



Industrial de Valvulas, S.A. de C.V.  
 Av. de La Industria Lote 16 Fracc. Industrial El Trebol  
 Tepotzotlan, Estado de Mexico C.P. 54600  
 Since 1842 Teléfono: (52 55) 5899 1700 Fax: (52 55) 5876 0156  
 E-Mail: Info@walworth.com.mx Web: www.walworthvalves.com

(Numero) Number  
 (Fecha) Date

V11C15292  
 11/01/2012

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

### ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS LAST EDITION:

(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PROBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES ULTIMA EDICIÓN.)

- API 598 - VALVE INSPECTION AND TESTING
- API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS
- MSS-SP61 - PRESSURE TESTING OF STEEL VALVES
- API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

- API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS
- ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED
- API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC022A08MAA8300000**  
 (Código)  
 Description **2 1/2" Fig. 300 F UT WCB, API TRIM No.8 830000**  
 Descripción **CAST STEEL GATE VALVE 300 CLASS**  
**(VALVULA COMPUERTA DE ACERO FUNDIDO CLASE 300)**

VALVE WITH LOW EMISSION CONTROL (50 PPM'S MAX.) (VALVULA SUMINISTRADA CON CONTROL DE BAJAS EMISIONES FUGITIVAS (50 PPM'S MAX.))

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	1125	1125	NA	NA
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

		CHEMICAL COMPOSITION (%)											COMPOSICIÓN QUIMICA (%)					TENS					YIELD					ELG					RED					BHN				
ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG																								
BODY CUERPO	WH15839	ASTM A-216/WCB	0.203	0.893	0.021	0.023	0.485	0.044	0.030	0.022	0.005	0.001		79.75	51.48	32	54	154																								
			Normalized to (Normalizado a) 930 °C											Cooled in air. (Enfriado en aire.)																												
BONNET BONETE	WH21111	ASTM A-216/WCB	0.197	0.860	0.034	0.016	0.430	0.046	0.036	0.035	0.056	0.005		77.29	49.16	31	44	167																								
			Normalized to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)																							
WEDGE DISCO	WH35947	ASTM A-216/WCB	0.204	0.961	0.022	0.012	0.470	0.010	0.016	0.001	0.027	0.002		80.33	50.17	28	54	154																								
			Normalized to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)																							

CERTIFICADO POR:  
 ASEGURAMIENTO DE

CERTIFIED BY:  
 QUALITY ASSURANCE

Yolanda Ponciano

Materiales en Interiores  
 Vástago - ASTM A 276 Tipo 410 (13% Cr.)  
 Recubrimiento en Disco - Sold. 430 (13%Cr)  
 Recubrimiento en Anillo - Sold. Stellite No. 6

FACIO-21 REV 3\*



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(Numero) Number

V10C15223

(Fecha) Date

29/09/2010

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

### ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS LAST EDITION:

(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PROBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES ULTIMA EDICIÓN.)

- API 598 - VALVE INSPECTION AND TESTING
- API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS
- MSS-SP61 - PRESSURE TESTING OF STEEL VALVES
- API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

- API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS
- ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED
- API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC031A12MAB790000C**  
 (Código)  
 Description **3" Fig. 5202 F 3HF WCB, API TRIM No.12 790000C**  
 Descripción **CAST STEEL GATE VALVE 150 CLASS**  
**(VALVULA COMPUERTA DE ACERO FUNDIDO CLASE 150)**

VALVE MANUFACTURED TO MEET LOW FUGITIVE EMISSION (50 PPM'S MAX) & NACE SERVICE MR-01-75 (VALVULA SUMINISTRADA CON CONTROL DE BAJAS EMISIONES FUGITIVAS 50 PPM'S MAX.) Y PARA SERVICIO NACE MR-01-75)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIESTROSTATICA)	450	450	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)											COMPOSICIÓN QUIMICA (%)									
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS	YIELD	ELG	RED	BHN					
														KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG					
BODY CUERPO	WH32220	ASTM A-216/WCB	0.199	0.895	0.019	0.027	0.446	0.022	0.036	0.006	0.040	0.008						77.00	50.32	32	51	166	
			Normalizated to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				
BONNET BONETE	WH32398	ASTM A-216/WCB	0.202	0.860	0.028	0.015	0.478	0.048	0.036	0.005	0.034	0.016						77.72	48.29	24	44	164	
			Normalizated to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Enfriado en aire. (Cooled in air.)				
WEDGE DISCO	91116	ASTM A-216/WCB	0.190	0.810	0.023	0.022	0.410	0.022	0.079	0.011	0.037	0.001						76.42	46.84	28	40	167	
			Normalizated to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				

