

API Standard 6FA, Third Edition

Fire Test Report

Performed for

Franklin Valve LP
Houston, Texas
www.franklinvalve.com



10 inch Class 150
Duraseal Valve

Project Number: 208149
December 13, 2008



Performed by

YARMOUTH RESEARCH AND TECHNOLOGY

434 Walnut Hill Road
North Yarmouth, ME 04097 USA
(207) 829-5359

www.yarmouthresearch.com

YARMOUTH RESEARCH AND TECHNOLOGY

Fire Test Information Sheet

Valve Manufacturer's Name:	Franklin Valve LP
Valve Manufacturer's Address:	11427 Todd Road Houston, Texas 77055
Did valve meet all required hydrostatic, leakage and other production pressure tests?	YES
Valve Product Code:	
Valve Description	Size: 10" Pressure Rating: ANSI 150 Type: Double Block and Bleed Weight: 532 lbs. Reduced or Full Bore: Reduced Body/Bonnet Material: WCB carbon steel Trim Material: Viton Seat Material: Viton Stem / Body Seal Material: WCB carbon steel Bolting Material: B7 stud and 2H nuts Is valve considered "Soft-Seated"? Yes
Valve Markings	Nameplate Information: Company name, size, model, Casting Markings: ANSI, temperature rating, material and serial number Franklin Duraseal 10" 150 D711
Assembly Drawing Number / Revision / Date of Issue:	Gear operator std. trim
Assembly Drawing sent to Yarmouth:	Gear operator std. trim
If valve is fitted with gearbox, state gearbox manufacturer, model number and mechanical advantage:	N/A Operator is integral to valve
If valve is non-symmetric, state direction of flow for test:	N/A
For double-seated valves, state maximum allowable cavity pressure:	450 psi
Manufacturer's Contact Name /Date:	

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Customer: Franklin Valves

Date: 12/13/2008

Specification: API Standard 6FA, Third Edition, April 1999

"Specification for Fire Testing of Valves"

Product Description: 10 inch Class 150 Duraseal Valve

Project Number: PN208149

Nom. Test Pressure: 210 psig

Comments:

Yarmouth Engineer: Matthew J. Wasielewski, P.E.

Equipment Confirmed to be in Calibration to NIST Standards: Yes

Burn and Cool Down Test

Burn Start Time:	9:21:00	
Average Pressure During Burn:	214	psig
Seat Leak Rate During Burn:	0	ml/min
Allowable Seat Leak Rate:	4000	ml/min
External Leak Rate During Burn/Cool Down:	0	ml/min
Allowable External Leak Rate:	1000	ml/min
Amount of Time of Avg. Cal. Blocks > 650 deg. C:	15.0	minutes
Were Test Conditions Within Compliance?	Yes	
Were the Valve Leakages Below the Allowables?	Yes	

Post-Burn Test

Seat Leak Rate During Burn:	0.0	mls
Allowable Leak Rate:	200	ml/min
External Leak Rate During Burn/Cool Down:	0.0	ml/min
Allowable Leak Rate:	400	ml/min
Were the Valve Leakages Below the Allowables?	Yes	

Operational Test

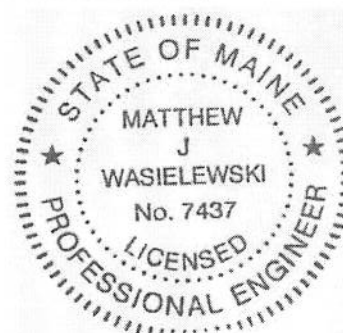
Did Valve Unseat and Open Fully?:	Yes	
Average Pressure During Test:	209	psig
External Leak Rate After Operating:	0	ml/min
Allowable External Leak Rate:	2000	ml/min

