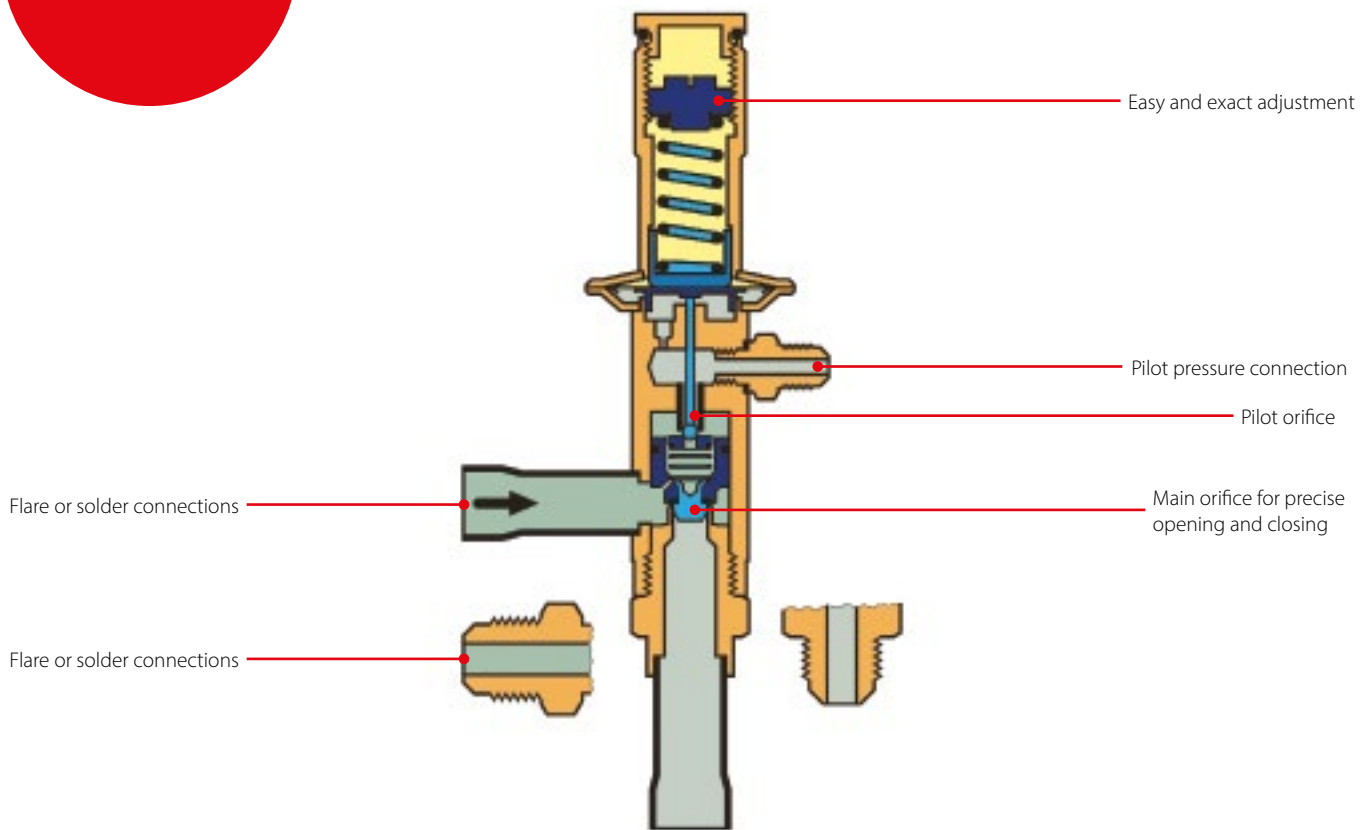
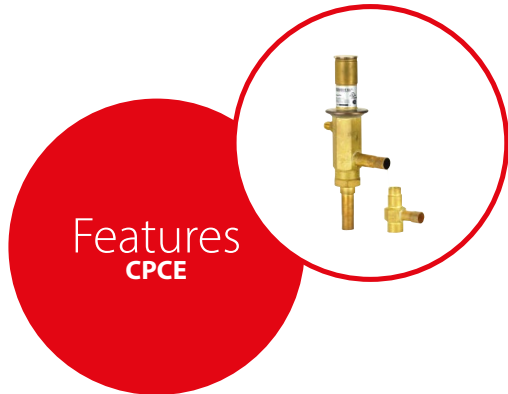


