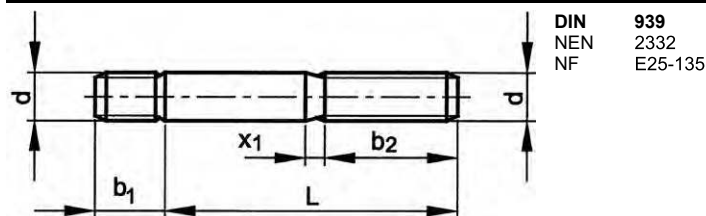


DIN 939

Stud metal end $\approx 1,25d$



Technical Data

d	$b_1 \approx 1,25d$	$b_2: L \leq 125\text{mm}$	$b_2: 125\text{mm} < L \leq 200\text{mm}$	$b_2 = L - (x_1 + 3) \text{ t/m } L \leq$	P	x_1
M6	7.5	18	24	20	1	2.5
M8	10	22	28	25	1.25	3.2
M10	12	26	32	30	1.5	3.8
M12	15	30	36	35	1.75	4.3
M14	18	34	40	40	2	5.0
M16	20	38	44	45	2	5.0
M18	22	42	48	50	2.5	6.3
M20	25	46	52	55	2.5	6.3
M22	28	50	56	60	2.5	6.3
M24	30	54	60	65	3	7.5
M27	35	60	66	70	3	7.5

- ATTENTION: when ordering studs acc. to DIN the diameter d x the effective length L has to be stated e.g. stud M10 x 65 - DIN 939, where L = 65 mm is the working length and $b_1 = 12$ mm the metal end. The total length is $65 + 12 = 77$ mm. The threadlength on the outside $b_2 = 26$ mm.
- The screw-in threaded end has been made with tolerance Sk6, acc. to DIN 13-51, meaning "heavy fit", and prevents loosening of studs during disassembly.
- Studs acc. to DIN 939 (5.6/5.8/8.8) with a metal end $\approx 1,25d$ have many applications, among others in cast-iron.

Materials

Thread	Material	Class	Surface treatment
M	St	5.6/5.8	
M	St	5.6/5.8	Zipl
M	St	5.6/5.8	Zipl yell.p.
M	St	8.8	
M	St.St. A2	70	
M	St.St. A4	70	

Stud metal end $\approx 1,25d$

Thread Metric thread
Material Steel
Class 5.6/5.8

DIN 939



d x L		d x L		d x L	
M6X20	200	M6X55	200	M8X45	100
M6X25	200			M8X50	100
M6X30	200	M8X20	100	M8X60	100
M6X35	200	M8X25	100	M8X65	100
M6X40	200	M8X30	100	M8X70	100
M6X45	200	M8X35	100		
M6X50	200	M8X40	100	M10X20	100

Stud metal end $\approx 1,25d$

d x L		d x L		d x L	
M10X25	100	M14X40	50	M20X80	25
M10X30	100	M14X50	50	M20X90	10
M10X35	100	M14X60	50	M20X100	10
M10X40	100			M20X110	10
M10X45	100	M16X30	50	M20X120	10
M10X50	100	M16X35	50	M20X140	10
M10X55	100	M16X40	50		
M10X60	100	M16X45	50	M22X50	10
M10X65	100	M16X50	50	M22X60	10
M10X70	100	M16X55	50	M22X70	10
		M16X60	50	M22X80	10
M12X25	100	M16X65	25	M22X90	10
M12X30	100	M16X70	25	M22X100	10
M12X35	100	M16X75	25	M22X110	10
M12X40	100	M16X80	25	M22X120	10
M12X45	100	M16X90	25	M22X140	10
M12X50	50	M16X100	25		
M12X55	50			M24X50	10
M12X60	50	M20X40	25	M24X60	10
M12X65	50	M20X45	25	M24X70	10
M12X70	50	M20X50	25	M24X80	10
M12X75	50	M20X55	25	M24X90	10
M12X80	50	M20X60	25	M24X100	10
M12X90	50	M20X65	25	M24X110	10
M12X100	50	M20X70	25	M24X120	10
		M20X75	25	M24X140	10

Stud metal end $\approx 1,25d$		
Thread	Metric thread	DIN 939  
Material	Steel	
Class	5.6/5.8	
Surface treatment	Zinc plated	

d x L		d x L		d x L	
M6X20	200	M8X50	100	M12X30	100
M6X25	200	M8X60	100	M12X35	100
M6X30	200			M12X40	100
M6X35	200	M10X20	100	M12X50	50
M6X40	200	M10X25	100	M12X60	50
M6X45	200	M10X30	100		
M6X50	200	M10X35	100	M16X35	50
		M10X40	100	M16X40	50
M8X20	100	M10X50	100	M16X45	50
M8X25	100	M10X60	100	M16X50	50
M8X30	100			M16X55	50
M8X35	100	M12X25	100	M16X60	50
M8X40	100				