CERTIFICADO POR:  
ASEGURAMIENTO DE

CERTIFIED BY:  
QUALITY ASSURANCE

Yolanda Ponciano

MATERIALES EN INTERIORES 3HF  
 Vástago - ASTM A 276 Tipo 316 (16- 18)  
 Recubrimiento en Disco - Sold. Inox. 316 (18 - 20)  
 Recubrimiento en Anillo - Sold. Stellite No. 6

FAC10-21 REV "3"



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(Numero) Number

V11C15294

(Fecha) Date

11/01/2012

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

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API 598 - VALVE INSPECTION AND TESTING  
 API 599 - METAL PLUG-VALVES - FLANGED, THREADED AND WELDING  
 ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES  
 ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS  
 MSS-SP61 - PRESSURE TESTING OF STEEL VALVES  
 API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK  
 API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS  
 ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED  
 API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC022A08MAA8300000**  
 (Código)  
 Description **2 1/2" Fig. 300 F UT WCB, API TRIM No.8 830000**  
 Descripción **CAST STEEL GATE VALVE 300 CLASS**  
**(VALVULA COMPUERTA DE ACERO FUNDIDO CLASE 300)**

VALVE WITH LOW EMISSION CONTROL (50 PPM'S MAX.) (VALVULA SUMINISTRADA CON CONTROL DE BAJAS EMISIONES FUGITIVAS (50 PPM'S MAX.))

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	1125	1125	NA	NA
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

CHEMICAL COMPOSITION (%)													COMPOSICIÓN QUIMICA (%)					
ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS	YIELD	ELG	RED	BHN
														KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS	YIELD	ELG	RED	BHN				
BODY CUERPO	WH15839	ASTM A-216/WCB	0.203	0.893	0.021	0.023	0.485	0.044	0.030	0.022	0.005	0.001		79.75	51.48	32	54	154				
			Normalizated to (Normalizado a) 930 °C										Cooled in air. (Enfriado en aire.)									
BONNET BONETE	WH21137	ASTM A-216/WCB	0.209	0.910	0.022	0.016	0.423	0.054	0.060	0.024	0.046	0.004		79.61	45.82	29	59	160				
			Normalizated to (Normalizado a) 920 °C										Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				
WEDGE DISCO	WH25947	ASTM A-216/WCB	0.194	0.960	0.028	0.020	0.436	0.007	0.057	0.005	0.005	0.001		74.53	46.69	27	49	151				
			Normalizated to (Normalizado a) 930 °C										Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				

CERTIFICADO POR:  
ASEGURAMIENTO DE

CERTIFIED BY:  
QUALITY ASSURANCE

Yolanda Ponciano

Materiales en Interiores

Vástago - ASTM A 276 Tipo 410 (13% Cr.)

Recubrimiento en Disco - Sold. 430 (13%Cr)

Recubrimiento en Anillo - Sold. Stellite No. 6

FACIO-21 REV \*3\*



# WALWORTH

Since 1842

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(Numero) Number

V095C4224

(Fecha) Date

29/09/2010

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS LAST EDITION:

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API 598 - VALVE INSPECTION AND TESTING  
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 ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS  
 MSS-SP61 - PRESSURE TESTING OF STEEL VALVES  
 API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK  
 API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS  
 ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED  
 API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC031A12MAB790000C**  
 (Código)  
 Description **3" Fig. 5202 F 3HF WCB, API TRIM No.12 790000C**  
 Descripción **CAST STEEL GATE VALVE 150 CLASS**  
 (VALVULA COMPUERTA DE ACERO FUNDIDO CLASE 150)

VALVE MANUFACTURED TO MEET LOW FUGITIVE EMISSION (50 PPM'S MAX) & NACE SERVICE MR-01-75 (VALVULA SUMINISTRADA CON CONTROL DE BAJAS EMISIONES FUGITIVAS 50 PPM'S MAX.) Y PARA SERVICIO NACE MR-01-75)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

