

# ▼ TYPE ER

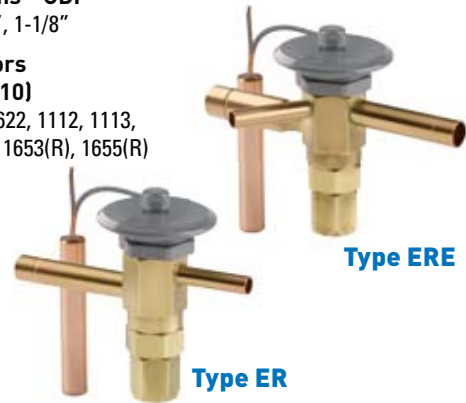
For Refrigerants 22, 134a, 404A, 410A, 507  
ODF Solder Connections

## FEATURES

- Small brass body
- Replaceable thermostatic element with gray epoxy coating
- Internally and externally equalized versions available
- Two body sizes:  
Small - For capacities less than 8 tons R-22, 6 tons R-404A, 5 tons R-134a and 8 tons R-410A  
Large - For capacities 10 to 12 tons R-22, 12-1/2 to 15 tons R-410A
- ODF connections in a variety of common sizes
- Inlet strainer available
- Available in single lot or case quantities
- Option for 15% bleed port  
(Other bleed port rates available with OEM version only)

**Outlet Connections - ODF**  
3/8", 1/2", 5/8", 7/8", 1-1/8"

**Mating Distributors**  
(See Bulletin 20-10)  
D260, D262, 1620, 1622, 1112, 1113,  
1115, 1116, 1651(R), 1653(R), 1655(R)



## SPECIFICATIONS

- Operating Temperature Range: -40°F (-40°C) through 50°F (10°C)
- Maximum Ambient Temperature: 140°F (60°C)
- Maximum Rated Pressure (UL): 450 psig (31 bar)  
700 psig (48.3 bar) for R-410A Only
- Maximum Low Side Test Pressure: 450 psig (31 bar)  
700 psig (48.3 bar) for R-410A Only
- Agency Certifications: UL Recognized under file SA5410.  
Covered under CE and the PED (Pressure Equipment Directive)



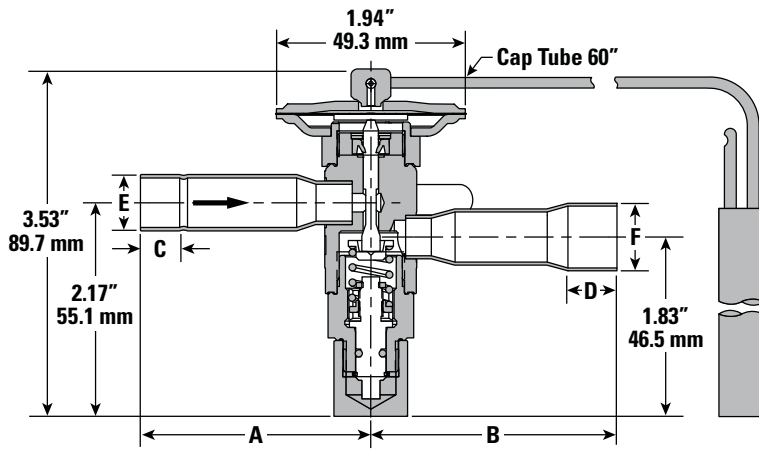
For complete details of construction, see page 2.

## MAXIMUM DEHYDRATION and BULB TEMPERATURE

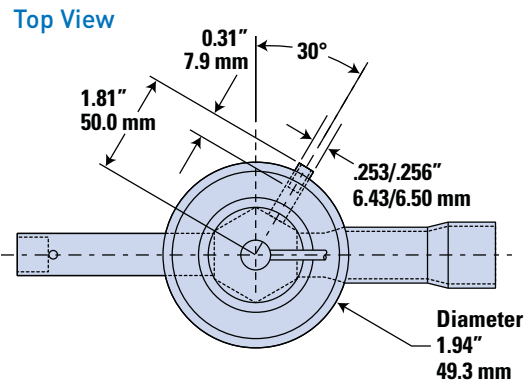
REFRIGERANT	THERMOSTATIC CHARGE			
	C	Z	GA	P TYPE, ZP SERIES
12, 134a	190°F 88°C	250°F 121°C	–	250°F 121°C
22, 407C	160°F 71°C	185°F 85°C	250°F 121°C	250°F 121°C
404A, 502, 507	150°F 66°C	170°F 77°C	–	250°F 121°C
410A	–	–	250°F* 121°C*	250°F* 121°C*

\* Bulb temperature can not exceed 160°F (71°C).

