

# DIÂMETROS DE FUROS PARA ROSCAR

# Hole Diameter for Thread

MACHOS  
SERT  
TIPO

M DIN 13. ISO 724/965.1		
D (mm)	P	ø Furo
M 1.0	0.25	0.8
M 1.1	0.25	0.9
M 1.2	0.25	1.0
M 1.4	0.3	1.1
M 1.6	0.35	1.3
M 1.8	0.35	1.5
M 2.0	0.4	1.6
M 2.2	0.45	1.8
M 2.5	0.45	2.1
M 3.0	0.5	2.5
M 3.5	0.6	2.9
M 4.0	0.7	3.3
M 4.5	0.75	3.8
M 5.0	0.8	4.2
M 6.0	1	5.0
M 7.0	1	6.0
M 8.0	1.25	6.8
M 9.0	1.25	7.8
M 10.0	1.5	8.5
M 11.0	1.5	9.5
M 12.0	1.75	10.3
M 14.0	2	12.1
M 16.0	2	14.1
M 18.0	2.5	15.6
M 20.0	2.5	17.6
M 22.0	2.5	19.6
M 24.0	3	21.1
M 27.0	3	24.1
M 30.0	3.5	26.6
M 33.0	3.5	29.6
M 36.0	4	32.1
M 39.0	4	35.1
M 42.0	4.5	37.6
M 45.0	4.5	40.6
M 48.0	5	43.1
M 52.0	5	47.1
M 56.0	5.5	50.6
M 60.0	5.5	54.6
M 64.0	6	58.2
M 68.0	6	62.2

M DIN 13		
D (mm)	P	ø Furo
M 1.7	0.35	1.4
M 2.3	0.4	1.9
M 2.6	0.45	2.2

BSW (W) BS 84 DIN 11		
D (mm)	N/1"	ø Furo
W 1/16	60	1.1
W 3/32	48	1.8
W 1/8	40	2.6
W 5/32	32	3.2
W 3/16	24	3.5
W 7/32	24	4.3
W 1/4	20	4.9
W 5/16	18	6.3
W 3/8	16	7.7
W 7/16	14	9.0
W 1/2	12	10.3
W 9/16	12	11.8
W 5/8	11	13.2
W 11/16	11	14.8
W 3/4	10	16.1
W 7/8	9	19.0
W 1"	8	21.7
W 1 1/8	7	24.4
W 1 1/4	7	27.6
W 1 3/8	6	30.0
W 1 1/2	6	33.2
W 1 5/8	5	35.4
W 1 3/4	5	38.6
W 1 7/8	5	41.1
W 2"	5	44.3
W 2 1/4	4	49.8
W 2 1/2	4	56.2
W 2 3/4	4	61.5
W 3"	4	67.8

MF DIN 13. ISO 724/965.1		
D (mm)	P	ø Furo
M 1.0	0.2	0.8
M 1.1	0.2	0.9
M 1.2	0.2	1.0
M 1.4	0.2	1.2
M 1.6	0.2	1.4
M 1.8	0.2	1.6
M 2.0	0.25	1.8
M 2.2	0.25	2.0
M 2.5	0.35	2.2
M 3.0	0.35	2.7
M 3.5	0.35	3.2
M 4.0	0.5	3.5
M 4.5	0.5	4.0
M 5.0	0.5	4.5
M 5.5	0.5	5.0
M 6.0	0.75	5.3
M 7.0	0.75	6.3
M 8.0	0.75	7.3
M 9.0	0.75	8.3
M 10.0	0.75	9.3
M 11.0	0.75	10.3
M 8.0	1	7.0
M 9.0	1	8.0
M 10.0	1	9.0
M 11.0	1	10.0
M 12.0	1	11.0
M 14.0	1	13.0
M 15.0	1	14.0
M 16.0	1	15.0
M 17.0	1	16.0
M 18.0	1	17.0
M 20.0	1	19.0
M 22.0	1	21.0
M 24.0	1	23.0
M 25.0	1	24.0
M 27.0	1	26.0
M 28.0	1	27.0
M 30.0	1	29.0
M 10.0	1.25	8.8
M 12.0	1.25	10.8
M 14.0	1.25	12.8
M 12.0	1.5	10.5
M 14.0	1.5	12.5
M 15.0	1.5	13.5
M 16.0	1.5	14.5
M 17.0	1.5	15.5
M 18.0	1.5	16.5
M 20.0	1.5	18.5
M 22.0	1.5	20.5
M 24.0	1.5	22.5
M 25.0	1.5	23.5
M 26.0	1.5	24.5

