

## Series TLK

Thermostatic expansion valves with fixed orifice and solder connections

### Specification Data



### Application

For serial produced systems such as drink dispensers, ice cream machines, milk cooling units, water chillers, vehicle air conditioning systems. For single injected evaporators.

### Specification / Technical Data

- Gas charged for quick response time adapted to small evaporators.
- Wide temperature range.
- Smallest dimensions.
- Extreme durability thanks to welded stainless steel head and stainless steel diaphragm.
- Fixed orifice.
- Standard capillary length: 1.0 m.
- Bulb diameter: 12 mm.
- Static superheat setting: 3 K. Other settings on request.
- Available with MOP (pressure limitation).
- On request with by-pass.
- Max. ambient temperature: 100 °C.
- Max. suction pressure: 22 bar.
- Max. test pressure: 32 bar.
- Refrigerants: R 134a, R 404A, R 22, Others on request.

## Thermal charges and temperature ranges

### 1. Gas charge

Designation on the type label: G

Temperature range	Refrigerants
+ 15 °C to – 30 °C	R 134 a
+ 15 °C to – 45 °C	R 22
± 10 °C to – 50 °C	R 404 A

Further refrigerants on request.

### 1a. Pressure limitation (MOP)

**MOP** valves protect the compressor by limiting the increase of suction pressure. For orders without MOP-indication. MOP + 10 °C will be delivered.

The MOP value should be chosen 5 K higher than the evaporating temperature to guarantee a perfect functioning of the valve.

Refrigerants	MOP in °C			
R 134 a	+ 15 °C	+ 10 °C	± 0 °C	
R 22	+ 15 °C	+ 10 °C	± 0 °C	– 18 °C
R 404 A		+ 10 °C	± 0 °C	– 18 °C