Was the Leakage Below the Allowable?	Yes
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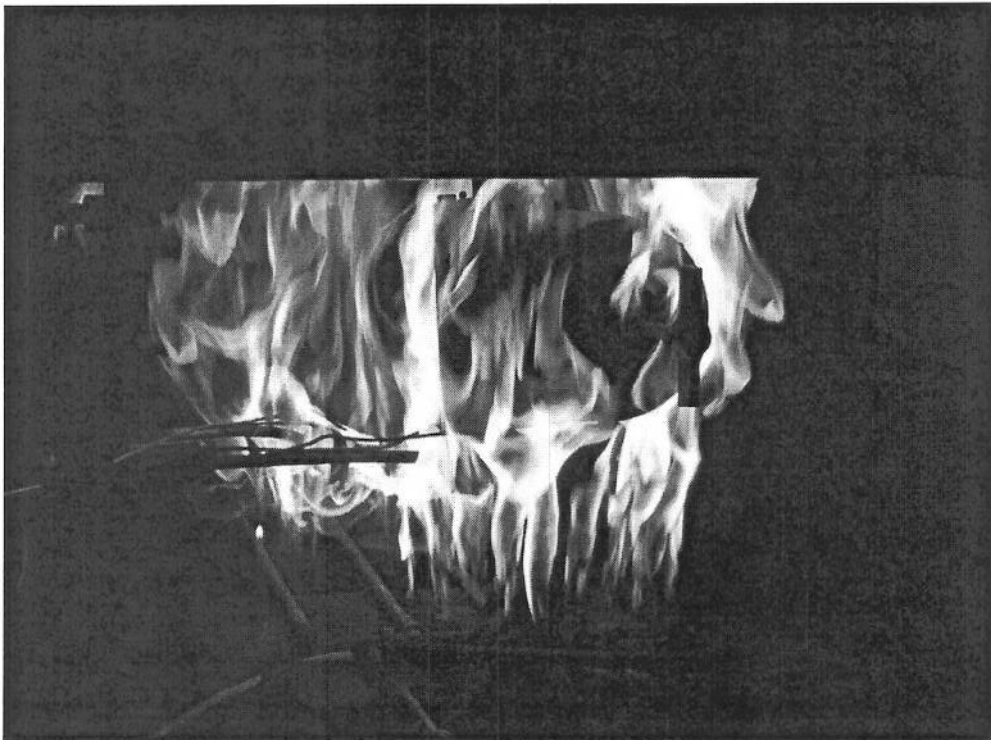
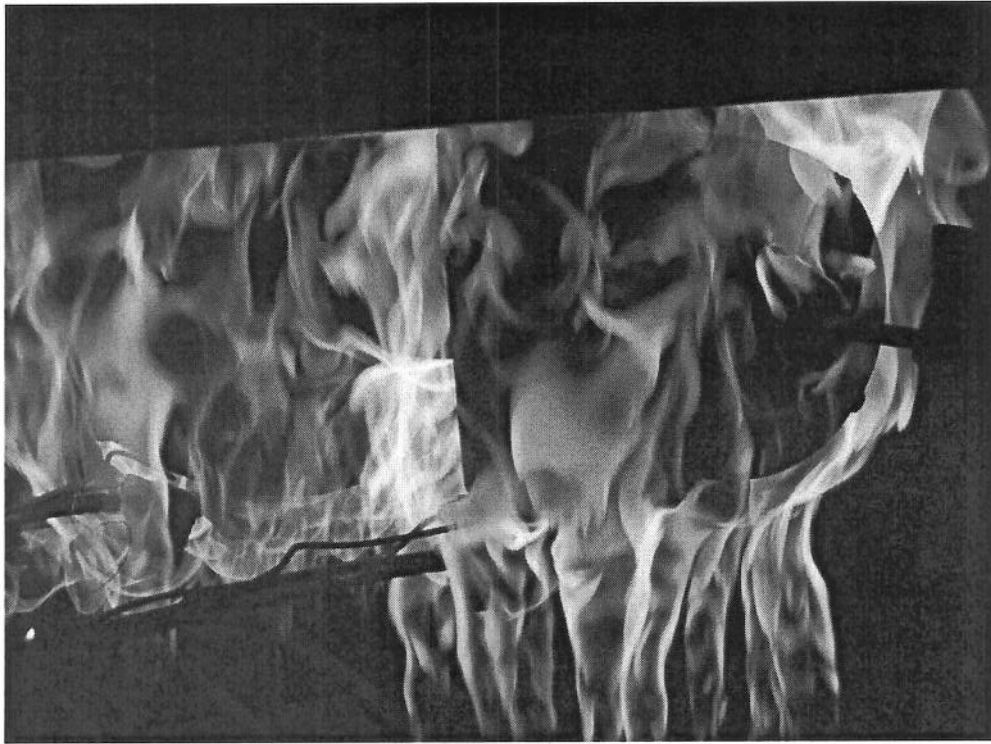
Valve Pass or Fail the Test Standard?	PASS
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Witnesses

Matthew J. Wasielewski



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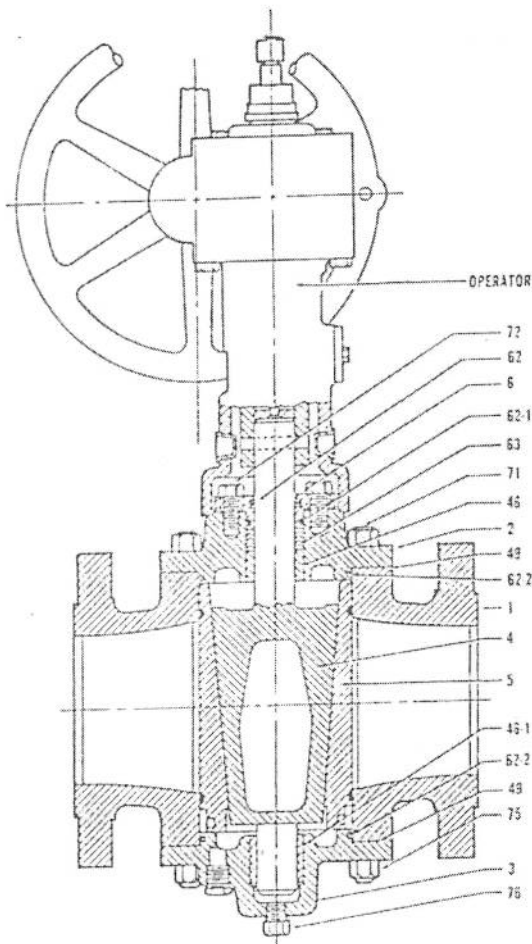


Valve During Burn



Gear Operated Franklin DuraSeal Valve

Parts List of Standard Trim



Representative of 4" Model D711 and Larger.
Right Angle Geared units are available in all sizes.

Reference Number	Description	Material
---	Operator	See Operator Specifications
1	Body	Cast Carbon Steel ASTM A216-WCB Chrome Plated
2	Bonnet	Cast Carbon Steel ASTM A216-WCB or Plate Carbon Steel ASTM A36
3	Lower Plate	Cast Carbon Steel ASTM A216-WCB or Plate Carbon Steel ASTM A36
4	Plug	Casting ASTM A216-WCB Electroless Nickel Plated
5	Slip	Casting Ductile Iron ASTM A536-80-55-06
6	Packing Gland	ASTM A564 Type 631, 17-4 SS
46	Bonnet Bushing	Bronze ASTM B505
46-1	Lower Plate Bushing	Bronze ASTM B505
49	Body Gasket	Mild Steel or Graphite-Type
62	Inner Gland O-Ring and Back-Up Ring	Viton Teflon
62-1	Outer Gland O-Ring	Viton
62-2	Bonnet & Lower Plate O-Ring	Viton
63	Packing	Graphite-Type
71	Stud	Steel ASTM A193 GR.B7
72	Packing Gland Cap Screw	Steel ASTM A193 GR.B7
75	Hex Nut	Steel ASTM A194 GR.2H
76	Pipe Plugs	Steel