G (BSP.F) ISO228/1.DIN259.BS2779		
D (mm)	N/1"	ø Furo
G 1/16	28	6.7
G 1/8	28	8.7
G 1/4	19	11.6
G 3/8	19	15.1
G 1/2	14	18.9
G 5/8	14	20.8
G 3/4	14	24.3
G 7/8	14	28.1
G 1	11	30.6
G 1 1/8	11	35.2
G 1 1/4	11	39.2
G 1 3/8	11	41.7
G 1 1/2	11	45.1
G 1 3/4	11	51.1
G 2	11	57.0
G 2 1/4	11	63.0
G 2 1/2	11	72.5
G 2 3/4	11	78.9
G 3	11	85.2
G 3 1/4	11	91.3
G 3 1/2	11	97.7
G 3 3/4	11	104.4
G 4	11	110.4

MF DIN 13. ISO 724/965.1		
D (mm)	P	ø Furo
M 27	1.5	25.5
M 28	1.5	26.5
M 30	1.5	28.5
M 32	1.5	30.5
M 33	1.5	31.5
M 35	1.5	33.5
M 36	1.5	34.5
M 38	1.5	36.5
M 39	1.5	37.5
M 40	1.5	38.5
M 42	1.5	40.5
M 45	1.5	43.5
M 48	1.5	46.5
M 50	1.5	48.5
M 52	1.5	50.5
M 18	2	16.1
M 20	2	18.1
M 22	2	20.1
M 24	2	22.1
M 25	2	23.1
M 27	2	25.1
M 28	2	26.1
M 30	2	28.1
M 32	2	30.1
M 33	2	31.1
M 36	2	34.1
M 39	2	37.1
M 40	2	38.1
M 42	2	40.1
M 45	2	43.1
M 48	2	46.1
M 50	2	48.1
M 52	2	50.1
M 30	3	27.1
M 33	3	30.1
M 36	3	33.1
M 39	3	36.1
M 40	3	37.1
M 42	3	39.1
M 45	3	42.1
M 48	3	45.1
M 50	3	47.1
M 52	3	49.1
M 42	4	38.1
M 45	4	41.1
M 48	4	44.1
M 52	4	48.1

UNC ASME B1.1		
D (mm)	P	ø Furo
Nº 1	64	1.5
Nº 2	56	1.8
Nº 3	48	2.0
Nº 4	40	2.3
Nº 5	40	2.6
Nº 6	32	2.8
Nº 8	32	3.4
Nº 10	24	3.9
Nº 12	24	4.5
1/4	20	5.2
5/16	18	6.7
3/8	16	8.1
7/16	14	9.5
1/2	13	10.9
9/16	12	12.4
5/8	11	13.8
3/4	10	16.8
7/8	9	19.7
1"	8	22.5
1 1/8	7	25.3
1 1/4	7	28.5
1 3/8	6	31.1
1 1/2	6	34.3
1 3/4	5	39.9
2"	4	45.1
2 1/4	4	51.5
2 1/2	4	57.8
2 3/4	4	64.1
3	4	70.5

UNF ASME B1.1		
D (mm)	P	ø Furo
Nº 0	80	1.0
Nº 1	72	1.5
Nº 2	64	1.8
Nº 3	56	2.1
Nº 4	48	2.4
Nº 5	44	2.7
Nº 6	40	2.9
Nº 8	36	3.5
Nº 10	32	4.1
Nº 12	28	4.7
1/4	28	5.5
5/16	24	7.0
3/8	24	8.6
7/16	20	10.0
1/2	20	11.6
9/16	18	13.0
5/8	18	14.6
3/4	16	17.6
7/8	14	20.6
1"	12	23.5
1 1/8	12	26.6
1 1/4	12	29.9
1 3/8	12	32.5
1 1/2	12	36.2



NPT		ANSI B2.1	
D (mm)	N/1"	ø Furo	
1/16	27	6.2	
1/8	27	8.4	
1/4	18	11.1	
3/8	18	14.3	
1/2	14	17.9	
3/4	14	23.0	
1"	11 1/2	29.0	
1" 1/4	11 1/2	37.7	
1" 1/2	11 1/2	44.0	
2"	11 1/2	56.0	
2" 1/2	8	66.7	
3"	8	83.0	

NPTF		ANSI B2.1	
D (mm)	N/1"	ø Furo	
1/16	27	6.2	
1/8	27	8.6	
1/4	18	11.1	
3/8	18	14.7	
1/2	14	17.9	
3/4	14	23.4	
1"	11 1/2	29.4	
1" 1/4	11 1/2	38.1	
1" 1/2	11 1/2	44.0	
2"	11 1/2	56.4	
2" 1/2	8	67.1	
3"	8	83.0	

