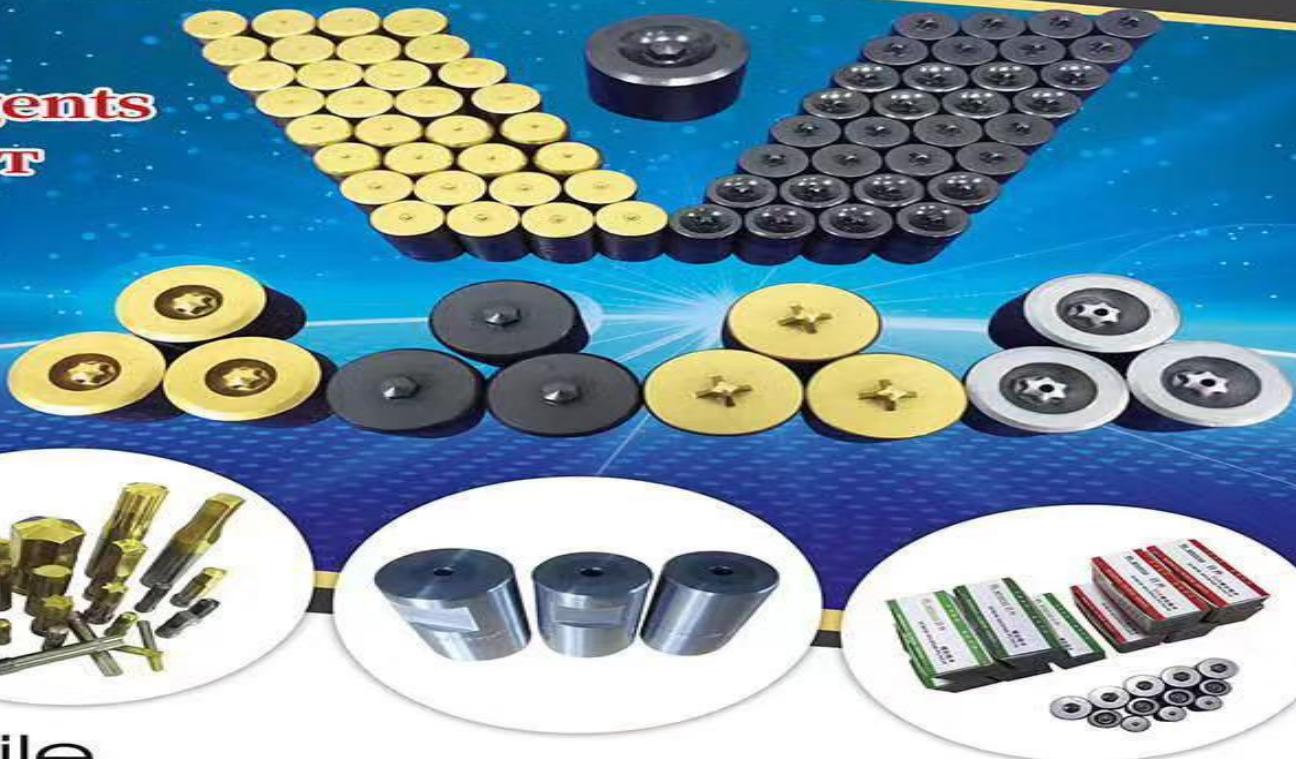


东莞日劲升五金制品有限公司
Dongguan SunRise hardware products co., LTD.
Risheng Precision screw making tools

诚招代理商
Recruitment of agents
торговый агент
भर्ती एजेंटों



Company profile

Our company professionally produces and sells various types of precise standard components, such as screw mould, punch, abnormal non-standard fastener mould.

Sunrise is located at Fenggang Town, Dongguan City, Guangdong Province, and the traffic is convenient. The company boasts of the complete scientific quality management system. It brings in the advanced production equipment and technologies from developed countries and regions, such as Japan and Taiwan.

Products are produced according to standards like JIS, ANSI, DIN, GB, ISO, BS. It may also produce and develop the special screw mould according to the requirements of clients. Our clients are widespread at home and Southeast Asia region. Our company sticks to the mission of honesty, quality and service first, and keeping moving. Friends from all walks of life are welcome to visit, guide and conduct business negotiations in Sunrise.

Address: No.166, Fengguan Road, Paradise, Fenggang Town, Dongguan City, China

Mobile phone: 008618676064337

Web: www.fastenerdie.com

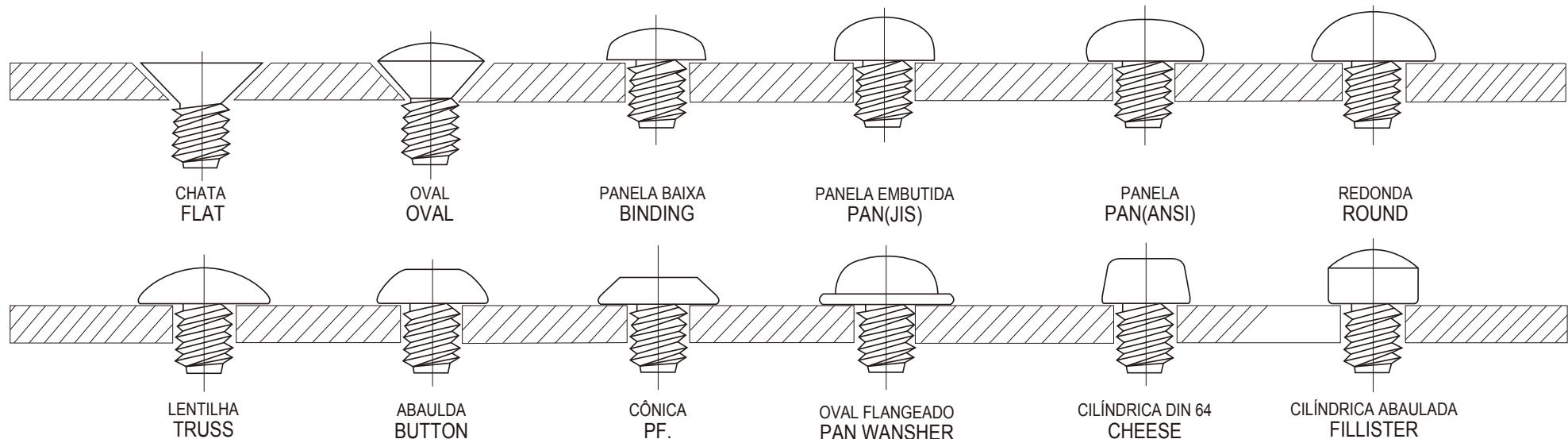
Contact: SUNRISE BILL



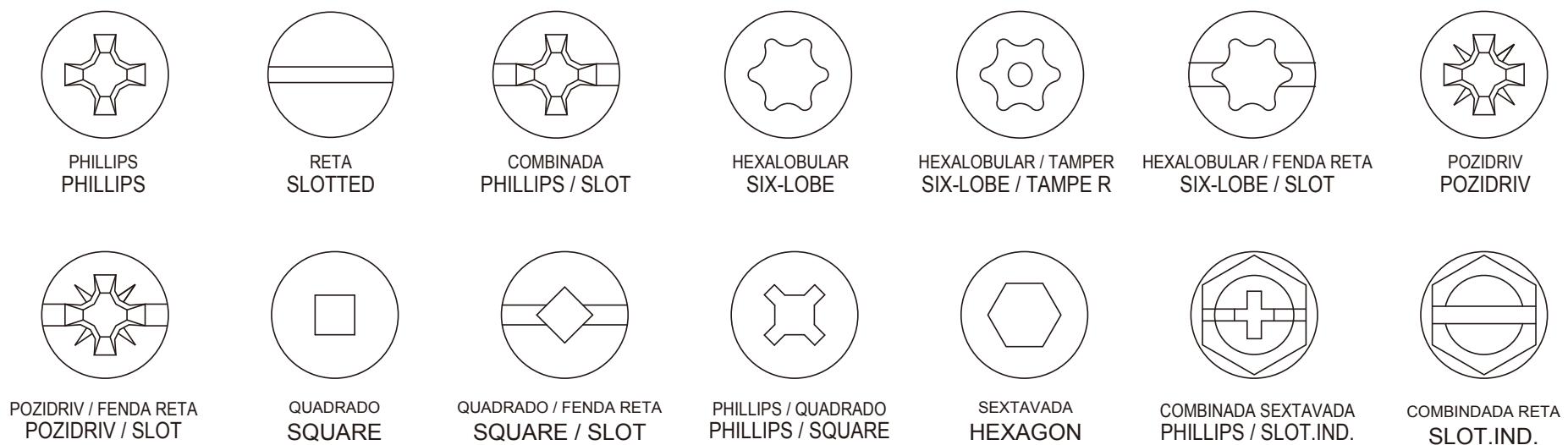
ÍNDICE | CONTENTS

• JIS - CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES	05-14
• DIN - CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES.....	15-27
• ANSI CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES.....	28-43
• PADRÃO PENETRAÇÃO (Q) PARA PUNÇÃO PHILIPS CABEÇA CHATA / RECESS GAGING DEPTH(Q) CONTROLLED PHILLIPS PUNCHES FOR FLAT HEAD	44-47
• POZI CABEÇA TIPO POZI / POZI HEAD	48-50
• CABEÇA TIPO HEXAGONAL / HEGON HEAD STYLES.....	51-55
• CABEÇA TIPO HEXALOBULAR / SIX-LOBE HEAD STYLES.....	56