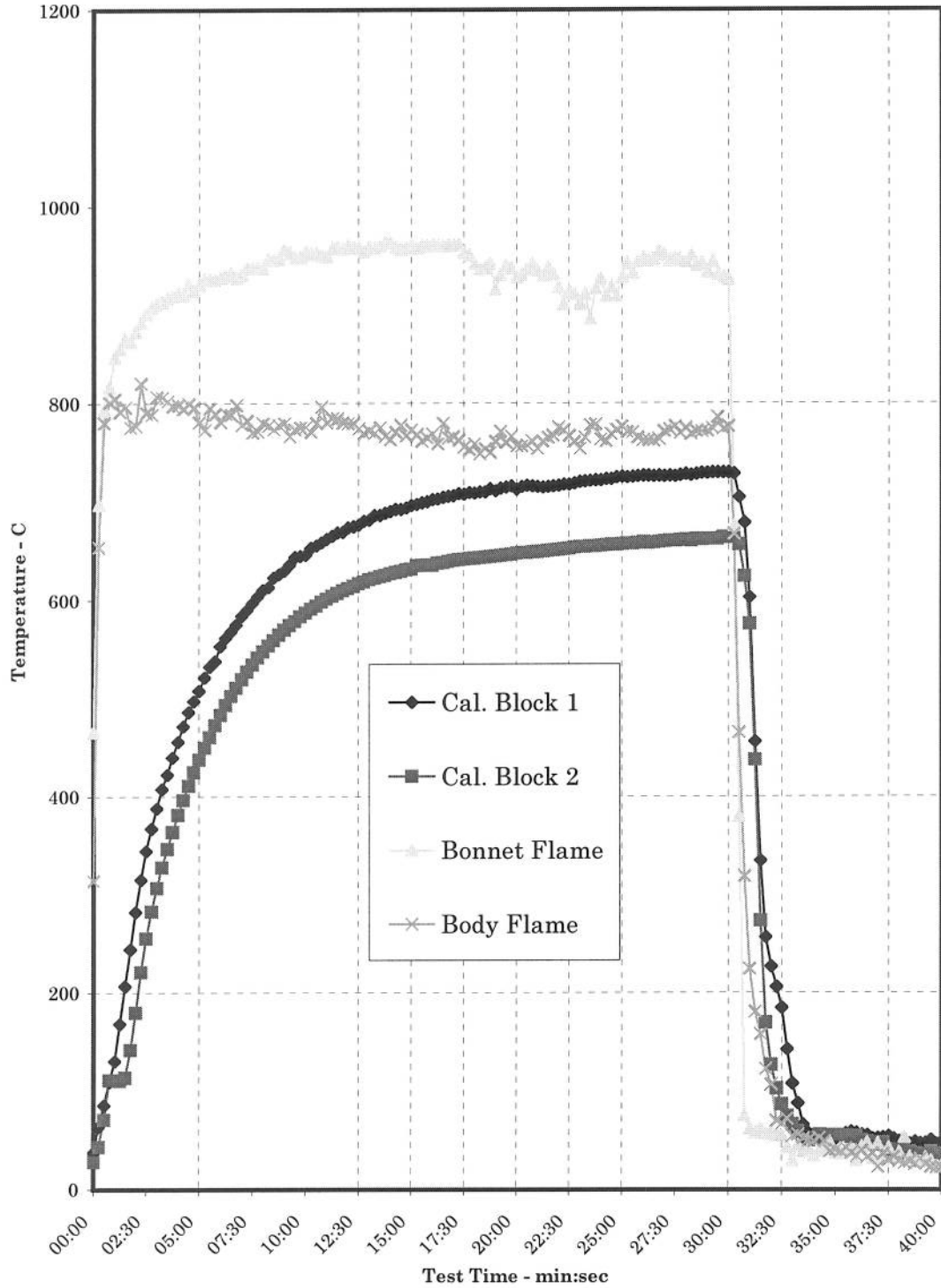
*Trim Codes are subject to change. For further information contact Franklin Valve factory.



