UL Product iQ™

VNIV.EX5985 - SPRINKLERS, AUTOMATIC AND OPEN

Sprinklers, Automatic and Open

See General Information for Sprinklers, Automatic and Open

TYCO FIRE & BUILDING PRODUCTS EX5985
1400 PENNBROOK PKWY
LANSDALE, PA 19446-3840 USA

Sprinkler Identification Numbers (SIN) TY1121, TY1221, TY1281, TY1282, TY1381, TY1382, TY3101, TY3103, TY3121, TY3123, TY3210, TY3221, TY3281, TY3282, TY3290, TY3301, TY3321, TY3322, TY3381, TY3382, TY3390, TY4101, TY4103, TY4121, TY4123, TY4210, TY4321, TY4322, TY4801, TY4910, TY9128 Fusible Element Type.

Sprinkler Identification Numbers (SIN) TY313, TY315, TY323, TY325, TY363, TY365, TY1131, TY1151, TY1231, TY1251, TY1331, TY2131, TY2231, TY3104, TY3131, TY3133, TY3151, TY3153, TY3187, TY3191, TY3201, TY3230, TY3231, TY3250, TY3251, TY3291,TY3296, TY3331, TY3332, TY3351, TY3391, TY3431, TY3451, TY3530, TY3535, TY3539, TY3532, TY3537, TY3550, TY3555, TY3631, TY3651, TY4131, TY4133, TY4151, TY4153, TY4191, TY4231, TY4251, TY4292, TY4232, TY4332, TY4631, TY4651, TY4831, TY4851, TY4931, TY4951, TY5131, TY5137, TY5151, TY5153, TY5231, TY5237, TY5251, TY5332, TY5337, TY5339, TY5831, TY5851, TY6137, TY6237, TY7103, TY7153, TY8131, TY8151, TY8181, TY8191, TY8231, TY8151, TY8281, TY8291, TY8331, TY8351, TY9131, TY9151, TY9181, TY9191, TY9231, TY9251, TY9281, TY9291 glass bulb type.

Sprinkler Identification Numbers (SIN) TY3111, TY3113, TY3211, TY3311, TY4113, TY4211, TY4811 and TY4911 are center strut type sprinklers. Chrome plated sprinklers are identified by an unplated area where the deflector is staked to the frame and/or unplated ends of the center strut. Telfon coated sprinklers are identified by the chrome plated operating mechanism.

Sprinkler Identification Numbers (SIN) TY3135, TY3155, TY3230, TY3235, TY3250, TY3255, TY3335, TY3337, TY3339, TY3355, TY3338, TY3357, TY3358, TY3735, TY3835, TY3935, TY5255, TY5235, TY5238, dry sprinkler glass bulb type.

Sprinkler Identification Numbers (SIN) TY3187, TY4180, TY4181, TY4182, TY2180, TY2181, TY2182 are plain brass glass bulb type attic sprinklers.

Sprinkler Identification Numbers (SIN) TY3180, TY3181, TY3182, TY3183, TY3184, TY3185, TY4522, TY5521, TY5522, TY9128 are fusible link type sprinklers.

Sprinkler Identification Numbers (SIN) TY1189, TY2189, TY2190, TY3189, TY3190, TY2199, TY3199 are plain brass glass bulb type quick response sprinklers for concealed spaces.

Sprinkler Identification Numbers (SIN) TY5111, TY5211, TY5811 are center strut type sprinklers.

SIN TY3261, fusible pellet type. Decorative chrome plated, white or black paint coated sprinklers are identified by uncoated levers.

Sprinkler Identification Numbers (SIN) SA1131, SA1132, SA1151, SA1152 glass bulb type.

UPRIGHT AND PENDENT STANDARD SPRAY SPRINKLERS

NOMINAL 5.6 K-FACTOR

SIN	Response Type	Type	System Working Pressure, psig	Temp Rating, °F
TY313	QR	Upright	250	135, 155, 175, 200, 286
TY315	SR	Upright	250	135, 155, 175, 200, 286, 360

TY323	QR	Pendent	250	135, 155, 175, 200, 286
TY325	SR	Pendent	250	135, 155, 175, 200, 286, 360
TY3231	QR	Pendent	250	135, 155, 175, 200, 286
TY3201	QR	Pendent	175	135, 155, 175, 200, 286
TY3221	QR	Pendent, Rec. Pendent	175	165, 212
TY3131	QR	Upright	250	135, 155, 175, 200, 286
TY3121	QR	Upright	175	165, 212
TY3211	SR	Pendent	175	135, 165, 212, 280, 360, 500
TY3251	SR	Pendent	250	135, 155, 175, 200, 286, 360, 500
TY3111	SR	Upright	175	135, 165, 212, 286, 360
TY3151	SR	Upright	250	135, 155, 175, 200, 286, 360, 500
TY3101	SR	Upright	175	135,165,212,280,360
TY3210	SR	Pendent	175	135,165,212,280,360
SA1131	QR	Pendent	175	155, 175, 200, 286
SA1132	QR	Upright	175	155, 175, 200, 286
SA1151	SR	Pendent	175	155, 175, 200, 286
SA1152	SR	Upright	175	155, 175, 200, 286
TY3296	SR	Pendent	175	400, 500
TY3191	SR	Upright	175	400, 500
TY8131	QR	Upright	250	135, 155, 175, 200, 286, 360
TY8151	SR	Upright	250	135, 155, 175, 200, 286, 360
TY8231	QR	Pendent	250	135, 155, 175, 200, 286, 360
TY8251	SR	Pendent	250	135, 155, 175, 200, 286, 360
TY8331	QR	HSW	250	135, 155, 175, 200, 286, 360
TY8351	SR	HSW	250	135, 155, 175, 200, 286, 360
TY9131	QR	Upright	250	135, 155, 175, 200, 286, 360
TY9151	SR	Upright	250	135, 155, 175, 200, 286, 360
TY9231	QR	Pendent	250	135, 155, 175, 200, 286, 360
TY9251	SR	Pendent	250	135, 155, 175, 200, 286, 360

