

## Series AEL

### AUTOMATIC EXPANSION VALVES

### FIXED ORIFICE, ADJUSTABLE EVAPORATING PRESSURE

#### PRODUCT DATA



#### Features

- Smallest dimensions
- High performance
- Hermetic construction
- Wide evaporating pressure range
- Adjustable evaporating pressure setting
- Solder connections
- Internal pressure equalisation
- Extreme durable due to stainless steel head and stainless steel diaphragm welded using protective gas
- Fixed orifice
- Bypass on request
- Refrigerants: all CFC, HCFC, HFC, not for ammonia

#### Specification

<b>Nominal capacity range</b>	1.4 to 30.8 kW R22
<b>Evaporating pressure range</b>	1 - 7 bar
<b>Factory setting for evaporating pressure</b>	2.2 bar
<b>Maximum pressure PS</b>	25.5 bar
<b>Maximum test pressure</b>	28 bar
<b>Max. ambient temperature</b>	100 °C

#### Installation

- The valves may be installed in any position.
- When soldering the valve, the valve body must not get warmer than 100 °C.
- Remove plastic cap during soldering
- Constructive modifications at the valve are not allowed.

#### Adjustment

One complete revolution of the adjusting screw effects an alternation of the evaporating pressure by approx. 0.8 bar.

Turning clockwise	=	Higher evaporation pressure
Turning counterclockwise	=	Lower evaporation pressure

#### Application

Automatic expansion valves (constant pressure valves) series AEL are used in general refrigeration and for original equipment.

For plants with single injected evaporators and without a liquid receiver, such as air conditioners, dehumidifiers, air driers, water coolers or ice-making machines.

#### Materials

<b>Body</b>	brass
<b>Head</b>	stainless steel, brass
<b>Connection tubes</b>	copper

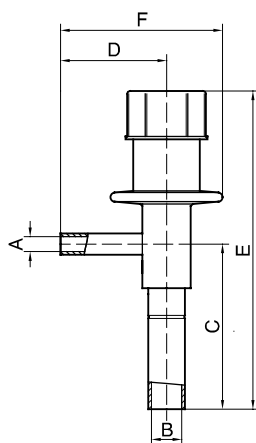
## Capacities

Type	Valve size	Orifice size	Nominal capacity (kW)			
			R134a	R22	R404A	R507
AEL	0.5	0.7	0.98	1.4	1.0	1.0
	1.0	1.0	1.4	2.1	1.5	1.5
	2.0	2.0	2.9	4.2	3.0	3.0
	3.0	3.0	6.7	9.8	6.8	6.9
	4.0	3.5	8.9	12.8	9.0	9.0
	5	4.75	16.3	23.6	16.5	16.6
	6	5	20.4	30.6	21.4	21.6

\* Capacities are based on  $t_0 = -10\text{ °C}$ ,  $t_c = +35\text{ °C}$  and 1 K subcooled liquid refrigerant entering the valve.  
For other operating conditions see capacity charts in Honeywell catalogue or consult the Honeywell software.

## Dimensions and Weights

Type	Valve size	Connections		Dimensions (mm)				Weight (kg)
		Inlet (A)	Outlet (B)	C	D	E	F	
AEL	0.5	6 mm ODF	10 mm ODF	58	36	106	54	approx. 0.16
	1.0		10 mm ODF					
	2.0	1/4" ODF	3/8" ODF					
	3.0							
	4.0	3/8" ODF	5/8" ODF	64	47	122	69	approx. 0.28
	5							
	6	10 mm ODF	16 mm ODF					
		3/8" ODF	5/8" ODF					



**Honeywell**

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