CPCE, Hot gas bypass regulator / LG, Liquid gas mixer (accessory)

CPCE hot gas bypass regulators adapt compressor capacity to actual evaporator load, and are designed for installation in a bypass line between the low and high pressure sides of the refrigeration system, for hot gas injection between evaporator and thermo-static expansion valve.

Injection is through an LG liquid-gas mixer.



Facts

Application:

- Traditional refrigeration
- Air conditioning units
- Commercial refrigeration
- Compressed air dryers
- Transport refrigeration

- Prevents high suction superheats by combining hot gas injection with expansion valve characteristics

- Can also protect against too low an evaporating temperature, i.e. to prevent evaporator icing
- LG Liquid-gax mixer can be used for hot gas defrosting or reverse cycle systems
- Superior control accuracy
- The regulator increases evaporator gas velocity thus ensuring better oil return to compressor
- Direct connection to system suction line regulates hot gas injection independent of evaporator pressure drop

- LG Liquid-gax mixer provides homogenous mixing of the liquid and hot gas refrigerant injected into the evaporator
- Applicable to R22, R1234ze ^{*}, R1270 ^{*}, R134a, R290 ^{*}, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507A, R513A, R600 ^{*}, R600a ^{*}

^{*} only LG 12 – 16 and LG 16 – 22

- May be used in the following EX range: Category 3 (Zone 2)
- Max. working pressure: PS / MWP = 28 bar / 406 psig

Technical data and ordering

CPCE - Hot gas bypass regulator



Ordering

Type	Rated capacity in [kW] / [TR] ¹⁾								Connection type	Connection size		Code no.
	R22		R134a		R404A / R507		R407C			[in]	[mm]	
	[kW]	[TR]	[kW]	[TR]	[kW]	[TR]	[kW]	[TR]				
CPCE 12	17.4	6.2	7.9	4.3	16.4	6.3	19.0	6.7	Flare ²⁾	½	12	034N0081
	17.4	6.2	7.9	4.3	16.4	6.3	19.0	6.7	Solder, ODF ³⁾	½	12	034N0082
CPCE 15	25.6	9.2	11.6	6.3	24.2	9.1	27.9	9.9	Solder, ODF ³⁾	¾	16	034N0083
CPCE 22	34.0	12.2	15.2	8.4	32.0	12.1	37.1	13.2	Solder, ODF ³⁾	1	22	034N0084

¹⁾ Rated capacity is the capacity of the regulator at:
 - Evaporating temperature $t_e = -10\text{ °C} / 14\text{ °F}$
 - Condensing temperature $t_c = 30\text{ °C} / 100\text{ °F}$
 - Reduction of suction temperature / pressure $\Delta t_s = \text{CPCE} : 4\text{ K}$

LG - Liquid-gas mixer (accessory)



Ordering

Type	Connection						Code no.
	Expansion valve Solder, ODM		Hot gas Solder, ODF		Liquid distributor Solder, ODF		
	[in]	[mm]	[in]	[mm]	[in]	[mm]	
LG 12 – LG 16	¾	16	½	12	¾	16	069G4001
LG 12 – LG 22	1	22	½	12	1	22	069G4002
LG 16 – LG 28	1 ¼	28	¾	16	1 ¼	28	069G4003
LG 22 – LG 35	1 ½	35	1	22	1 ½	35	069G4004

Application example