### CHEMICAL COMPOSITION (%)

### COMPOSICIÓN QUIMICA (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										MECHANICAL TEST (PROP. MECANICAS)				
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS KPSI CVN@	YIELD KPSI 1ST	ELG % 2ND	RED % 3RD
BODY CUERPO	WH32069	ASTM A-216/WCB	0.205	0.943	0.029	0.025	0.500	0.024	0.030	0.006	0.021	0.007	72.26	50.32	28	50	167
			Normalized to (Normalizado a) 930 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)														
BONNET BONETE	WH32398	ASTM A-216/WCB	0.202	0.860	0.028	0.015	0.478	0.048	0.036	0.005	0.034	0.016	77.72	48.29	24	44	164
			Normalized to (Normalizado a) 930 °C      Temper to (Temple a) 650 °C      Enfriado en aire. (Cooled in air.)														
WEDGE DISCO	91114	ASTM A-216/WCB	0.190	0.800	0.025	0.021	0.460	0.020	0.084	0.011	0.034	0.002	75.69	48.72	27	40	169
			Normalized to (Normalizado a) 930 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)														

CERTIFICADO POR:  
ASEGURAMIENTO DE

CERTIFIED BY:  
QUALITY ASSURANCE

Yolanda Ponciano

MATERIALES EN INTERIORES 3HF  
 Vástago - ASTM A 276 Tipo 316 (16- 18)  
 Recubrimiento en Disco - Sold. Inox. 316 (18 - 20)  
 Recubrimiento en Anillo - Sold. Stellite No. 6

FAC10-21 REV 03\*



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(Numero) Number  
 (Fecha) Date

V11C15252  
 11/01/2012

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

### ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS LAST EDITION:

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- API 598 - VALVE INSPECTION AND TESTING
- API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS
- MSS-SP61 - PRESSURE TESTING OF STEEL VALVES
- API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

- API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS
- ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED
- API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

**Part No.** AC022A08MAA8300000  
 (Código)  
**Description** 2 1/2" Fig. 300 F UT WCB, API TRIM No.8 830000  
 Descripción CAST STEEL GATE VALVE 300 CLASS  
 (VALVULA COMPUERTA DE ACERO FUNDIDO CLASE 300)  
 VALVE WITH LOW EMISSION CONTROL (50 PPM'S MAX.) (VALVULA SUMINISTRADA CON CONTROL DE BAJAS EMISIONES FUGITIVAS (50 PPM'S MAX.))

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	1125	1125	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

CHEMICAL COMPOSITION (%)													COMPOSICIÓN QUIMICA (%)					TENS	YIELD	ELG	RED	BHN
ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG				

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG					
BODY CUERPO	WH21145	ASTM A-216/WCB	0.193	0.963	0.026	0.018	0.454	0.060	0.059	0.020	0.023	0.005		76.27	56.11	32	56	150					
			Normalizated to (Normalizado a) 920 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				
BONNET BONETE	WH21102	ASTM A-216/WCB	0.193	0.890	0.024	0.019	0.412	0.074	0.030	0.029	0.045	0.006		73.81	44.37	36	59	151					
			Normalizated to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				
WEDGE DISCO	WH35947	ASTM A-216/WCB	0.204	0.961	0.022	0.012	0.470	0.010	0.016	0.001	0.027	0.002		80.33	50.17	28	54	154					
			Normalizated to (Normalizado a) 930 °C											Temper to (Temple a) 650 °C					Cooled in air. (Enfriado en aire.)				

CERTIFICADO POR:  
ASEGURAMIENTO DE

CERTIFIED BY:  
QUALITY ASSURANCE

Yolanda Ponciano

Materiales en Interiores  
 Vástago - ASTM A 276 Tipo 410 (13% Cr.)  
 Recubrimiento en Disco - Sold. 430 (13%Cr)  
 Recubrimiento en Anillo - Sold. Stellite No. 6

FAC10-21 REV 03\*



# WALWORTH

Since 1842

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(Numero) Number

V09C11037

(Fecha) Date

20/05/2009

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS LAST EDITION:

(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PROBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES ULTIMA EDICIÓN.)