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11437 Todd St.
Houston, TX 77055
(713) 812-7100
(713) 686-5158 Fax
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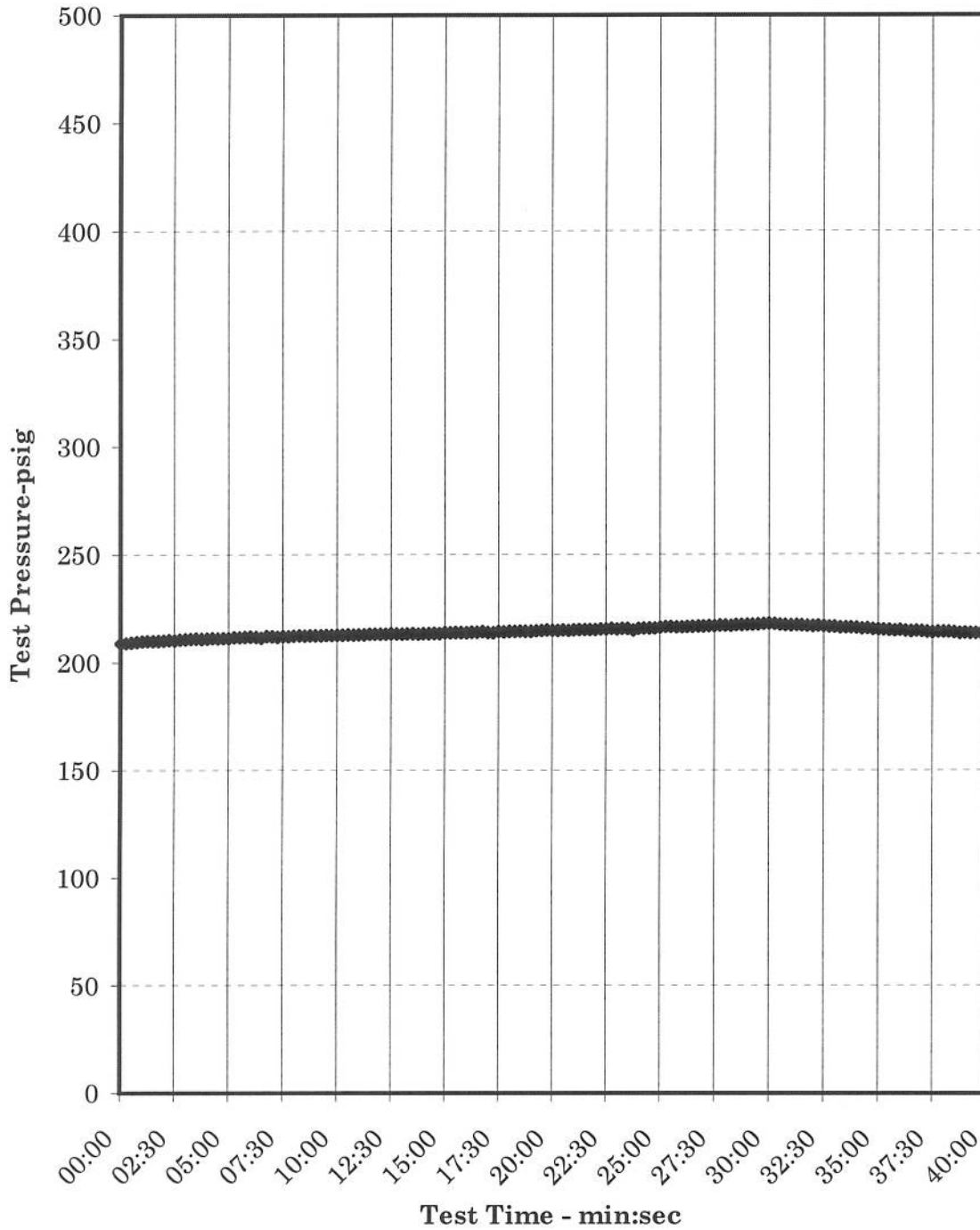
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Temperature verses Time Chart

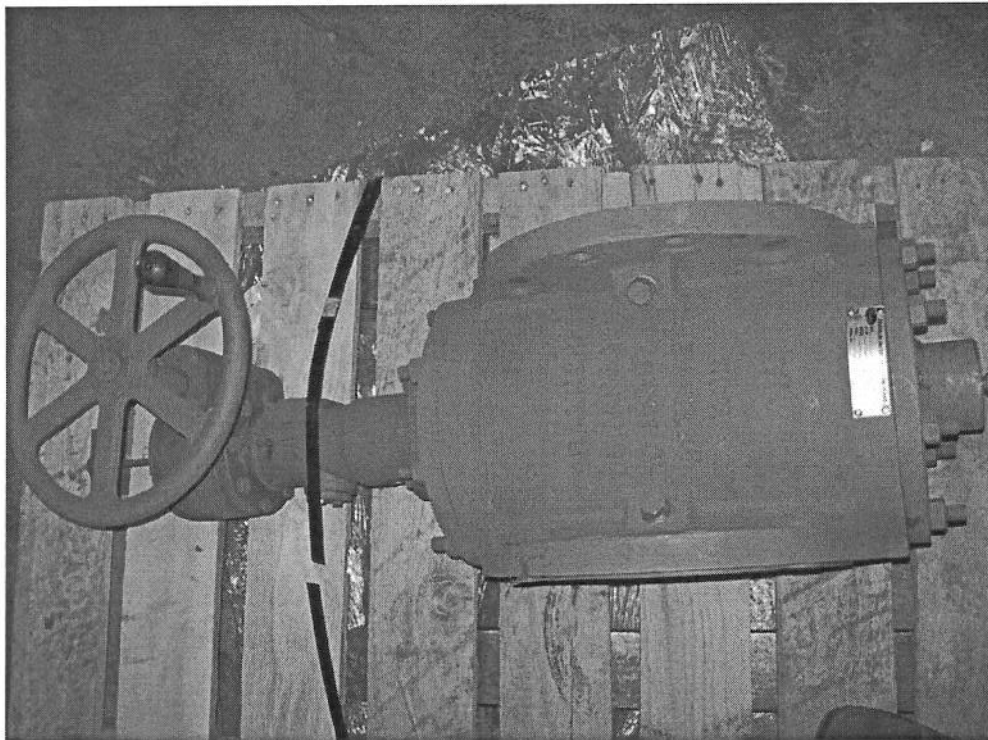
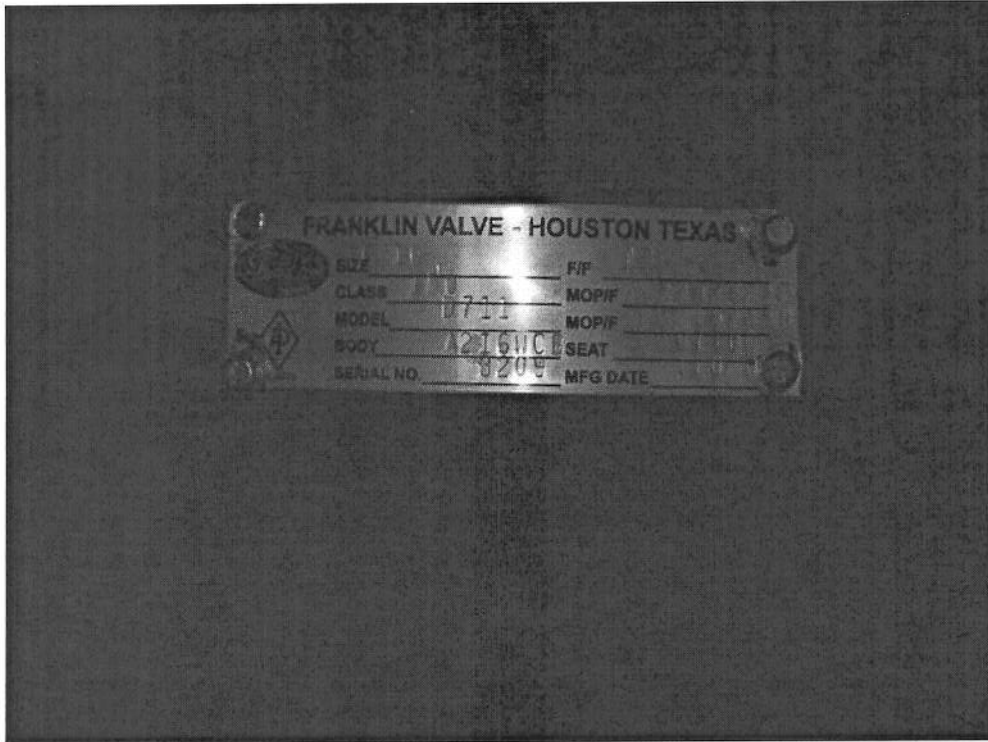