NPSM		ANSI B2.1	
D (mm)	N/1"	ø Furo	
1/16	27	6.2	
1/8	27	8.6	
1/4	18	11.1	
3/8	18	14.7	
1/2	14	17.9	
3/4	14	23.4	
1"	11 1/2	29.4	
1" 1/4	11 1/2	38.1	
1" 1/2	11 1/2	44.0	
2"	11 1/2	56.4	
2" 1/2	8	67.1	

NPSF		ANSI B2.1	
D (mm)	N/1"	ø Furo	
1/16	27	6.2	
1/8	27	8.6	
1/4	18	11.1	
3/8	18	14.7	
1/2	14	17.9	
3/4	14	23.4	
1"	11 1/2	29.4	

UNEF		ANSI B2.1	
D (mm)	N/1"	ø Furo	
Nº 12	32	4.8	
1/4	32	5.6	
5/16	32	7.2	
3/8	32	8.8	
7/16	28	10.3	
1/2	28	11.9	
9/16	24	13.3	
5/8	24	14.9	
11/16	24	16.5	
3/4	20	17.9	
13/16	20	19.5	
7/8	20	21.1	
15/16	20	22.7	
1"	20	24.3	
1" 1/16	18	25.7	
1" 1/8	18	27.3	
1" 3/16	18	28.9	
1" 1/4	18	30.5	
1" 5/16	18	32.1	
1" 3/8	18	33.7	
1" 7/16	18	35.2	
1" 1/2	18	36.8	
1" 9/16	18	38.4	
1" 5/8	18	40.0	
1" 11/16	18	41.6	

FÓRMULA:  
de broca = D-P  
D: DIÂMETRO EXTERNO  
P: PASSO  
Exemplo:  
M14 x 2  
de broca = 14.0-2.0 = 12.0

MACHOS  
TAPS

## MACHO LAMINADOR

UNC		ASME B1.1	
D (mm)	N/1"	ø Furo	
Nº 1	64	1.7	
Nº 2	56	2.0	
Nº 3	48	2.3	
Nº 4	40	2.6	
Nº 5	40	2.9	
Nº 6	32	3.1	
Nº 8	32	3.8	
Nº 10	24	4.3	
Nº 12	24	5.0	
1/4	20	5.8	
5/16	18	7.3	
3/8	16	8.8	
7/16	14	10.3	
1/2	13	11.8	
9/16	12	13.3	
5/8	11	14.8	

UNF		ASME B1.1	
D (mm)	N/1"	ø Furo	
Nº 1	72	1.7	
Nº 2	64	2.0	
Nº 3	56	2.3	
Nº 4	48	2.6	
Nº 5	44	2.9	
Nº 6	40	3.2	
Nº 8	36	3.8	
Nº 10	32	4.5	
Nº 12	28	5.1	
1/4	28	5.9	
5/16	24	7.5	
3/8	24	9.0	

M		ANSI B2.1	
D (mm)	N/1"	ø Furo	
M 1.0	0.25	0.9	
M 1.1	0.25	1.0	
M 1.2	0.25	1.1	
M 1.4	0.3	1.3	
M 1.6	0.35	1.4	
M 1.7	0.35	1.5	
M 1.8	0.35	1.6	
M 2.0	0.4	1.8	
M 2.2	0.45	2	
M 2.3	0.4	2.1	
M 2.5	0.45	2.3	
M 2.6	0.45	2.4	
M 3.0	0.5	2.8	
M 3.5	0.6	3.2	
M 4.0	0.7	3.7	
M 4.5	0.75	4.2	
M 5.0	0.8	4.6	
M 6.0	1	5.5	
M 7.0	1	6.5	
M 8.0	1.25	7.4	
M 9.0	1.25	8.4	
M 10.0	1.5	9.3	
M 11.0	1.5	10.3	
M 12.0	1.75	11.2	
M 14.0	2	13.1	
M 16.0	2	15.1	

MF		DIN 13.ISO724/965.1	
D (mm)	N/1"	ø Furo	
M 4	0.5	3.8	
M 5	0.5	4.8	
M 6	0.5	5.8	
M 6	0.75	5.7	
M 8	0.75	7.7	
M 8	1	7.5	
M 10	1	9.5	
M 12	1	11.5	
M 14	1	13.5	
M 16	1	15.5	
M 12	1.5	11.3	
M 14	1.5	13.3	
M 16	1.5	15.3	
M 18	1.5	17.3	
M 20	1.5	19.3	

FÓRMULA:  
de broca = D-P/2  
D: DIÂMETRO EXTERNO  
P: PASSO  
Exemplo:  
M14 x 2  
de broca = 14.0-2/2 = 13.0