TIPOS DE CABEÇA DE PARAFUSOS | SCREW HEAD STYLES

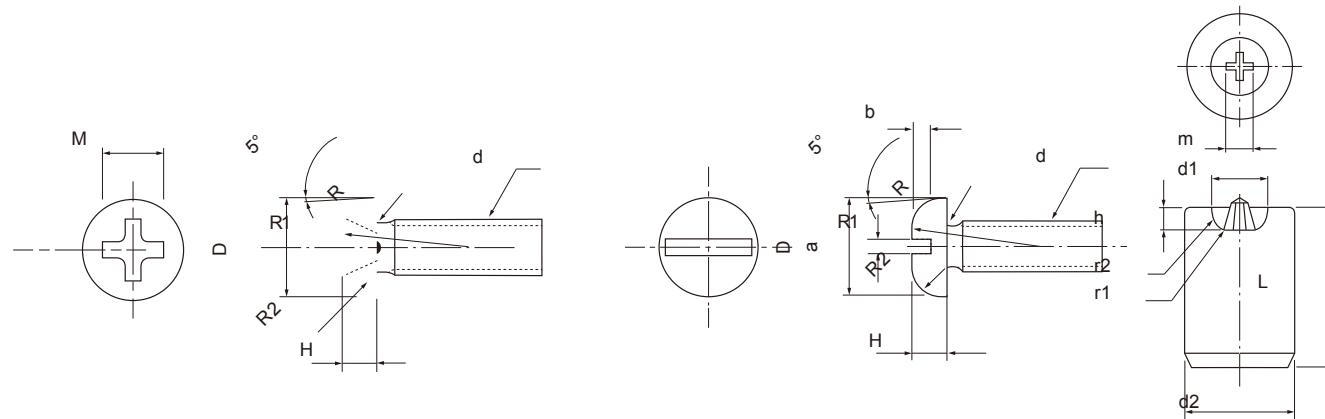


TIPOS DE CABEÇA DE FENDAS | SCREW HEAD STYLES



JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

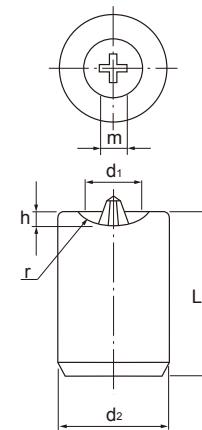
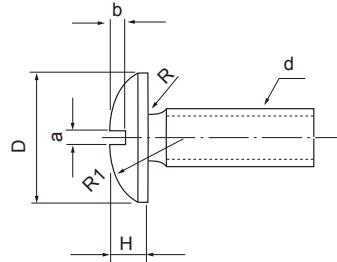
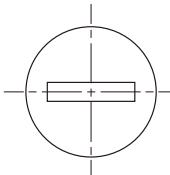
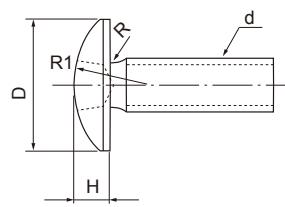
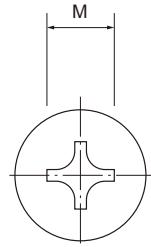
JMP (JIS PAN HEAD MACHINE & TAPPING SCREW)



Nominal Size	D		H		R1	R2	a		b		R	M	Q		Punch Code
	Size	Tol.	Size	Tol.	About	About	Size	Tol.	Size	Tol.	Min.	Max.	Max.	Min.	
M1	2		0.65		3	0.3	0.32		0.3	± 0.05	0.1	-	-	-	-
M1.2	2.3	-0.3	0.8		3.5	0.4	0.32	+0.1	0.4		0.1	-	-	-	-
M1.4	2.6		0.9		3.7	0.5	0.32		0.5		0.1	-	-	-	-
M1.6	3		1		4	0.5	0.4		0.55		0.1	-	-	-	-
M1.7	3.2		1.1		4.2	0.6	0.4		0.6	± 0.1	0.1	-	-	-	-
M2	3.5		1.3		4.5	0.7	0.6		0.7		0.1	2.2	1.01	0.60	JMP M2.0
M2.2	4		1.5		5	0.8	0.6		0.8		0.1	2.4	1.21	0.80	JMP M2.3
M2.3	4		1.5		5	0.8	0.6	+0.15	0.8		0.1	2.4	1.21	0.80	JMP M2.3
M2.5	4.5		1.7		6	0.9	0.8		0.9		0.1	2.6	1.42	1.00	JMP M2.6
M2.6	4.5		1.7		6	0.9	0.8		0.9	± 0.15	0.1	2.6	1.42	1.00	JMP M2.6
M3	5.5		2		7	1.1	0.8		1.1		0.1	3.5	1.43	0.86	JMP M3.0
M3.5	6	0 -0.5	2.3		8	1.3	1		1.25	± 0.2	0.1	3.8	1.73	1.15	JMP M3.5
M4	7		2.6		9	1.5	1		1.4		0.2	4.1	2.03	1.45	JMP M4.0
M4.5	8	0	2.9		11	1.7	1		1.6	± 0.25	0.2	4.5	2.43	1.84	JMP M4.5
M5	9	-0.6	3.3		12	1.9	1.2		1.8	± 0.3	0.2	4.8	2.73	2.14	JMP M5.0
M6	10.5	-0.7	3.9		14	2.3	1.2	+0.2	2.1		0.25	6.2	2.86	2.26	JMP M6.0
M8	14	-0.8	5.2		18	3	1.6		2.8	± 0.5	0.4	7.7	4.36	3.73	JMP M8.0

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

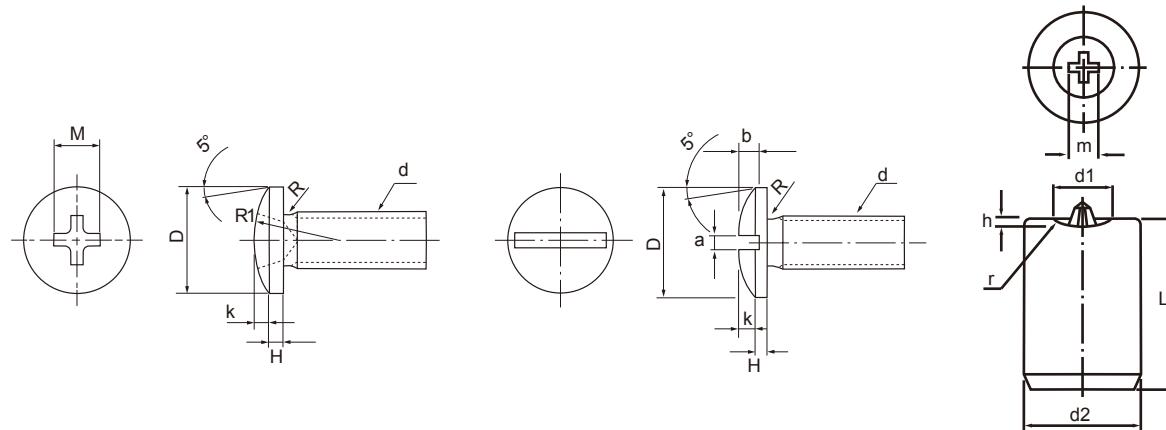
JMT (JIS TRUSS HEAD MACHINE & TAPPING SCREW)



Nominal Size	D		H		R	a		b		R	M	Q		Punch Code
	Size	Tol.	Size	Tol.	About	Size	Tol.	Size	Tol.	Min.	Max.	Max.	Min.	
M2	4.5	0 -0.4	1.2	± 0.1	3	0.6	+0.15 0	0.6	± 0.1	0.1	2.2	1.01	0.65	JMT M2.0
M2.2	5		1.3		3.2	0.6		0.65		0.1	2.3	1.11	0.75	JMT M2.2
M2.3	5.2		1.4		3.4	0.6		0.7		0.1	2.4	1.21	0.85	JMT M2.3
M2.5	5.7		1.5		3.7	0.8		0.75		0.1	2.5	1.32	0.95	JMT M2.5
M2.6	5.9		1.6		3.9	0.8		0.8		0.1	2.6	1.42	1.05	JMT M2.6
* M3	6.9	0 -0.5	1.9	± 0.15	4.6	0.8		0.95	± 0.15	0.1	2.9	1.72	1.34	JMT M3.0 (PH # 1)
M3	6.9		1.9		4.6	0.8		0.95		0.1	3.6	1.55	1.05	JMT M3.0 -2
M3.5	8.1		2.2		5.4	1		1.1		0.1	3.9	1.83	1.30	JMT M3.5
M4	9.4		2.5		6.1	1		1.25	± 0.2	0.2	4.2	2.13	1.60	JMT M4.0
M4.5	10.6	0 -0.6	2.8		6.9	1		1.4		0.2	4.6	2.53	1.99	JMT M4.5
M5	11.8		3.1		7.7	1.2		1.6		0.2	4.9	2.83	2.29	JMT M5.0
M6	14		3.7	± 0.2	9.1	1.2		1.9	± 0.4	0.25	6.2	2.86	2.31	JMT M6.0
M8	17.8	-0.8	4.8		11.7	1.6	+0.2 0	2.4		0.4	7.7	4.36	3.78	JMT M8.0

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

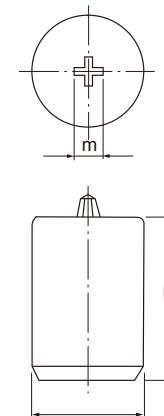
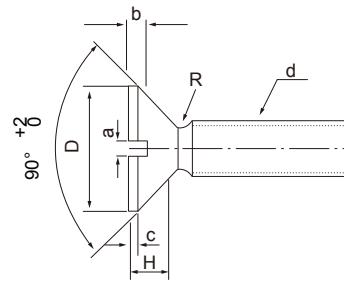
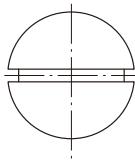
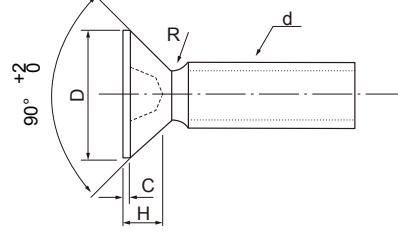
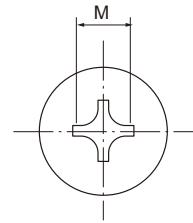
JMB (JIS BINDING HEAD MACHINE & TAPPING SCREW)



Nominal Size	D		H	K		H+K		a		b		R	M	Q		Punch Code
	Size	Tol.	About	Size	Tol.	Size	Tol.	Size	Tol.	Size	Tol.	Min.	Max.	Max.	Min.	
M2	4.3	0 -0.4	0.85	0.35	±0.1	1.2	±0.15	0.6	+0.15 0	0.65	±0.1	0.1	2.2	1.01	0.65	JMB M2.0
M2.2	4.7		0.9	0.4		1.3		0.6		0.7		0.1	2.3	1.11	0.75	JMB M2.2
M2.3	4.9		1	0.4		1.4		0.6		0.7		0.1	2.4	1.21	0.85	JMB M2.3
M2.5	5.3		1	0.5		1.5		0.8		0.8		0.1	2.5	1.32	0.95	JMB M2.5
M2.6	5.5		1.1	0.5		1.6		0.8		0.85	±0.15	0.1	2.6	1.42	1.05	JMB M2.6
M3	6.3		1.3	0.6		1.9		0.8		1		0.1	3.6	1.53	1.01	JMB M3.0
M3.5	7.3	0 -0.5	1.5	0.7	±0.15	2.2	±0.2	1	+0.2 0	1.15	±0.2	0.1	3.9	1.83	1.30	JMB M3.5
M4	8.3		1.7	0.8		2.5		1		1.3		0.2	4.2	2.13	1.60	JMB M4.0
M4.5	9.3		1.9	0.9		2.8		1		1.5	±0.25	0.2	4.6	2.53	1.99	JMB M4.5
M5	10.3		2.1	1		3.1		1.2		1.7		0.2	4.9	2.83	2.29	JMB M5.0
M6	12.4	-0.7	2.4	1.3		3.7		1.2		2		±0.3	0.25	6.2	2.86	2.31
M8	16.4	-0.8	3.1	1.7	±0.2	4.8	±0.3	1.6	±0.2	2.8	±0.5	0.4	7.7	4.36	3.78	JMB M8.0

