

FlowCal+™ compact dynamic automatic flow balancing valve



127 series

Submittal Data 02937 NA — Issue Date 02/2020

Application

The FlowCal+™ compact dynamic flow balancing valve is pressure independent and maintains a fixed flow rate as differential pressures vary. It incorporates an exclusive flow cartridge, made of an anti-scale, low noise polymer. Constructed of DZR low-lead brass, FlowCal+ is ideally suited for use in plumbing applications such as hot water recirculation systems. The built-in check valve protects against circuit thermo-siphoning. The outlet temperature gauge (optional) verifies the fluid temperature in the circuit. The FlowCal+ can also be used in hydronic systems.

Typical Specification

Furnish and install on the plans and described herein, a Caleffi FlowCal+™ compact automatic flow balancing valve as manufactured by Caleffi. Each balancing valve must be designed with an inline body style with 1/2", 3/4", or 1" union sweat, NPT male threaded, press, PEX crimp and PEX expansion end connections. The design must include a DZR low-lead brass body and connections (<0.25% Lead content) certified by ICC-ES, high abrasion resistant, anti-scale, low noise, interchangeable polymer flow cartridge, stainless steel spring, and peroxide-cured EPDM seals. Each valve must be designed for fixed flow rates ranging from 0.35 to 10 gpm with ±10% accuracy, 230 psi (16 bar) maximum working pressure and working temperature range of 32 to 212°F (0 to 100°C). Each balancing valve shall be a Caleffi model 127AFC or approved equal.



Technical Data

Materials

Valve

Body:	DZR low-lead brass
Flow cartridge:	anti-scale polymer
Spring:	stainless steel
Seals:	peroxide-cured EPDM

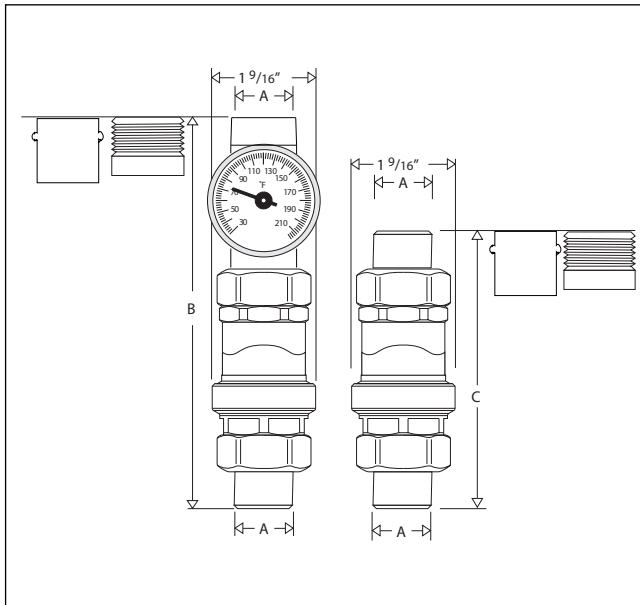
NSF/ANSI 372-2011, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, certified by ICC-ES, file PMG-1360. PEX crimp fittings certified to ASTM F 1807. PEX expansion fittings certified to ASTM F 1960. US Patent: 7,246,635 B2.

Performance

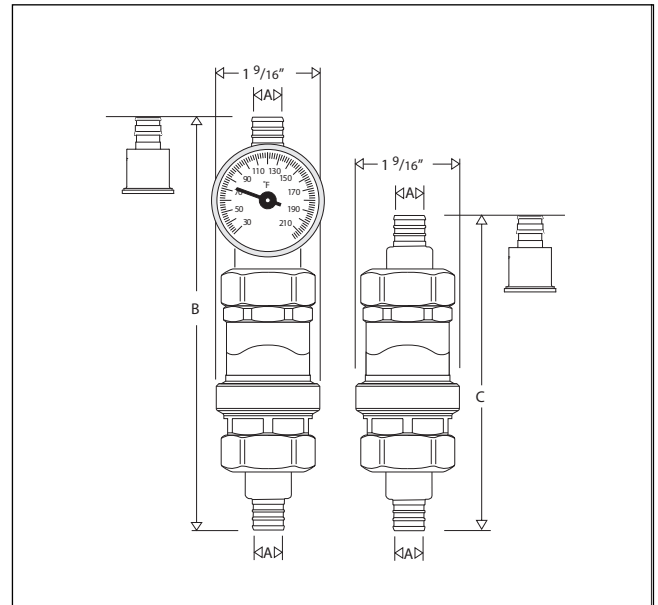
Suitable Fluids:	water, glycol solutions
Max. percentage of glycol:	50%
Max. working pressure:	230 psi (16 bar)
Working temperature range:	32 - 212°F (0-100°C)
Flow rate:	21 fixed flow settings ranging from 0.35 - 10 gpm ±10%
Flow accuracy:	±10%
Differential pressure control ranges:	2-14, 2-32, 4-34, 5-35 psid
Control stem adjustment wrench:	9 mm
Connections:	1/2", 3/4", 1" union sweat, NPT male, press, PEX crimp or PEX expansion

