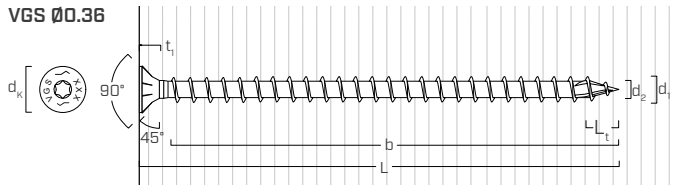
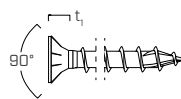


GEOMETRY AND MECHANICAL CHARACTERISTICS

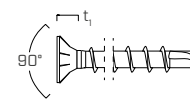
VGS Ø0.36



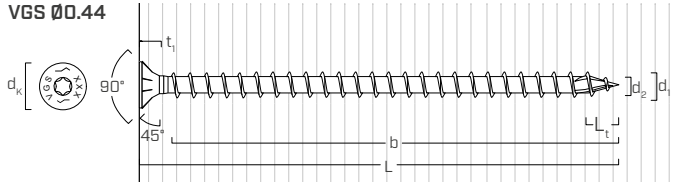
$L \leq 20 \frac{1}{2}$ in



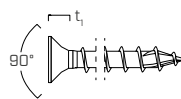
$L > 20 \frac{1}{2}$ in



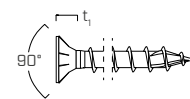
VGS Ø0.44



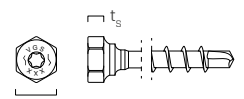
$L \leq 10$ in



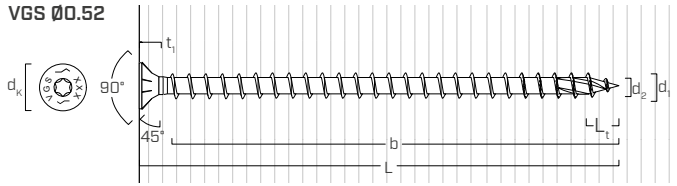
$10 \text{ in} < L \leq 23 \frac{5}{8}$ in



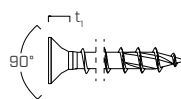
$L > 23 \frac{5}{8}$ in



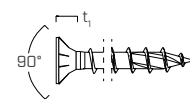
VGS Ø0.52



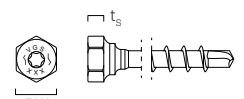
$L \leq 10$ in



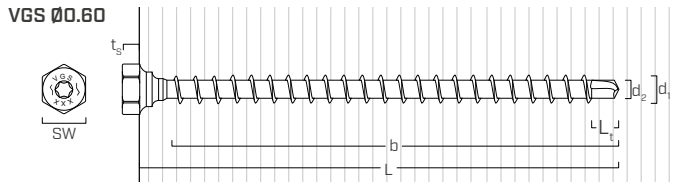
$10 \text{ in} < L \leq 23 \frac{5}{8}$ in



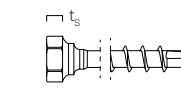
$L > 23 \frac{5}{8}$ in



VGS Ø0.60



$L > 23 \frac{5}{8}$ in



GEOMETRY

Nominal diameter	d_1	[in] ⁽¹⁾	0.36	0.44	0.44	0.52	0.52	0.60
		[mm]	9	11	11	13	13	15
Outer thread diameter	d_1	[in]	0.354	0.433	0.433	0.512	0.512	0.591
Length	L	[in]	-	$\leq 23 \frac{5}{8}$	$> 23 \frac{5}{8}$	$\leq 23 \frac{5}{8}$	$> 23 \frac{5}{8}$	-
Head diameter	d_K	[in]	0.630	0.760	-	0.866	-	-
Countersunk head thickness	t_1	[in]	0.256	0.323	-	0.370	-	-
Wrench size	SW	-	-	-	SW17	-	SW19	SW22
Exagonal head thickness	t_s	[in]	-	-	0.252	-	0.295	0.346
Root diameter	d_2	[in]	0.232	0.260	0.260	0.315	0.315	0.354
Tip Length	L_t	[in]	0.354	0.433	0.433	0.512	0.512	0.591
Pre-drilling hole diameter ⁽²⁾	$d_{V,G \leq 0.55}$	[in]	13/64	15/64	15/64	5/16	5/16	23/64
Pre-drilling hole diameter ⁽³⁾	$d_{V,G > 0.55}$	[in]	15/64	9/32	9/32	23/64	23/64	13/32

(1) The nominal diameter of the screw is converted into imperial units and rounded up to the nearest decimal point.

(2) Pre-drilling applies to timber with $G \leq 0.55$ (optional).

(3) Pre-drilling applies to timber with $G > 0.55$ (required).

MECHANICAL PARAMETERS

Nominal diameter	d_1	[in]	0.36	0.44	0.44	0.52	0.52	0.60
Tensile strength (allowable)	f_{tens}	[lbf]	2450	3200	3200	4400	4400	4800
Bending yield strength (specified)	$F_{y,b}$	[psi]	180000	170000	170000	161000	161000	135000

Nominal diameter	d ₁	[in]	0.36	0.44	0.44	0.52	0.52	0.60	
Withdrawal (design value)	W ₉₀	[lb/in]	G = 0.35	192	207	207	235	235	255
		G = 0.42	220	240	240	272	272	295	
		G = 0.49	255	272	272	308	308	334	
		G = 0.55	280	298	298	338	338	366	
minimum embedded length		[in]	2 1/8	2 5/8	2 5/8	3 1/16	3 1/16	3 1/2	

NOTE

- The mechanical parameters of the VGS Ø15 (0.60") screws in the tables have been estimated analytically and validated by experimental tests.

