

Last update: 2022-01
www.climate.emerson.com/en-gb

Ref: TI_SOL-FLR_A3_EN_Rev00
 Application Engineering Europe

SOLENOID VALVE SERIES

110RB-..FLR / 200RB-...FLR



General information

110RB- /200RB-...FLR solenoid valve series are direct or servo actuated solenoid valves, mainly used in refrigerant control of various devices such as refrigerating and freezing systems, air conditioners and heat pumps.

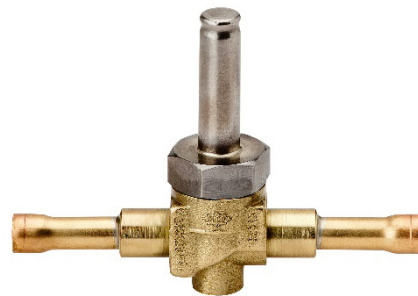
Features

- To A3 application conditions adapted valve design
- Compact size
- No disassembly necessary for brazing
- Extended copper tubes for easy installation
- Normally closed
- Pilot operated requires minimum operating differential
- ATEX compliant coils (ESC-EX...)

NOTE: Product types for safety class A1 / A2L, please refer to separate documents.



110RB



200RB / 200RH

Type Code



	200	RB	-	6	T	4	FLR	
Size Model Serie 110 / 200								Option FLR Flammable Version
Design Series RB Standard version – smaller sizes								Connection Size in multiples of 1/8" i.e.1/2"
Seat diameter in multiples of 1/16" i.e. 3/8"								Connection type T Solder

Selection Table – Valve Sizes

Type		Part No.		Connection Size		Kv	Nominal Capacities
				(mm)	(inch)	(m ³ /h)	(kW) Liquid line duty
110RB	2	T2	-FLR (m)	801465	6	0.2	4.2
		T2	-FLR (z)	801466	1/4		
		T3	-FLR	801467	10		
200RB	3	T3	-FLR (m)	801323	10	0.4	7.9
		T3	-FLR (z)	801445	3/8		
	4	T3	-FLR (z)	801446	3/8	0.9	18.7
		T4	-FLR (z)	801447	1/2		
		T10	-FLR (m)	801448	10		
	6	T12	-FLR (m)	801449	12	1.6	32.8
		T4	-FLR (z)	801450	1/2		
		T5	-FLR	801451	12		
		T12	-FLR (m)	801452	16		

NOTE: Nominal Capacities at +38 °C Condensing Temperature. +4 °C Evaporating Temperature. 0.15 bar Pressure Drop Between Valve inlet and Outlet in Liquid Applications (For Hot Gas Applications 1 bar Pressure Drop and +18 °C Suction Gas Temperature); Subcooling 1 K. For other operating conditions use the “Controls Navigator” or “Selection” tool (www.emersonclimate.eu).

Selection Table Accessory – ESC Coil

Coils						
Type Coils	Part No.	Supply voltage	Power Input	Description	Temperature range	Illustration
ESC-EX24VAC	801035	24 VAC ±10 % 50 Hz	17 VA, 8 W	IP65 with molded cable assembly with 3 m length	-10...+50 °C	
ESC-EX230VAC	801036	230 VAC ±10 % 50 Hz	17 VA, 8 W			
Others						
Type	Part No.	Description				Illustration
ESC-K01	801034	Screw cap (incl. 2x O-ring & fixing retainer)				

NOTE: Coils are delivered with retainer kit.