API 598 - VALVE INSPECTION AND TESTING  
 API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING  
 ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES  
 ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS  
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 API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK  
 API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS  
 ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED  
 API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC031A12MAB790000M**  
 (Código)  
 Description **3" Fig. 5202 F 3HF WCB, API TRIM No.12 790000M**  
 Descripción **CAST STEEL GATE VALVE 150 PSI**  
 (VALVULA COMPUERTA DE ACERO FUNDIDO 150 PSI)

MANUFACTURED TO MEET NACE MR-01-75-2003 REQUIREMENTS AND LOW FUGITIVE EMISSIONS CONTROL (VALVULA SERVICIO NACE MR-01-75 \*Y CONTROL DE EMISIONES FUGITIVAS 50 PPM'S)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

### CHEMICAL COMPOSITION (%)

### COMPOSICIÓN QUIMICA (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										MECHANICAL TEST (PROP. MECANICAS)				
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS KPSI CVN@	YIELD KPSI 1ST	ELG % 2ND	RED % 3RD
BODY CUERPO	WH22684	ASTM A-216/WCB	0.195	0.811	0.031	0.015	0.481	0.026	0.010	0.034	0.054	0.005	77.43	49.44	28	53	159
			Normalized to (Normalizado a) 920 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)														
BONNET BONETE	WH29190	ASTM A-216/WCB	0.213	0.941	0.028	0.020	0.425	0.040	0.067	0.014	0.020	0.002	71.34	43.36	32	43	157
			Normalized to (Normalizado a) 920 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)														
WEDGE DISCO	WH15685	ASTM A-216/WCB	0.191	0.903	0.029	0.018	0.464	0.041	0.019	0.049	0.019	0.003	79.60	44.80	31	40	156
			Normalized to (Normalizado a) 920 °C      Temper to (Temple a) 650 °C      Cooled in air. (Enfriado en aire.)														

CERTIFICADO POR:  
ASEGURAMIENTO DE

CERTIFIED BY:  
QUALITY ASSURANCE

Yolanda Ponciano

MATERIALES EN INTERIORES 3HF  
 Vástago - ASTM A 276 Tipo 316 (16-18)  
 Recubrimiento en Disco - Sold. Inox. 316 (18-20)  
 Recubrimiento en Anillo - Sold. Stellite No. 6

FACIO-21 REV 03



# WALWORTH

Since 1842

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(Numero) Number

V09C11402

(Fecha) Date

20/05/2009

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE FOLLOWING STANDARDS LAST EDITION:

(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PROBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES ULTIMA EDICIÓN.)

- API 598 - VALVE INSPECTION AND TESTING
- API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING
- ANSI B16-10 - FACE TO FACE AND END TO END DIMENSIONS OF VALVES
- ANSI B16-34 - VALVES - FLANGED, THREADED AND WELDING ENDS
- MSS-SP61 - PRESSURE TESTING OF STEEL VALVES
- API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

- API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK
- API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS
- ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED
- API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. **AC031A12MAB790000M**  
 (Código)  
 Description **3" Fig. 5202 F 3HF WCB, API TRIM No.12 790000M**  
 Descripción **CAST STEEL GATE VALVE 150 PSI**  
**(VALVULA COMPUERTA DE ACERO FUNDIDO 150 PSI)**

MANUFACTURED TO MEET NACE MR-01-75-2003 REQUIREMENTS AND LOW FUGITIVE EMISSIONS CONTROL (VALVULA SERVICIO NACE MR-01-75 \*Y CONTROL DE EMISIONES FUGITIVAS 50 PPM'S)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

CHEMICAL COMPOSITION (%)													COMPOSICIÓN QUIMICA (%)					
ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS	YIELD	ELG	RED	BHN
														KPSI CVN@	KPSI 1ST	% 2ND	% 3RD	AVG
BODY CUERPO	WH22724	ASTM A-216/WCB	0.199	0.900	0.019	0.012	0.437	0.018	0.044	0.005	0.040	0.001		78.01	45.96	32	47	152
			Normalizated to (Normalizado a) 920 °C			Temper to (Temple a) 650 °C			Cooled in air. (Enfriado en aire.)									
BONNET BONETE	WH28813	ASTM A-216/WCB	0.211	0.963	0.033	0.018	0.416	0.012	0.087	0.009	0.014	0.006		83.95	47.85	29	53	168
			Normalizated to (Normalizado a) 930 °C			Temper to (Temple a) 650 °C			Cooled in air. (Enfriado en aire.)									
WEDGE DISCO	D8567	ASTM A-216/WCB	0.110	0.960	0.024	0.020	0.600	0.500	0.450	0.017	0.017	0.001	0.398	87.96	45.25	28	44	158
			Normalizated to (Normalizado a) 930 °C			Temper to (Temple a) 650 °C			Cooled in air. (Enfriado en aire.)									