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Pressure verses Time Chart



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Valve prior to Test

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Fire Test Information

Customer: Franklin Valves

Date: 12/13/2008

Product Code: 10 inch Class 150 Duraseal Valve

Project Number: PN208149

Fire Test Raw Data

Time	Pressure (psig)	Water Volume (mls)	Cal. Block 1 Temp-C	Cal. Block 2 Temp-C	Cal. Block 3 Temp-C	Avg. Cal Block Temp-C	Bonnet Flame Temp-C	Body Flame Temp-C	Average Flame Temp-C
9:21:00	209	45638	37.2	27.8	38.3	34.4	466.1	313.9	390.0
9:21:15	209	45642	63.9	43.3	73.3	60.2	697.8	654.4	676.1
9:21:30	209	45632	85.6	71.1	102.2	86.3	793.3	780.6	786.9
9:21:45	210	45629	109.4	111.1	130.6	117.0	816.7	801.1	808.9
9:22:00	210	45630	130.6	111.1	154.4	132.0	847.2	804.4	825.8
9:22:15	210	45627	168.3	110.6	180.6	153.1	856.1	791.7	823.9
9:22:30	210	45626	206.7	113.9	205.0	175.2	865.6	796.1	830.8
9:22:45	210	45614	244.4	141.7	227.8	204.6	862.8	776.1	819.4
9:23:00	210	45628	282.2	180.0	247.8	236.7	873.3	777.8	825.6
9:23:15	210	45613	315.0	221.1	270.6	268.9	882.2	820.6	851.4
9:23:30	210	45621	344.4	255.6	287.2	295.7	890.6	790.6	840.6
9:23:45	211	45624	367.2	282.8	306.1	318.7	897.2	788.9	843.1
9:24:00	211	45616	387.8	306.7	324.4	339.6	901.1	806.7	853.9
9:24:15	211	45617	407.8	327.8	341.7	359.1	902.8	806.1	854.4
9:24:30	211	45611	422.2	346.7	358.9	375.9	906.7	802.2	854.4
9:24:45	211	45622	440.0	363.9	371.7	391.9	909.4	797.2	853.3
9:25:00	211	45621	456.1	381.1	387.8	408.3	911.1	798.3	854.7
9:25:15	211	45633	471.7	396.7	403.3	423.9	910.6	794.4	852.5
9:25:30	211	45621	486.1	411.1	417.8	438.3	921.1	799.4	860.3
9:25:45	211	45624	497.2	425.0	428.9	450.4	915.0	795.6	855.3
9:26:00	211	45616	507.8	437.8	437.8	461.1	920.6	781.1	850.8
9:26:15	212	45606	521.1	450.0	450.6	473.9	926.1	773.3	849.7
9:26:30	212	45593	532.2	461.1	457.8	483.7	925.6	795.0	860.3
9:26:45	212	45613	537.8	472.8	473.3	494.6	926.1	789.4	857.8
9:27:00	212	45639	553.3	483.3	480.6	505.7	927.8	781.1	854.4
9:27:15	212	45617	561.7	493.3	491.1	515.4	930.0	790.0	860.0
9:27:30	212	45640	568.3	502.8	500.6	523.9	932.2	788.3	860.3
9:27:45	212	45623	575.0	511.1	509.4	531.9	927.8	798.3	863.1
9:28:00	212	45656	583.9	519.4	512.2	538.5	931.1	778.3	854.7
9:28:15	212	45621	590.0	527.2	521.1	546.1	937.8	782.8	860.3
9:28:30	212	45615	597.2	534.4	526.7	552.8	937.8	770.6	854.2
9:28:45	212	45652	603.9	541.7	533.9	559.8	937.8	771.7	854.7
9:29:00	212	45636	610.6	547.8	541.1	566.5	937.8	780.0	858.9

