

Air Traps

SERIES A

MIYAWAKI **Air Traps** are designed for discharge of condensate from air piping, receiver tanks, gas and compressed air systems.

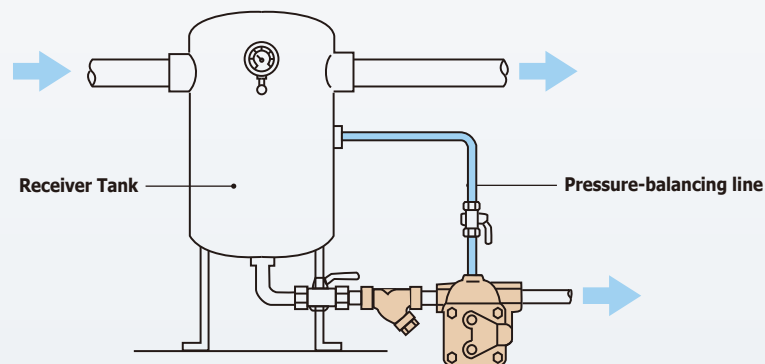
Depending on the operating conditions and applications a wide range of various types of air traps is available. Most of the traps can be fitted with a pressure – balancing line to ensure air can escape from the trap body to prevent air locking. Pressure-balancing lines are usually not necessary, if the air trap is installed directly below the equipment to be drained or if the trap is installed vertically.

MIYAWAKI offers different seat materials and various body materials (including stainless steel) for draining special gas applications.

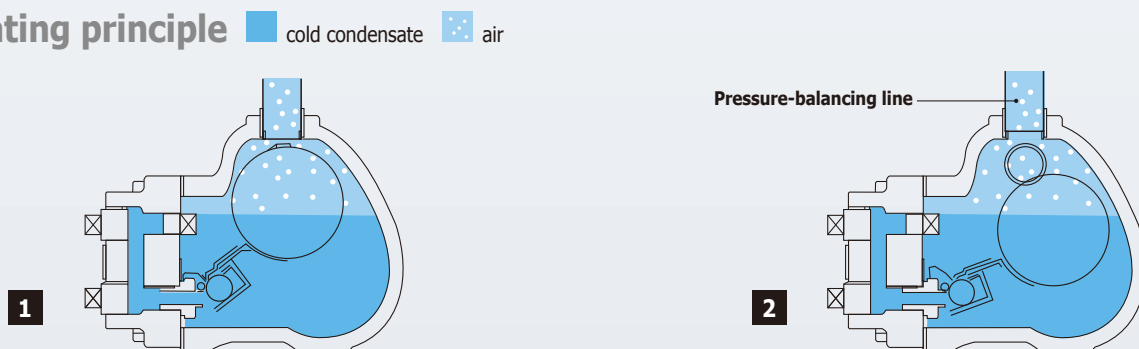
Models

AG11, AG12	Cast iron ball float air traps for medium condensate amounts
AGC1V	Stainless steel ball float air trap for small condensate loads (vertical installation)
AG29	Ductile cast iron ball float air and gas trap
AGH29	Cast steel ball float air and gas trap
AGU29	Stainless steel ball float air and gas trap
AGH12, AGH50	Cast Steel ball float air and gas trap
AE8	Ductile cast iron inverted bucket air trap
AV	Cast iron thermodynamic air trap with incorporated bypass

Installation Example



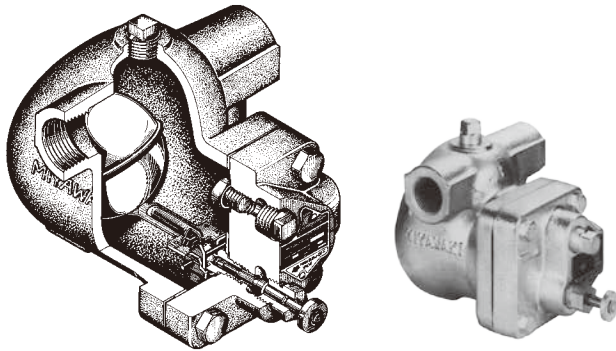
Operating principle



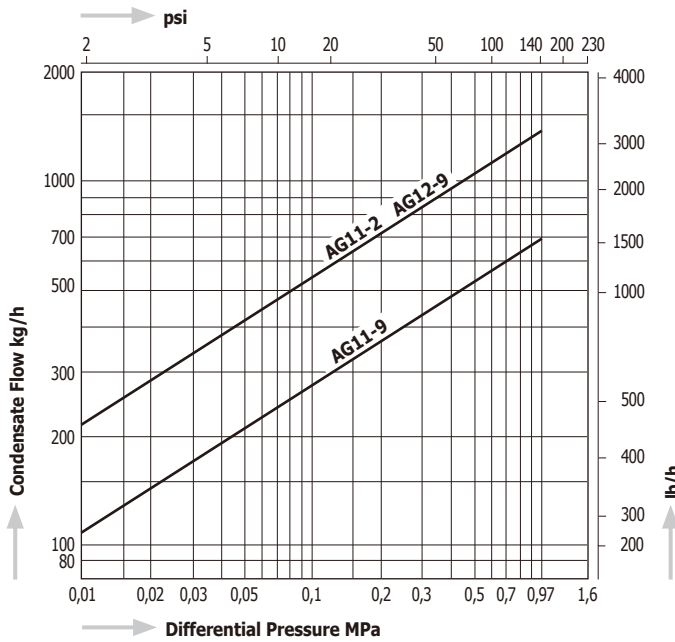
At start-up condensate enters the air trap. The float is rising and the condensate will be discharged through the wide open valve. Air, which usually enters the trap body together with the condensate, will accumulate in the upper part of the trap body. To prevent air locking, a pressure-balancing line connects the upper part of the trap with the drained equipment, so that the air can escape easily from the trap body.