## DIMENSIONS - TYPE ERE (SMALL BODY) with NUMBER 43 and 45 ELEMENT



1/4 ODF Insert Strainer - P/N 1543-002  
3/8 ODF Insert Strainer - P/N 1524-000



## CONNECTIONS

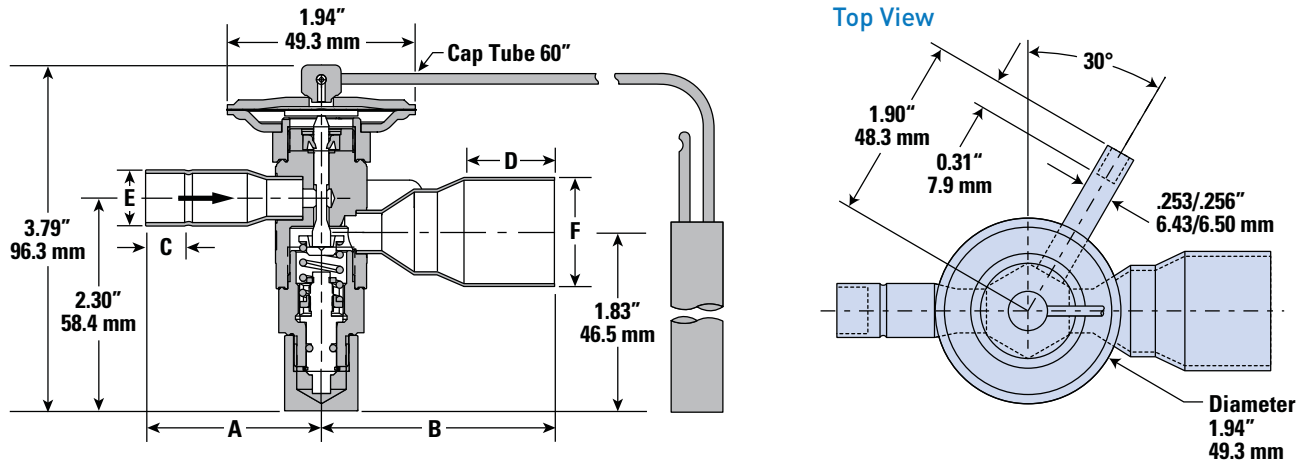
FITTING SIZE		Inches						mm					
Inlet	Outlet	A	B	C	D	E	F	A	B	C	D	E	F
1/4	3/8	1.69	2.42	0.31	0.31	.253/.256	.377/.381	42.9	61.5	7.87	7.87	6.43/6.50	9.58/9.68
3/8	1/2	2.42	2.51	0.31	0.40	.377/.381	.502/.506	61.5	63.8	7.90	10.2	9.58/9.68	12.8/12.9
1/2	5/8	2.35	2.51	0.40	0.50	.502/.506	.627/.632	59.7	63.8	10.2	12.7	12.8/12.9	15.9/16.1
	7/8		2.41		0.78	.877/.882	19.8						
5/8	1-1/8	2.35	2.41	0.50	0.91	.627/.632	1.128/1.135	59.7	61.2	12.7	23.1	15.9/16.1	28.7

# ▼ TYPE ER

For Refrigerants 22, 134a, 404A, 410A, 507  
ODF Solder Connections

## SPECIFICATIONS - CONTINUED

### DIMENSIONS - TYPE ERE (LARGE BODY) with NUMBER 45-5 ELEMENT



### CONNECTIONS

FITTING SIZE Inches		Inches						mm						
		A	B	C	D	E	F	A	B	C	D	E	F	
Inlet	Outlet													
5/8	7/8	2.48	2.51	0.50	0.78	.627/.632	.877/.882	63.0	63.8	12.7	19.8	15.9/16.1	22.3/22.4	28.7/28.8
	1-1/8				0.91		1.128/1.135				23.1			