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

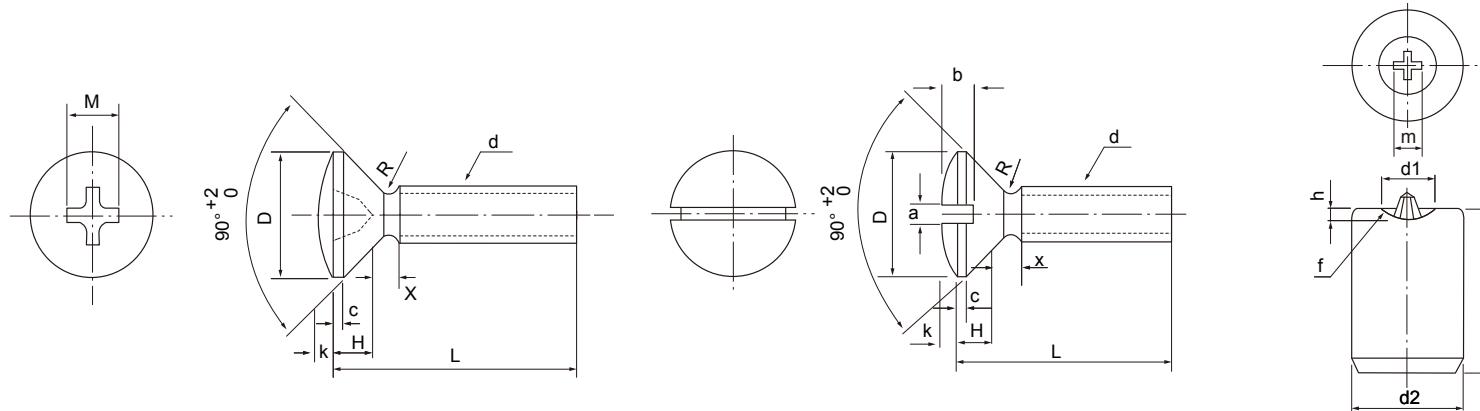
JMF (JIS FLAT HEAD MACHINE & TAPPING SCREW)



Nominal Size	D		H		c		a		b		R	M	Q		Punch Code
	Size	Tol.	Size	Tol.	About	Size	Tol.	Size	Tol.	About	Max.	Max.	Min.		
M1	2		0.6		0.1	0.32		0.25		0.1	-	-	-	-	-
M1.2	2.4		0.7		0.1	0.32		0.3		0.12	-	-	-	-	-
M1.4	2.8		0.85		0.15	0.32		0.3		0.14	-	-	-	-	-
M1.6	3.2		0.95		0.15	0.4		0.35		0.16	-	-	-	-	-
M1.7	3.4		1		0.15	0.4		0.4		0.17	-	-	-	-	-
M2	4		1.2		0.2	0.6		0.5		0.2	2.2	1.01	0.65	JMF	M2.0
M2.2	4.4		1.3		0.2	0.6		0.5		0.22	2.4	1.21	0.85	JMF	M2.2
M2.3	4.6		1.35		0.2	0.6		0.5		0.23	2.4	1.21	0.85	JMF	M2.3
M2.5	5		1.45		0.2	0.8		0.6		0.25	2.6	1.42	1.05	E-1	
M2.6	5.2		1.5		0.2	0.8		0.6		0.26	2.6	1.42	1.05	E-1	
M3	6		1.75		0.25	0.8		0.7		0.3	3.5	1.43	0.91	F-1	
M3.5	7		2		0.25	1		0.8		0.35	4.0	1.93	1.40	F-4	
M4	8		2.3		0.3	1		0.9		0.4	4.4	2.33	1.79	F-6	
M4.5	9		2.55		0.3	1		1		0.45	4.8	2.73	2.19	F-11	
M5	10		2.8		0.3	1.2		1.1		0.5	5.0	2.93	2.38	F-13	
M6	12	-0.7	3.4		0.4	1.2		1.4	±0.25	0.6	6.6	3.26	2.70	G-1	
M8	16	-0.8	4.4		0.4	1.6		1.8	±0.3	0.8	8.3	4.96	4.36	G-6	

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

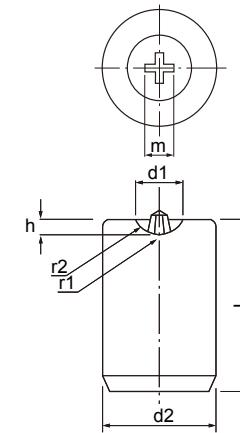
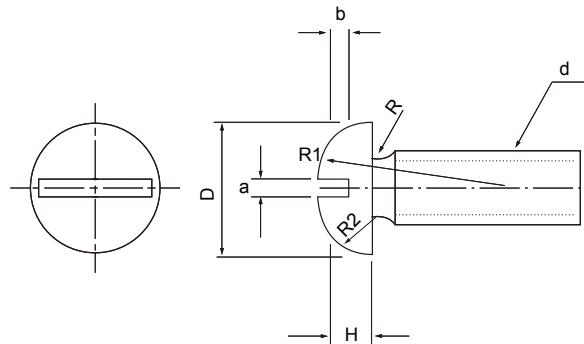
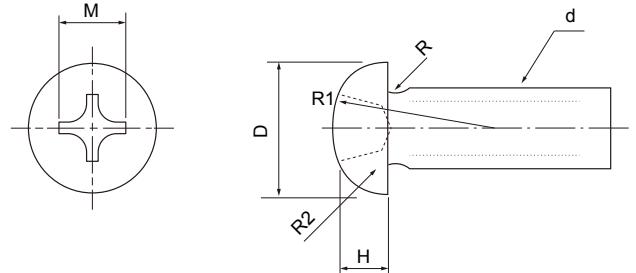
JMO (JIS OVAL HEAD MACHINE & TAPPING SCREW)



Nominal Size	D		H		c	k	H+k		a		b		R	M	Q		Punch Code
	Size	Tol.	Size	Tol.	About	About.	Size	Tol.	Size	Tol.	Size	Tol.	About	Max.	Max.	Min.	
M1	2		0.6		0.1	0.2	0.8	-0.2	0.32		0.35		0.1	-	-	-	
M1.2	2.4		0.7		0.1	0.3	1		0.32		0.45		0.12	-	-	-	
M1.4	2.8		0.85		0.15	0.3	1.15		0.32		0.5		0.14	-	-	-	
M1.6	3.2		0.95		0.15	0.35	1.3		0.4		0.55		0.16	-	-	-	
M1.7	3.4		1		0.15	0.4	1.4		0.4		0.6		0.17	-	-	-	
M2	4		1.2		0.2	0.4	1.6		0.6		0.7		0.2	2.4	1.21	0.85	JMO M2.0
M2.2	4.4		1.3		0.2	0.5	1.8		0.6		0.8		0.22	2.7	1.52	1.14	JMO M2.2
M2.3	4.6		1.35		0.2	0.5	1.85		0.6		0.8		0.23	2.7	1.52	1.14	JMO M2.3
M2.5	5		1.45		0.2	0.55	2		0.8		0.9		0.25	2.9	1.72	1.34	JMO M2.5
M2.6	5.2		1.5		0.2	0.6	2.1		0.8		0.9		0.26	2.9	1.72	1.34	JMO M2.6
M3	6		1.75		0.25	0.7	2.45		0.8		1.1		0.3	3.7	1.63	1.11	JMO M3.0
M3.5	7		2		0.25	0.8	2.8		1		1.2		0.35	4.2	2.13	1.60	JMO M3.5
M4	8		2.3		0.3	0.9	3.2		1		1.4		0.4	4.6	2.53	1.99	JMO M4.0
M4.5	9		2.55		0.3	1	3.55		1		1.5		0.45	5.0	2.93	2.38	JMO M4.5
M5	10		2.8		0.3	1.2	4		1.2		1.7		0.5	5.2	3.13	2.58	JMO M5.0
M6	12	-0.7	3.4		0.4	1.4	4.8		1.2		2.1		0.6	6.8	3.46	2.90	JMO M6.0
M8	16	-0.8	4.4		0.4	1.8	6.2		1.6		2.7		0.8	8.5	5.16	4.56	JMO M8.0

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

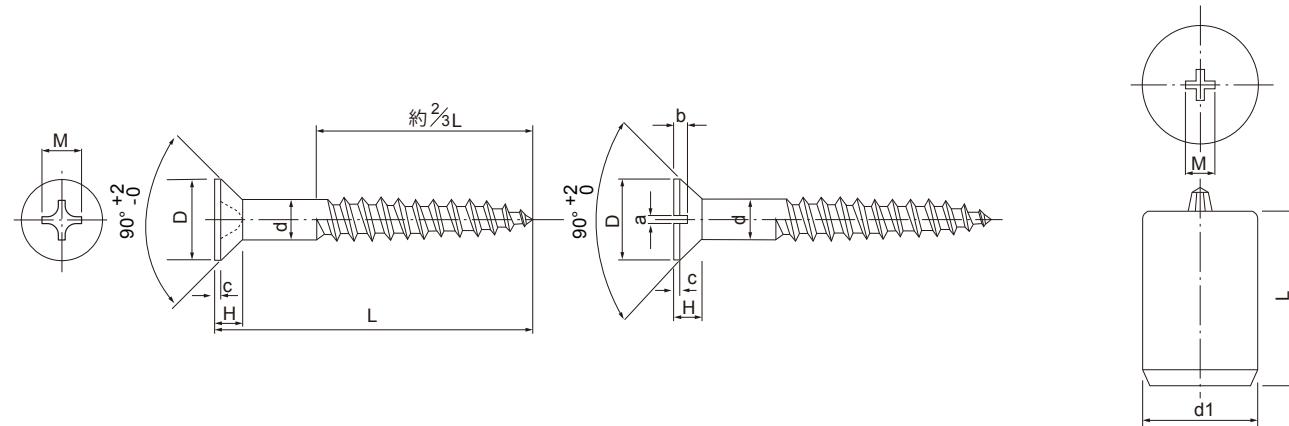
JMR (JIS ROUND HEAD MACHINE & TAPPING SCREW)