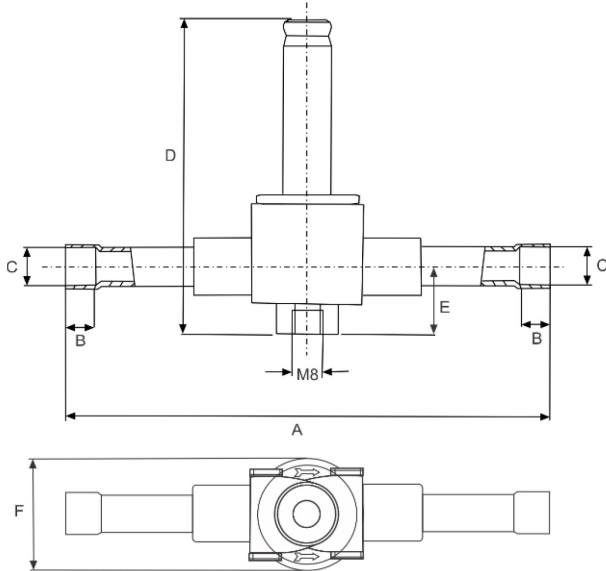
Technical Data

Max. allowable Pressure PS	31 bar	Recommended coil according to Refrigerant safety class	ESC-EX
Max. Test Pressure PT	34 bar	ΔP min (bar)	110RB-...FLR 0 bar 200RB-...FLR 0.05 bar
Temperatures	Ambient -40...+120 °C Medium -40...+50 °C	Released Refrigerants	R290 A3
Factory Valve State	Normally closed (NC)	Standards	EN 12284
Material Connection	Copper ODF	Markings	ERC in progress

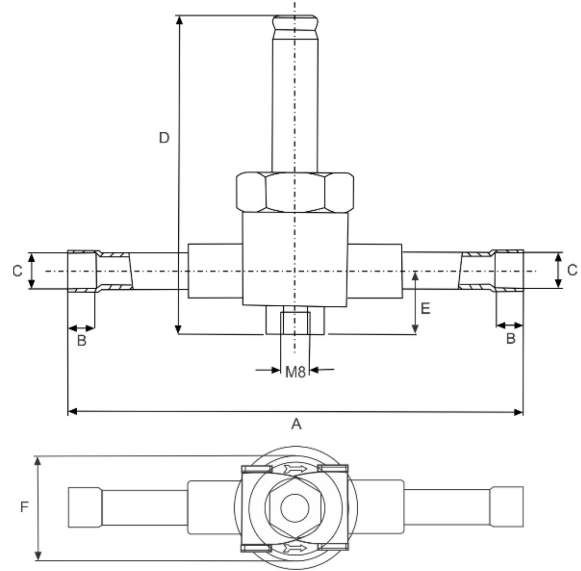
NOTE: For Technical Data details ESC Coil please refer to Technical Information document for ESC.

Dimension (mm)

100RB-...FLR



200RB-...FLR



110...	Ø Port	ODF = C		(mm)				
		(mm)	(inch)	A	B	D	E	F
110RB 2T2-FLR	3	6	1/4	126	8	77		29
110RB 2T3-FLR	3	10	3/8	126	8	77		29

200...	Ø Port	ODF = C		(mm)				
		(mm)	(inch)	A	B	D	E	F
200RB-3T3-FLR*	4.8	10		126	8	88	18	29
200RB-3T3-FLR	4.8		3/8	126	8	88	18	29
200RB-4T3-FLR	6		3/8	126	8	88	18	29
200RB-4T4-FLR	6		1/2	126	10	88	18	29
200RB-4T10-FLR	6	10		126	10	88	18	29
200RB-4T12-FLR	6	12		126	10	88	18	29
200RB-6T4-FLR	10		1/2	126	10	88	18	29
200RB-6T12-FLR	10	12		126	10	88	18	29
200RB-6T5-FLR	10	16	5/8	126	13	88	18	29

*) (mm)

DISCLAIMER

- The contents of this publication are presented for informational purposes only and are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability.
- Emerson Climate Technologies GmbH and/or its affiliates (collectively "Emerson"), as applicable, reserve the right to modify the design or specifications of such products at any time without notice.
- Emerson does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson product remains solely with the purchaser or end user.
- Emerson does not assume responsibility for possible typographic errors contained in this publication.