



BASO Gas Products LLC

H91 Series BASOTROL® Automatic Gas Valve

Description

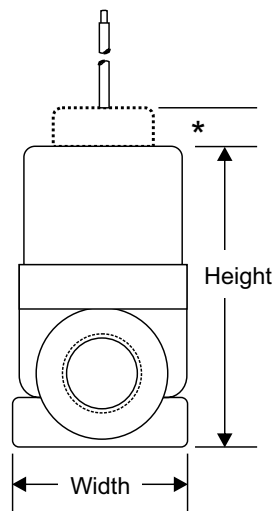
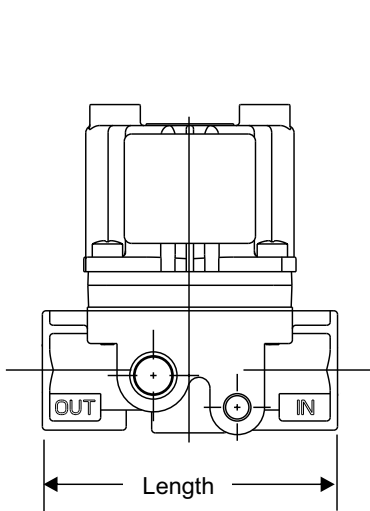
H91 Series automatic gas valves are electrically operated shut-off valves that automatically open and close on an electrical demand signal from a thermostat or other controlling device. Typical applications include heaters, wall furnaces, commercial cooking equipment, water heaters, boilers, generators, commercial dryers and similar applications. The H91 can be used with natural gas or LP at pressures up to 0.5 psi. Several cover options are available.

Specifications

- Rated inlet pressure: 0.5 psi
- Permissible ambient (surface) temperature:
 - 40° to 175°F (-40° to 79°C) CSA
 - 40° to 140°F (-40° to 60°C) UL
- -40° to 125°F (-40° to 52°C) UL for H91E_, H91L_, H91M_ and H91R_ only.

Agency Listing

- CSA (AGA/CGA) Certificate number 229521-1656058
- Australian Gas Association Certificate number 4235 (H91A_, B_, C_, D_, E_, L_ and M_ models only [excludes models H91_V])
- UL Listed File number MH5939, H91AAA, AAG, ABA, ABG, ACA, ACG, ADA, ADG, AMA, AMG, ARA, ARG
- UL Recognized File number MH5939



* For valves with a conduit hub at the top, add 0.44 in. (11 mm) to the height dimension.