Flow rate (GPM)	Last 3 digits (AFC__)	ΔP control ranges (psid)	Flow rate (GPM)	Last 3 digits (AFC__)	ΔP control ranges (psid)
0.35	G35	2 - 14	2.60	2G6	2 - 32
0.50	G50		3.00	3G0	
0.75	G75		3.50	3G5	
1.00	1G0	2 - 32	4.00	4G0	
1.30	1G3		4.50	4G	
1.50	1G5		5.00	5G0	
1.75	1G7		6.00	6G0	4 - 34
2.00	2G0		7.00	7G0	
2.20	2G2		8.00	8G0	
2.50	2G5		9.00	9G0	5 - 35
			10.00	10G	

Dimensions



Code	A (union connections)	B (w/ Gauge)	C (w/o Gauge)	Wt (lb/kg)
127140AFC ...	1/2" NPT male	7 1/8"	----	1.2/0.54
127141AFC ...	1/2" NPT male	----	4 7/8"	1.0/0.45
127147AFC ...	1/2" press	7"	----	1.2/0.54
127146AFC ...	1/2" press	----	4 3/4"	1.0/0.45
127148AFC ...	1/2" sweat	7 1/8"	----	1.0/0.45
127149AFC ...	1/2" sweat	----	4 7/8"	0.8/0.36
127150AFC ...	3/4" NPT male	7 5/16"	----	1.2/0.54
127151AFC ...	3/4" NPT male	----	5 11/16"	1.0/0.45
127157AFC ...	3/4" press	9 5/16"	----	1.2/0.54
127156AFC ...	3/4" press	----	7 1/16"	1.0/0.45
127158AFC ...	3/4" sweat	7 9/16"	----	1.0/0.45
127159AFC ...	3/4" sweat	----	5 5/16"	0.8/0.36
127160AFC ...	1" NPT male	8 1/16"	----	1.4/0.64
127161AFC ...	1" NPT male	----	5 13/16"	1.2/0.54
127167AFC ...	1" press	9 7/16"	----	1.5/0.68
127166AFC ...	1" press	----	7 3/16"	1.3/0.60
127168AFC ...	1" sweat	8 9/16"	----	1.2/0.54
127169AFC ...	1" sweat	----	6 5/16"	1.0/0.45



Code	A (union connections)	B (w/ Gauge)	C (w/o Gauge)	Wt (lb/kg)
127143AFC ...	1/2" PEX expansion	7 7/8"	----	1.2/0.54
127142AFC ...	1/2" PEX expansion	----	5 5/8"	1.0/0.45
127145AFC ...	1/2" PEX crimp	7 3/4"	----	1.2/0.54
127144AFC ..	1/2" PEX crimp	----	5 1/2"	1.0/0.45
127153AFC ...	3/4" PEX expansion	8 13/16"	----	1.2/0.54
127152AFC ...	3/4" PEX expansion	----	6 9/16"	1.0/0.45
127155AFC ...	3/4" PEX crimp	8 1/16"	----	1.2/0.54
127154AFC ...	3/4" PEX crimp	----	5 13/16"	1.0/0.45
127163AFC ...	1" PEX expansion	9 11/16"	----	1.5/0.68
127162AFC ...	1" PEX expansion	----	7 7/16"	1.3/0.60
127165AFC ...	1" PEX crimp	8 11/16"	----	1.5/0.68
127164AFC ...	1" PEX crimp	----	6 7/16"	1.3/0.60

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system.

Job name _____
Job location _____
Engineer _____
Mechanical contractor _____
Contractor's P.O. No. _____
Representative _____

Size _____
Quantity _____
Approval _____
Service _____
Tag No. _____
Notes _____

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