



**WEIL-McLAIN<sup>®</sup>**

# 80 Burner Specification and Data Sheet

## Beckett gas burners

Models **CG10, CG15 & CG25**

*Flame retention type, for gas firing*



Burner model	Motor size H.P.	Standard motor electrical characteristics	Optional motor electrical characteristics	Length (from mounting flange to label area on burner front)	Overall width
CG10	1/3	120/60/1	240/60/1	22.0	11.7
CG15	1/2	120/60/1	230/60/1, 460/60/1, 575/60/1	28.7	20.8
CG25	3/4	120/60/1	230/60/1, 460/60/1, 575/60/2	29.2	20.9



Boiler Model Number	Burner Input Gas MBH	Burner Model Number	Positive Pressure in Firebox Inches w.c.	Burner Motor 3450 RPM H.P.	Pressure Drop through gas train Inches w.c.	Gas Manifold Pressure	Gas Pressure required at Gas controls Inlet Inches w.c.*	
							Minimum	Maximum
380	346	CG10.1	0.28	1/3	1.50	1.75	3.25	14.00
480	491	CG10.3	0.28	1/3	1.96	1.50	3.50	14.00
580	639	CG10.4	0.28	1/3	1.46	3.00	4.50	14.00
680	787	CG10.5	0.27	1/3	2.22	3.25	5.50	14.00
780	935	CG10.6	0.27	1/3	2.17	3.25	5.25	14.00
880	1082	CG10.6	0.27	1/3	2.34	4.00	6.50	14.00
980	1230	CG15.3	0.27	1/2	2.46	3.50	6.00	14.00
1080	1378	CG15.4	0.26	1/2	3.09	3.00	6.00	14.00
1180	1526	CG25.2	0.26	3/4	2.40	2.75	5.25	14.00
1280	1674	CG25.2	0.26	3/4	2.37	3.00	5.50	14.00

\*Gas pressures shown are for standard gas train arrangement. Contact Weil McLain for alternate gas trains to support other gas pressures.

**Notes**

- 1 Standard motor voltage is 120/60/1.
- 2 Direct Spark Ignition is standard on all models.
- 3 CG10 models are available only as OO (On-Off operation) or LFS (Low fire start, high fire run. Single position air, adjustable opening gas valve).
- 4 CG15 and CG25 are available as: LHL Low-high-low-off operation. Two position air controlled by linkageless damper actuator, fixed damper pre-purge.
  - Must be wired with boiler temperature or pressure control switch or operation will be low-high-off.
  - MOD – On-off operation with proven low fire start and full modulating firing conditions with combustion air control.
  - Modulation control drives combustion air damper and fuel metering valve in response to boiler demand. Fixed damper pre-purge for RM 7895C.
  - Open damper pre-purge for RM7840L.
- 5 Burner capacities listed for elevations up to 2,000 feet. For higher elevations, consult local Weil-McLain distributor/agent or sales office.
- 6 Gas ratings based on natural gas with heating value of 1,000 btu per cubic foot and specific gravity of 0.60.
- 7 Boiler-burner unit to be adjusted to achieve +0.10 inches W.C. pressure at flue collar, resulting in positive pressure in firebox as listed.

# Burner Specification and Data Sheet



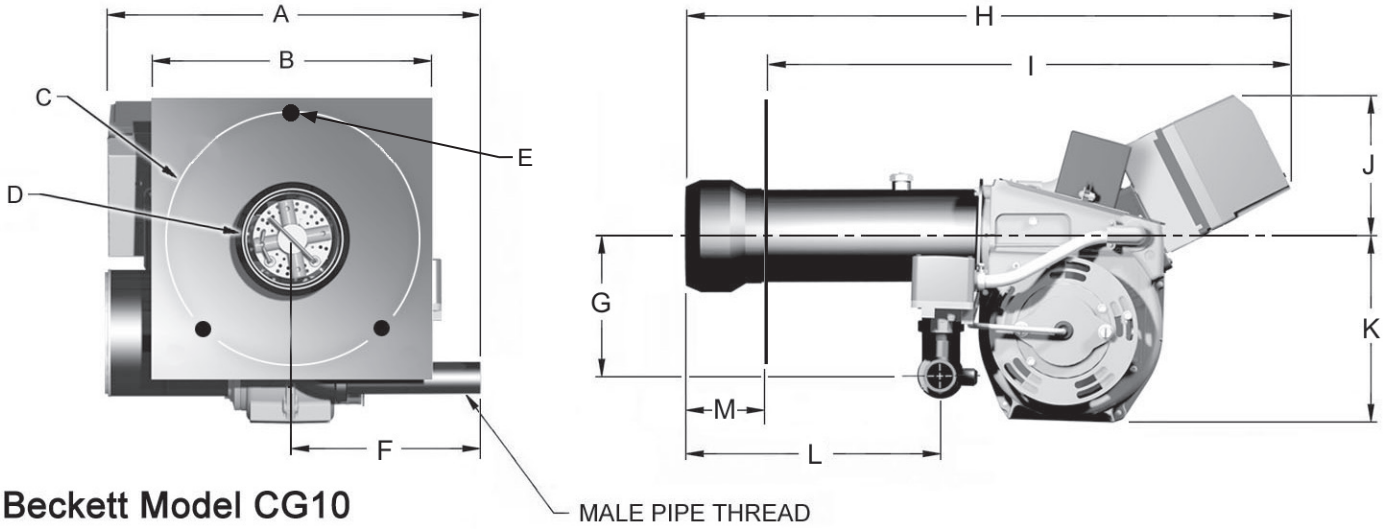
Standard Gas Control Components and Sizes in Inches				
Boiler model number	Manual Hand Valve (point of field connection)	Combination Diaphragm Operating Gas Valve and Regulator	Safety Gas Valve	Manual Checking Gas Valve
380-1080	1	1	1	1
1180 & 1280	1-1/4	1-1/4	1-1/4	1-1/4