H91 Dimensions

Selection Chart

Part Number	Inlet/Outlet NPT	Natural Gas Capacity Btu/hr at 1 in. Pressure Drop	Voltage (AC unless noted)	Pilot Tap NPT	Pressure Tap NPT	Leads/Tabs (when looking at the inlet)
H91AA-4C	1/8 in. x 1/8 in.	70,000	120V	None	None	30"/Conduit Top
H91AA-5C	1/8 in. x 1/8 in.	70,000	120V	None	None	30"/Conduit Outlet
H91AA-6C	1/8 in. x 1/8 in.	70,000	120V	None	1/8-27 L	24"/Conduit Inlet
H91AA-7C	1/8 in. x 1/8 in.	70,000	120V	None	None	60"/Conduit Top
H91AG-2C	1/8 in. x 1/8 in.	70,000	25V	None	None	1/4 Tab
H91BA-11C	1/4 in. x 1/4 in.	100,000	120V	None	None	90"/Conduit Top
H91BA-3C	1/4 in. x 1/4 in.	100,000	120V	None	None	30"/Conduit Top
H91BA-7C	1/4 in. x 1/4 in.	100,000	120V	None	None	36"/Conduit Right
H91BG-2C	1/4 in. x 1/4 in.	100,000	25V	None	1/8-27 R	12"/Conduit Inlet
H91BG-6C	1/4 in. x 1/4 in.	100,000	25V	None	1/8-27 R	1/4 Tab
H91BG-7C	1/4 in. x 1/4 in.	100,000	25V	None	1/8-27 R	1/4 Tab
H91CA-12C	3/8 in. x 3/8 in.	115,000	120V	None	None	48"/Conduit Inlet
H91CA-15C	3/8 in. x 3/8 in.	115,000	120V	1/8-27 L&R	1/8-27 Bottom	30"/Conduit Left
H91CA-16C	3/8 in. x 3/8 in.	115,000	120V	None	None	30"/Conduit Outlet
H91CA-18C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 R	30"/Conduit Top
H91CA-21C	3/8 in. x 3/8 in.	115,000	120V	None	None	1/4 Tab
H91CA-23C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L&R	1/4 Tab
H91CA-24C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L	5"/Conduit Left
H91CA-27C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L&R	1/4 Tab
H91CA-28C	3/8 in. x 3/8 in.	115,000	120V	None	None	48"/Conduit Right
H91CA-32C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L	7.1"/Conduit Inlet
H91CA-33C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L	7.1"/Conduit Outlet
H91CA-34C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L	7.1"/Conduit Inlet
H91CA-35C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 T L	7.1"/Conduit Outlet
H91CA-36C	3/8 in. x 3/8 in.	115,000	120V	None	None	7.1"/Conduit Left
H91CA-37C	3/8 in. x 3/8 in.	115,000	120V	None	None	7.1"/Conduit Right
H91CA-38C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L	7.1"/Conduit Inlet
H91CA-39C	3/8 in. x 3/8 in.	115,000	120V	None	1/8-27 L	7.1"/Conduit Outlet
H91CA-40C	3/8 in. x 3/8 in.	115,000	120V	None	None	7.1"/Conduit Right
H91CG-12C	3/8 in. x 3/8 in.	115,000	25V	1/8-27 L&R	1/8-27 Bottom	30"/Conduit Top
H91CG-15C	3/8 in. x 3/8 in.	115,000	25V	None	1/8-27 Bottom	1/4 Tab
H91CG-17C	3/8 in. x 3/8 in.	115,000	25V	None	None	48"/Conduit Right
H91CG-8C	3/8 in. x 3/8 in.	115,000	25V	None	None	1/4 Tab
H91CS-10C	3/8 in. x 3/8 in.	115,000	240V	1/8-27 L&R	None	6"/Conduit Outlet
H91CS-9C	3/8 in. x 3/8 in.	115,000	240V	None	None	30"/Conduit Inlet
H91DA-11C	1/2 in. x 1/2 in.	240,000	120V	None	None	30"/Conduit Inlet
H91DA-12C	1/2 in. x 1/2 in.	240,000	120V	None	None	1/4 Tab
H91DA-13C	1/2 in. x 1/2 in.	240,000	120V	None	None	1/4 Tab
H91DA-1C	1/2 in. x 1/2 in.	240,000	120V	None	None	30"/Conduit Top
H91DA-6C	1/2 in. x 1/2 in.	240,000	120V	None	1/8-27 L	76"/Conduit Right
H91DA-7C	1/2 in. x 1/2 in.	240,000	120V	None	1/8-27 Bottom	1/4 Tab
H91DA-8C	1/2 in. x 1/2 in.	240,000	120V	1/8-27 R	1/8-27 L	48"/Conduit Top
H91DB-2C	1/2 in. x 1/2 in.	240,000	240V	None	None	1/4 Tab
H91DG-11C	1/2 in. x 1/2 in.	240,000	25V	1/8-27 R	1/8-27 R	1/4 Tab
H91DG-12C	1/2 in. x 1/2 in.	240,000	25V	None	None	30"/Conduit Inlet