### BULB SIZES

REFRIGERANT	STANDARD CHARGE	BULB DIMENSION		REPLACEMENT	PART NUMBER			
		Inches	mm		CAPILLARY TUBE LENGTH			
					30" 760 mm	60" 1500 mm		
R-404A R-408A R-502	C	0.50 OD x 3.00	12.7 OD x 76.2	KT-43-SC	179943	180204		
R-402A R-507	C			KT-43-PC	180288	180338		
R-402A R-404A R-408A R-502 R-507	Z			KT-43-SZ	180228	180318		
	ZP			KT-43-SZP	180230	180060		
R-22 R-407C R-422D	C			0.75 OD x 2.00	19.5 OD x 50.8	KT-43-VC	180269	180319
	CP100					KT-43-VCP100	180270	180272
	GA					KT-43-VGA	180284	180276
R-134a R-401A R-409A	C	0.50 OD x 3.00	12.7 OD x 76.2	KT-43-JC	180314	180310		
	CP60			KT-43-JCP60	180206	180312		
R-410A	ZGA	0.75 OD x 2.00	19.5 OD x 50.8	KT-45-ZGA	181209	181212		
				KT-45-5-ZGA	—	180298		
	ZCP180	0.50 OD x 3.00	12.7 OD x 76.2	KT-45-ZCP180	181355	181213		
				KT-45-5-ZCP180	—	181216		

# ▼ TYPE ER

For Refrigerants 22, 134a, 404A, 410A, 507  
ODF Solder Connections

## SPECIFICATIONS - CONTINUED

### VALVE NOMENCLATURE

<b>ER</b>	<b>Z</b>	<b>E</b>	–	<b>1</b>	–	<b>GA</b>	–	<b>3/8</b>	x	<b>1/2</b>	x	<b>1/4</b>	–	<b>60"</b>
Valve Type	Refrigerant Code	Externally Equalized		Nominal Capacity in Tons		Thermostatic Charge		Inlet Connection Size		Outlet Connection Size		External Equalizer Connection Size		Capillary Tube Length

R-22, R-407C, R-422D

VALVE TYPE	VALVE SIZE	CONNECTIONS Inches		STRAINER INCLUDED	WITH EXTERNAL EQUALIZER	CAPILLARY TUBE LENGTH		THERMOSTATIC CHARGE		
		Inlet	Outlet			Inches	mm	C	CP100	GA
								TYPE R with 22 (V) Refrigerant		
Part Number										
ER	ERV-1/3	1/4 ODF	3/8 ODF	YES	NO	30	760	169159	—	—
	ERV-1/3	1/4 ODF	1/2 ODF	YES	NO	30	760	169173	—	—
	ERV-1/3	3/8 ODF	1/2 ODF	YES	NO	30	760	169209	—	—
	ERV-1/2	1/4 ODF	3/8 ODF	YES	NO	30	760	169158	—	—
	ERV-1/2	1/4 ODF	1/2 ODF	YES	NO	30	760	169172	—	—
	ERV-1/2	3/8 ODF	1/2 ODF	YES	NO	30	760	169208	—	—
	ERV-1	3/8 ODF	1/2 ODF	YES	NO	60	1500	169206	—	—
	ERV-2	3/8 ODF	1/2 ODF	YES	NO	60	1500	169207	—	—
	ERVE-1/3	1/4 ODF	1/2 ODF	YES	YES	30	760	169187	—	—
	ERVE-1/2	1/4 ODF	1/2 ODF	YES	YES	30	760	169186	—	—
	ERVE-1/2	3/8 ODF	1/2 ODF	YES	YES	30	760	169246	—	—
	ERVE-1	1/4 ODF	1/2 ODF	YES	YES	60	1500	169185	—	—
	ERVE-1	3/8 ODF	1/2 ODF	YES	YES	60	1500	169230	168796	168798
	ERVE-1-1/2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169243	168742	168743
	ERVE-2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169231	168744	168745
	ERVE-3	3/8 ODF	1/2 ODF	YES	YES	60	1500	169234	168746	168748
	ERVE-3	1/2 ODF	5/8 ODF	NO	YES	60	1500	169265	168747	168749
	ERVE-4	3/8 ODF	1/2 ODF	YES	YES	60	1500	169238	168750	168753
	ERVE-4	1/2 ODF	5/8 ODF	NO	YES	60	1500	169268	168751	168754
	ERVE-4	1/2 ODF	7/8 ODF	NO	YES	60	1500	169282	168752	168755
	ERVE-5	3/8 ODF	1/2 ODF	YES	YES	60	1500	169241	168756	168759
	ERVE-5	1/2 ODF	5/8 ODF	NO	YES	60	1500	169271	168757	168760
	ERVE-5	1/2 ODF	7/8 ODF	NO	YES	60	1500	169283	168758	168761
	ERVE-6	1/2 ODF	5/8 ODF	NO	YES	60	1500	169274	168762	168766
	ERVE-6	1/2 ODF	7/8 ODF	NO	YES	60	1500	169284	168763	168767
	ERVE-6	5/8 ODF	7/8 ODF	NO	YES	60	1500	169293	168764	168768
	ERVE-8	1/2 ODF	7/8 ODF	NO	YES	60	1500	—	168769	168772
	ERVE-8	5/8 ODF	7/8 ODF	NO	YES	60	1500	169294	168770	168773
	ERVE-8	5/8 ODF	1-1/8 ODF	NO	YES	60	1500	—	168771	168774
	ERVE-10	5/8 ODF	7/8 ODF	NO	YES	60	1500	169295	168775	168777
ERVE-10	5/8 ODF	1-1/8 ODF	NO	YES	60	1500	—	168776	168778	
ERVE-12	5/8 ODF	7/8 ODF	NO	YES	60	1500	169296	168779	168781	
ERVE-12	5/8 ODF	1-1/8 ODF	NO	YES	60	1500	—	168780	168782	