Condensate continuously enters the air trap. Depending on the condensate amount the float will move upwards or downwards to open or close the valve seat. Usually a certain liquid level will be maintained in the trap body and condensate will be discharged continuously. Air will leave the trap body through the pressure-balancing line.

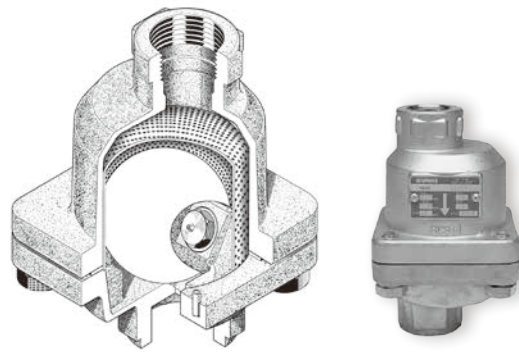
AG11, AG12



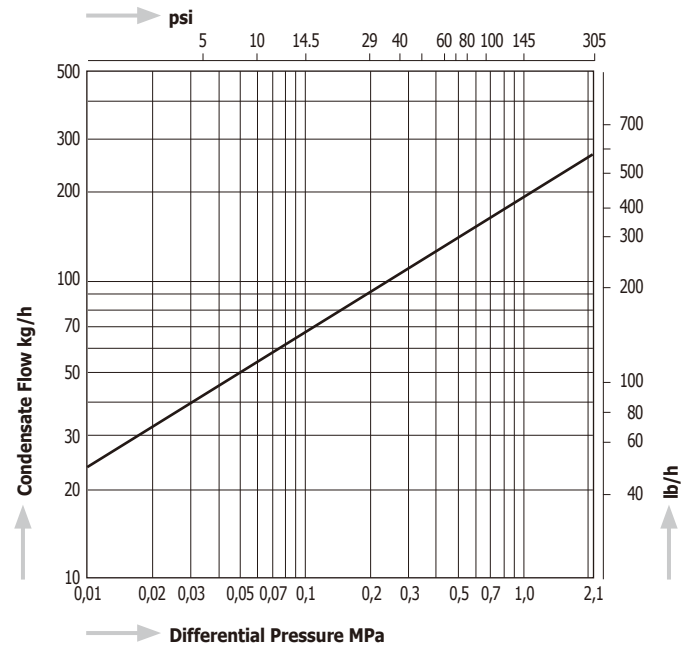
Capacity Chart AG11, AG12



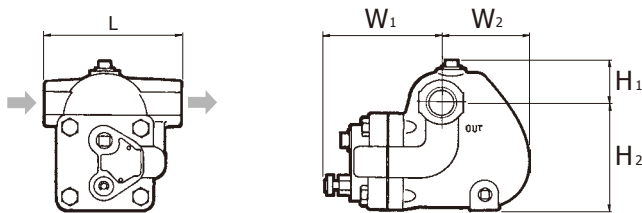
AGC1V



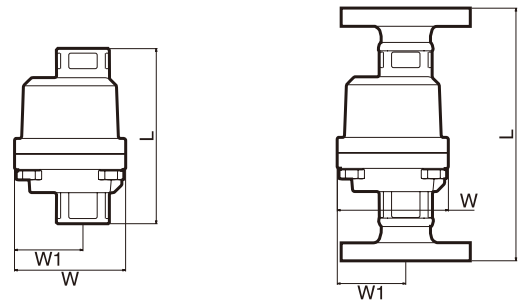
Capacity Chart AGC1V



Dimensions AG11, AG12



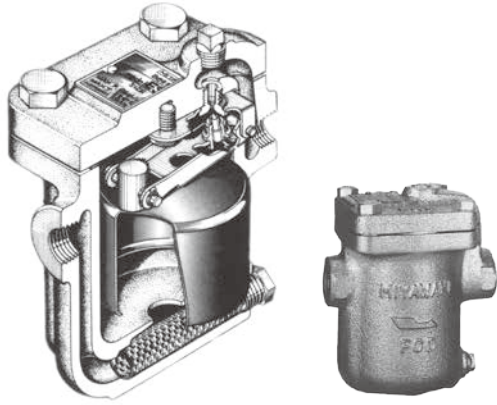
Dimensions AGC1V, AGC1V-W, AGC1V-F



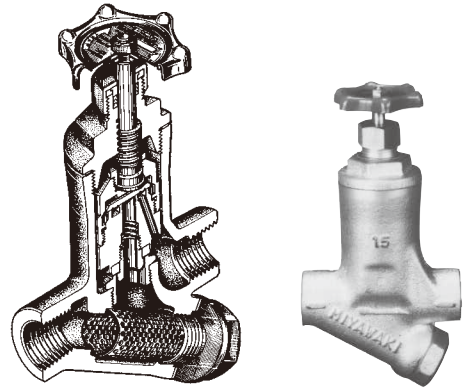
Model	Connections	Size	Max. Operating Pressure		Max. Operating Temperature		Dimensions (mm)						Dimensions (in)						Body Material	Weight	
			MPa	psig	°C	°F	L	H1	H2	W1	W2	W	L	H1	H2	W1	W2	W		kg	lb
AG11 - 2 AG12 - 9	Screwed Rc, NPT	1/2", 3/4"	0,2	29	100	212	120	37	92	121	60	-	4.7	1.5	3.6	4.8	2.4	-	Cast Iron FC250	3,9	8.6
		3/4", 1"	0,97	140			140	47	113	129	92	-	5.5	1.9	4.4	5.1	3.6	-		5,9	13.0
AGC1V	Screwed Rc, NPT	1/2"	2,1	305	350	662	127	-	-	53	-	86	5.0	-	-	2.1	-	3.4	Stainless Steel SCS13A	1,8	4.0
		3/4"					5.4						2,0							4.2	
		1"					5.5						2,0							4.4	
		1/2"					5.0						2,0							4.4	
AGC1V-W	Socket Weld JIS, ASME, DIN	3/4"	2,1	305	350	662	136	-	-	53	-	86	5.4	-	-	2.1	-	3.4	Stainless Steel SCS13A	1,9	4.2
		1"					5.5						2,0							4.4	
		1/2"					5.5						2,0							4.4	
AGC1V-F	Flanged JIS, ASME, DIN	1/2"	2,1	305	350	662	175	-	-	53	86	6.9	-	-	2.1	-	3.4	Stainless Steel SCS13A	3,3	7.3	
		3/4"					7.7					2,0							4.4		
		1"					8.5					2,0							4.4		
		1/2"					195					195							195	215	51

Horizontal version for AGC1V is available as special design. For more details, please contact MIYAWAKI Inc. or an authorized representative.