Flame Safeguard Provided with Listed Control Systems by Code									
Boiler model number	UL/ CSD1			FM			IRI		
	OO or LFS	LHL	MOD	OO or LFS	LHL	MOD	OO or LFS	LHL	
380-880	RM895A	--	--	RM7895A	--	--	RM7895A	--	--
980 & 1080	--	RM7895C	RM7895C	--	RM7895C	RM7895C	--	RM7895C	RM7895C
1180 & 1280	--	RM7895C	RM7840L	--	RM7895C	RM7840L	--	RM7895C	RM7840L

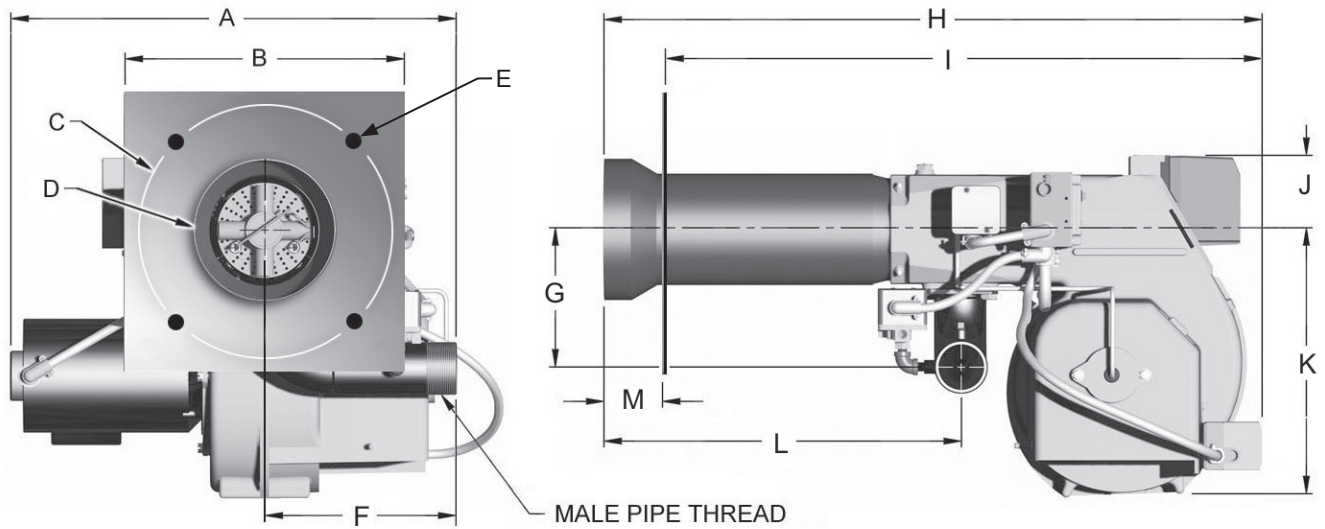
Additional control suppliers are available

## Notes

- 8 Minimum gas pressures listed are subject to variations due to job conditions. Gas burners for other gas pressures are available. Consult local Weil-McLain distributor/agent or sales office.
- 9 Gas manifold pressures shown are for initial start-up. Final pressure should be determined after checking actual gas flow and combustion readings.
- 10 Combustion Controls:
  - a) RM7895 flame safeguard control uses ultraviolet electronic flame detector to monitor gas burner flame, and provides pre-purge programming. "C" models provide 10 second main flame establishing period.
  - b) RM7840L flame safeguard control monitors the gas burner flame, provides pre-purge and post-purge programming, provides switching necessary to allow firing rate motor to be driven to both low fire start and high fire positions, prevents start-up if preignition interlock circuit or running interlock circuit does not "prove", system will lock out on safety. Ultraviolet sensitive electronic flame detector is standard.
- 11 Burners listed by Underwriters Laboratories, Inc., Canadian Gas Association, state of Connecticut, Fire Marshal state of Massachusetts, city of New York MEA, and others.
- 12 Special controls can be provided to meet other code requirements not listed. Consult your local Weil-McLain distributor/agent or sales office.



Beckett Model CG10



Beckett Models CG15 & CG25

Burner model	Dimensions, in inches													
	A	B	C	D	E	F	G	H	I	J	K	L	M	Pipe Thread
	Overall width	Square flange width & height	Bolt circle	Maximum tube O.D.	Number of Bolt holes	Centerline to end of manifold	Tube centerline to manifold centerline	Overall Length (max.)	Burner length	Centerline to top of burner	Centerline to bottom of burner	Centerline of manifold to end of tube	Insertion Depth (max.)	
CG10	11.70	10.0	6.75	4.6	3	8.1	6.0	26.0	22.0	6.8	8.2	11.0	4.0	1-1/4 NPT
CG15	20.80	12.00	10.00	5.6	4	9.4	5.2	32.7	28.7	4.1	10.8	18.4	4.0	1-1/4 NPT
CG25	20.90	12.00	10.00	6.9	4	9.3	6.8	33.2	29.2	4.1	12.8	17.8	4.0	2 NPT



Weil-McLain  
 500 Blaine Street  
 Michigan City, IN 46360-2388  
<http://www.weil-mclain.com>