Part Number	Inlet/Outlet NPT	Natural Gas Capacity Btu/hr at 1 in. Pressure Drop	Voltage (AC unless noted)	Pilot Tap NPT	Pressure Tap NPT	Leads/Tabs (when looking at the inlet)
H91DG-13C	1/2 in. x 1/2 in.	240,000	25V	None	None	30"/Conduit Inlet
H91DG-2C	1/2 in. x 1/2 in.	240,000	25V	None	None	1/4 Tab
H91DG-4C	1/2 in. x 1/2 in.	240,000	25V	None	None	30"/Conduit Top
H91DS-1C	1/2 in. x 1/2 in.	240,000	208/240V	None	None	30"/Conduit Top
H91DS-3C	1/2 in. x 1/2 in.	240,000	208/240V	1/8-27 R	1/8-27 L	48"/Conduit Top
H91EA-1C	1/2 in. x 1/2 in.	311,000	120V	None	None	30"/Conduit Top
H91EA-3C	1/2 in. x 1/2 in.	311,000	120V	None	None	30"/WO Conduit R
H91EA-5C	1/2 in. x 1/2 in.	311,000	120V	1/8-27 L&R	1/8-27 L&R	30"/Conduit Right
H91EA-6C	1/2 in. x 1/2 in.	311,000	120V	None	None	30"/Conduit Top
H91EA-8C	1/2 in. x 1/2 in.	311,000	120V	1/8-27 L&R	1/8-27 L&R	38.88"/Conduit Top
H91EG-7C	1/2 in. x 1/2 in.	311,000	25V	1/8-27 L&R	1/8-27 L&R	1/4 Tab
H91ES-1C	1/2 in. x 1/2 in.	311,000	208/240V	1/8-27 L&R	1/8-27 L&R	30"/Conduit Left
H91ES-3C	1/2 in. x 1/2 in.	311,000	208/240V	1/8-27 L&R	1/8-27 L&R	36"/Conduit Top
H91EV-1C	1/2 in. x 1/2 in.	311,000	12VDC	None	None	1/4 Tab
H91EV-3C	1/2 in. x 1/2 in.	311,000	12VDC	None	1/8-27 L	1/4 Tab
H91JV-1C	1/2 in. x 1/2 in.	240,000	12VDC	None	None	1/4 Tab
H91JV-2C	1/2 in. x 1/2 in.	240,000	12VDC	None	None	1/4 Tab
H91LA-13C	3/4 in. x 3/4 in.	430,000	120V	None	None	30"/Conduit Right
H91LA-1C	3/4 in. x 3/4 in.	430,000	120V	None	None	30"/Conduit Top
H91LA-2C	3/4 in. x 3/4 in.	430,000	120V	None	None	30"/Conduit Left
H91LA-6C	3/4 in. x 3/4 in.	430,000	120V	None	1/8-27 L	9"/Conduit Right
H91LA-8C	3/4 in. x 3/4 in.	430,000	120V	None	None	42"/Conduit Inlet
H91LG-12C	3/4 in. x 3/4 in.	430,000	25V	1/8-27 R	1/8-27 Bottom	30"/Conduit Top
H91LG-14C	3/4 in. x 3/4 in.	430,000	25V	1/8-27 R	1/8-27 Bottom	1/4 Tab
H91LG-15C	3/4 in. x 3/4 in.	430,000	25V	None	None	30"/Conduit Inlet
H91LG-7C	3/4 in. x 3/4 in.	430,000	25V	None	1/8-27 Bottom	30"/WO Conduit Nut
H91LG-8C	3/4 in. x 3/4 in.	430,000	25V	None	1/8-27 L	1/4 Tab
H91LG-9C	3/4 in. x 3/4 in.	430,000	25V	None	1/8-27 R	1/4 Tab
H91MA-2C	1 in. x 1 in.	505,000	120V	None	None	34"/Conduit Inlet
H91MA-4C	1 in. x 1 in.	505,000	120V	1/8-27 L&R	1/8-27 Bottom	30"/Conduit Top
H91MA-5C	1 in. x 1 in.	505,000	120V	None	None	30"/Conduit Inlet
H91MB-1C	1 in. x 1 in.	505,000	240V	1/8-27 L&R	1/8-27 Bottom	30"/Conduit Top
H91MG-1C	1 in. x 1 in.	505,000	25V	None	None	1/4 Tab
H91MG-3C	1 in. x 1 in.	505,000	25V	None	1/8-27 Bottom	30"/WO Conduit Top
H91MG-6C	1 in. x 1 in.	505,000	25V	None	1/8-27 Bottom	30"/Conduit Top
H91MG-8C	1 in. x 1 in.	505,000	25V	1/8-27 L&R	1/8-27 Bottom	1/4 Tab
H91MG-9C	1 in. x 1 in.	505,000	25V	None	None	30"/Conduit Inlet
H91RA-1C	3/4 in. x 3/4 in.	325,000	120V	1/8-27 R	1/8-27 L	48"/Conduit Top
H91RA-2C	3/4 in. x 3/4 in.	325,000	120V	1/8-27 L&R	None	30"/Conduit Top
H91RA-4C	3/4 in. x 3/4 in.	325,000	120V	1/8-27 L&R	None	30"/Conduit Top
H91RA-5C	3/4 in. x 3/4 in.	325,000	120V	1/8-27 L&R	1/8-27 L&R	30"/Conduit Top
H91RA-6C	3/4 in. x 3/4 in.	325,000	120V	None	None	1/4 Tab
H91RB-1C	3/4 in. x 3/4 in.	325,000	240	None	None	30"/Conduit Right
H91RG-1C	3/4 in. x 3/4 in.	325,000	25V	1/8-27 L&R	1/8-27 Bottom	1/4 Tab
H91RG-2C	3/4 in. x 3/4 in.	325,000	25V	None	1/8-27 L&R	1/4 Tab
H91RG-3C	3/4 in. x 3/4 in.	325,000	25V	None	None	30"/Conduit Left