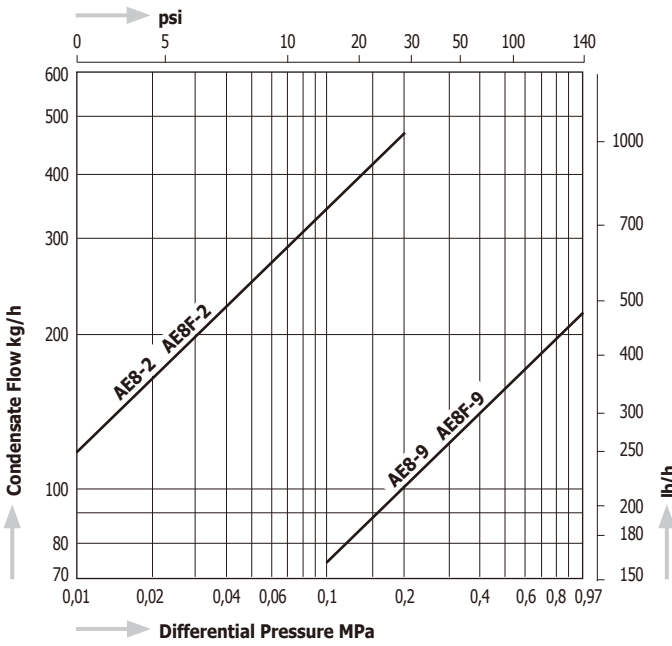
AE8



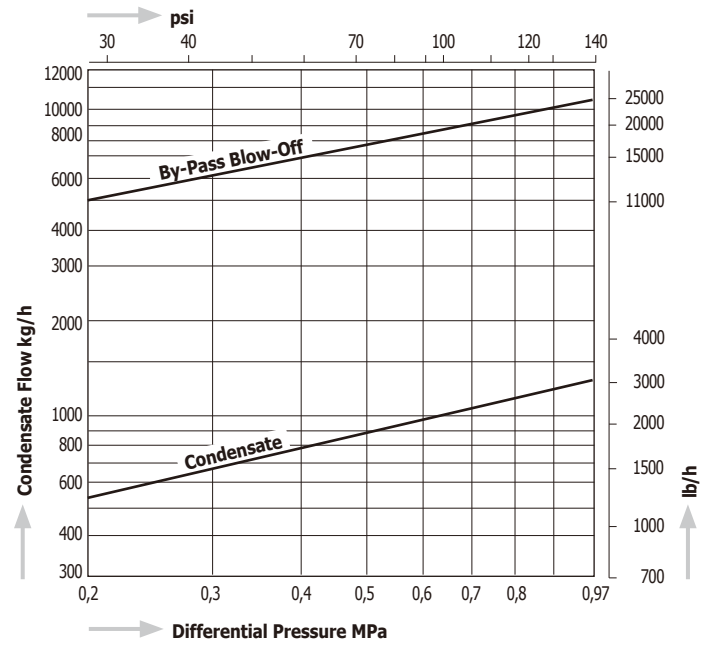
AV



Capacity Chart AE8

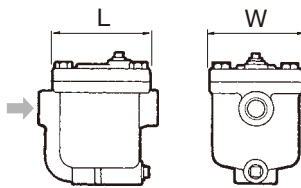


Capacity Chart AV

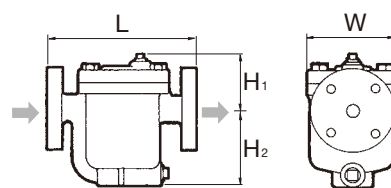


Dimensions

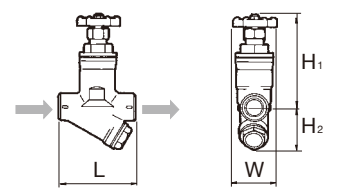
AE8



AE8F

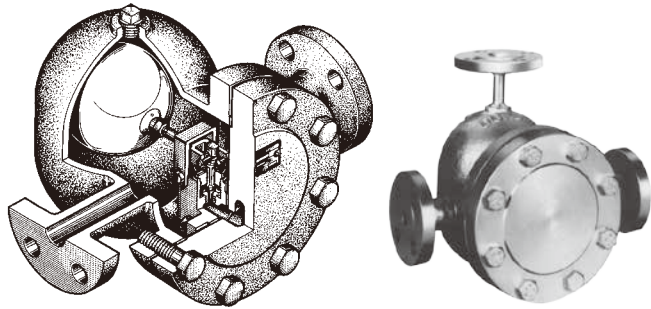


AV

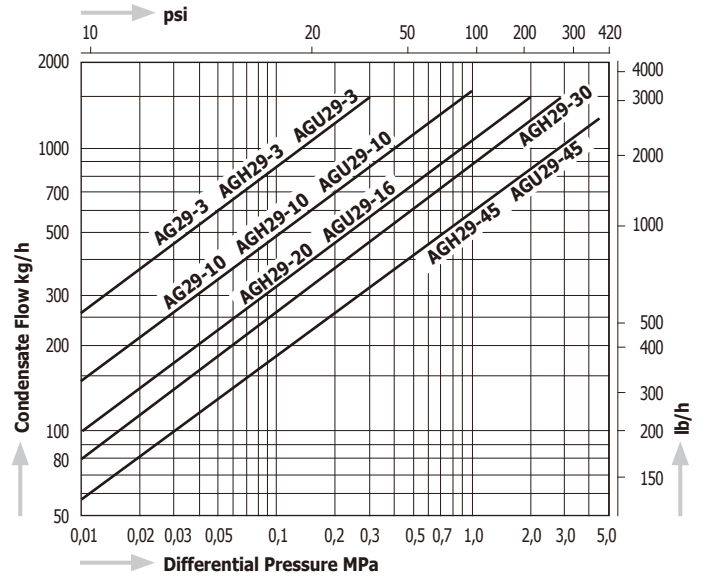


Model	Connections	Size	Max. Operating Pressure		Max. Operating Temperature		Dimensions (mm)				Dimensions (in)				Body Material	Weight				
			MPa	psig	°C	°F	L	H ₁	H ₂	W	L	H ₁	H ₂	W		kg	lb			
AE8- 9	Screwed Rc, NPT	1/2"	0,2	29	350	662	130	73	90	100	5.1	2.9	3.5	3.9	Ductile Cast Iron FCD450	3,7	8.1			
		135								5.3	3,9					8.6				
		1/2"	0,97	140			130	73	90	100	5.1	2.9	3.5	3.9		3,7	8.1			
		3/4"					135				5.3					3,9	8.6			
		1"					175	73	90	100	6.9					2.9	3.5	3.9	5,3	11.7
AE8F- 9	Flanged JIS, ASME, DIN	1/2"	0,2	29	350	662	195	68	95	100	7.7	2.7	3.7	3.9	Ductile Cast Iron FCD450	5,7	12.5			
		215					8.5				6,8					15.0				
		1/2"	0,97	140			175	73	90	100	6.9	2.9	3.5	3.9		5,3	11.7			
		3/4"					195	68	95	100	7.7					2.7	3.7	5,7	12.5	
		1"					215				8.5							6,8	15.0	
AV-4	Screwed Rc, NPT	1/2"	0,97	140	150	302	110	155	65	65	4.3	6.1	2.6	Cast Iron FC250	2,4	5.3				
AV-6		3/4"					120				65				70	4.7	2.6	2.6	2,5	5.5
AV-8		1"					120				70				70	4.7	2.8	2.6	2,7	5.9