NOMINAL 1.4 TO 4.2 K-FACTOR

SIN	Response Type	Type	Nom K-Factor	System Working Pressure, psig	Temp Rating, °F
TY1231	QR	Pendent	2.8	175	135, 155, 175, 200, 286
TY2231	QR	Pendent	4.2	175	135, 155, 175, 200, 286
TY1221	QR	Pendent, Rec. Pendent	2.8	175	165, 212
TY1131	QR	Upright	2.8	175	135, 155, 175, 200, 286
TY1121	QR	Upright	2.8	175	165, 212
TY2131	QR	Upright	4.2	175	135, 155, 175, 200, 286
TY1251	SR	Pendent	2.8	175	135, 155, 175, 200, 286, 360
TY1151	SR	Upright	2.8	175	135, 155, 175, 200, 286, 360

NOMINAL 8.0 K-FACTOR

SIN	Response Type	Type	Inlet Thread NPT	System Working Pressure, psig	Temp Rating, °F
TY4231	QR	Pendent	3/4	175	135, 155, 175, 200, 286
TY4131	QR	Upright	3/4	175	135, 155, 175, 200, 286
TY4121	QR	Upright	3/4	175	165, 212
TY4221	QR	Pendent	3/4	175	165, 212
TY4911	SR	Pendent	1/2	175	135, 165, 212, 286, 360
TY4211	SR	Pendent	3/4	175	135, 165, 212, 280, 286
TY4251	SR	Pendent	3/4	175	135, 155, 175, 200, 286, 360
TY4951	SR	Pendent	1/2, 3/4	175	135, 155, 175, 200, 286, 360
TY4811	SR	Upright	1/2	175	135, 165, 212, 280, 360
TY4111	SR	Upright	3/4	175	135, 165, 212, 280, 360
TY4151	SR	Upright	3/4	175	135, 155, 175, 200, 286, 360
TY4831	QR	Upright	1/2	175	135, 155, 175, 200, 286
TY4851	SR	Upright	1/2, 3/4	175	135, 155, 175, 200, 286, 360
TY4931	QR	Pendent	1/2	175	135, 155, 175, 200, 286

TY4101	SR	Upright	3/4	175	135, 165, 212, 280, 360
TY4801	SR	Upright	1/2	175	135, 165, 212, 280, 360
TY4210	SR	Upright	3/4	175	135, 165, 212, 280, 360
TY4910	SR	Upright	1/2	175	135, 165, 212, 280, 360
TY4292	SR	Pendent	3/4	175	400, 500
TY4191	SR	Upright	3/4	175	400, 500

STANDARD SIDEWALL SPRAY SPRINKLERS

SIN	Response Type	Type	Nom K-Factor	System Working Pressure, psig	Temp Rating, °F
TY1381+, ++	QR	Flush HSW	5.6	175	165
TY3331+, ++	QR	HSW	5.6	250	135, 155, 175, 200, 286
TY3321	QR	HSW	5.6	175	165, 212
TY3331+, ++	QR	Rec. HSW	5.6	250	135, 155, 175, 200
TY3431	QR	VSW	5.6	175	135, 155, 175, 200, 286
TY3311	SR	HSW	5.6	175	135, 165, 212, 280, 360
TY3351+, ++	SR	HSW	5.6	250	135, 155, 175, 200, 286, 360
TY3351+, ++	SR	Rec. HSW	5.6	250	135, 155, 175, 200
TY3381+, ++	QR	Flush HSW	5.6	175	165
TY3390+, ++	SR	Flush HSW	5.6	175	140
TY3390	SR	Flush HSW	5.6	175	165
TY3391+, ++	QR	Flush HSW	5.6	175	135, 155, 175, 200
TY3451	SR	VSW	5.6	175	135, 155, 175, 200, 286, 360
TY3301	SR	HSW	5.6	175	135, 165, 212, 280, 360

+ Ordinary hazard occupancies.

++ Installation 4 to 12 in. below the ceiling.

FLUSH, RECESSED AND CONCEALED SPRINKLERS

SIN	Response Type	Type	Nom K-Factor	System Working Pressure, psig	Temp Rating, °F	
					Cover	Sprinkler
TY1281	QR	Flush Pendent	5.6	175	—	165

TY323	QR	Rec. Pendent	5.6	250	—	135, 155, 175, 200
TY325	SR	Rec. Pendent	5.6	250	—	135, 155, 175, 200
TY3531	QR	Concealed	5.6	250	139, 165	155, 200
TY3281	QR	Flush Pendent	5.6	175	—	165
TY3291	QR	Flush Pendent	5.6	175	—	135, 155, 175, 200
TY1231	QR	Rec. Pendent	2.8	175	—	135, 155, 175, 200
TY3201	QR	Rec. Pendent	5.6	175	—	135, 155, 175, 200
TY3231	QR	Rec. Pendent	5.6	250	—	135, 155, 175, 200, 286
TY4231	QR	Rec. Pendent	8.0	175	—	135, 155, 175, 200, 286
TY3261	QR	Flush	5.6	175	—	162
TY3290	SR	Flush Pendent	5.6	175	—	140, 165, 212
TY3390	SR	Flush HSW	5.6	175	—	140, 165
TY1251	SR	Rec. Pendent	2.8	175	—	135, 155, 175, 200
TY3211	SR	Rec. Pendent	5.6	175	—	135, 165, 212, 280, 360
TY3251	SR	Rec. Pendent	5.6	250	—	135, 155, 175, 200, 286
TY4211	SR	Rec. Pendent	8.0	175	—	135, 165, 212, 280, 360
TY4951	SR	Rec. Pendent	8.0	175	—	135, 155, 175, 200
TY4251	SR	Rec. Pendent	8.0	175	—	135, 155, 175, 200, 286
TY3551	SR	Concealed	5.6	250	139, 165	155, 200
TY5521	QR	Concealed Pendent	11.2	175	139, 165	160, 212
TY3530	QR	Concealed Pendent	5.6	175	139, 165	155, 200
TY3550	SR	Concealed Pendent	5.6	175	139, 165	155, 200