# ▼ TYPE ER

For Refrigerants 22, 134a, 404A, 410A, 507  
ODF Solder Connections

## SPECIFICATIONS - CONTINUED

R-404A, R-408A, R-507

VALVE TYPE	VALVE SIZE	CONNECTIONS Inches		STRAINER INCLUDED	WITH EXTERNAL EQUALIZER	CAPILLARY TUBE LENGTH		THERMOSTATIC CHARGE		
		Inlet	Outlet			Inches	mm	C*	Z	ZP
								TYPE R with 404A (S) Refrigerant Part Number		
ER	ERS-1/6	1/4 ODF	3/8 ODF	YES	NO	30	760	169155	169156	169157
	ERS-1/6	1/4 ODF	1/2 ODF	YES	NO	30	760	169169	169170	169171
	ERS-1/6	3/8 ODF	1/2 ODF	YES	NO	30	760	169203	169204	169205
	ERS-1/4	1/4 ODF	3/8 ODF	YES	NO	30	760	169152	169153	169154
	ERS-1/4	1/4 ODF	1/2 ODF	YES	NO	30	760	169166	169167	169168
	ERS-1/4	3/8 ODF	1/2 ODF	YES	NO	30	760	169200	169201	169202
	ERS-1/2	1/4 ODF	3/8 ODF	YES	NO	60	1500	169149	169150	169151
	ERS-1/2	1/4 ODF	1/2 ODF	YES	NO	60	1500	169163	169165	169164
	ERS-1/2	3/8 ODF	1/2 ODF	YES	NO	60	1500	169198	169197	169199
	ERS-1	3/8 ODF	1/2 ODF	YES	NO	60	1500	169191	169192	169193
	ERS-1-1/2	3/8 ODF	1/2 ODF	YES	NO	60	1500	169195	169196	169194
	ERSE-1/6	1/4 ODF	1/2 ODF	YES	YES	30	760	169184	—	—
	ERSE-1/4	1/4 ODF	1/2 ODF	YES	YES	30	760	169181	169183	169182
	ERSE-1/2	1/4 ODF	1/2 ODF	YES	YES	60	1500	169178	169180	169179
	ERSE-1/2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169228	169229	169227
	ERSE-1	1/4 ODF	1/2 ODF	YES	YES	60	1500	169177	169176	—
	ERSE-1	3/8 ODF	1/2 ODF	YES	YES	60	1500	169216	169217	169215
	ERSE-1-1/2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169224	169223	169222
	ERSE-2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169219	169220	169218
	ERSE-3	3/8 ODF	1/2 ODF	YES	YES	60	1500	169226	169221	169225
ERSE-3	1/2 ODF	5/8 ODF	NO	YES	60	1500	169260	169261	169262	
ERSE-4	1/2 ODF	7/8 ODF	NO	YES	60	1500	169278	169280	169279	
ERSE-6	5/8 ODF	7/8 ODF	NO	YES	60	1500	169287	169288	169289	

\* For C charge on R-507 or R-402A, use element kit 180288 (30") or 180338 (60") KT-43-PC.