AG29



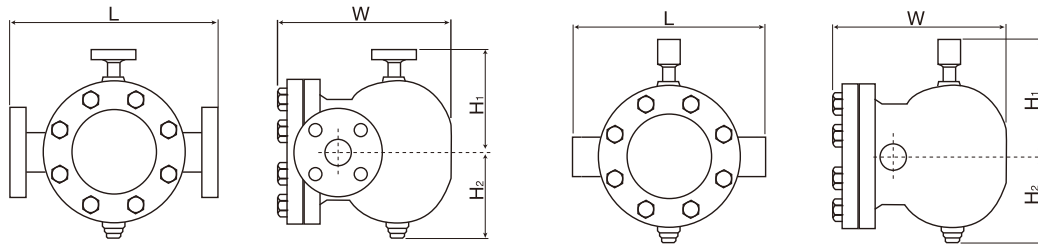
Capacity Chart AG29, AGH29, AGU29



Dimensions

AG29, AGH29, AGU29

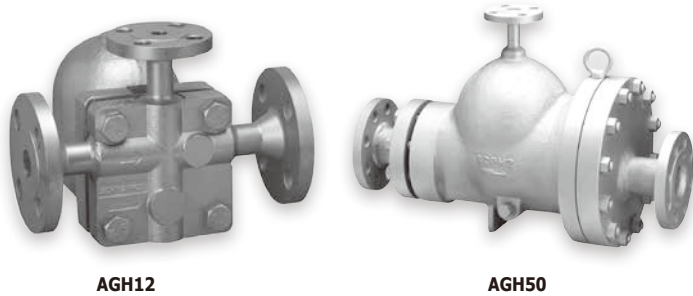
AGH29W, AGU29W



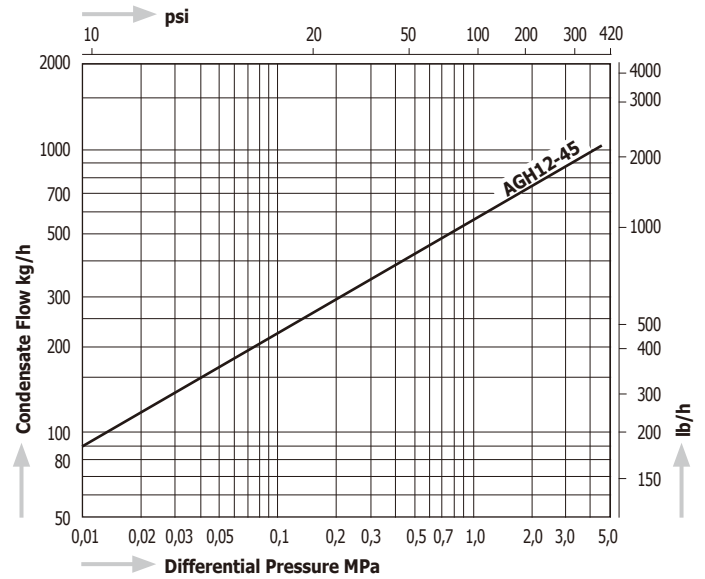
Model	Connections	Size	Max. Operating Pressure PMO		Max. Differential Pressure PMX		Max. Operating Temperature TMO		Dimensions (mm)				Dimensions (in)				Body Material	Weight	
			MPa	psig	MPa	psig	°C	°F	L	H ₁	H ₂	W	L	H ₁	H ₂	W		kg	lb
AG29 - 3	Flanged JIS, ASME, DIN	½" - 1"	0,3	43	0,3	43	300	572	340	200	120	260	13.4	7.9	4.7	10.2	Ductile Cast Iron FCD450	26	57.2
			0,97	140	0,97	140													
AGH29 - 10	Flanged JIS, ASME, DIN	½" - 2"	3,0	435	0,3	43	400	752	340	200	120	260	13.4	7.9	4.7	10.2	Cast Steel SCPH2	28,0*	61.6*
					1,0	145												½" - 1"	½" - 1"
					2,0	290												1 ¼" - 2"	1 ¼" - 2"
					3,0	435												1 ¼" - 2"	1 ¼" - 2"
AGH29W - 20	Socket Weld JIS, ASME, DIN	½" - 1"	3,0	435	0,3	43	400	752	280	200	120	260	11.0	7.9	4.7	10.2	Cast Steel SCPH2	25,5	56.1
					1,0	145													
					2,0	290													
					3,0	435													
AGU29 - 16	Flanged JIS, ASME, DIN	½" - 2"	3,0	435	0,3	43	400	752	340	200	120	260	13.4	7.9	4.7	10.2	Stainless Steel SCS13A	28,0*	61.6*
					1,0	145												½" - 1"	½" - 1"
					1,6	230												1 ¼" - 2"	1 ¼" - 2"
					4,5	652												1 ¼" - 2"	1 ¼" - 2"
AGU29W - 10	Socket Weld JIS, ASME, DIN	½" - 1"	3,0	435	0,3	43	400	752	280	200	120	260	11.0	7.9	4.7	10.2	Stainless Steel SCS13A	25,5	56.1
					1,0	145													
					1,6	230													
					4,5	652													

* The weight may differ depending on the size and flange standard.