DRY SPRINKLERS

SIN	Response Type	Type	Max Length, in.	System Working Pressure, psig	Nom K-Factor	Temp Rating, F
TY3535#	QR	Concealed	48	175	5.6	155, 200
TY3335*	QR	HSW	48	175	5.6	135, 155, 175, 200, 286
TY3235	QR	Pendent	48	175	5.6	135, 155, 175, 200, 286
TY5235	QR	Pendent	48	175	11.2	135, 155, 175, 200, 286
TY3235	QR	Rec. Pendent	48	175	5.6	135, 155, 175, 200, 286
TY5235	QR	Rec. Pendent	48	175	11.2	135, 155, 175, 200, 286
TY3135#	QR	Upright	48	175	5.6	135, 155, 175, 200, 286
TY3555	SR	Concealed	48	175	5.6	155, 200
TY3355*	SR	HSW	48	175	5.6	135, 155, 175, 200, 286, 360
TY3255	SR	Pendent	48	175	5.6	135, 155, 175, 200, 286, 360
TY5255	SR	Pendent	48	175	11.2	135, 155, 175, 200, 286, 360
TY3255	SR	Rec. Pendent	48	175	5.6	135, 155, 175, 200, 286
TY5255	SR	Rec. Pendent	48	175	11.2	135, 155, 175, 200, 286
TY3155	SR	Upright	48	175	5.6	135, 155, 175, 200, 286, 360
TY3230	QR	Pendent, Rec. Pendent	48	175	5.6	135, 155, 175, 200, 286
TY3250	SR	Pendent	48	175	5.6	135, 155, 175, 200, 286, 360
TY3250	SR	Rec. Pendent	48	175	5.6	135, 155, 175, 200, 286
TY3337	QR	Pendent, Rec. Pendent	48	175	5.6	135, 155, 175, 200, 286

TY3357*	SR	HSW	48	175	5.6	135, 155, 175, 200, 286, 360
TY3357*	SR	Rec. HSW	48	175	5.6	135, 155, 175, 200, 286
TY3735+	QR	HSW	48	175	5.6	135, 155, 175, 200, 286
TY3835+	QR	Upright	48	175	5.6	135, 155, 175, 200, 286
TY3935+	QR	Pendent	48	175	5.6	135, 155, 175, 200, 286
TY3935+	QR	Rec. Pendent	48	175	5.6	135, 155, 175, 200, 286

* For ordinary hazard occupancies when installed 4 to 12 in. below ceiling.

The 155°F sprinkler utilizes a 135°F coverplate and the 200°F sprinkler utilizes a 155°F coverplate

+ 3/4 in. NPT

CONVENTIONAL (OLD STYLE) SPRINKLERS

SIN	Response Type	Nom K-Factor	Temp Rating, °F
TY363	QR	5.6	135, 155, 175, 200, 286
TY365	SR	5.6	135, 155, 175, 200, 286
TY3631	QR	5.6	135, 155, 175, 200, 286
TY4631	QR	8.0	135, 155, 175, 200, 286
TY3651	SR	5.6	135, 155, 175, 200, 286, 360, 500
TY4651	SR	8.0	135, 155, 175, 200, 286, 360

STANDARD RESPONSE - (SR) - EXTENDED COVERAGE SPRINKLER - LIGHT HAZARD

SIN	Type	Max Width (A) Ft	Max Length (B) Ft	Min Flow GPM	Nom K-Factor	Distance Below Ceiling In.	Temp Rating, °F
TY3302	HSW, Rec. HSW	16	18	29	5.6	4 to 12	155, 200
TY3302	HSW, Rec. HSW	16	20	32	5.6	4 to 12	155, 200
TY3302	HSW	16	24	39	5.6	4 to 18	135
TY3332	HSW, Rec. HSW	16	20	32	5.6	4 to 6	155
TY3332	HSW, Rec. HSW	16	22	35	5.6	4 to 6	155, 175

TY4322	HSW	16	22	37	8.0	4 to 6	165
TY4322	HSW	16	24	44	8.0	4 to 6	165
TY4322	HSW	16	20	45	8.0	4 to 18	165
TY4332	HSW, Rec. HSW	16	20	33	8.0	4 to 12	135
TY4332	HSW, Rec. HSW	16	22	35	8.0	4 to 6	155, 175
TY4332	HSW, Rec. HSW	16	22	36	8.0	4 to 12	155, 175
TY4332	HSW, Rec. HSW	16	24	39	8.0	4 to 6	155, 175
TY4332	HSW, Rec. HSW	16	24	40	8.0	4 to 12	155, 175
TY3232	Pendent, Rec. pendent	20	20	40	5.6	—	155
TY5522*	Concealed Pendent	20	20	40	11.2	—	160, 212

Dimension of wall on which a sidewall sprinkler is installed.

(B) Dimension perpendicular to wall on which a sidewall sprinkler is installed.

* Utilizes A 135 or 165°F Coverplate.

QUICK RESPONSE - (QR) - EXTENDED COVERAGE SPRINKLERS - LIGHT HAZARD

SIN	Type	Max Width (A) Ft	Max Length (B) Ft	Min Flow GPM	System Working Pressure, psig	Nom K-Factor	Distance Below Ceiling In.	Temp Rating, °F
TY1282	Flush Pendent	16	16	26	175	5.6	—	165
TY1382	Flush HSW	16	16	26	175	5.6	4 to 12	165
TY3232	Pendent, Rec. pendent	16	16	26	175	5.6	—	135, 155
TY3232	Pendent, Rec. pendent	18	18	33	175	5.6	—	135, 155
TY3232	Pendent, Rec. pendent	20	20	40	175	5.6	—	135
TY3282	Flush Pendent	16	16	26	175	5.6	—	165
TY3382	Flush HSW	16	16	26	175	5.6	4 to 12	165
TY6237	Pendent	18	18	37	175	14.0	—	135, 155, 175, 200, 286
TY6237	Pendent	20	20	40	175	14.0	—	135, 155,