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Fire Test Data - continued

9:29:15	212	45632	613.3	553.9	548.9	572.0	947.2	777.8	862.5
9:29:30	212	45645	623.3	559.4	551.7	578.1	946.1	773.9	860.0
9:29:45	213	45658	626.7	565.0	556.7	582.8	947.2	777.8	862.5
9:30:00	213	45649	630.0	570.0	562.8	587.6	956.7	780.0	868.3
9:30:15	212	45654	636.1	574.4	565.6	592.0	953.3	766.7	860.0
9:30:30	213	45660	643.9	578.3	568.9	597.0	948.3	773.3	860.8
9:30:45	213	45661	645.0	583.3	576.1	601.5	948.3	775.6	861.9
9:31:00	213	45662	646.1	587.2	583.3	605.6	953.9	776.1	865.0
9:31:15	213	45641	653.3	591.1	587.8	610.7	952.2	771.1	861.7
9:31:30	213	45713	655.6	594.4	586.7	612.2	953.3	780.0	866.7
9:31:45	213	45653	658.9	598.3	591.1	616.1	950.0	796.1	873.1
9:32:00	213	45642	662.2	601.7	592.8	618.9	949.4	780.6	865.0
9:32:15	213	45666	665.6	604.4	597.8	622.6	957.2	785.0	871.1
9:32:30	213	45704	668.9	607.2	595.0	623.7	958.9	784.4	871.7
9:32:45	213	45676	669.4	610.0	601.1	626.9	956.7	780.6	868.6
9:33:00	213	45715	673.9	612.2	604.4	630.2	959.4	780.0	869.7
9:33:15	213	45684	675.0	614.4	610.6	633.3	958.9	780.0	869.4
9:33:30	213	45690	676.7	617.2	608.9	634.3	957.2	774.4	865.8
9:33:45	213	45712	680.6	618.9	611.7	637.0	954.4	770.0	862.2
9:34:00	213	45693	681.7	621.1	612.2	638.3	958.9	772.2	865.6
9:34:15	213	45715	686.1	622.8	617.8	642.2	956.7	770.0	863.3
9:34:30	213	45708	686.1	624.4	617.8	642.8	959.4	775.6	867.5
9:34:45	213	45708	688.3	625.6	618.3	644.1	963.9	766.7	865.3
9:35:00	213	45737	690.0	627.2	623.3	646.9	963.3	763.3	863.3
9:35:15	213	45731	692.2	628.3	621.7	647.4	958.9	771.1	865.0
9:35:30	214	45721	692.2	629.4	626.1	649.3	956.1	777.8	866.9
9:35:45	213	45738	693.9	631.1	623.3	649.4	957.8	767.2	862.5
9:36:00	214	45741	696.1	631.7	628.9	652.2	960.6	773.3	866.9
9:36:15	214	45746	697.2	635.0	625.6	652.6	956.7	768.3	862.5
9:36:30	214	45751	698.9	635.6	628.3	654.3	960.6	761.7	861.1
9:36:45	214	45760	700.0	636.1	626.1	654.1	960.0	765.0	862.5
9:37:00	214	45787	702.2	635.6	633.9	657.2	962.2	768.9	865.6
9:37:15	214	45765	702.8	637.8	633.3	658.0	959.4	758.9	859.2
9:37:30	214	45779	704.4	638.3	635.0	659.3	960.0	780.0	870.0
9:37:45	214	45803	705.6	639.4	635.6	660.2	961.1	765.0	863.1
9:38:00	214	45775	706.1	640.6	636.7	661.1	960.6	766.1	863.3
9:38:15	214	45764	708.3	641.1	639.4	663.0	961.7	762.8	862.2
9:38:30	214	45806	707.8	641.7	640.0	663.1	953.3	755.6	854.4
9:38:45	214	45801	709.4	642.2	640.0	663.9	950.6	752.8	851.7
9:39:00	214	45804	708.9	642.8	637.2	663.0	942.2	758.9	850.6
9:39:15	214	45816	710.0	643.3	640.0	664.4	936.1	748.9	842.5
9:39:30	214	45817	710.0	643.9	643.3	665.7	937.8	753.9	845.8
9:39:45	214	45820	713.3	644.4	645.6	667.8	942.8	750.0	846.4

