



WALWORTH
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Industrial de Valvulas, S.A de C.V.
Av. de La Industria Lote 16 Fracc. Industrial El Trebol
Tepozotlan, Estado de México C.P. 54600

(Numero) Number **V08R2522**
(Fecha) Date **15/04/2008**

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 6D - PIPELINE VALVES - GATE, PLUG, BALL ANF 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. **AR031A12MAA**

(Código) **3" Fig. 5341 F 3HF WCB, API TRIM No.12 8300000**

Description **CAST STEEL SWING CHECK VALVE
(VALVULA RETENCIÓN TIPO COLUMPIO DE ACERO FUNDIDO)**

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

PRESSURE TEST (PRUEBAS DE PRESION)	SHELL (CASCO)	BACK (SEAT)	SIDE (LADO)
HYDROSTATIC (PSI) (HIDROSTATICA)	450	N A	315
PNEUMATIC (PSI) (NEUMATICA)		N A	N A

MECHANICAL TESTS (PROP. MECANICAS)

ITEM (PARTE)	HEAT No. (COLADA)	MATERIAL (ASTM)	CHEMICAL COMPOSITION (%)										MECHANICAL TESTS (PROP. MECANICAS)							
			C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Cb	TENS KPSI CVN@	YIELD KPSI 1ST	ELG % 2ND	RED % 3RD	BHN AVG		
BODY CUERPO	WH17008	ASTM A-216/WCB	0.217	0.987	0.031	0.013	0.459	0.020	0.030	0.020	0.030	0.020	0.030	0.001	0.001	73.66	45.67	26	48	165
	HD3250	ASTM A-216/WCB	0.190	0.910	0.016	0.018	0.530	0.078	0.121	0.039	0.041	0.004	0.004	0.004	74.39	47.85	26	48	172	
COVER TAPA	WH18162	ASTM A-216/WCB	0.206	0.920	0.026	0.022	0.446	0.053	0.040	0.019	0.018	0.002	0.002	0.002	73.95	47.27	30	60	153	
			Normalized to (Normalizado a) 920 °C																	

Sandra Ruiz

CERTIFICADO POR: **ASEGURAMIENTO DE CALIDAD**

CERTIFIED BY: **QUALITY ASSURANCE**