Nominal Size	D		H		R ₁	R ₂	a		b		R	M	Q		Punch Code
	Size	Tol.	Size	Tol.	About	About	Size	Tol.	Size	Tol.	Min.	Max.	Max.	Min.	
M1	2	0 -0.3	0.8	±0.1	1.2	0.7	0.32	+0.1 0	0.45	±0.1	0.1	-	-	-	JMR M2.0
M1.2	2.3		0.9		1.4	0.8	0.32		0.5		0.1	-	-	-	
M1.4	2.6		1		1.6	0.9	0.32		0.6		0.1	-	-	-	
M1.6	3		1.1		1.8	1	0.4		0.65		0.1	-	-	-	
M1.7	3.2		1.2		1.9	1.1	0.4		0.7		0.1	-	-	-	
M2	3.5	0 -0.4	1.3		2.1	1.2	0.6		0.8	±0.15 0	0.1	2.1	0.91	0.50	
M2.2	4		1.5		2.4	1.3	0.6		0.9		0.1	2.3	1.11	0.70	JMR M2.3
M2.3	4		1.5		2.4	1.3	0.6		0.9		0.1	2.3	1.11	0.70	JMR M2.3
M2.5	4.5		1.7		2.7	1.5	0.8		1		0.1	2.5	1.32	0.90	JMR M2.6
M2.6	4.5		1.7		2.7	1.5	0.8		1		0.1	2.5	1.32	0.90	JMR M2.6
M3	5.5	0 -0.5	2	±0.15	3.3	1.8	0.8	+0.2 0	1.2	±0.2	0.1	3.4	1.33	0.76	JMR M3.0
M3.5	6		2.3		3.6	2	1		1.4		0.1	3.7	1.63	1.06	JMR M3.5
M4	7		2.6		4.2	2.3	1		1.6		0.2	4.0	1.93	1.35	JMR M4.0
M4.5	8		3		4.8	2.7	1		1.9	±0.3	0.2	4.4	2.33	1.74	JMR M4.5
M6	10.5	-0.7	4	±0.2	6.3	3.5	1.2	+0.2 0	2.5	±0.4	0.25	6.1	2.76	2.16	JMR M6.0
		-0.8								±0.5					

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

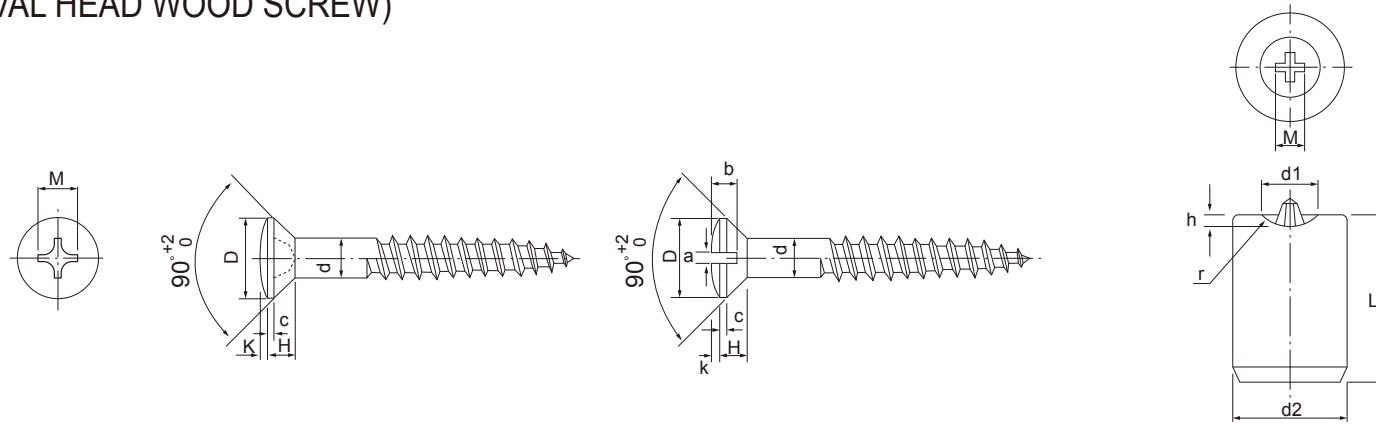
JWF (JIS FLAT HEAD WOOD SCREW)



Nominal Size	d		D		H		C	a		b		M	Q			Punch Code
	Size	Tol.	Size	Tol.	Size	Tol.	About	Size	Tol.	Size	Tol.	Max.	Max.	Min.		
1.6	1.6	±0.05	3.2	0 -0.4	0.95	0 -0.2	0.15	0.4	+0.15 0	0.4	±0.1	-	-	-	-	-
1.8	1.8	±0.07	3.6		1.05		0.15	0.6		0.5		-	-	-	-	-
2.1	2.1		4.2		1.25		0.2	0.6		0.5		2.5	1.32	0.95	JWF M2.1	
2.4	2.4		4.8		1.4		0.2	0.7		0.6		2.7	1.52	1.14	E-2	
2.7	2.7		5.4		1.55		0.2	0.8		0.7		2.9	1.72	1.34	E-4	
3.1	3.1	±0.1	6.2	0 -0.5	1.8	0 -0.3	0.25	0.9	+0.2 0	0.8	±0.2	3.8	1.73	1.20	F-2	
3.5	3.5		7		2		0.25	1		0.9		4.2	2.13	1.60	F-5	
3.8	3.8		7.6		2.15		0.25	1		0.9		4.5	2.43	1.89	F-8	
4.1	4.1		8.2	0 -0.6	2.35		0.3	1.2		1		4.8	2.73	2.19	F-11	
4.5	4.5		9		2.55		0.3	1.2		1.1		5.2	3.13	2.58	F-15	
4.8	4.8	±0.12	9.6		2.7		0.3	1.3		1.2	±0.25	5.4	3.33	2.77	F-17	
5.1	5.1		10.2		2.85		0.3	1.4		1.2		6.4	3.06	2.50	G-0	
5.5	5.5		11		3.05		0.3	1.4		1.3		6.7	3.36	2.80	G-2	
5.8	5.8		11.6	0 -0.7	3.2	0 -0.4	0.3	1.6	+0.25 0	1.4		7.0	3.66	3.09	JWF M5.8	
6.2	6.2		12.4		3.5		0.4	1.6		1.5		7.3	3.96	3.39	G-4.5	
6.8	6.8	±0.15	13.6		3.8		0.4	1.6		1.6		7.8	4.46	3.87	G-5	
7.5	7.5		15		4.15		0.4	1.8		1.8	±0.35	9.0	4.65	4.11	JWF M7.5	
8	8		16	0 -0.8	4.4		0.4	1.8		1.9		9.3	4.95	4.41	H-1	
9.5	9.5		19		5.15		0.4	2	+0.3	2.2	±0.4	10.3	5.95	5.39	H-4	

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

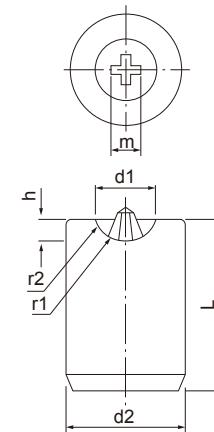
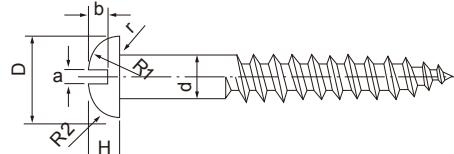
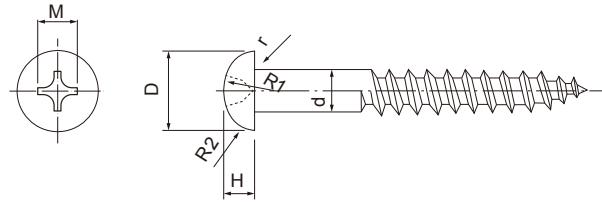
JWO (JIS OVAL HEAD WOOD SCREW)



Nominal Size	d		D		H		C	K	H+K		a		b		M	Q		Punch Code
	Size	Tol.	Size	Tol.	Size	Tol.	About	About	Size	Tol.	Size	Tol.	Size	Tol.	Max.	Max.	Min.	
1.6	1.6	± 0.05	3.2		0.95		0.15	0.4	1.35	0	0.4		0.7	± 0.1	-	-	-	-
1.8	1.8		3.6		1.05		0.15	0.4	1.45		0.6		0.7	-	-	-	-	-
2.1	2.1		4.2	$0 -0.4$	1.25		0.2	0.5	1.75		0.6		0.9		2.7	1.52	1.14	JWO M 2.1
2.4	2.4	± 0.07	4.8		1.4		0.2	0.6	2		0.7		1	± 0.15	2.9	1.72	1.34	JWO M 2.4
2.7	2.7		5.4		1.55		0.2	0.7	2.25		0.8		1.1		3.1	1.92	1.54	JWO M 2.7
3.1	3.1		6.2		1.8		0.25	0.8	2.6		0.9		1.3	± 0.2	3.9	1.83	1.30	JWO M 3.1
3.5	3.5		7	$0 -0.5$	2		0.25	0.8	2.8		1		1.4		4.3	2.23	1.69	JWO M 3.5
3.8	3.8	± 0.1	7.6		2.15		0.25	0.9	3.05		1	± 0.2	1.5	± 0.25	4.6	2.53	1.99	JWO M 3.8
4.1	4.1		8.2		2.35		0.3	1	3.35		1.2		1.7		4.9	2.83	2.28	JWO M 4.1
4.5	4.5		9		2.55		0.3	1.1	3.65		1.2		1.8		5.3	3.23	2.68	JWO M 4.5
4.8	4.8		9.6	$0 -0.6$	2.7		0.3	1.1	3.8		1.3		1.9	± 0.3	5.5	3.43	2.87	JWO M 4.8
5.1	5.1		10.2		2.85		0.3	1.2	4.05		1.4		2		6.5	3.16	2.60	JWO M 5.1
5.5	5.5	± 0.12	11		3.05		0.3	1.3	4.35		1.4		2.2		6.8	3.46	2.90	JWO M 5.5
5.8	5.8		11.6		3.2		0.3	1.4	4.6		1.6		2.3	± 0.4	7.1	3.76	3.19	JWO M 5.8
6.2	6.2		12.4	$0 -0.7$	3.5		0.4	1.4	4.9		1.6		2.5		7.4	4.06	3.48	JWO M 6.2
6.8	6.8		13.6		3.8		0.4	1.6	5.4		1.6	± 0.25	2.7		7.9	4.56	3.97	JWO M 6.8
7.5	7.5		15		4.15		0.4	1.8	5.95		1.8		3		9.2	4.85	4.31	JWO M 7.5
8	8		16	$0 -0.8$	4.4		0.4	1.8	6.2		1.8		3.1		9.5	5.15	4.60	JWO M 8.0
9.5	9.5		19	-0.8	5.15		0.4	2.3	7.45		2	$+0.3$	3.7		10.5	6.15	5.58	JWO M 9.5