								175, 200, 286
TY6237	Rec. Pendent	18	18	37	175	14.0	—	135, 155, 175, 200
TY6237	Rec. Pendent	20	20	40	175	14.0	—	135, 155, 175, 200
TY5237	Pendent, Rec. pendent	16	16	30	175	11.2	—	135, 155, 175, 200, 286
TY5237	Pendent, Rec. pendent	18	18	33	175	11.2	—	135, 155, 175, 200, 286
TY5237	Pendent	20	20	40	175	11.2	—	135, 155, 175
TY5237	Rec. pendent	20	20	40	175	11.2	—	135, 175
TY3532*	Concealed	16	16	26	175	5.6	—	155, 200
TY3532*	Concealed	20	20	40	175	5.6	—	155, 200
TY3532*	Concealed	18	18	33	175	5.6	—	155, 200
TY3537*	Concealed	16	16	26	175	5.6	—	155, 200
TY3537*	Concealed	20	20	40	175	5.6	—	155, 200
TY3537*	Concealed	18	18	33	175	5.6	—	155, 200
TY4232	Pendent, Rec. Pendent	16	16	26	175	8.0	—	135
TY4232	Pendent	16	16	26	175	8.0	—	155
TY4232	Pendent, Rec. Pendent	18	18	33	175	8.0	—	135
TY4232	Pendent	18	18	33	175	8.0	—	155
TY4232	Pendent, Rec. Pendent	20	20	40	175	8.0	—	135
TY4232	Pendent	20	20	40	175	8.0	—	155
TY4332+	Concealed HSW	16	16	26	250	8.0	4 to12	155
TY3539*	Dry Concealed	16	16	26	175	175	—	155, 200
TY3539*	Dry Concealed	18	18	33	175	175	—	155, 200
TY3302	HSW, Rec. HSW	16	16	26	175	5.6	4 to 12	200
TY3302	HSW, Rec. HSW	16	16	26	175	5.6	4 to 18	135, 155

TY3302	HSW, Rec. HSW	16	18	29	175	5.6	4 to 18	135, 155
TY3302	HSW, Rec. HSW	16	20	32	175	5.6	4 to 18	135, 155
TY3302	HSW	16	22	36	175	5.6	4 to 18	135
TY3338, TY3339	Dry HSW	16	16	26	175	5.6	4 to 12	135, 155
TY3338, TY3339	Dry HSW	16	18	29	175	5.6	4 to 12	135, 155
TY3338, TY3339	Dry HSW	18	16	29	175	5.6	4 to 12	135, 155
TY3338, TY3339	Dry HSW	16	20	32	175	5.6	4 to 12	135, 155
TY3358	Dry HSW	16	16	26	175	5.6	4 to 12	135, 155
TY3358	Dry HSW	16	18	29	175	5.6	4 to 12	135, 155
TY3358	Dry HSW	16	20	32	175	5.6	4 to 12	135, 155
TY3358	Dry HSW	18	16	29	175	5.6	4 to 12	135, 155
TY5238	Dry Pendent	18	18	33	175	11.2	—	135, 155, 175, 200
TY5238	Dry Pendent, Rec. Pendent	16	16	30	175	11.2	—	135, 155, 175, 200
TY3322	HSW	16	16	29	175	5.6	4 to 12	165
TY3322	HSW	18	16	29	175	5.6	4 to 12	165
TY3322	HSW	16	20	33	175	5.6	4 to 12	165
TY4322	HSW	16	16	26	175	8.0	4 to 6	165
TY4322	HSW	16	18	29	175	8.0	4 to 6	165
TY4322	HSW	18	16	31	175	8.0	4 to 6	165
TY4322	HSW	18	18	33	175	8.0	4 to 6	165
TY4322	HSW	16	20	34	175	8.0	4 to 6	165
TY4322	HSW	20	16	35	175	8.0	4 to 6	165
TY4322	HSW	16	22	37	175	8.0	4 to 6	165
TY4322	HSW	16	18	38	175	8.0	4 to 18	165
TY3332	HSW, Rec. HSW	16	16	26	250	5.6	4 to 12	135, 155, 175

TY3332	HSW, Rec. HSW	16	18	29	250	5.6	4 to 12	135, 155, 175
TY3332	HSW, Rec. HSW	16	20	32	250	5.6	4 to 6	135, 155, 175
TY3332	HSW, Rec. HSW	16	22	35	250	5.6	4 to 6	135
TY4332	HSW, Rec. HSW	16	16	26	250	8.0	4 to 12	135, 155, 175
TY4332	HSW, Rec. HSW	16	18	29	250	8.0	4 to 12	135, 155, 175
TY4332	HSW, Rec. HSW	16	20	32	250	8.0	4 to 6	135
TY4332	HSW, Rec. HSW	16	20	33	250	8.0	4 to 12	135
TY4332	HSW, Rec. HSW	16	22	35	250	8.0	4 to 6	135
TY4332	HSW, Rec. HSW	16	22	36	250	8.0	4 to 12	135
TY4332	HSW, Rec. HSW	16	24	39	250	8.0	4 to 6	135
TY4332	HSW, Rec. HSW	16	24	40	250	8.0	4 to 12	135
TY4522+	Concealed HSW	14	22	31	175	8.0	4 to 6	160
TY4522+	Concealed HSW	14	22	36	175	8.0	6 to 12	160
TY4522+	Concealed HSW	14	24	34	175	8.0	4 to 6	160
TY4522+	Concealed HSW	14	24	38	175	8.0	6 to 12	160
TY4522+	Concealed HSW	16	16	26	175	8.0	4 to 6	160
TY4522+	Concealed HSW	16	16	27	175	8.0	6 to 12	160
TY4522+	Concealed HSW	16	18	29	175	8.0	4 to 12	160
TY4522+	Concealed HSW	16	20	32	175	8.0	4 to 12	160
TY4522+	Concealed HSW	16	22	36	175	8.0	4 to 12	160
TY4522+	Concealed HSW	16	24	39	175	8.0	4 to 12	160
TY4522+	Concealed HSW	18	18	33	175	8.0	4 to 12	160
TY4522+	Concealed HSW	18	20	36	175	8.0	4 to 12	160
TY4522+	Concealed HSW	18	22	40	175	8.0	4 to 12	160
TY5522*	Concealed Pendent	16	16	30	175	11.2	—	160, 212
TY5522*	Concealed Pendent	18	18	33	175	11.2	—	160, 212

* The 155 or 160°F sprinkler utilizes a 135°F coverplate and the 200 or 212°F sprinkler utilizes a 165°F coverplate.