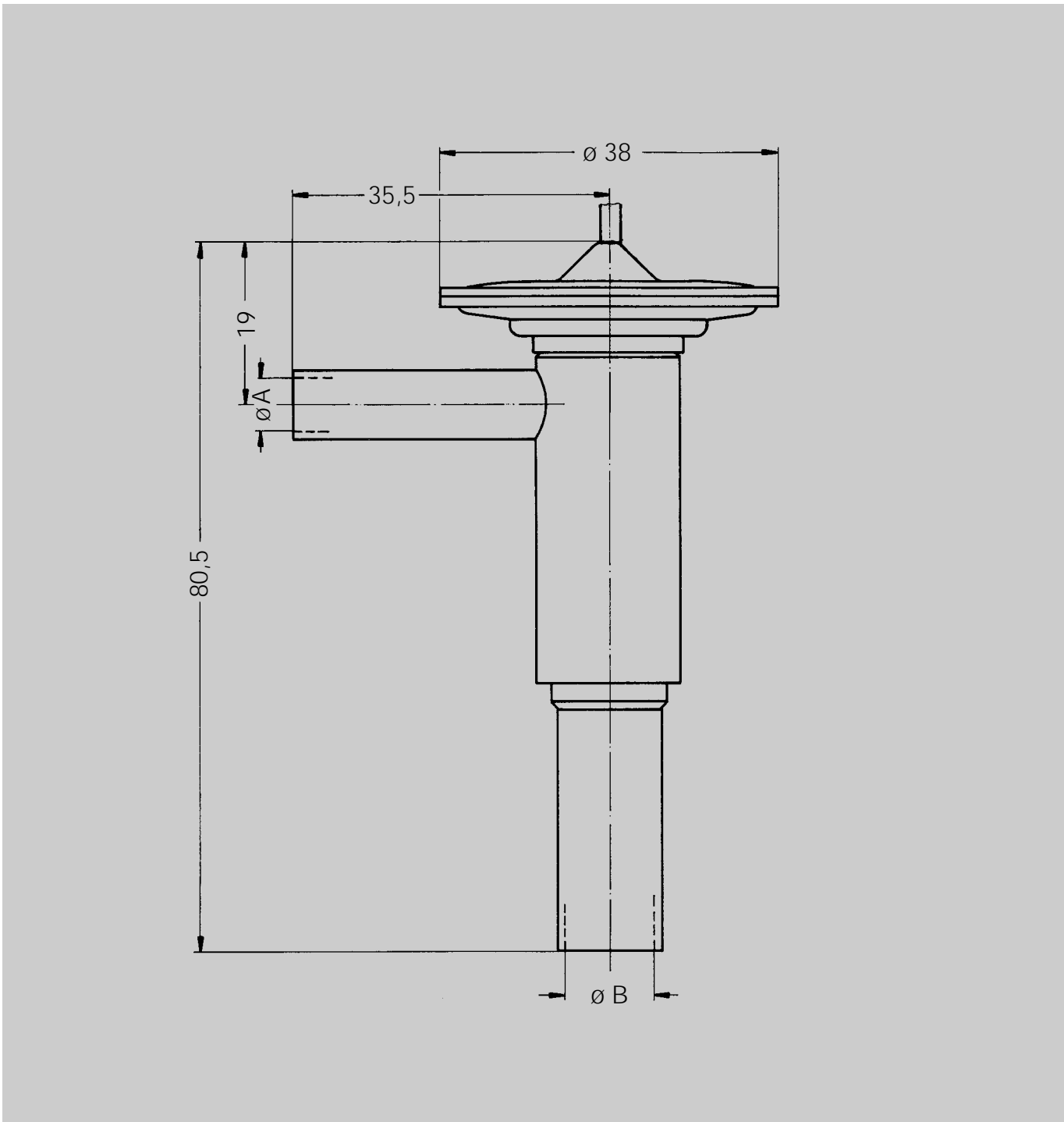
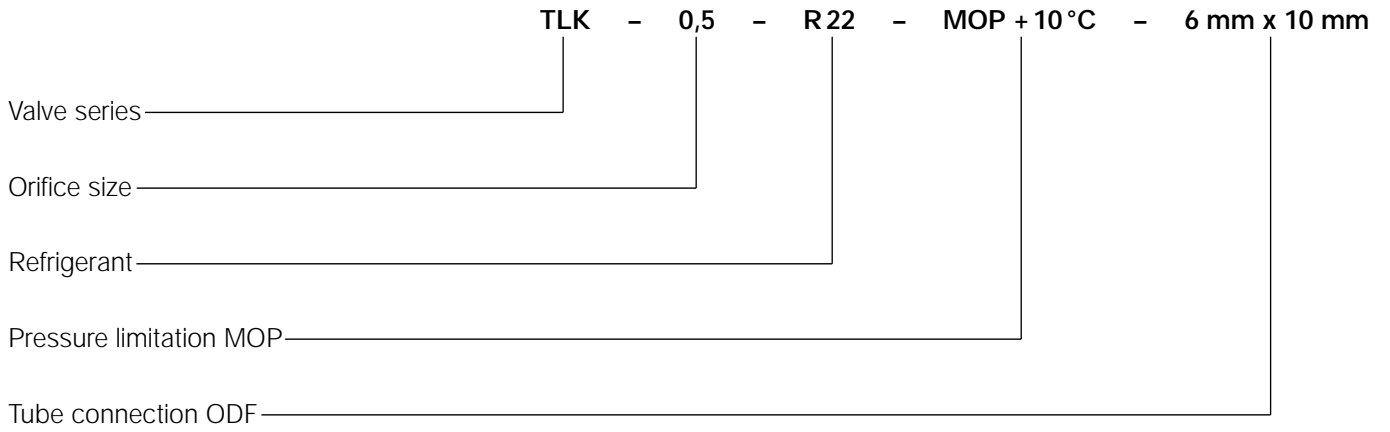
Further MOP suspensions on request.

## Capacities

Type	Valve size	Nominal capacities in kW*			Connections (solder ODF)				Weight kg
		R 134 a	R 22	R 404 A	Inlet (A)		Outlet (B)		
					mm	inch	mm	inch	
TLK	0.3	0.34	0.50	0.37	6	1/4"	10	3/8"	0.15
TLK	0.5	0.65	0.95	0.70					
TLK	0.7	0.90	1.30	1.00					
TLK	1.0	1.30	1.90	1.45					
TLK	1.5	2.10	3.10	2.30	10	3/8"	12	1/2"	
TLK	1.5	2.10	3.10	2.30					
TLK	2.0	2.70	3.90	2.90					

\* Capacities are based on  $t_0 = -10\text{ °C}$ ,  $t_c = +25\text{ °C}$  and 1 K subcooled liquid refrigerant entering the valve.  
For other operating conditions see selection tables in catalogue, section 8 or consult the Honeywell software.

Valve nomenclature / Order instructions



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## Installation

- The valves may be installed in any position in the liquid line.
- The bulb should preferably be positioned on the upper half of a horizontal suction line but never behind a liquid trap. As a general rule, bulbs of expansion valves should be insulated to prevent them from being affected by the ambient temperature.
- In case of ice formation at the mounting site of the bulb, we advise to use a bulb clamp instead of clips.
- When soldering the valve, use a damp cloth to protect the valve body against temperatures exceeding 100 °C.

## Options:

All OEM requirements.

## Materials:

Body/power head: brass/stainless steel.

Connection tubes: copper.

All data provided in this literature is subject to change without notice.

Honeywell cannot be held responsible for incorrect information contained therein.

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