CODES AND DIMENSIONS

d ₁ [mm] [in]	CODE	L		b		pcs
		[mm]	[in]	[mm]	[in]	
9 0.36 TX 40	VGS9100	100	4	90	3 1/2	50
	VGS9120	120	4 3/4	110	4 3/8	50
	VGS9140	140	5 1/2	130	5 1/8	50
	VGS9160	160	6 1/4	150	6	50
	VGS9180	180	7 1/8	170	6 3/4	50
	VGS9200	200	8	190	7 1/2	50
	VGS9220	220	8 5/8	210	8 1/4	50
	VGS9240	240	9 1/2	230	9 1/16	50
	VGS9260	260	10 1/4	250	10	50
	VGS9280	280	11	270	10 5/8	50
	VGS9300	300	11 3/4	290	11 7/16	50
	VGS9320	320	12 5/8	310	12 3/16	50
	VGS9340	340	13 3/8	330	13	50
	VGS9360	360	14 1/4	350	13 3/4	50
	VGS9380	380	15	370	14 9/16	50
	VGS9400	400	15 3/4	390	15 3/8	50
	VGS9440	440	17 1/4	430	16 15/16	25
	VGS9480	480	19	470	18 1/2	25
	VGS9520	520	20 1/2	510	20 1/16	25
	VGS9560	560	22	550	21 5/8	25
	VGS9600	600	23 5/8	590	23 1/4	25
11 0.44 TX 50	VGS1180	80	3 1/8	70	2 3/4	25
	VGS11100	100	4	90	3 1/2	25
	VGS11125	125	4 15/16	115	4 1/2	25
	VGS11150	150	6	140	5 1/2	25
	VGS11175	175	6 7/8	165	6 1/2	25
	VGS11200	200	8	190	7 1/2	25
	VGS11225	225	8 7/8	215	8 7/16	25
	VGS11250	250	10	240	9 1/2	25
	VGS11275	275	10 7/8	265	10 7/16	25
	VGS11300	300	11 3/4	290	11 7/16	25
	VGS11325	325	12 3/4	315	12 3/8	25
	VGS11350	350	13 3/4	340	13 3/8	25
	VGS11375	375	14 3/4	365	14 3/8	25
	VGS11400	400	15 3/4	390	15 3/8	25
	VGS11425	425	16 3/4	415	16 5/16	25
	VGS11450	450	17 3/4	440	17 1/4	25
	VGS11475	475	18 11/16	465	18 5/16	25
	VGS11500	500	19 3/4	490	19 5/16	25
	VGS11525	525	20 11/16	515	20 1/4	25
	VGS11550	550	21 5/8	540	21 1/4	25
	VGS11575	575	22 5/8	565	22 1/4	25
11 0.44 TX 50 SW 17	VGS11600	600	23 5/8	590	23 1/4	25
	VGS11650	650	25 9/16	630	24 13/16	25
	VGS11700	700	27 1/2	680	26 3/4	25
	VGS11750	750	29 1/2	680	26 3/4	25
	VGS11800	800	31 1/2	780	30 11/16	25
	VGS11850	850	33 7/16	830	32 11/16	25
	VGS11900	900	35 1/2	880	34 5/8	25
	VGS11950	950	37 3/8	930	36 5/8	25
	VGS111000	1000	39 3/8	980	38 9/16	25

d ₁ [mm] [in]	CODE	L		b		pcs
		[mm]	[in]	[mm]	[in]	
13 0.52 TX 50	VGS1380	80	3 1/8	70	2 3/4	25
	VGS13100	100	4	90	3 1/2	25
	VGS13150	150	6	140	5 1/2	25
	VGS13200	200	8	190	7 1/2	25
	VGS13250	250	10	240	9 1/2	25
	VGS13300	300	11 3/4	280	11	25
	VGS13350	350	13 3/4	330	13	25
	VGS13400	400	15 3/4	380	15	25
	VGS13450	450	17 3/4	430	16 15/16	25
	VGS13500	500	19 3/4	480	19	25
13 0.52 TX 50 SW 19	VGS13550	550	21 5/8	530	20 7/8	25
	VGS13600	600	23 5/8	580	22 13/16	25
	VGS13650	650	25 9/16	630	24 13/16	25
	VGS13700	700	27 1/2	680	26 3/4	25
	VGS13750	750	29 1/2	730	28 3/4	25
	VGS13800	800	31 1/2	780	30 11/16	25
	VGS13850	850	33 7/16	830	32 11/16	25
	VGS13900	900	35 1/2	880	34 5/8	25
	VGS13950	950	37 3/8	930	36 5/8	25
	VGS131000	1000	39 3/8	980	38 9/16	25
15 0.60 TX 50 SW 22	VGS131100	1100	43 5/16	1080	42 1/2	25
	VGS131200	1200	47 1/4	1180	46 7/16	25
	VGS131300	1300	51 3/16	1280	50 3/8	25
	VGS131400	1400	55 1/8	1380	54 5/16	25
	VGS131500	1500	59 1/16	1480	58 1/4	25
	VGS15600	600	23 5/8	580	22 13/16	25
	VGS15700	700	27 1/2	680	26 3/4	25
	VGS15800	800	31 1/2	780	30 11/16	25
	VGS15900	900	35 1/2	880	34 5/8	25
	VGS151000	1000	39 3/8	980	38 9/16	25
	VGS151200	1200	47 1/4	1080	42 1/2	25
	VGS151400	1400	55 1/8	1380	54 5/16	25
	VGS151600	1600	63	1580	62 3/16	25
	VGS151800	1800	70 7/8	1780	70 1/16	25
	VGS152000	2000	78 3/4	1980	77 15/16	25

RELATED PRODUCTS



VGS

45° WASHER FOR VGS

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TORQUE LIMITER

TORQUE LIMITER

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WASP

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