+ Utilizes a 135°F coverplate.

Dimension of wall on which a sidewall sprinkler is installed.

(B) Dimension perpendicular to wall on which a sidewall sprinkler is installed.

STANDARD RESPONSE - (SR) - EXTENDED COVERAGE SPRINKLERS - ORDINARY HAZARD

SIN	Type	Max Width x Length FtxFt	Ordinary Hazard Group	Min Sprinkler Flow Rate GPM	Nom K-Factor	Temp Rating °F
TY5332	HSW	16x16	1	38	11.2	155, 200
TY5332	HSW	16x16	2	51	11.2	155, 200
TY5332	HSW	16x18	1	43	11.2	155, 200
TY5332	HSW	16x18	2	58	11.2	155, 200
TY5332	HSW	16x20	1	48	11.2	155, 200
TY5332	HSW	16x20	2	64	11.2	155, 200
TY5337	HSW	16x22	1	53	11.2	200
TY5337	HSW	16x22	2	71	11.2	200
TY5337	HSW	16x24	1	58	11.2	200
TY5337	HSW	16x24	2	77	11.2	200
TY5339	Dry HSW	16x16	1	38	11.2	155, 200
TY5339	Dry HSW	16x16	2	51	11.2	155, 200
TY5339	Dry HSW	16x18	1	43	11.2	155, 200
TY5339	Dry HSW	16x18	2	58	11.2	155, 200
TY5339	Dry HSW	16x20	1	48	11.2	155, 200
TY5339	Dry HSW	16x20	2	64	11.2	155, 200
TY5237+	Pendent, Rec. Pendent	16x16	1	39	11.2	135, 155, 175, 200, 286
TY5237+	Pendent, Rec. Pendent	16x16	2	51	11.2	135, 155, 175, 200, 286
TY5238	Pendent, Rec. Pendent	16x16	1	39	11.2	155, 175, 200, 286
TY5238+	Pendent, Rec.	16x16	2	51	11.2	155, 175, 200, 286

	Pendent					
TY5237+	Pendent, Rec. Pendent	18x18	1	49	11.2	135, 155, 175, 200, 286
TY5237+	Pendent, Rec. Pendent	18x18	2	65	11.2	135, 155, 175, 200, 286
TY5237+	Pendent, Rec. Pendent	20x20	1	60	11.2	135, 155, 175, 200, 286
TY5237+	Pendent, Rec. Pendent	20x20	2	80	11.2	135, 155, 175, 200, 286
TY6237+	Pendent, Rec. Pendent	16x16	1	39	14.5	135, 155, 175, 200, 286
TY6237+	Pendent, Rec. Pendent	16x16	2	51	14.0	135, 155, 175, 200, 286
TY6237+	Pendent, Rec. Pendent	18x18	1	49	14.0	135, 155, 175, 200, 286
TY6237+	Pendent, Rec. Pendent	18x18	2	65	14.0	135, 155, 175, 200, 286
TY6237+	Pendent, Rec. Pendent	20x20	1	60	14.0	135, 155, 175, 200, 286
TY6237+	Pendent, Rec. Pendent	20x20	2	80	14.0	135, 155, 175, 200, 286
TY5137+	Upright	16x16	1	39	11.2	135, 155, 175, 200, 286
TY5137+	Upright	16x16	2	51	11.2	135, 155, 175, 200, 286
TY5137+	Upright	18x18	1	49	11.2	135, 155, 175, 200, 286
TY5137+	Upright	18x18	2	65	11.2	135, 155, 175, 200,

						286
TY5137+	Upright	20x20	1	60	11.2	135, 155, 175, 200, 286
TY5137+	Upright	20x20	2	80	11.2	135, 155, 175, 200, 286
TY6137+	Upright	16x16	1	39	14.5	135, 155, 175, 200, 286
TY6137+	Upright	16x16	2	51	14.5	135, 155, 175, 200, 286
TY6137+	Upright	18x18	1	49	14.5	135, 155, 175, 200, 286
TY6137+	Upright	18x18	2	65	14.5	135, 155, 175, 200, 286
TY6137+	Upright	20x20	1	60	14.5	135, 155, 175, 200, 286
TY6137+	Upright	20x20	2	80	14.5	135, 155, 175, 200, 286

+ Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.

QUICK RESPONSE (QR) - EXTENDED COVERAGE SPRINKLERS - ORDINARY HAZARD

SIN	Type	Max Width x Length Ft x Ft	Ordinary Hazard Group	Min Sprinkler Flow Rate GPM	Nom K-Factor	Temp Rating, °F
TY5137	Upright	14 x 14	1	30	11.2	135, 155, 175, 200, 286
TY5137	Upright	14 x 14	2	39	11.2	135, 155, 175, 200, 286
TY5237+	Pendent, Rec. Pendent	14 x 14	1	30	11.2	135, 155, 175, 200, 286
TY5237+	Pendent, Rec. Pendent	14 x 14	2	39	11.2	135, 155, 175, 200, 286
TY5238	Pendent, Rec. Pendent	14 x 14	1	30	11.2	135, 155, 175, 200, 286
TY5238	Pendent, Rec. Pendent	14 x 14	2	39	11.2	135, 155, 175, 200, 286

TY6137	Upright	14 x 14	1	39	14.0	135, 155, 175, 200, 286
TY6137	Upright	14 x 14	2	51	14.0	135, 155, 175, 200, 286
TY6237	Pendent	14 x 14	1	39	14.0	135, 155, 175, 200, 286
TY6237	Pendent	14 x 14	2	51	14.0	135, 155, 175, 200, 286
TY6237	Rec. Pendent	14 x 14	1	39	14.0	135, 155, 175, 200
TY6237	Rec. Pendent	14 x 14	2	51	14.0	135, 155, 175, 200

+ Sprinklers are suitable for installation below noncombustible obstructed construction as described in NFPA 13-1999.