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

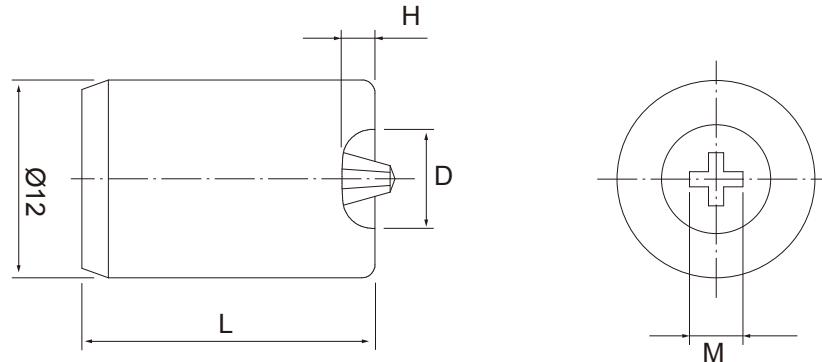
JWR (JIS ROUND HEAD WOOD SCREW)



Nominal Size	d		D		H		R1	R2	a	b		M	Q		Punch Code	
	Size	Tol.	Size	Tol.	Size	Tol.	About	About	Size	Tol.	Size	Tol.	Max.	Max.	Min.	
1.6	1.6	± 0.05	3	± 0.1	1.3	± 0.2	1.6	1.1	0.4	± 0.15	0.8	± 0.1	-	-	-	JWR M 2.1
1.8	1.8		3.3		1.4		1.8	1.2	0.6		0.9	± 0.15	-	-	-	
2.1	2.1		3.9		1.6		2.3	1.4	0.6		1		2.5	1.32	0.9	
2.4	2.4		4.4		1.8		2.6	1.5	0.7		1.1		2.7	1.52	1.1	
2.7	2.7		5		2		3	1.7	0.8		1.2	± 0.2	2.9	1.72	1.29	
3.1	3.1		5.7	± 0.1	2.3	± 0.25	3.4	1.9	0.9		1.4		3.7	1.63	1.06	
3.5	3.5		6.5		2.5		4	2.1	1		1.6	± 0.25	3.9	1.83	1.25	
3.8	3.8		7		2.7		4.4	2.3	1		1.7		4.1	2.03	1.45	
4.1	4.1		7.6		2.9		4.8	2.4	1.2		1.8	± 0.3	4.3	2.23	1.64	
4.5	4.5		8.3		3.1		5.2	2.6	1.2		1.9		4.5	2.43	1.84	
4.8	4.8	± 0.12	8.9	± 0.3	3.3	± 0.2	5.7	2.8	1.3	± 0.2	2	± 0.4	4.7	2.63	2.04	JWR M 4.8
5.1	5.1		9.4		3.5		6	2.9	1.4		2.2		5.9	2.56	1.96	
5.5	5.5		10.2		3.8		6.5	3.2	1.4		2.4		6.1	2.76	2.16	
5.8	5.8		10.7	± 0.35	4	± 0.25	6.9	3.3	1.6		2.5	± 0.4	6.3	2.96	2.36	
6.2	6.2		11.5		4.2		7.4	3.5	1.6		2.6		6.6	3.26	2.65	
6.8	6.8		12.6		4.6		8.2	3.8	1.6		2.8		6.9	3.56	2.93	
7.5	7.5		13.9	± 0.4	5	± 0.3	9.1	4.2	1.8		3.1		8.4	4.05	3.48	
8	8		14.8		5.3		9.7	4.4	1.8		3.3		8.7	4.35	3.77	
9.5	9.5		17.6		6.3		11.6	5.2	2		3.9		9.7	5.35	4.75	

JIS CABEÇA PARAFUSO TIPO JIS / JIS SCREW HEAD STYLES

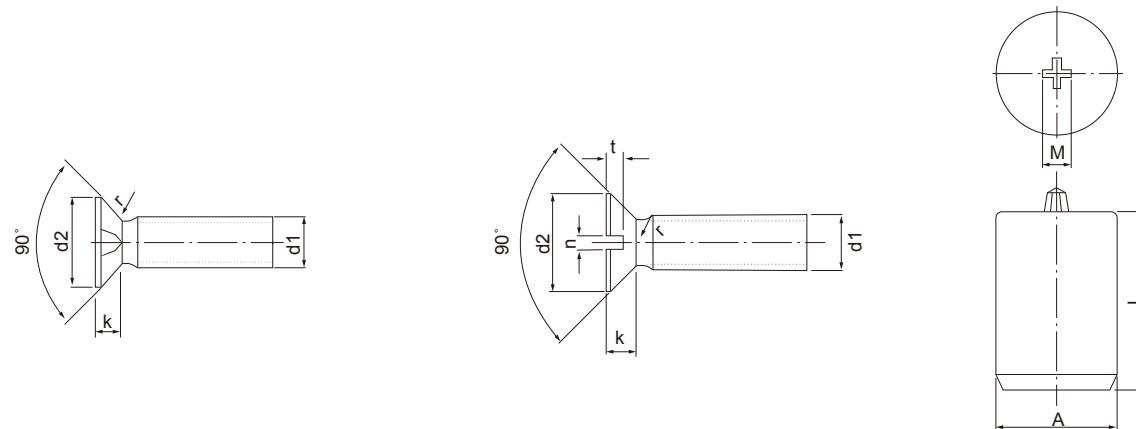
JCIS 0# CROSS RECESSED PAN HEAD MACHINE SCREWS



Screw Size	Nominal Size	D		H		M		Q		Punch Code	
		Head Width		Head Depth		Width		Depth			
		Size	Tol.	Size	Tol.	Max.	Min.	Max.	Min.		
Screw Size 1	M1.4	2.0	+0.05 ~ -0.10	0.5	+0.05	1.55	1.45	0.74	0.51	JMP-1 M1.4	
	M1.7	2.5		0.5		1.7	1.55	0.89	0.61	JMP-1 M1.7	
	M2.0	3.0	+0.05 ~ -0.20	0.6	+0.08	2.0	1.85	1.21	0.91	JMP-1 M2.0	
	M2.3	3.5		0.7		2.2	2.0	1.41	1.06	JMP-1 M2.3	
	M2.6	4.0		0.8		2.2	2.0	1.41	1.06	JMP-1 M2.6	
Screw Size 3	M1.4	2.5	+0.05 ~ -0.10	0.8	+0.05	1.65	1.5	0.84	0.56	JMP-3 M1.4	
	M1.7	3.0		0.9		1.9	1.75	1.10	0.81	JMP-3 M1.7	
	M2.0	3.5	+0.05 ~ -0.20	1.0	+0.08	2.1	1.95	1.31	1.01	JMP-3 M2.0	
	M2.3	4.0		1.1		2.2	2.0	1.41	1.06	JMP-3 M2.3	
	M2.6	4.5		1.2		2.2	2.0	1.41	1.06	JMP-3 M2.6	

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

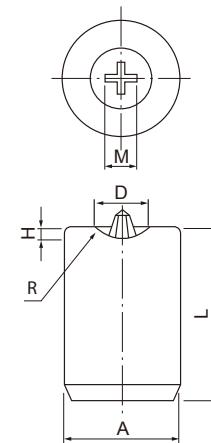
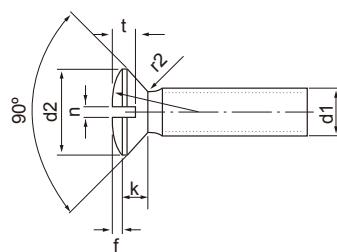
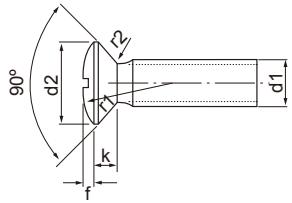
DMF (DIN FLAT HEAD MACHINE SCREW) <DIN 965>



Nominal Size	d2		K max.	r max.	Number of Cross Recess	M	Q		n	r max.	T		Punch Code
	—	Tol.					min.	max.			min.	max.	
M2.5	4.7	+0 ~ -0.3	1.5	0.7	1	2.7	1.25	1.55	0.6	0.25	0.5	0.7	E-3
M3	5.6		1.65	0.8		2.9	1.5	1.8	0.8	0.3	0.6	0.85	E-6
M3.5	6.5	+0 ~ -0.36	1.93	0.95	2	3.9	1.4	1.9	0.8	0.35	0.7	1	F-4
M4	7.5		2.2	1		4.4	1.9	2.4	1	0.4	0.8	1.1	F-8
M5	9.2	+0 ~ -0.43	2.5	1.3		4.6	2.1	2.6	1.2	0.5	1	1.3	F-10
M6	11		3	1.6	3	6.6	2.8	3.3	1.6	0.6	1.2	1.6	G-2
M8	14.5	+0 ~ -0.43	4	2	4	8.7	3.9	4.4	2	0.8	1.6	2.1	H-0
M10	18		5	2.5		9.6	4.8	5.3	2.5	1	2	2.6	H-2

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

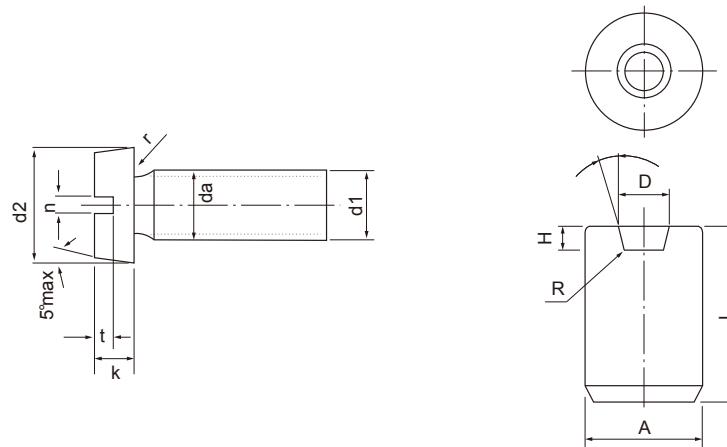
DMO (DIN OVAL HEAD MACHINE SCREW) <DIN 966>



