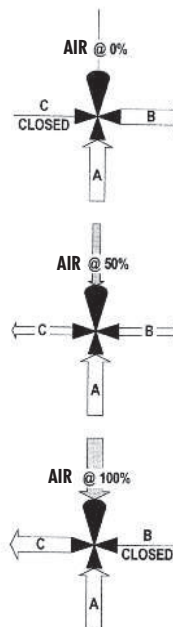
All dimensions are nominal. Dimensions in [ ] are in millimeters.

CONTROL VALVES

## Diverting



DIVERTING FLOW DIAGRAM



Diverting Size	Class 125			Class 250		
	E	F	G	E	F	G
2 1/2"	9.0 [229]	7.1 [180]	5.5 [140]	9.6 [244]	7.4 [188]	5.5 [140]
3"	10.0 [254]	8.0 [203]	6.1 [155]	10.8 [274]	8.4 [213]	6.1 [155]
4"	13.0 [330]	9.9 [251]	7.1 [180]	13.6 [345]	10.3 [262]	7.1 [180]
5"	12.0 [305]	10.5 [267]	7.5 [191]	12.9 [328]	11.0 [279]	7.5 [191]
6"	14.1 [358]	11.1 [282]	8.1 [206]	14.5 [368]	11.5 [292]	8.1 [206]
8"	16.3 [414]	11.8 [300]	9.2 [234]	N/A	N/A	N/A

Trerice 3-Way Valves are not designed for use in steam applications.

## Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Cast-iron	Bronze	Linear	Class II	Class 125 flanged Class 250 flanged	140 PSI @ 300°F (149°C) 310 PSI @ 300°F (149°C)

## Valve Body Selection

Diverting					Maximum Close-Off Pressure (psid)				Approximate Shipping Wt.	
Valve Body Number		Size		C <sub>v</sub>	Actuator				Class 125	Class 250
Class 125	Class 250	Connection (Flanged)	Nominal Port		940B	940B w/Positioner	940C	940C w/Positioner		
K75	L75	2 1/2	2 1/2"	68	x	110	x	x	59 lbs [26.8 kg]	73 lbs [33.1 kg]
K80	L80	3	3"	85	x	108	x	x	78 lbs [35.4 kg]	94 lbs [42.6 kg]
K85	L85	4	4"	160	x	106	x	111	138 lbs [62.6 kg]	164 lbs [74.4 kg]
K90	L90	5	5"	195	x	104	x	108	152 lbs [68.9 kg]	213 lbs [96.6 kg]
K95	L95	6	6"	270	x	102	x	106	203 lbs [92.1 kg]	284 lbs [128.8 kg]
K100	N/A	8	8"	425	x	x	x	104	316 lbs [143.3 kg]	N/A

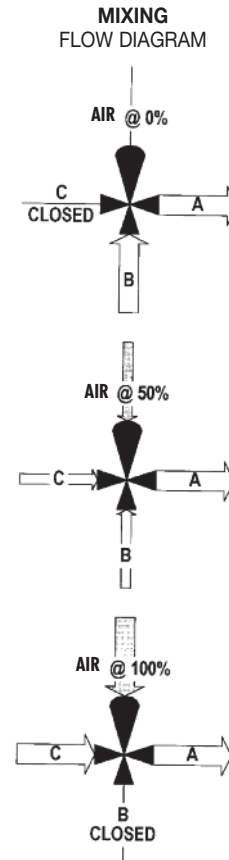
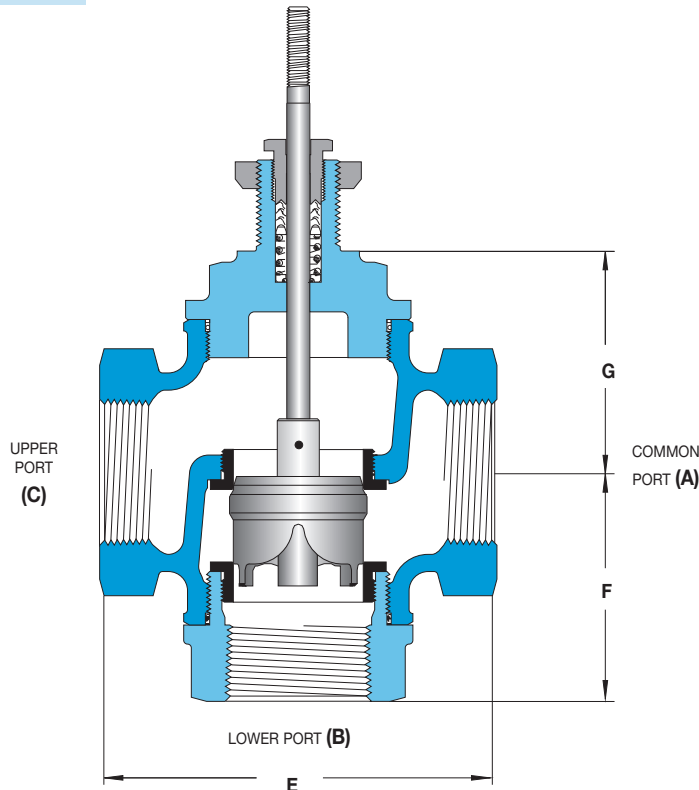
# STAINLESS STEEL

# Valve Body Selection (for 940 Series Heavy Duty Control Valve)

All dimensions are nominal. Dimensions in [ ] are in millimeters.

3-WAY • 1/2" – 2"

## Mixing



CONTROL VALVES

Trerice 3-Way Valves are not designed for use in steam applications. To properly control the mixing of two flows, inlet pressures at ports B and C should be as equal as possible.

## Specifications

Body Material	Trim Material	Trim Style	Close-off	Connection	Pressure & Temperature Rating
Stainless steel	Stainless steel	Linear	Class IV	Threaded	515 PSI @ 400°F (204°C)

## Valve Selection

Mixing				Maximum Close-Off Pressure (psid)		Dimensions			Approximate Shipping Wt.
Valve Body Number	Size		C <sub>v</sub>	Actuator		E	F	G	
	Connection (NPT)	Nominal Port		940B	940B w/Positioner				
M18	1/2	1/2"	6.3	210	335	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M25	3/4	3/4"	8.2	81	335	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M34	1	1"	10	33	335	5.0 [127]	2.8 [71]	2.8 [71]	8 lbs [3.6 kg]
M56	1 1/2	1 1/2"	20	x	286	6.1 [155]	3.4 [86]	3.5 [89]	15 lbs [6.8 kg]
M67	2	2"	40	x	170	6.5 [165]	3.8 [97]	3.8 [97]	19 lbs [8.6 kg]