Stud metal end $\approx 1,25d$		
Thread	Metric thread	DIN 939
Material	Steel	
Class	5.6/5.8	
Surface treatment	Zinc plated yellow passivated	

d x L		d x L		d x L	
M6X20	200	M8X50	100	M12X30	100
M6X25	200	M8X60	100	M12X35	100
M6X30	200			M12X40	100
M6X35	200	M10X20	100	M12X50	50
M6X40	200	M10X25	100	M12X60	50
M6X45	200	M10X30	100		
M6X50	200	M10X35	100	M16X35	50
		M10X40	100	M16X40	50
M8X20	100	M10X50	100	M16X45	50
M8X25	100	M10X60	100	M16X50	50
M8X30	100			M16X55	50
M8X35	100	M12X25	100	M16X60	50
M8X40	100				

Stud metal end $\approx 1,25d$		
Thread	Metric thread	DIN 939  
Material	Steel	
Class	8.8	

d x L		d x L		d x L	
M6X20	200	M12X25	100	M16X100	25
M6X25	200	M12X30	100		
M6X30	200	M12X35	100	M20X40	25
M6X35	200	M12X40	100	M20X45	25
M6X40	200	M12X45	100	M20X50	25
M6X45	200	M12X50	50	M20X55	25
M6X50	200	M12X55	50	M20X60	25
M6X55	200	M12X60	50	M20X65	25
		M12X65	50	M20X70	25
M8X20	100	M12X70	50	M20X75	25
M8X25	100	M12X75	50	M20X80	25
M8X30	100	M12X80	50	M20X90	10
M8X35	100	M12X90	50	M20X100	10
M8X40	100	M12X100	50	M20X110	10
M8X45	100			M20X120	10
M8X50	100	M14X30	50	M20X140	10
M8X60	100	M14X35	50		
M8X65	100	M14X40	50	M22X60	10
M8X70	100	M14X50	50	M22X70	10
		M14X60	50	M22X80	10
M10X20	100				
M10X25	100	M16X35	50	M24X50	10
M10X30	100	M16X40	50	M24X60	10
M10X35	100	M16X45	50	M24X70	10
M10X40	100	M16X50	50	M24X75	10
M10X45	100	M16X55	50	M24X80	10
M10X50	100	M16X60	50	M24X90	10
M10X55	100	M16X65	25	M24X100	10
M10X60	100	M16X70	25	M24X110	10
M10X65	100	M16X75	25	M24X120	10
M10X70	100	M16X80	25		
		M16X90	25	M27X100	10

Stud metal end ≈ 1,25d

Thread

Material

Class

Metric thread

Stainless steel A2

70

DIN 939

RoHS



d x L		d x L		d x L	
M6X16*	200			M12X80	10
M6X20	100	M10X20	25	M12X90	10
M6X25	100	M10X22*	100	M12X100	10
M6X30	100	M10X25	25	M12X110*	100
M6X35	100	M10X30	25	M12X120*	100
M6X40	100	M10X35	25		
M6X45	100	M10X40	25	M14X40*	50
M6X50	100	M10X45	25	M14X70*	50
M6X55*	200	M10X50	25		
M6X60	100	M10X55	25	M16X25*	50
M6X70	100	M10X60	25	M16X30	10
M6X80	100	M10X65	25	M16X35	10
M6X90	100	M10X70	25	M16X40	10
M6X100	100	M10X75	25	M16X45	10
		M10X80	25	M16X50	10
M8X16	200	M10X90	10	M16X55	10
M8X20	50	M10X100	10	M16X60	10
M8X25	50	M10X120*	100	M16X65	10
M8X30	50			M16X70	10
M8X35	50	M12X20	10	M16X75	10
M8X40	50	M12X25	10	M16X80	10
M8X45	50	M12X30	10	M16X90	10
M8X50	50	M12X35	10	M16X100	10
M8X55*	200	M12X40	10	M16X110*	50
M8X60	50	M12X45	10		
M8X70	50	M12X50	10	M20X35*	50
M8X75*	200	M12X55	10	M20X40	5
M8X80	50	M12X60	10	M20X45	5
M8X90	25	M12X65	10	M20X50	5
M8X100	25	M12X70	10	M20X55	5
M8X110*	200	M12X75	10	M20X60	5

Stud metal end ≈ 1,25d

d x L		d x L		d x L	
M20X65	5	M20X100	5	M24X80*	50
M20X70	5	M20X110*	50	M24X90	50
M20X75	5	M20X120	5	M24X100*	50
M20X80	5				
M20X85*	50	M24X65*	50	M27X75*	25
M20X90	5	M24X70*	50		

- Sizes with a diameter > M24 and sizes with a length > 8xd are minimal property class 50.