Nominal Size	d2		f	k	r1	r2	Number of Cross Recess	M	Q		n	r2	t		Punch Code
	—	Tol.							min.	max.			min.	max.	
M2.5	4.7	+0 ~ -0.3	0.6	1.5	5	0.7	1	2.7	1.3	1.6	0.6	0.25	1	1.2	DMO M2.5
M3	5.6		0.75	1.65	6	0.8		3.1	1.7	2	0.8	0.3	1.2	1.45	DMO M3.0
M3.5	6.5		0.9	1.93	7	0.95		4.2	1.74	2.24	0.8	0.35	1.4	1.7	DMO M3.5
M4	7.5	+0 ~ -0.36	1	2.2	8	1		4.5	2.04	2.54	1	0.4	1.6	1.9	DMO M4.0
M5	9.2		1.25	2.5	10	1.3		5.3	2.77	3.27	1.2	0.5	2	2.3	DMO M5.0
M6	11	+0 ~ -0.43	1.5	3	12	1.6	3	6.8	3.03	3.53	1.6	0.6	2.4	2.8	DMO M6.0
M8	14.5		2	4	16	2		9	4.18	4.68	2	0.8	3.2	3.7	DMO M8.0
M10	18		2.5	5	20	2.5		10	5.38	5.88	2.5	1	4	4.6	DMO M10.0

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

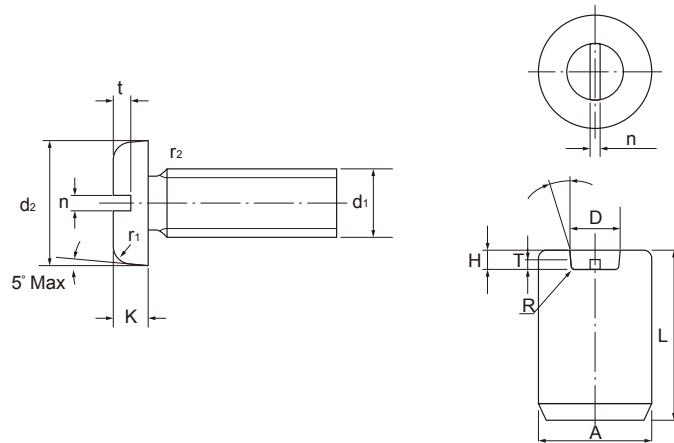
DMC (DIN CHEEZE HEAD MACHINE SCREW) <DIN 84>



Nominal Size	d2		k		n	t		Punch Code
	—	Tol.	—	Tol.		min.	max.	
M2	3.8	+0 ~ -0.18	1.3	+0 ~ -0.14	0.5	0.6	0.8	DMC-B M2.0
M2.3	4.4		1.5		0.6	0.7	0.9	DMC-B M2.3
M2.5	4.5		1.6		0.6	0.7	0.9	DMC-B M2.5
M2.6	5		1.7		0.6	0.8	1	DMC-B M2.6
M3	5.5		2		0.8	0.9	1.15	DMC-B M3.0
M3.5	6		2.4		0.8	1.1	1.4	DMC-B M3.5
M4	7		2.6		1	1.2	1.5	DMC-B M4.0
M5	8.5		3.3		1.2	1.5	1.8	DMC-B M5.0
M6	10	+0 ~ -0.18	3.9	+0 ~ -0.18	1.6	1.8	2.2	DMC-B M6.0
M8	13		5		2	2.1	2.6	DMC-B M8.0
M10	16		6		2.5	2.4	3	DMC-B M10.0

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

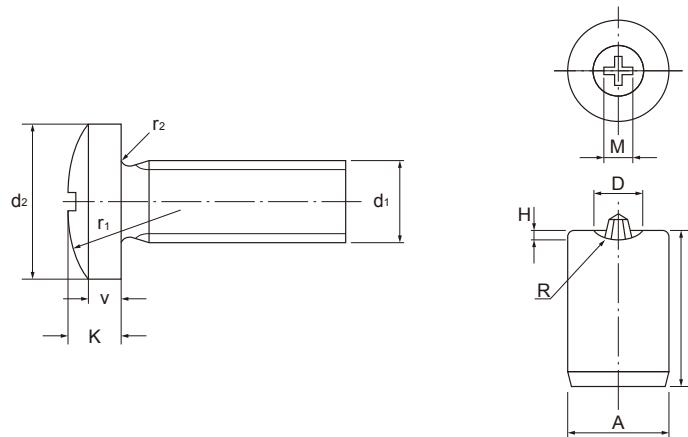
DMP (DIN PAN HEAO MACHINE SCREW) <DIN 85>



Nominal Size	d2		k		n	r1		t		Punch Code
	—	Tol.	—	Tol.		max.	min.	min.	max.	
M3	6	+0 ~ -0.18	1.8		0.8	1.2	0.6	0.7	0.95	DMP-C M3
M3.5	7		2.1		0.8	1.4	0.7	0.8	1.1	DMP-C M3.5
M4	8	+0 ~ -0.22	2.4		1	1.6	0.8	1	1.3	DMP-C M4
M5	10		3		1.2	2	1	1.2	1.5	DMP-C M5
M6	12	+0 ~ -0.27	3.6		1.6	2.4	1.2	1.5	1.9	DMP-C M6
M8	16		4.8		2	3.2	1.6	1.9	2.4	DMP-C M8
M10	20	+0 ~ -0.33	6		2.5	4	2	2.4	3	DMP-C M10

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

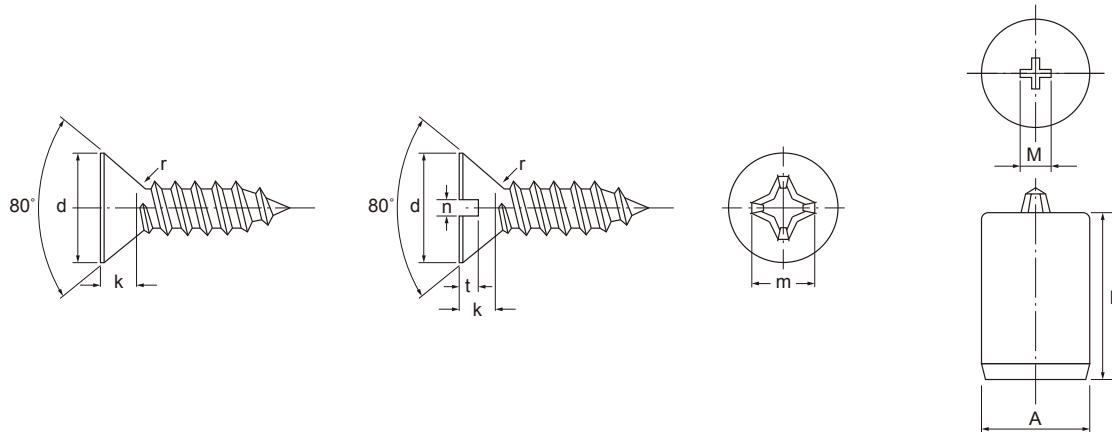
DML (DIN FILLISTER HEAD MACHINE SCREW) <DIN 7985>



Nominal Size	d2		k		r1	v	Number of Cross Recess	M	Q		Punch Code
	—	Tol.	—	Tol.					min.	max.	
M2	4	+0 ~ -0.18	1.6	±0.125	4	1.1	1	2.5	1.1	1.4	DML M2
M2.5	5		2		5	1.3		2.7	1.3	1.6	DML M2.5
M3	6		2.4		6	1.6		3.1	1.7	2	DML M3
M3.5	7		2.7		7	1.9	2	4.2	1.74	2.24	DML M3.5
M4	8	+0 ~ -0.22	3.1	±0.15	8	2		4.6	2.04	2.54	DML M4
M5	10		3.8		10	2.5		5.3	2.77	3.27	DML M5
M6	12		4.6		12	3	3	6.8	3.03	3.53	DML M6
M8	16	+0 ~ -0.27	6	±0.18	16	3.7		9	4.18	4.68	DML M8
M10	20		7.5		20	4.8	4	10.2	5.38	5.88	DML M10

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

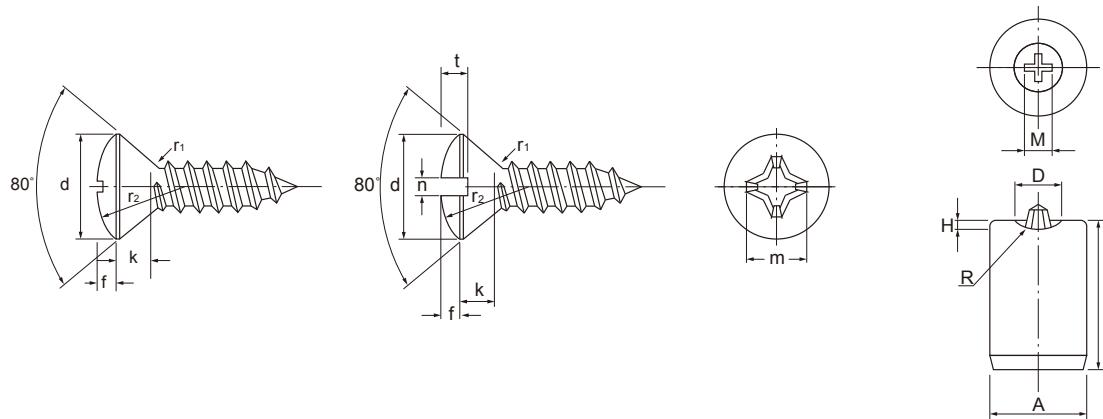
DTF (DIN FLAT HEAD TAPPING SCREW) <DIN 7982>



Nominal Size	d	k	$r_{max.}$	Number of Cross Recess	m	Q		n	Tol.	$r_{max.}$	t		Punch Code
						min.	max.				min.	max.	
2.2	4.3	1.3	0.8	1	2.5	1.02	1.32	0.6	+0.06 +0.2	0.8	0.4	0.6	E-1
2.9	5.5	1.7	1.1		3	1.4	1.7	0.8		1.1	0.5	0.75	E-5
3.5	6.8	2.1	1.4	2	4.2	1.62	2.12	1		1.4	0.6	0.95	F-5
3.9	7.5	2.3	1.5		4.6	2.03	2.53	1		1.5	0.7	1.05	F-9
4.2	8.1	2.5	1.6		4.7	2.11	2.62	1.2	+0.06 +0.31	1.6	0.75	1.15	F-10
4.8	9.5	3	1.9		5.1	2.59	3.1	1.2		1.9	0.85	1.35	F-15
5.5	10.8	3.4	2.1	3	6.8	2.95	3.53	1.6		2.1	1	1.5	G-3
6.3	12.4	3.8	2.4		7.1	3.33	3.91	1.6		2.4	1.2	1.75	G-4.5

