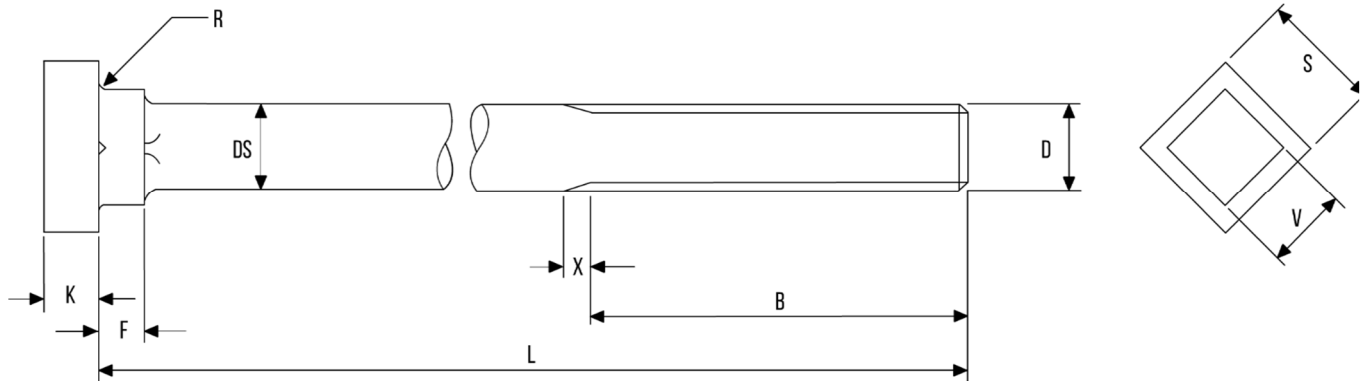


FOUNDATION BOLTING



HOLDING DOWN BOLTS (SQUARE SQUARE) - BS7419



Diameter	Thread Length (B)		Dia. of Unthreaded Shank (DS)		Thickness of Head (K)			Radius (R)
	Min.	Max.	Min.	Max.	Nom.	Min.	Max.	Min.
(M12)	112.0	118.0	11.3	12.7	8.0	7.3	8.8	0.5
M16	116.0	122.0	15.3	16.7	10.0	9.3	10.8	0.6
M20	120.0	127.5	19.2	20.8	12.5	11.6	13.4	0.8
(M22)	122.0	131.0	21.2	22.8	14.0	13.1	14.9	0.8
M24	124.0	133.0	23.2	24.8	15.0	14.1	15.9	0.8
(M27)	127.0	137.0	26.2	27.8	17.0	16.0	16.1	1.0
M30	130.0	140.5	29.2	30.8	18.7	17.7	19.8	1.0
(M33)	133.0	145.0	32.0	34.0	21.0	20.0	22.1	1.0
M36	136.0	148.0	35.0	37.0	22.5	21.5	23.6	1.0
(M39)	139.0	152.0	38.0	40.0	25.0	34.0	26.1	1.0
M42	142.0	155.5	41.0	43.0	26.0	25.0	27.1	1.2
(M45)	145.0	160.0	44.0	46.0	28.0	27.0	29.1	1.6
M48	148.0	163.0	47.0	49.0	30.0	29.0	31.1	1.6

Continued...

FOUNDATION BOLTING



HOLDING DOWN BOLTS (SQUARE SQUARE) - BS7419 (CONTINUED)

Diameter	Width Across Flats (S)		Thickness of Underhead (F)			Underhead Width Across Flats (V)		Thread Runout (X)
	Min.	Max.	Nom.	Min.	Max.	Min.	Max	Max.
(M12)	18.16	19.00	6.00	5.25	6.75	11.30	12.70	4.40
M16	23.16	24.00	8.00	7.25	8.75	15.30	16.70	5.00
M20	29.16	30.00	10.00	9.25	10.75	19.16	20.84	6.30
(M22)	31.16	32.00	11.00	10.25	11.75	21.16	27.84	6.30
M24	35.00	36.00	12.00	11.10	12.90	23.16	24.84	7.50
(M27)	40.00	41.00	13.50	12.60	14.40	26.16	27.84	7.50
M30	45.00	46.00	15.00	14.10	15.90	29.16	30.84	9.00
(M33)	46.80	50.00	16.50	15.60	17.40	32.00	34.00	9.00
M36	53.80	55.00	18.00	17.10	18.90	35.00	37.00	10.00
(M39)	58.10	60.00	19.50	18.45	20.55	38.00	40.00	10.00
M42	63.10	65.00	21.00	19.95	22.05	43.00	41.00	11.00
(M45)	68.10	70.00	22.50	21.45	23.55	44.00	46.00	11.00
M48	73.10	75.00	24.00	22.95	25.05	47.00	49.00	12.50

Sizes in brackets are non-preferred sizes
All dimensions are in mm

TOLERANCE ON NOMINAL LENGTH

Nominal Length		Tolerance
Over	Up to and Including	
250	315	± 5.20
315	400	± 5.70
400	500	± 6.30
500	625	± 6.80
625	800	± 7.20
800	1000	± 7.40
1000	1250	± 7.60

PREFERRED SIZES

Nominal Length for Thread				
M16	M20	M24	M30	M36
300	300	-	-	-
375	375	375	-	-
-	400	400	-	-
450	450	450	450	450
525	525	525	525	525
600	600	600	600	600
-	750	750	750	750
-	1000	100	1000	1000