AGH12, AGH50

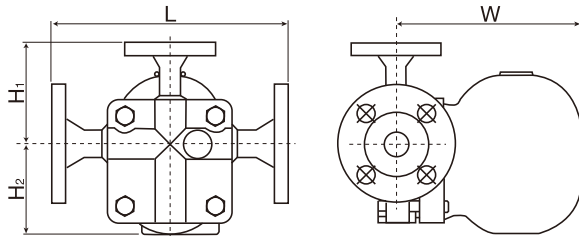


Capacity Chart AGH12-45

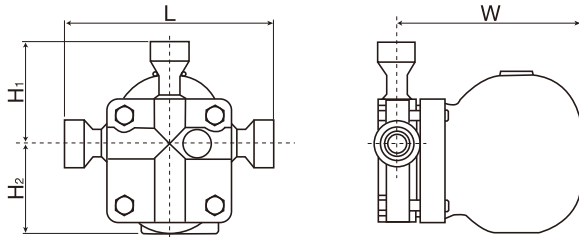


Dimensions

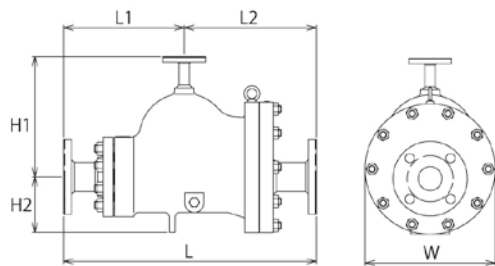
AGH12-45F



AGH12-45W



AGH50



Capacity Chart AGH50

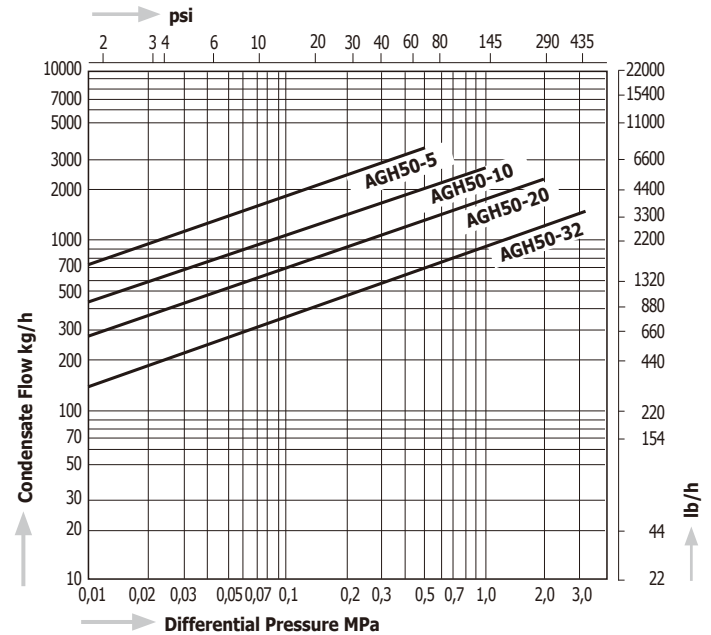


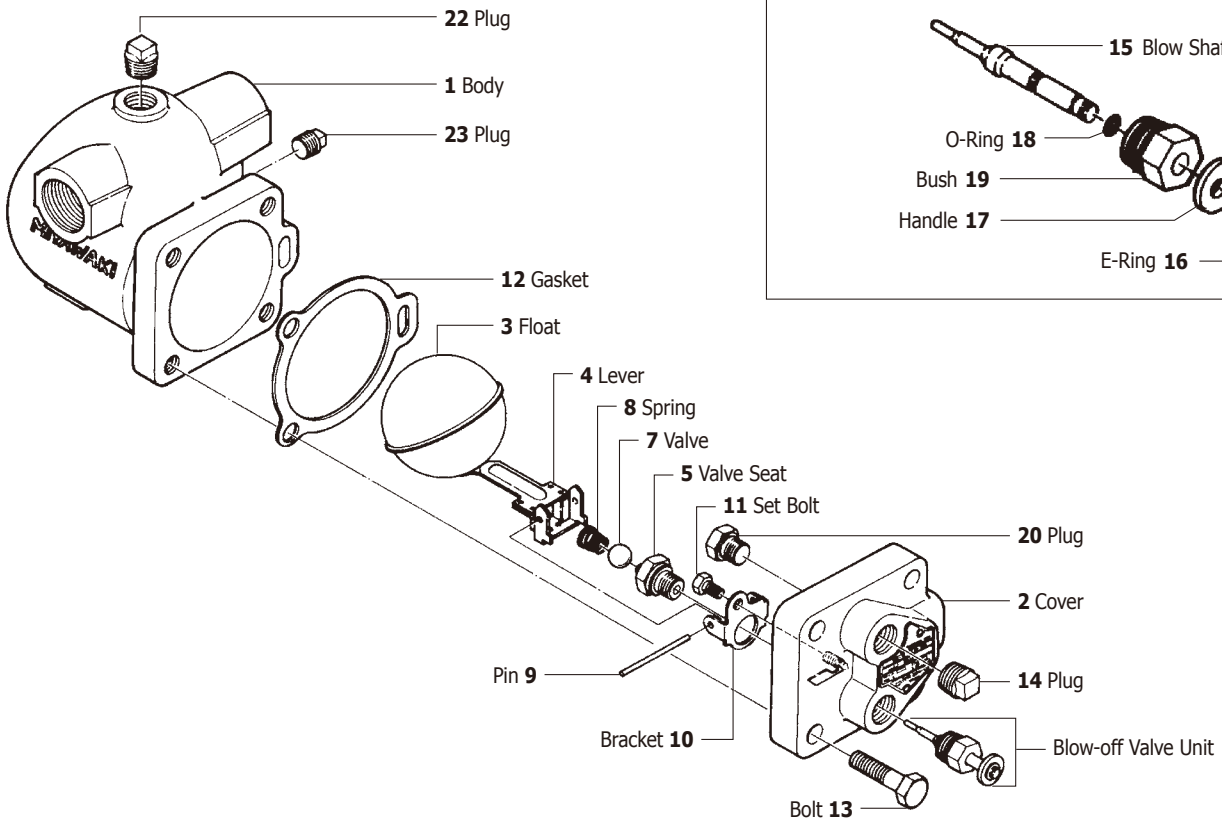
Table 1: Dimensions L and Weight

Model	Size	ASME Class* (#150, #300)							
		Dimensions* (mm)			Dimensions* (in)			Weight*	
		L	L ₁	L ₂	L	L ₁	L ₂	kg	lb
AGH50	2"	525	250	275	20.7	9.8	10.8	64	140.8
	2½"	550	265	285	21.7	10.4	11.2	68	149.6
	3"	555		290	21.9	10.4	11.4	72	158.4
	4"	590	285	305	23.2	11.2	12.0	73 / 82	160.6 / 180.4

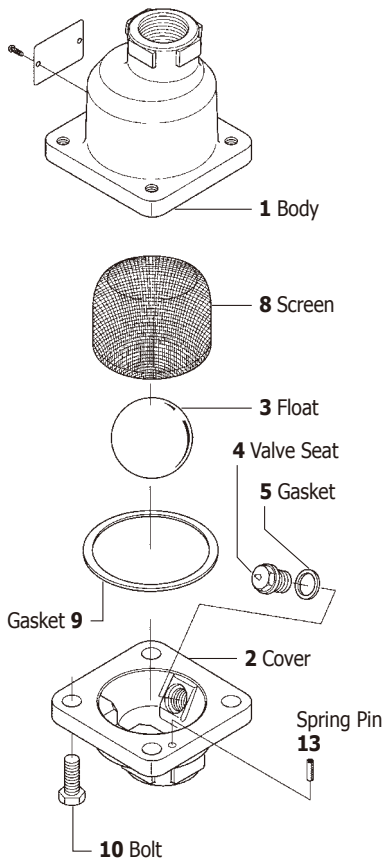
Model	Connections	Size	Max. Operating Pressure, PMO		Max. Differential Pressure, PMX		Max. Operating Temperature, TMO		Dimensions* (mm)					Dimensions* (in)					Body Material	Weight*	
			MPa	psig	MPa	psig	°C	°F	L	L ₁	L ₂	H ₁	H ₂	W	L	L ₁	L ₂	H ₁		H ₂	W
AGH12 - 45F	Flanged JIS, ASME, DIN	½" - 1"	4,5	652	4,5	652	425	800	250	107	95	195	9.8	4.2	3.7	7.7	Cast Steel SCPH2	17	37.4		
AGH12 - 45W	Socket Weld JIS, ASME, DIN																	12	26.4		
AGH50 -	Flanged JIS, ASME, DIN	2" - 4"	3,2	464	0,5	72.5	400	752	Table 1	250	115	270	Table 1	9.8	4.5	10.6	Cast Steel SCPH2	Table 1			
					1,0	145															
					2,0	290															
					3,2	464															

* Depending on the flange standard the face-to-face dimensions and the weight may differ.
Stainless Steel as body material is available as special design. For more details, please contact MIYAWAKI Inc. or an authorized representative.