Part Number	Inlet/Outlet NPT	Natural Gas Capacity Btu/hr at 1 in. Pressure Drop	Voltage (AC unless noted)	Pilot Tap NPT	Pressure Tap NPT	Leads/Tabs (when looking at the inlet)
H91RS-1C	3/4 in. x 3/4 in.	325,000	208/240V	1/8-27 L&R	None	30"/Conduit Top
H91RS-2C	3/4 in. x 3/4 in.	325,000	208/240V	1/8-27 L&R	None	30"/Conduit Top
H91RS-3C	3/4 in. x 3/4 in.	325,000	208/240V	1/8-27 L&R	1/8-27 L&R	30"/Conduit Top
H91RS-4C	3/4 in. x 3/4 in.	325,000	208/240V	1/8-27 L&R	None	30"/Conduit Top
H91RV-1C	3/4 in. x 3/4 in.	325,000	12VDC	1/8-27 L&R	1/8-27 Bottom	1/4 Tab
H91RV-2C	3/4 in. x 3/4 in.	325,000	12VDC	1/8-27 L&R	1/8-27 Bottom	1/4 Tab
H91SA-2C	1/2 in. cc x 1/2 in. cc	160,000	120V	1/8-27 L&R	None	1/4 Tab
H91SG-1C	1/2 in. cc x 1/2 in. cc	160,000	25V	1/8-27 R	None	1/4 Tab
H91VA-1C	3/8 in. cc x 3/8 in. cc	55,000	120V	None	None	1/4 Tab
H91WA-4C	1/4 in. cc x 1/4 in. cc	42,000	120V	None	1/8-27 L	30"/Conduit Top
H91WG-1C	1/4 in. cc x 1/4 in. cc	42,000	25V	None	None	1/4 Tab
H91WG-6C	1/4 in. cc x 1/4 in. cc	42,000	25V	None	None	30"/Conduit Top
H91WG-7C	1/4 in. cc x 1/4 in. cc	42,000	25V	None	None	12"/Side Eyelet Inlet
H91WS-2C	1/4 in. cc x 1/4 in. cc	42,000	208/240V	None	None	12"/Side Eyelet Inlet

Dimensions

Part Number	Height		Width		Length	
	in.	mm	in.	mm	in.	mm
H91A_	2.88	73	1.75	44	2.53	64
H91B_	2.88	73	1.75	44	2.53	64
H91C_	2.88	73	1.75	44	2.53	64
H91D_	3.00	76	1.84	47	3.00	76
H91E_	3.22	82	1.84	47	3.00	76
H91J_	3.22	82	1.84	47	3.00	76
H91L_	3.72	94	2.63	67	3.50	89
H91M_	4.06	103	2.63	67	3.50	89
H91R_	3.22	82	1.84	47	3.00	76
H91S_	3.22	82	1.84	47	3.00	76
H91V_	2.88	73	1.75	44	2.53	64
H91W_	2.88	73	1.75	44	2.53	64

H91 to BGA Conversion

Part Number	BGA Replacement	Functional	Exact
H91AA-4	BGA158EAD-1CAA	X	
H91AA-5	BGA158EAD-1CAA	X	
H91AA-6	BGA158EAD-1CAB	X	
H91AA-7	BGA158EAD-1CAA	X	
H91AG-2	BGA158EAC-1CAA		X
H91BA-11	BGA158EBD-1CAA	X	
H91BA-3	BGA158EBD-1CAA	X	
H91BA-7	BGA158EBD-1CAA	X	
H91BG-2	BGA158EBC-1CAC	X	
H91BG-6	BGA158EBC-1CAC		X

Part Number	BGA Replacement	Functional	Exact
H91BG-7	BGA158EBC-1CAC		X
H91CA-12	BGA158ECD-1CAA	X	
H91CA-15	BGA158ECD-1ADD	X	
H91CA-16	BGA158ECD-1DAA	X	
H91CA-18	BGA158ECD-1CAC	X	
H91CA-21	BGA158ECD-1CAA		X
H91CA-23	BGA158ECD-1CAE		X
H91CA-24	BGA158ECD-1AAB	X	
H91CA-27	BGA158ECD-1CAE		X