CORROSION RESISTANT SPRINKLERS

SIN	Type	Nom K-Factor	Coating Type	Temp Rating, °F
TY313	Upright	5.6	Polyester	135, 155, 175, 200, 286
TY323	Pendent	5.6	Polyester	135, 155, 175, 200, 286
TY315	Upright	5.6	Polyester	135, 155, 175, 200, 286
TY325	Pendent	5.6	Polyester	135, 155, 175, 200, 286
TY363	Conventional	5.6	Polyester	135, 155, 175, 200, 286
TY365	Conventional	5.6	Polyester	135, 155, 175, 200, 286
TY3631	Conventional	5.6	Polyester	135, 155, 175, 200 ,286
TY4631	Conventional	8.0	Polyester	135, 155, 175, 200, 286
TY3311	HSW	5.6	Lead	165, 212
TY3332	HSW	5.6	Polyester	135, 155, 175
TY4332	HSW	8.0	Polyester	135, 155, 175
TY3351	HSW	5.6	Polyester, lead	135, 155, 175, 200, 286, 360
TY3331	HSW	5.6	Polyester, lead	135, 155, 175, 200, 286
TY3311	HSW	5.6	Wax	165, 212
TY3311	HSW	5.6	Wax over lead	165, 212
TY3351	HSW	5.6	Wax, Wax over lead	135, 155, 175, 200
TY5332	HSW	11.2	Polyester	155, 200
TY5337	HSW	11.2	Polyester	155, 200
TY5131	Upright	11.2	Polyester	155, 200, 250, 286
TY5231	Pendent	11.2	Polyester	155, 200, 250, 286

TY3211	Pendent	5.6	Lead	165, 212
TY3251	Pendent	5.6	Polyester, lead	135, 155, 175, 200, 286, 360
TY3231	Pendent	5.6	Polyester, lead	135, 155, 175, 200, 286
TY3211	Pendent	5.6	Wax	165, 212
TY3211	Pendent	5.6	Wax over lead	165, 212
TY3251	Pendent	5.6	Wax, Wax over lead	135, 155, 175, 200
TY4911	Pendent	8.0	Lead	165, 212
TY4211	Pendent	8.0	Lead	165, 212
TY4251	Pendent	8.0	Polyester, lead	135, 155, 175, 200, 286, 360
TY4231	Pendent	8.0	Polyester, lead	135, 155, 175, 200, 286
TY4911	Pendent	8.0	Wax	165, 212
TY4211	Pendent	8.0	Wax	165, 212
TY4911	Pendent	8.0	Wax over lead	165, 212
TY4211	Pendent	8.0	Wax over lead	165, 212
TY4251	Pendent	8.0	Wax, Wax over lead	135, 155, 175, 200
TY5237	Pendent	11.2	Lead	135, 155, 175, 200, 286
TY5237	Pendent	11.2	Polyester	135, 155, 175, 200, 286
TY6237	Pendent	14	Lead	135, 155, 175, 200, 286
TY6237	Pendent	14	Polyester	135, 155, 175, 200, 286
TY7251	Pendent	16.8	Polyester	155, 200, 286
TY3111	Upright	5.6	Lead	165, 212
TY3133	Upright	5.6	Lead	135, 155, 175, 200, 286
TY3153	Upright	5.6	Lead	135, 155, 175, 200, 286, 360
TY3151	Upright	5.6	Polyester, lead	135, 155, 175, 200, 286, 360
TY3131	Upright	5.6	Polyester, lead	135, 155, 175, 200, 286
TY3111	Upright	5.6	Wax	165, 212
TY3111	Upright	5.6	Wax over lead	165, 212
TY3151	Upright	5.6	Wax, Wax over lead	135, 155, 175, 200
TY4811	Upright	8.0	Lead	165, 212

TY4111	Upright	8.0	Lead	165, 212
TY4133	Upright	8.0	Lead	135, 155, 175, 200, 286
TY4153	Upright	8.0	Lead	135, 155, 175, 200, 286, 360
TY4151	Upright	8.0	Polyester, lead	135, 155, 175, 200, 286, 360
TY4131	Upright	8.0	Polyester, lead	135, 155, 175, 200, 286
TY4811	Upright	8.0	Wax	165, 212
TY4111	Upright	8.0	Wax	165, 212
TY4811	Upright	8.0	Wax over lead	165, 212
TY4111	Upright	8.0	Wax over lead	165, 212
TY4151	Upright	8.0	Wax, Wax over lead	135, 155, 175, 200
TY5137	Upright	11.2	Lead	135, 155, 175, 200, 286
TY5137	Upright	11.2	Polyester	135, 155, 175, 200, 286
TY6137	Upright	14	Lead	135, 155, 175, 200, 286
TY6137	Upright	14	Polyester	135, 155, 175, 200, 286
TY7151	Upright	16.8	Polyester	155, 200, 286
TY3431	VSW	5.6	Polyester, lead	135, 155, 175, 200, 286
TY3451	VSW	5.6	Polyester, lead	135, 155, 175, 200, 286, 360
TY3451	VSW	5.6	Wax, Wax over lead	135, 155, 175, 200
TY9281	Pendent	8.0	Stainless Steel	135, 155, 175, 200, 286
TY8181	Upright	5.6	Stainless Steel	135, 155, 175, 200, 286
TY8281	Pendent	5.6	Stainless Steel	135, 155, 175, 200, 286
TY9181	Upright	8.0	Stainless Steel	135, 155, 175, 200, 286
TY8291	Pendent	5.6	Stainless Steel	135, 155, 175, 200, 286, 360, 500
TY8191	Upright	5.6	Stainless Steel	135, 155, 175, 200, 286, 360, 500
TY9291	Pendent	8.0	Stainless Steel	135, 155, 175, 200, 286, 360, 500
TY9191	Upright	8.0	Stainless Steel	135, 155, 175, 200, 286, 360, 500
TY3230	Pendent	5.6	Stainless Steel	135, 155, 175, 200, 286
TY3250	Pendent	5.6	Stainless Steel	135, 155, 175, 200, 286, 360
TY3337	HSW	5.6	Stainless Steel	135, 155, 175, 200, 286
TY3357	HSW	5.6	Stainless Steel	135, 155, 175, 200, 286, 360