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Fire Test Data - continued

9:40:00	214	45819	711.1	645.0	642.2	666.1	915.6	761.1	838.3
9:40:15	215	45838	713.9	645.6	645.0	668.1	931.1	771.7	851.4
9:40:30	215	45830	715.0	646.1	642.8	668.0	940.0	760.0	850.0
9:40:45	215	45853	716.1	646.7	643.9	668.9	937.2	766.7	851.9
9:41:00	215	45852	712.8	647.8	645.6	668.7	928.9	756.7	842.8
9:41:15	215	45890	715.6	648.3	646.7	670.2	930.6	756.7	843.6
9:41:30	215	45858	716.7	648.3	649.4	671.5	936.1	757.8	846.9
9:41:45	215	45868	716.1	648.9	647.8	670.9	941.7	761.7	851.7
9:42:00	215	45869	715.6	649.4	646.7	670.6	935.0	753.9	844.4
9:42:15	215	45893	715.0	650.0	646.7	670.6	929.4	761.1	845.3
9:42:30	215	45869	715.6	650.6	648.9	671.7	938.3	765.6	851.9
9:42:45	215	45879	716.1	651.1	652.8	673.3	931.7	767.2	849.4
9:43:00	215	45897	716.7	651.7	650.6	673.0	917.8	775.6	846.7
9:43:15	215	45921	717.8	652.2	649.4	673.1	900.6	772.8	836.7
9:43:30	215	45898	717.8	652.8	650.6	673.7	913.9	767.2	840.6
9:43:45	216	45923	718.9	653.9	650.6	674.4	911.1	761.1	836.1
9:44:00	215	45928	720.6	654.4	653.3	676.1	901.1	753.9	827.5
9:44:15	216	45944	721.1	654.4	653.3	676.3	911.1	765.6	838.3
9:44:30	216	45940	721.7	655.0	653.9	676.9	885.6	778.3	831.9
9:44:45	215	45955	722.2	655.0	656.7	678.0	916.7	778.9	847.8
9:45:00	216	45940	722.2	655.6	657.2	678.3	926.7	763.9	845.3
9:45:15	216	45961	723.3	656.1	655.6	678.3	908.3	761.7	835.0
9:45:30	216	45957	723.3	656.7	657.8	679.3	917.8	768.9	843.3
9:45:45	216	45968	725.0	656.7	654.4	678.7	908.3	773.3	840.8
9:46:00	216	45976	725.6	657.2	655.6	679.4	927.8	776.7	852.2
9:46:15	216	45973	725.0	657.8	653.9	678.9	942.8	771.1	856.9
9:46:30	216	45993	725.6	657.8	661.1	681.5	932.2	771.1	851.7
9:46:45	216	46009	726.1	658.3	658.9	681.1	943.3	765.6	854.4
9:47:00	216	45990	726.7	659.4	656.7	680.9	947.8	762.8	855.3
9:47:15	216	46012	726.7	658.3	657.2	680.7	944.4	762.8	853.6
9:47:30	217	46012	726.1	658.9	659.4	681.5	946.1	762.2	854.2
9:47:45	217	46034	726.7	659.4	659.4	681.9	953.3	763.9	858.6
9:48:00	217	46038	726.1	660.0	658.9	681.7	950.6	771.7	861.1
9:48:15	217	46043	726.7	660.6	660.0	682.4	945.0	773.3	859.2
9:48:30	217	46051	726.1	660.6	661.7	682.8	947.8	776.7	862.2
9:48:45	217	46057	727.2	661.1	661.1	683.1	945.6	770.0	857.8
9:49:00	217	46071	728.3	661.7	660.6	683.5	943.3	775.0	859.2
9:49:15	217	46079	727.2	660.6	662.8	683.5	950.0	768.9	859.4
9:49:30	217	46078	728.3	662.2	661.7	684.1	940.6	771.7	856.1
9:49:45	217	46107	729.4	661.7	663.3	684.8	942.2	771.7	856.9
9:50:00	218	46113	729.4	662.2	662.2	684.6	933.3	772.2	852.8
9:50:15	217	46140	730.0	662.2	661.1	684.4	943.9	774.4	859.2
9:50:30	218	46141	730.0	662.2	662.8	685.0	931.1	786.1	858.6

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Fire Test Data - continued

9:50:45	218	46114	730.0	663.9	662.8	685.6	928.9	774.4	851.7
9:51:00	218	46137	730.0	663.9	663.9	685.9	925.0	776.7	850.8
9:51:15	218	46130	728.9	663.9	665.0	685.9	676.1	667.2	671.7
9:51:30	217	46130	704.4	656.7	651.7	670.9	380.0	465.0	422.5
9:51:45	217	46128	678.9	624.4	634.4	645.9	75.6	318.3	196.9
9:52:00	217	46071	602.8	575.6	612.2	596.9	62.2	224.4	143.3
9:52:15	217	46114	456.1	437.2	591.1	494.8	58.3	180.6	119.4
9:52:30	217	46085	334.4	273.3	572.2	393.3	62.2	157.8	110.0
9:52:45	217	46108	256.7	169.4	531.7	319.3	57.2	122.8	90.0
9:53:00	217	46074	226.7	126.7	502.8	285.4	58.9	106.7	82.8
9:53:15	217	46052	205.6	102.8	485.6	264.6	55.6	70.0	62.8
9:53:30	217	46097	184.4	86.7	461.1	244.1	55.6	67.2	61.4
9:53:45	217	46077	142.2	75.0	431.1	216.1	43.9	72.2	58.1
9:54:00	217	46053	107.8	66.7	359.4	178.0	29.4	54.4	41.9
9:54:15	216	46047	87.8	60.0	254.4	134.1	45.6	56.1	50.8
9:54:30	216	46024	66.1	50.6	217.2	111.3	39.4	52.2	45.8
9:54:45	216	46001	57.2	50.0	192.8	100.0	42.2	50.6	46.4
9:55:00	216	45971	52.8	52.8	168.9	91.5	34.4	48.9	41.7
9:55:15	216	45956	53.3	56.1	137.2	82.2	38.9	52.8	45.8
9:55:30	216	45951	49.4	53.3	119.4	74.1	43.3	49.4	46.4
9:55:45	215	45909	51.1	55.6	111.1	72.6	48.9	38.9	43.9
9:56:00	215	45931	51.7	55.6	104.4	70.6	37.8	40.6	39.2
9:56:15	215	45889	54.4	55.6	95.6	68.5	37.2	38.9	38.1
9:56:30	215	45883	57.2	55.6	88.3	67.0	40.0	42.2	41.1
9:56:45	215	45858	58.9	53.3	83.3	65.2	41.1	37.2	39.2
9:57:00	215	45854	57.8	55.0	83.3	65.4	30.0	33.9	31.9
9:57:15	215	45842	56.1	51.1	70.0	59.1	43.9	40.0	41.9
9:57:30	214	45820	55.6	49.4	65.6	56.9	48.3	33.3	40.8
9:57:45	215	45793	52.2	48.3	63.9	54.8	31.7	36.7	34.2
9:58:00	214	45798	52.8	45.6	62.2	53.5	47.2	23.3	35.3
9:58:15	214	45778	53.3	48.3	63.3	55.0	31.1	36.1	33.6
9:58:30	214	45766	54.4	41.1	62.2	52.6	42.8	30.0	36.4
9:58:45	214	45754	52.2	40.6	59.4	50.7	32.2	33.3	32.8
9:59:00	214	45741	49.4	35.0	60.6	48.3	38.3	28.9	33.6
9:59:15	214	45727	48.3	40.0	59.4	49.3	53.9	27.2	40.6
9:59:30	214	45689	46.7	38.9	57.2	47.6	33.3	28.3	30.8
9:59:45	214	45668	48.9	36.7	55.6	47.0	28.9	26.1	27.5
10:00:00	214	45669	47.2	36.1	52.2	45.2	28.3	31.1	29.7
10:00:15	214	45647	47.8	35.6	50.0	44.4	32.8	26.1	29.4
10:00:30	214	45640	50.6	38.9	47.2	45.6	29.4	23.3	26.4
10:00:45	213	45644	46.7	36.1	50.6	44.4	23.9	22.2	23.1
10:01:00	214	45646	48.9	36.7	48.3	44.6	23.9	22.8	23.3