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

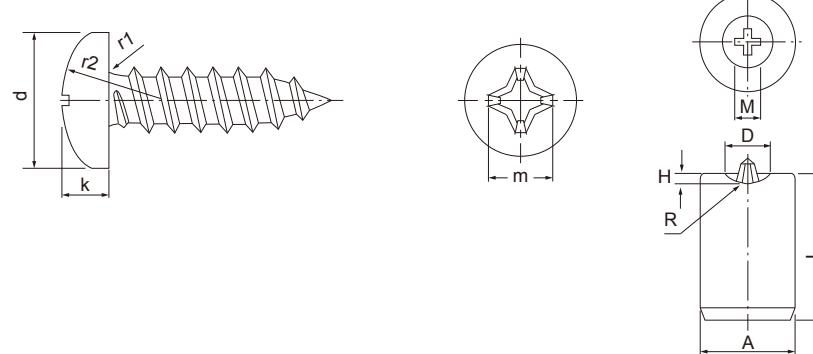
DTO (DIN OVAL HEAD TAPPING SCREW) <DIN 7983>



Nominal Size	d	f	k	r ₁	r ₂	Number of Cross Recess	m	Q		n	t		Punch Code	
								min.	max.		Tol.	min.	max.	
2.2	4.3	0.7	1.3	0.8	3.8	1	2.8	1.17	1.57	0.6	+0.06 +0.2	0.95	1.15	DTO 2.2
2.9	5.5	0.9	1.7	1.1	4.6		3.4	1.81	2.21	0.8		1.25	1.5	DTO 2.9
3.5	6.8	1.2	2.1	1.4	5.4	2	4.6	1.89	2.39	1	+0.2	1.55	1.9	DTO 3.5
3.9	7.5	1.3	2.3	1.5	6		4.7	2.04	2.54	1		1.7	2.05	DTO 3.9
4.2	8.1	1.4	2.5	1.6	6.6	3	4.9	2.24	2.74	1.2	+0.06 +0.31	1.85	2.25	DTO 4.2
4.8	9.5	1.5	3	1.9	8.2		5.4	2.7	3.2	1.2		2.15	2.6	DTO 4.8
5.5	10.8	1.7	3.4	2.1	9.4	3	7	3.02	3.53	1.6	+0.31	2.45	2.95	DTO 5.5
6.3	12.4	2	3.8	2.4	11.1		7.4	3.46	3.96	1.6		2.85	3.45	DTO 6.3

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

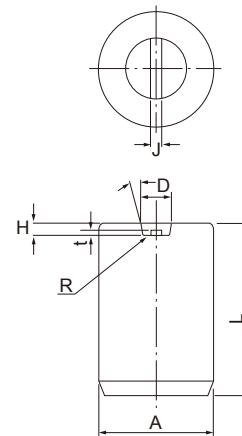
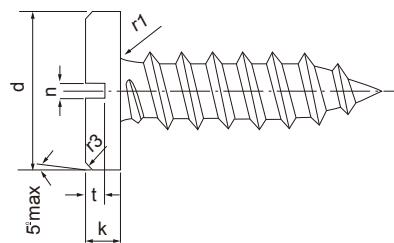
DTP (DIN PAN HEAD TAPPING SCREW) <DIN 7981>



Nominal Size	d		k		r1 max.	r2	Number of Cross Recess	m	Q		Punch Code
	—	Tol.	max.	min.					min.	max.	
2.2	4.2	+0 ~ -0.3	1.8	1.55	0.3	3.4	1	2.6	0.86	1.32	DTP 2.2
2.9	5.6		2.2	1.95	0.4	4.4		3	1.35	1.8	DTP 2.9
3.5	6.9		2.6	2.35	0.5	5.4		4.2	1.4	2.03	DTP 3.5
3.9	7.5		2.8	2.55	0.5	5.8	2	4.4	1.63	2.26	DTP 3.9
4.2	8.2		3.05	2.75	0.6	6.2		4.6	1.8	2.46	DTP 4.2
4.8	9.5		3.55	3.25	0.7	7.2		5	2.26	2.87	DTP 4.8
5.5	10.8		3.95	3.65	0.8	8.2	3	6.5	2.49	3.15	DTP 5.5
6.3	12.5		4.55	4.25	0.9	9.5		7.1	3	3.66	DTP 6.3

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

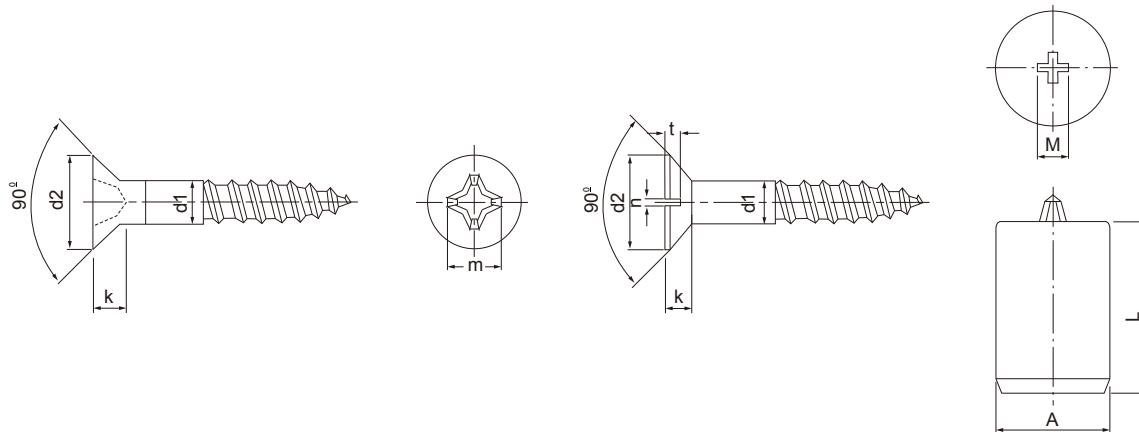
DTP (DIN PAN HEAD TAPPING SCREW) <DIN 7971>



Nominal Size	d		t		n		r1 max.	r3	k		Punch Code
	—	TOL.	min.	max.	—	Tol.			max.	min.	
2.2	4.2	+0 ~ -0.36	0.55	0.8	0.6	+0.06~0.2	0.3	0.9	1.35	1.15	DTPC 2.2
2.9	5.6		0.75	1	0.8		0.4	1	1.75	1.5	DTPC 2.9
3.5	6.9		0.95	1.25	1		0.5	1.2	2.1	1.85	DTPC 3.5
3.9	7.5		1.05	1.4	1		0.5	1.3	2.25	2	DTPC 3.9
4.2	8.2		1.15	1.5	1.2	+0.06~0.31	0.6	1.3	2.45	2.15	DTPC 4.2
4.8	9.5		1.35	1.7	1.2		0.7	1.6	2.8	2.5	DTPC 4.8
5.5	10.8		1.55	1.95	1.6		0.8	2	3.2	2.85	DTPC 5.5
6.3	12.5		1.8	2.2	1.6		0.9	2.2	3.65	3.3	DTPC 6.3

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

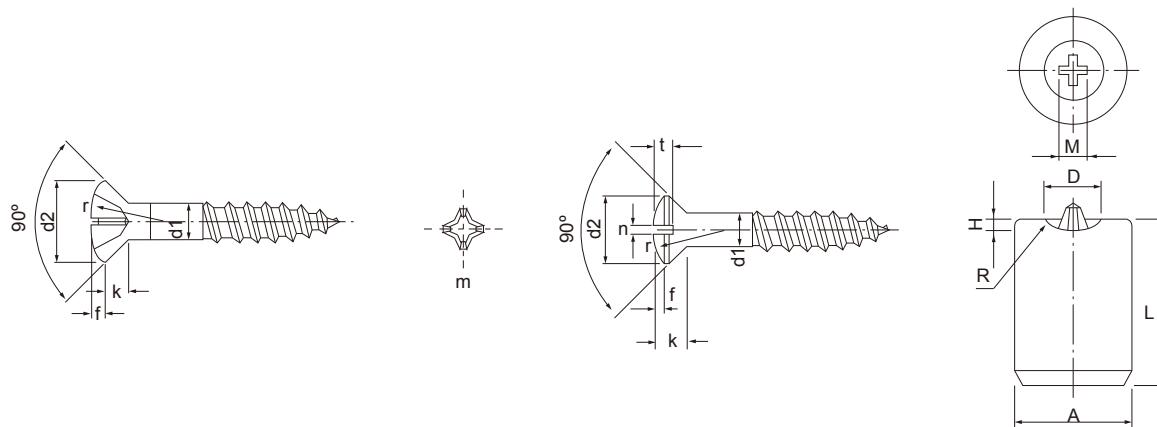
DWF (DIN FLAT HEAD WOOD SCREW) <DIN 7997>



Nominal Size	d2		k max.	Number of Cross Recess	m	Q		n		t		Punch Code
	—	Tol.				min.	max.	—	Tol.	min.	max.	
2	3.8	± 0.375	1.2	1	-	-	-	0.5	$+0.20 \sim +0.06$	0.4	0.6	DWF 2.0
2.5	4.7		1.5		2.7	1.25	1.55	0.6		0.5	0.7	E-3
3	5.6		1.65		2.9	1.5	1.8	0.8		0.6	0.85	E-6
3.5	6.5	± 0.45	1.93	2	3.9	1.4	1.9	0.8	$+0.31 \sim +0.06$	0.7	1	F-4
4	7.5		2.2		4.4	1.9	2.4	1		0.8	1.1	F-8
4.5	8.3		2.35		4.6	2.1	2.6	1		0.9	1.2	F-10
5	9.2		2.5		4.8	2.29	2.79	1.2		1	1.3	F-12
5.5	10.2	± 0.55	2.75	3	6.2	2.31	2.81	1.2	$+0.31 \sim +0.06$	1.1	1.4	DMF 5.5
6	11		3		6.6	2.8	3.3	1.6		1.2	1.6	G-2
7	12.5		3.5		6.8	2.95	3.53	2		1.4	1.9	G-3
8	14.5	4	4	4	8.7	3.9	4.4	2		1.6	2.1	H-0

DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

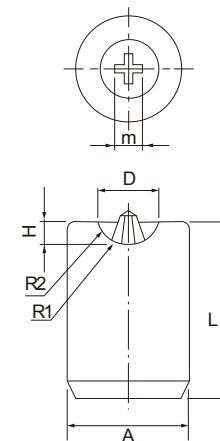
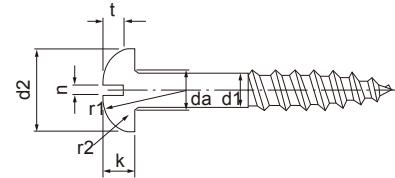
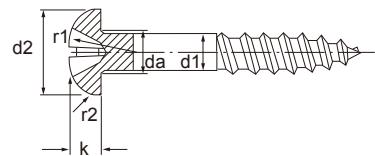
DWO (DIN OVAL HEAD WOOD SCREW) <DIN 7995>