TY3339	HSW	5.6	Stainless Steel	135, 155, 175, 200, 286
TY3296	Pendent	5.6	Lead	400, 500
TY4292	Pendent	8.0	Lead	400, 500
TY3191	Upright	5.6	Lead	400, 500
TY4191	Upright	8.0	Lead	400, 500
TY8131	Upright	5.6	Polyester	135, 155, 175, 200, 286, 360
TY8151	Upright	5.6	Polyester	135, 155, 175, 200, 286, 360
TY8231	Pendent	5.6	Polyester	135, 155, 175, 200, 286, 360
TY8251	Pendent	5.6	Polyester	135, 155, 175, 200, 286, 360
TY8331	HSW	5.6	Polyester	135, 155, 175, 200, 286, 360
TY8351	HSW	5.6	Polyester	135, 155, 175, 200, 286, 360
TY9131	Upright	8.0	Polyester	135, 155, 175, 200, 286, 360
TY9151	Upright	8.0	Polyester	135, 155, 175, 200, 286, 360
TY9231	Pendent	8.0	Polyester	135, 155, 175, 200, 286, 360
TY9251	Pendent	8.0	Polyester	135, 155, 175, 200, 286, 360

HIGH TEMPERATURE, WAX COATED SPRINKLERS

SIN	Type	Nom K-Factor	Max Ambient Temp, F	Sprinkler Temp Rating, F
TY3351	HSW	8.0	150	286
TY4251	Pendent	8.0	150	286
TY3251	Pendent	8.0	150	286
TY4151	Upright	8.0	150	286
TY3151	Upright	8.0	150	286
TY3451	VSW	8.0	150	286
TY9281	Pendent	8.0	150	286
TY8181	Upright	5.6	150	286
TY8281	Pendent	5.6	150	286
TY9181	Upright	8.0	150	286
TY8291	Pendent	5.6	150	286

TY8191	Upright	5.6	150	286
TY9291	Pendent	8.0	150	286
TY9191	Upright	8.0	150	286

INTERMEDIATE LEVEL SPRINKLERS

SIN*	Response Type	Type	Nom K-Factor	Temp Rating, °F
TY313	QR	Upright	5.6	135, 155, 175, 200, 286
TY315	SR	Upright	5.6	135, 155, 175, 200, 286
TY323	QR	Pendent	5.6	135, 155, 175, 200, 286
TY325	SR	Pendent	5.6	135, 155, 175, 200, 286
TY3231	QR	Pendent	5.6	135, 155, 175, 200, 286
TY3221	QR	Pendent	5.6	165
TY4231	QR	Pendent	8.0	135, 155, 175, 200, 286
TY4221	QR	Pendent	8.0	165
TY3133	QR	Upright	5.6	135, 155, 175, 200, 286
TY3123	QR	Upright	5.6	165
TY4133	QR	Upright	8.0	135, 155, 175, 200, 286
TY4123	QR	Upright	8.0	165
TY3251	SR	Pendent	5.6	135, 155, 175, 200, 286, 360
TY4251	SR	Pendent	8.0	135, 155, 175, 200, 286, 360
TY3113	SR	Upright	5.6	135, 165, 212, 280, 360
TY3153	SR	Upright	5.6	135, 155, 175, 200, 286, 360
TY4111	SR	Upright	8.0	135, 165, 212, 280, 360
TY4113	SR	Upright	8.0	135, 165, 212, 280, 360
TY4153	SR	Upright	8.0	135, 155, 175, 200, 286, 360
TY4211	SR	Upright	8.0	135, 165, 212, 280, 360
TY4210	SR	Pendent	8.0	135, 165, 212, 280, 360
TY3210	SR	Pendent	5.6	135, 165, 212, 280, 360
TY3211	SR	Pendent	5.6	135, 165, 212, 280, 360

TY3103	SR	Upright	5.6	135, 165, 212, 280, 360
TY4103	SR	Upright	8.0	135, 165, 212, 280, 360

* These sprinklers are available with or without sprinkler guards Models G1 and G4 as covered under File MS26602.

SPRINKLERS FOR STORAGE PROTECTION (CONTROL MODE DENSITY AREA)

SIN	Response Type	Type	Nom K-Factor	Temp Rating, °F
TY5231	QR	Pendent	11.2	155, 200, 286
TY5131	QR	Upright	11.2	155, 200, 286
TY5111	SR	Upright	11.2	165, 212, 286
TY5211	SR	Pendent	11.2	165, 212, 286
TY5151	SR	Upright	11.2	155, 200, 286
TY5831[A]	QR	Upright	11.2	155, 200
TY5851	SR	Upright	11.2	155, 200, 286
TY5251	SR	Rec. Pendent, Pendent	11.2	155, 200, 286
TY7151	SR	Upright	16.8	155, 200, 286
TY7251	SR	Pendent	16.8	155, 200, 286

A- For retrofit only, not to be installed in new systems.