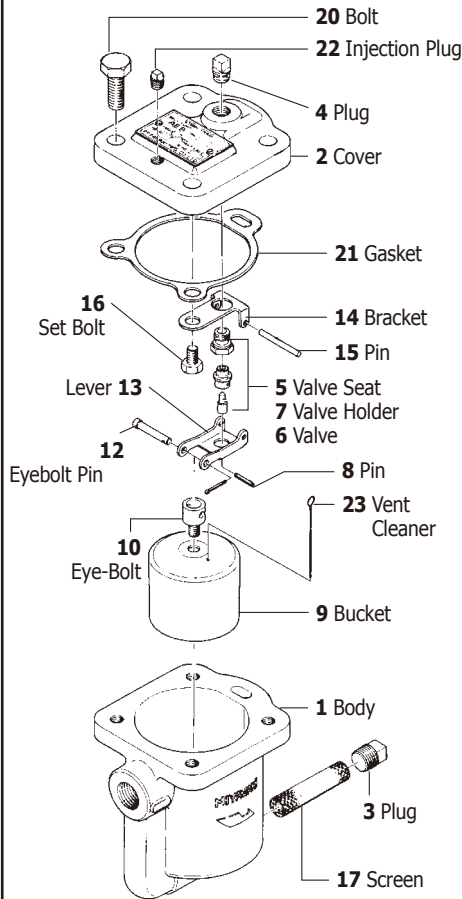
AG11/AG12



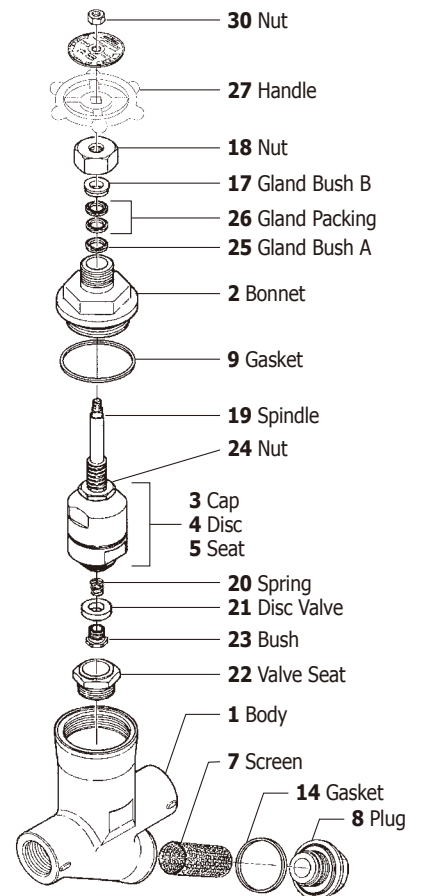
AGC1V



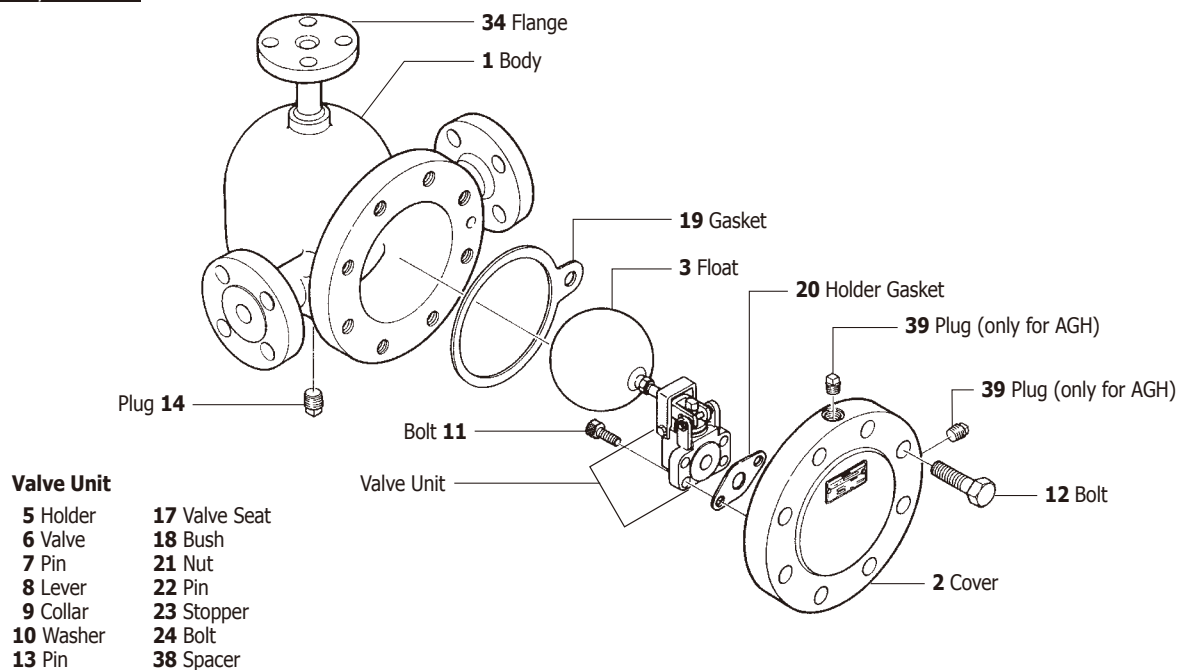
AE8



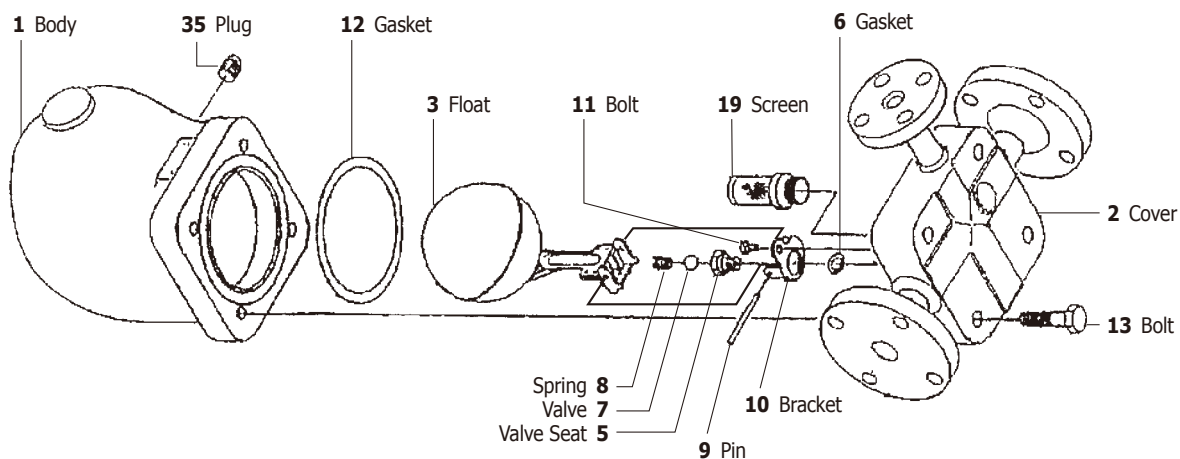
AV



AG29, AGH29, AGU29



AGH12



AGH50