Yarmouth Research and Technology

Leakage Summary for Burn and Cool Down Periods

All pressure transducers and thermocouples are in calibration per YRT's QA program.
Seat leakages were collected manually. External leakage was collected electronically.

Total Through Seat Leakage Collected Over 30 Minute Duration:	0	mls
Average Leak Rate Over 30 Minute Duration:	0.0	ml/min
Allowable Leak Rate:	4000	ml/min

Total Through Seat Leakage Collected Over 10 Minute Cool Down:	0	mls
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Total Water Volume Lost Over 40 Minute Burn and Cool Down:	-8	mls
Water Collected in System Relief Valve:	0	mls
Calculated External Leakage During 40 Minute Duration:	-8	mls
Average Leak Rate Over 40 Minute Duration:	0.0	ml/min
Allowable Leak Rate:	1000	ml/min

Were the Valve Leakages Below the Allowables?	Yes
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Yarmouth Research and Technology

Summary of Test Parameters During Burn and Cool Down Periods

Amount of Time Pressure Dropped Below 50%:	0.0	minutes
Maximum Allowable Low Pressure Time:	2.0	minutes
Maximum Pressure During Burn/Cool Down:	218	psig
Average Pressure During Burn/Cool Down:	214	psig
Minimum Pressure During Burn/Cool Down:	209	psig
<hr/>		
Maximum Cavity Pressure:	2376	psig
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Amount of Time of Avg. Cal Block > 650 deg.C:	15.0	minutes
Minimum Allowable Time at Temperature:	15.0	minutes
Maximum Avg Cal Block Temperature:	730.0	deg. C
Average Cal Block Temperature:	503.8	deg. C
Lowest Avg Cal. Block Temperature:	37.2	deg. C
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Maximum Body Flame Temperature During Burn:	820.6	deg. C
Average Body Flame Temperature During Burn:	770.4	deg. C
<hr/>		
Maximum Bonnet Flame Temperature During Burn:	963.9	deg. C
Average Bonnet Flame Temperature During Burn:	923.3	deg. C
<hr/>		
Average of Both Flame Temperatures During Burn:	846.9	deg. C

Note

Were Test Conditions Within Compliance?	Yes
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Yarmouth Research and Technology

Post-Burn Seat Test Information

Customer: Franklin Valves

Date: 12/13/2008

Product Code: 10 inch Class 150 Duraseal Valve

Project Number: PN208149

Test Data

Time	Pressure (psig)	Cal Block Temp - C
10:08:35	30	22.8
10:08:50	30	27.2
10:09:05	30	27.2
10:09:20	30	21.7
10:09:35	30	26.1
10:09:50	30	19.4
10:10:05	30	22.8
10:10:20	30	22.8
10:10:35	30	18.9
10:10:50	31	36.1
10:11:05	30	22.8
10:11:20	30	23.9
10:11:35	30	22.2
10:11:50	30	22.8
10:12:05	30	24.4
10:12:20	30	31.7
10:12:35	30	29.4
10:12:50	30	26.7
10:13:05	30	26.7
10:13:20	30	27.2
10:13:35	30	26.7

Leakages were collected manually.

Total Seat Leakage Collected Over 5 Minute Duration:	0.0	mls
Average Leak Rate Over 5 Minute Duration:	0.0	ml/min
Allowable Leak Rate:	200	ml/min
Total Seat Leakage Collected Over 5 Minute Duration:	0.0	mls
Average Leak Rate Over 5 Minute Duration:	0.0	ml/min
Allowable Leak Rate:	400	ml/min

Was the Valve Leakage Below the Allowable?	Yes
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Yarmouth Research and Technology

Operational Test Information

Customer: Franklin Valves

Date: 12/13/2008

Product Code: 10 inch Class 150 Duraseal Valve

Project Number: PN208149

Test Data

Time	Pressure (psig)	Cal Block Temp - C
10:18:44	207	20.6
10:18:59	208	20.6
10:19:14	208	23.9
10:19:29	209	23.3
10:19:44	209	23.9
10:19:59	209	23.3
10:20:14	209	25.0
10:20:29	209	25.0
10:20:44	209	23.3
10:20:59	209	25.0
10:21:14	209	17.2
10:21:29	209	23.9
10:21:44	210	23.3
10:21:59	210	17.8
10:22:14	210	26.7
10:22:29	210	12.2
10:22:44	210	21.7
10:22:59	210	20.6
10:23:14	210	25.0
10:23:29	210	21.7
10:23:44	210	25.6

Leakages were collected manually.

Total External Leakage Collected Over 5 Minute Duration:	0.0	mls
Average Leak Rate Over 5 Minute Duration:	0.0	ml/min
Allowable Leak Rate:	2000	ml/min

Was the Valve Leakage Below the Allowable?	Yes
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