EXTENDED COVERAGE SPRINKLERS FOR STORAGE PROTECTION (CONTROL MODE DENSITY AREA)

SIN	Response Type	Max Width x Length Ft x Ft	Type	Nom K-Factor	Temp Rating, F
TY9128	SR	14 x 14	Upright	25.2	165, 212

These sprinklers have not been investigated for use as a Control Mode Specific Application (CMSA) sprinkler in accordance with Chapter 21 of NFPA 13.

SPRINKLERS FOR STORAGE PROTECTION (CONTROL MODE SPECIFIC APPLICATION)

SIN	Response Type	Type	Nom K-Factor	Temp Rating, °F
TY5153	SR	Upright	11.2	155, 200, 286
TY7103	SR	Upright	16.8	286

TY7153	SR	Upright	16.8	200

SPECIFIC APPLICATION SPRINKLERS

Attic Sprinklers

SIN	Response Type	Fire Risk	Roof Pitch (In./In.)	Max Width Ft	Max Length Ft	Min Flow Rate GPM	Nom K-Factor	Temp Rating, F
TY2180	QR	++	3/12 to 7/12	6	20	13	4.2	155
TY2180	QR	++	3/12 to 7/12	6	20	13	4.2	200
TY2181	QR	++	7/12 to 12/12	6	20	13	4.2	155
TY2181	QR	++	7/12 to 12/12	6	20	13	4.2	200
TY2182	QR	++	10/12 to 12/12	6	20	13	4.2	155
TY2182	QR	++	10/12 to 12/12	6	20	13	4.2	200
TY3180	QR	++	4/12 to 6/12	6	60	38	5.6	212
TY3180	QR	++	4/12 to 6/12	6	40	25	5.6	212
TY3181	QR	++	7/12 to 9/12	6	60	38	5.6	212
TY3181	QR	++	7/12 to 9/12	6	40	25	5.6	212
TY3182	QR	++	10/12 to 12/12	6	60	38	5.6	212
TY3182	QR	++	10/12 to 12/12	6	40	25	5.6	212
TY3183	QR	++	4/12 to 6/12	6	40	35	5.6	212
TY3183	QR	++	4/12 to 6/12	6	30	25	5.6	212
TY3184	QR	++	7/12 to 9/12	6	40	35	5.6	212
TY3184	QR	++	7/12 to 9/12	6	30	25	5.6	212
TY3185	QR	++	10/12 to 12/12	6	40	35	5.6	212
TY3185	QR	++	10/12 to 12/12	6	30	25	5.6	212
TY3187	QR	++	4/12 to 12/12	6	28	34	5.6	200
TY3187	QR	++	4/12 to 12/12	6	20	25	5.6	200
TY3183	QR	++	4/12 to 6/12	6	10	19	5.6	212
TY3184	QR	++	7/12 to 9/12	6	10	19	5.6	212
TY3185	QR	++	10/12 to 12/12	6	10	19	5.6	212
TY4180	QR	++	4/12 to 6/12	6	60	38	8.0	200

TY4181	QR	++	7/12 to 9/12	6	60	38	8.0	200
TY4182	QR	++	10/12 to 12/12	6	60	38	8.0	200

++ For protection of Light Hazard attic spaces of wood truss or open wood joist construction with saddle type roofs in buildings 20 to 60 ft in width and not exceeding a protection area of 400 sq ft per sprinkler when installed in accordance with the manufacturer' s installation and design parameter instructions.

Window Sprinklers

SIN	Response Type	Fire Risk	Type	Nom K-Factor	Distance Between Sprinklers, Ft	Min Flow Rate GPM	Temp Rating, F
TY3388	QR	*, %	HSW	5.6	6 to 8	20	155, 200
TY3388	QR	*, %	HSW	5.6	+	15	155, 200
TY3488	QR	*, %	VSW	5.6	6 to 8	20	155, 200
TY3488	QR	*, %	VSW	5.6	+	15	155, 200

+ Located between Mullions and not greater than 6 ft apart.

* For use on heat-strengthened or tempered glass windows without horizontal mullions having a maximum height of 13 ft. Combustibles must be maintained at a minimum distance of 2 in. from the glass. This may be accomplished by use of a 3 ft. pony wall or any other method acceptable to the authority having jurisdiction when installed in accordance with the manufacturer's installation and design parameter instructions.

% For use on UL certified FireLite Plus ceramic glass (by Technical Glass Products) without horizontal mullions having a maximum height of 8 ft. Combustibles are not required to be maintained at any minimum distance from the glass when the sprinklers are installed in accordance with the manufacturer's installation and design parameter instructions.

Authorities having jurisdiction shall be consulted to determine the hydraulic requirements for each installation.

Concealed Space Sprinklers

SIN	Response Type	Type	Height of Space, In.		Max Coverage Area, Ft^2	Nom K-Factor	Temp Rating, F
			Min	Max			
TY1189+	QR	Upright	12	36	100	2.8	175
TY1189++	QR	Upright	6*	54	100	2.8	175
TY2189+ **	QR	Upright	12	36	144	4.2	175
TY2189++ **	QR	Upright	6*	54	144	4.2	175
TY3189+ **	QR	Upright	12	36	144	5.6	175
TY3189++ **	QR	Upright	6*	54	144	5.6	175
TY2190%	QR	Upright	6	480	120	4.2	200
TY3190%	QR	Upright	6	480	120	5.6	200

TY2199+ **	QR	Upright	6*	84	196	4.2	200
TY2199++ **	QR	Upright	6*	84	196	4.2	200
TY3199+ **	QR	Upright	6*	84	256	5.6	200
TY3199++ **	QR	Upright	6*	84	256	5.6	200

* Minimum distance between upper and lower joists.

** Wet or Dry pipe systems using steel pipe.

+ For use in light hazard flat concealed spaces incorporating noncombustible or wood truss construction. The Manufacturers Installation and Design Parameter Instructions should be consulted for specific installation parameters, obstruction criteria and hydraulic design requirements.

++ For use in combustible solid wood and composite wood joist construction.

% For use in attic areas outside the scope of application for the BB, SD or HIP sprinklers.

Trademark and/or Tradename: "CSC"

Last Updated on 2019-01-25

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