# ▼ TYPE ER

For Refrigerants 22, 134a, 404A, 410A, 507  
ODF Solder Connections

## SPECIFICATIONS - CONTINUED

R-134a, R-401A, R-409A

VALVE TYPE	VALVE SIZE	CONNECTIONS Inches		STRAINER INCLUDED	WITH EXTERNAL EQUALIZER	CAPILLARY TUBE LENGTH		THERMOSTATIC CHARGE	
		Inlet	Outlet			Inches	mm	C	CP60
								TYPE R with 134a (J) Refrigerant	
ER	ERJ-1/6	1/4 ODF	1/2 ODF	YES	NO	30	760	169162	—
	ERJ-1/4	1/4 ODF	3/8 ODF	YES	NO	30	760	169147	—
	ERJ-1/4	1/4 ODF	1/2 ODF	YES	NO	30	760	169161	—
	ERJ-1/2	1/4 ODF	3/8 ODF	YES	NO	60	1500	169146	—
	ERJ-1/2	1/4 ODF	1/2 ODF	YES	NO	60	1500	169160	—
	ERJ-1/2	3/8 ODF	1/2 ODF	YES	NO	60	1500	169190	—
	ERJ-1	3/8 ODF	1/2 ODF	YES	NO	60	1500	169188	—
	ERJ-1-1/2	3/8 ODF	1/2 ODF	YES	NO	60	1500	169189	—
	ERJE-1/4	3/8 ODF	1/2 ODF	YES	YES	30	760	169175	—
	ERJE-1/2	1/4 ODF	1/2 ODF	YES	YES	60	1500	169174	—
	ERJE-1/2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169214	—
	ERJE-1	3/8 ODF	1/2 ODF	YES	YES	60	1500	169210	—
	ERJE-1-1/2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169213	—
	ERJE-2	3/8 ODF	1/2 ODF	YES	YES	60	1500	169211	—
	ERJE-2	1/2 ODF	5/8 ODF	NO	YES	60	1500	—	169257
	ERJE-3	3/8 ODF	1/2 ODF	YES	YES	60	1500	169212	—
	ERJE-3	1/2 ODF	5/8 ODF	NO	YES	60	1500	—	169258
	ERJE-4	1/2 ODF	5/8 ODF	NO	YES	60	1500	—	169259
	ERJE-4	1/2 ODF	7/8 ODF	NO	YES	60	1500	—	169277
	ERJE-5	5/8 ODF	7/8 ODF	NO	YES	60	1500	—	169285

R-410A

VALVE TYPE	VALVE SIZE	CONNECTIONS Inches		STRAINER INCLUDED	WITH EXTERNAL EQUALIZER	CAPILLARY TUBE LENGTH		THERMOSTATIC CHARGE	
		Inlet	Outlet			Inches	mm	CP180	GA
								TYPE R with 410A (Z) Refrigerant	
ER	ERZE-1	3/8 ODF	1/2 ODF	YES	YES	60	1500	168878	168790
	ERZE-1-1/2	3/8 ODF	1/2 ODF	YES	YES	60	1500	168783	168784
	ERZE-2	3/8 ODF	1/2 ODF	YES	YES	60	1500	168737	168786
	ERZE-3	3/8 ODF	1/2 ODF	YES	YES	60	1500	168787	168788
	ERZE-4	3/8 ODF	1/2 ODF	YES	YES	60	1500	168789	168718
	ERZE-5	3/8 ODF	1/2 ODF	YES	YES	60	1500	168791	168792
	ERZE-6	1/2 ODF	5/8 ODF	NO	YES	60	1500	168793	168794
	ERZE-8	1/2 ODF	7/8 ODF	NO	YES	60	1500	168795	168797
	ERZE-8	5/8 ODF	7/8 ODF	NO	YES	60	1500	168736	168719
	ERZE-12-1/2	5/8 ODF	7/8 ODF	NO	YES	60	1500	168799	168801
	ERZE-12-1/2	5/8 ODF	1-1/8 ODF	NO	YES	60	1500	168800	168802
	ERZE-15	5/8 ODF	7/8 ODF	NO	YES	60	1500	168803	168720
	ERZE-15	5/8 ODF	1-1/8 ODF	NO	YES	60	1500	168804	168807