CERTIFICADO POR:  
ASEGURAMIENTO DE

CERTIFIED BY:  
QUALITY ASSURANCE

Yolanda Ponciano

MATERIALES EN INTERIORES 3HF  
 Vástago - ASTM A 276 Tipo 316 (16- 18)  
 Recubrimiento en Disco - Sold. Inox. 316 (18 - 20)  
 Recubrimiento en Anillo - Sold. Stellite No. 6

FAC10-21 REV 03



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(Numero) Number

V09C11454

(Fecha) Date

20/05/2009

## QUALITY ASSURANCE CERTIFICATE OF COMPLIANCE

(ACCORDING TO EN10204 TYPE 3.1)

ASEGURAMIENTO DE CALIDAD CERTIFICADO DE CUMPLIMIENTO

WE CERTIFY THAT THE PRODUCT LISTED BELOW WAS DESIGNED, MANUFACTURED AND TESTED ACCORDING TO OUR QUALITY SYSTEM AND REQUIREMENTS GIVEN IN ONE OR MORE OF THE

FOLLOWING STANDARDS LAST EDITION:

(CERTIFICAMOS QUE EL PRODUCTO LISTADO ABAJO FUE DISEÑADO, FABRICADO Y PROBADO DE ACUERDO CON NUESTRO SISTEMA DE CALIDAD Y CON REQUISITOS ESTABLECIDOS EN UNO O MAS DE LOS SIGUIENTES ESTANDARES ULTIMA EDICIÓN.)

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 API 599 - METAL PLUG VALVES - FLANGED, THREADED AND WELDING  
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 MSS-SP61 - PRESSURE TESTING OF STEEL VALVES  
 API 594 - CHECK VALVES FLANGED, LUG, WAFER AND BUTT WELDING

API 6D - PIPELINE VALVES - GATE, PLUG, BALL AND CHECK  
 API 600 - STEEL GATE VALVES, FLANGED AND WELDING ENDS  
 ANSI B16-11 - FORGED FITTINGS, SOCKET - WELDING AND THREADED  
 API 602 - COMPACT STEEL GATE VALVES - FLANGED, THREADED, WELDING AND EXTENDED - BODY ENDS

Part No. AC031A12MAB790000M  
 (Código)  
 Description 3" Fig. 5202 F 3HF WCB, API TRIM No.12 790000M  
 Descripción CAST STEEL GATE VALVE 150 PSI  
 (VALVULA COMPUERTA DE ACERO FUNDIDO 150 PSI)

MANUFACTURED TO MEET NACE MR-01-75-2003 REQUIREMENTS AND LOW FUGITIVE EMISSIONS CONTROL (VALVULA SERVICIO NACE MR-01-75 \*Y CONTROL DE EMISIONES FUGITIVAS 50 PPM'S)

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)	
			1	2
HYDROSTATIC (PSI) (HIDROSTATICA)	450	450	N A	N A
PNEUMATIC (PSI) (NEUMATICA)			80	80

### MECHANICAL TEST (PROP. MECANICAS)

### CHEMICAL COMPOSITION (%)

### COMPOSICIÓN QUIMICA (%)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										TENS	YIELD	ELG	RED	BHN
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	KPSI CVN@	KPSI 1ST	% 2ND	% 3RD
BODY CUERPO	WH22727	ASTM A-216/WCB	0.196	0.989	0.025	0.027	0.477	0.025	0.045	0.005	0.035	0.001	76.27	41.47	29	43	158
			Normalizated to (Normalizado a) 930 °C Temper to (Temple a) 650 °C Cooled in air. (Enfriado en aire.)														
BONNET BONETE	WH28578	ASTM A-216/WCB	0.193	0.890	0.033	0.017	0.509	0.040	0.035	0.020	0.019	0.002	81.20	49.16	31	50	159
			Normalizated to (Normalizado a) 930 °C Temper to (Temple a) 650 °C Cooled in air. (Enfriado en aire.)														
WEDGE DISCO	D8567	ASTM A-216/WCB	0.110	0.960	0.024	0.020	0.600	0.500	0.450	0.017	0.017	0.001	87.96	45.25	28	44	158
			Normalizated to (Normalizado a) 930 °C Temper to (Temple a) 650 °C Cooled in air. (Enfriado en aire.)														

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MATERIALES EN INTERIORES 3HF  
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FAC10-21 REV 13\*