Thread
Material
Class

Metric thread
Stainless steel A4
70

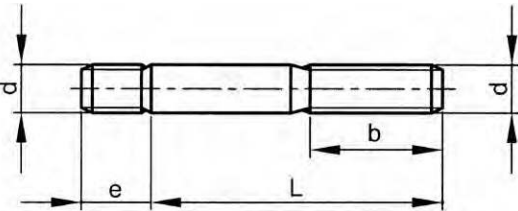
DIN 939

d x L		d x L		d x L	
M6X16*	200	M10X50	25	M16X55	10
M6X20	100	M10X55	25	M16X60	10
M6X25	100	M10X60	25	M16X65	10
M6X30	100	M10X65	25	M16X70	10
M6X35	100	M10X70	25	M16X75	10
M6X40	100	M10X75*	100	M16X80	10
M6X45	100	M10X80	25	M16X90*	50
M6X50	100	M10X90	10	M16X100	10
M6X60	100	M10X100	10	M16X120*	50
M6X65*	200				
M6X70	100	M12X20	10	M18X45*	50
M6X80	100	M12X25	10		
M6X100	100	M12X30	10	M20X40	5
		M12X35	10	M20X45	5
M8X16*	200	M12X40	10	M20X50	5
M8X20	50	M12X45	10	M20X55	5
M8X25	50	M12X50	10	M20X60	5
M8X30	50	M12X55	10	M20X65	5
M8X35	50	M12X60*	100	M20X70	5
M8X40	50	M12X65	10	M20X75	5
M8X45	50	M12X70	10	M20X80	5
M8X50	50	M12X75	10	M20X85*	50
M8X55*	200	M12X80*	100	M20X90	5
M8X60	50	M12X90	10	M20X100	5
M8X65*	200	M12X100	10	M20X110*	50
M8X70	50	M12X110*	100	M20X120	5
M8X80	50	M12X120*	100		
M8X100	25			M24X50*	50
		M14X35*	50	M24X60	5
M10X20	25			M24X70	5
M10X25	25	M16X30	10	M24X80	5
M10X30	25	M16X35	10	M24X90	5
M10X35	25	M16X40	10	M24X100	5
M10X40	25	M16X45	10		
M10X45	25	M16X50	10		

- Sizes with a diameter > M24 and sizes with a length > 8xd are minimal property class 50.

DIN ≈ 939

Stud metal end ≈ 1,25d BSW



DIN ≈939 (1955)
NEN ≈2346 (1962)



Technical Data

d	b	e ≈ 1,25d	Threads per inch	d	b	e ≈ 1,25d	Threads per inch
5/16	18	10	18	5/8	28	20	11
3/8	20	12	16	3/4	32	25	10
1/2	25-30	16	12	1 Inch	40-55	35	8

- Whitworth thread (BSW) is not internationally recommended.
- It is advised to use metric (M).
- ATTENTION: when ordering studs according to DIN the diameter d x the effective length L has to be stated e.g. stud 5/16 x 25, where L = 25 mm is the working length and e 10 mm the metal end.
- The total length is 25 + 10 = 35 mm.
- The threadlength on the outside b = 18 mm.
- Studs acc. to ≈ DIN 939 (1955) with a metal end e ≈ 1,25 d have many applications, among others in cast-iron.
- The screw-in threaded end has been made with tolerance Sk6, acc. to DIN 13 and 14, Beiblatt 14 (1944), meaning "heavy fit", and prevents loosening of studs during disassembly.

Stud metal end ≈ 1,25d BSW

Thread British Standard Whitworth
Material Steel
Class 5.6/5.8



d x L		d x L		d x L	
5/16X25MM	100	1/2X35MM	50	5/8X70MM	25
5/16X30MM	100	1/2X40MM	50	5/8X80MM	25
5/16X35MM	100	1/2X45MM	50		
		1/2X50MM	50	3/4X50MM	25
3/8X25MM	100	1/2X60MM	50	3/4X60MM	25
3/8X30MM	100	1/2X70MM	50	3/4X70MM	25
3/8X35MM	100	1/2X80MM	50	3/4X80MM	10
3/8X40MM	100				
3/8X50MM	100	5/8X45MM	25	1.IN.X50MM	10
		5/8X50MM	25	1.IN.X60MM	10
1/2X30MM	50	5/8X60MM	25	1.IN.X100MM	10

- Depending on availability class 5.8 can be supplied.