continued on following page

Part Number	BGA Replacement	Functional	Exact
H91CA-28	BGA158ECD-1BAA	X	
H91CA-32	BGA158ECD-1CAB	X	
H91CA-33	BGA158ECD-1DAB	X	
H91CA-34	BGA158ECD-1CAB	X	
H91CA-35	BGA158ECD-1DAB	X	
H91CA-36	BGA158ECD-1AAA	X	
H91CA-37	BGA158ECD-1BAA	X	
H91CA-38	BGA158ECD-1CAB	X	
H91CA-39	BGA158ECD-1DAB	X	
H91CA-40	BGA158ECD-1BAA	X	
H91CG-12	BGA158ECC-1CDD	X	
H91CG-15	BGA158ACC-1CAD		X
H91CG-17	BGA158ECC-1BAA	X	
H91CG-8	BGA158ACC-1CAA		X
H91CS-10	BGA158ECE-1DDA	X	
H91CS-9	BGA158ECE-1CAA	X	
H91DA-11	BGA171EDD-1CAA	X	
H91DA-12	BGA171EDD-1CAA		X
H91DA-13	BGA171EDD-1CAA		X
H91DA-1	BGA171EDD-1CAA	X	
H91DA-6	BGA171EDD-1BAB	X	
H91DA-7	BGA171EDD-1CAD		X
H91DA-8	BGA171EDD-1CCB	X	
H91DB-2	BGA171EDE-1CAA		X
H91DG-11	BGA171EDC-1CCC		X
H91DG-12	BGA171EDC-1CAA	X	
H91DG-13	BGA171EDC-1CAA	X	
H91DG-2	BGA171EDC-1CAA		X
H91DG-4	BGA171EDC-1CAA	X	
H91DS-1	BGA171EDE-1CAA	X	
H91DS-3	BGA171EDE-1CCB	X	
H91EA-1	BGA171EDD-1CAA	X	
H91EA-3	BGA171EDD-1BAA	X	
H91EA-5	BGA171EDD-1BDE	X	
H91EA-6	BGA171EDD-1CAA	X	
H91EA-8	BGA171EDD-1CDE	X	
H91EG-7	BGA171EDC-1CDE		X
H91ES-1	BGA171EDE-1ADE	X	
H91ES-3	BGA171EDE-1CDE	X	
H91EV-1	BGA171EDA-1CAA		X
H91EV-3	BGA171EDA-1CAB		X
H91JV-1	BGA171EDA-1CAA		X
H91JV-2	BGA171EDA-1CAA		X

Part Number	BGA Replacement	Functional	Exact
H91LA-13	BGA171EHJ-1BAA	X	
H91LA-1	BGA171EHJ-1CAA	X	
H91LA-2	BGA171EHJ-1AAA	X	
H91LA-6	BGA171EHJ-1BAB	X	
H91LA-8	BGA171EHJ-1AAA	X	
H91LG-12	BGA171EHH-1CCD	X	
H91LG-14	BGA171EHH-1CCD		X
H91LG-15	BGA171EHH-1CAA	X	
H91LG-7	BGA171EHH-1CAD	X	
H91LG-8	BGA171EHH-1CAB		X
H91LG-9	BGA171EHH-1CAC		X
H91MA-2	BGA110EJJ-1CAA	X	
H91MA-4	BGA110EJJ-1CDD	X	
H91MA-5	BGA110EJJ-1CAA	X	
H91MB-1	BGA110EJK-1CDD	X	
H91MG-1	BGA110EJH-1CAA		X
H91MG-3	BGA110EJH-1CAD	X	
H91MG-6	BGA110EJH-1CAD	X	
H91MG-8	BGA110EJH-1CDD		X
H91MG-9	BGA110EJH-1CAA	X	
H91RA-1	BGA171EFD-1CCB	X	
H91RA-2	BGA171EFD-1CDA	X	
H91RA-4	BGA171EFD-1CDA	X	
H91RA-5	BGA171EFD-1CDE	X	
H91RA-6	BGA171EFD-1CAA		X
H91RB-1	BGA171EFE-1BAA	X	
H91RG-1	BGA171EFC-1CDD		X
H91RG-2	BGA171EFC-1CAE		X
H91RG-3	BGA171EFC-1AAA	X	
H91RS-1	BGA171EFE-1CDA	X	
H91RS-2	BGA171EFE-1CDA	X	
H91RS-3	BGA171EFE-1CDE	X	
H91RS-4	BGA171EFE-1CDA	X	
H91RV-1	BGA171EFA-1CDD		X
H91RV-2	BGA171EFA-1CDD		X
H91SA-2	BGA171EPD-1CDA		X
H91SG-1	BGA171EPB-1CCA		X
H91VA-1	BGA158END-1CAA		X
H91WA-4	BGA158EMD-1CAB	X	
H91WG-1	BGA158EMB-1CAA		X
H91WG-6	BGA158EMB-1CAA	X	
H91WG-7	BGA158EMB-1CAA	X	
H91WS-2	BGA158EME-1CAA	X	