Nominal Size	d2		f	k	r	Number of Cross Recess	m	Q		n	t		Punch Code	
	-	Tol.	≈	max.	≈			min.	max.		-	Tol.		
2	3.8	±0.375	0.5	1.2	4	1	-	-	-	0.5	+0.20~+0.06	0.8	1	-
2.5	4.7		0.6	1.5	5		2.7	1.3	1.6	0.6		1	1.2	DWO 2.5
3	5.6		0.75	1.65	6		3.1	1.7	2.0	0.8		1.2	1.45	DWO 3.0
3.5	6.5	±0.45	0.9	1.93	7	2	4.2	1.74	2.24	0.8		1.4	1.7	DWO 3.5
4	7.5		1	2.2	8		4.5	2.04	2.54	1		1.6	1.9	DWO 4.0
4.5	8.3		1.1	2.35	9		5.0	2.55	3.05	1		1.8	2.1	DWO 4.5
5	9.2		1.25	2.5	10		5.3	2.77	3.27	1.2		2	2.3	DWO 5.0
5.5	10.2	±0.55	1.4	2.75	11	3	7.1	3.31	3.81	1.2	+0.31~+0.06	2.2	2.5	DWO 5.5
6	11		1.5	3	12		7.4	3.66	4.16	1.6		2.4	2.8	DWO 6.0
7	12.5		1.75	3.5	14		8.3	4.52	5.02	2		2.8	3.2	DWO 7.0
8	14.5		2	4	16	4	9.9	5.03	5.53	2		3.2	3.7	DWO 8.0

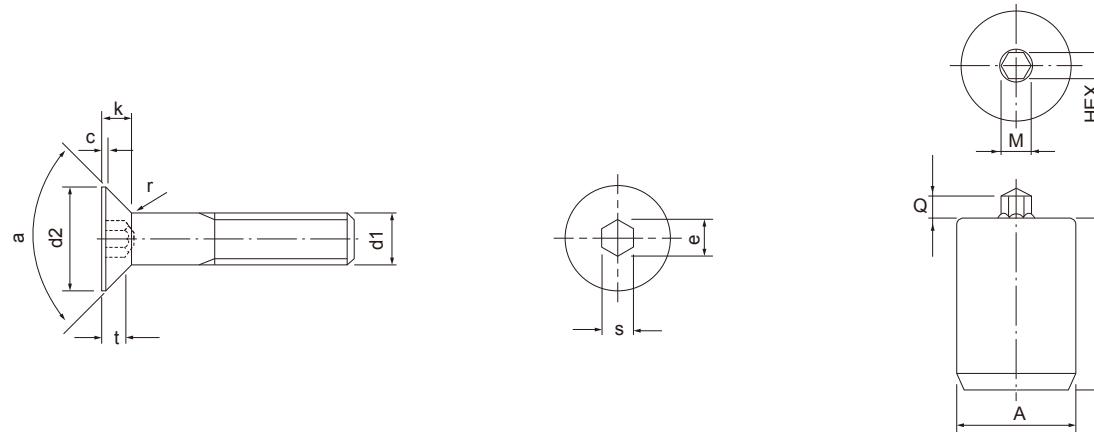
DIN | CABEÇA PARAFUSO TIPO DIN / DIN SCREW HEAD STYLES

DWR (DIN ROUND HEAD WOOD SCREW) <DIN 7996>



Nominal Size	d2		da		K	r1 ≈	r2 ≈	Number of Cross Recess	m	Q		n		t min.	t max.	Punch Code
	-	Tol.	-	Tol.						min.	max.	-	Tol.			
2	4	±0.375	2.8	±0.2	1.4	3.2	1.6	0	-	-	-	0.5	+0.20~+0.06	0.75	0.9	-
2.5	5		3.3		1.7	4	2	1	2.3	0.85	1.15	0.6		0.85	1.1	DWR 2.5
3	6		3.8		2.1	4.8	2.4		2.7	1.3	1.6	0.8		1.05	1.35	DWR 3.0
3.5	7		4.3		2.4	5.6	2.8	2	3.7	1.22	1.72	0.8		1.2	1.6	DWR 3.5
4	8		5	±0.45	2.8	6.4	3.2		4.1	1.62	2.12	1		1.4	1.8	DWR 4.0
4.5	9		5.5		3.1	7.2	3.6		4.4	1.88	2.38	1		1.55	2	DWR 4.5
5	10		6		3.5	8	4		4.8	2.28	2.78	1.2		1.75	2.3	DWR 5.0
5.5	11		6.6	±0.24	3.8	8.8	4.4	3	6.2	2.42	2.92	1.2		1.9	2.5	DWR 5.5
6	12		7.2		4.2	9.6	4.8		6.6	2.82	3.32	1.6	+0.31~+0.06	2.1	2.7	DWR 6.0
7	14		8.2		4.9	11.2	5.6		7.3	3.52	4.02	2		2.45	3.2	DWR 7.0
8	16		10.2		5.6	12.8	6.4	4	8.8	3.93	4.43	2		2.8	3.6	DWR 8.0

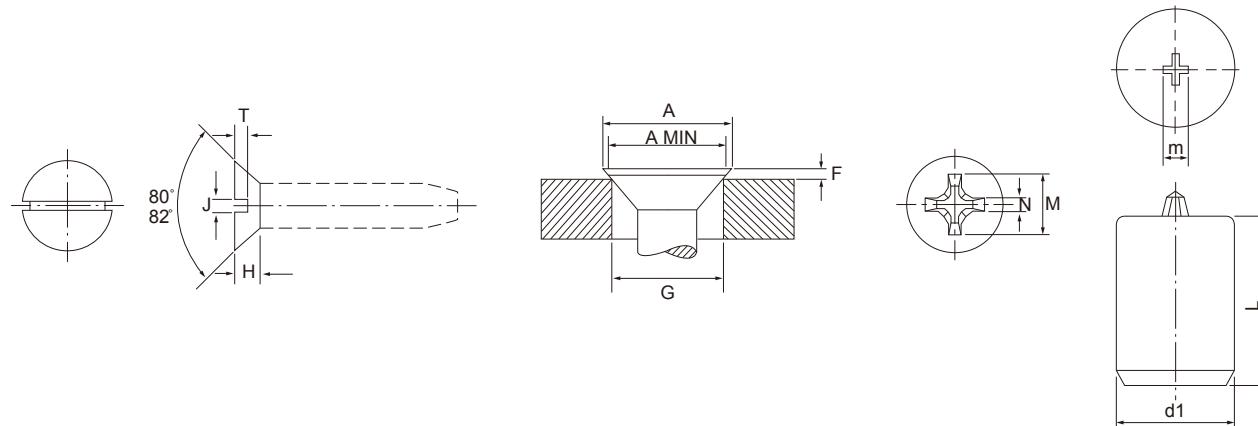
DMF(6H) (DIN FLAT HEX. RECELLS SCREW) <DIN 7991>



Nominal Size	a	c	d2	e	k	r	s			t	Punch Code
				≈			NOM	min.	max.		
M 3	90°	0.2	6	2.3	1.7	0.1	2	2.02	2.10	1.2	DMF (6H) M 3
M 4		0.3	8	2.9	2.3	0.2	2.5	2.52	2.60	1.8	DMF (6H) M 4
M 5		0.3	10	3.5	2.8	0.2	3	3.02	3.10	2.3	DMF (6H) M 5
M 6		0.3	12	4.7	3.3	0.3	4	4.02	4.12	2.5	DMF (6H) M 6
M 8		0.4	16	5.8	4.4	0.5	5	5.02	5.14	3.5	DMF (6H) M 8
M 10		0.5	20	7	5.5	0.5	6	6.02	6.14	4.4	DMF (6H) M 10
M 12		0.5	24	9.4	6.5	1	8	8.025	8.175	4.6	DMF (6H) M 12
M 14		0.5	27	11.7	7	1	10	10.025	10.175	4.8	-
M 16		0.5	30	11.7	7.5	1	10	10.025	10.175	5.3	-
M 18		0.5	33	13.9	8	1	12	12.032	12.212	5.5	-
M 20		0.5	36	13.9	8.5	1	12	12.032	12.212	5.9	-
M 22	60°	1	36	16.5	13.1	1	14	14.032	14.212	8.8	-
M 24		1	39	16.5	14	1.6	14	14.032	14.212	10.3	-

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

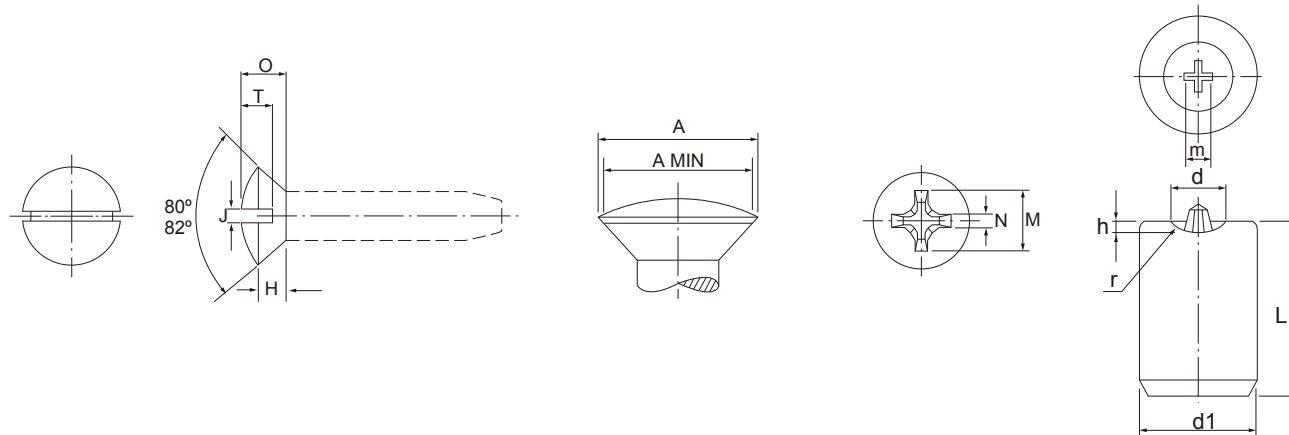
AMF (ANSI FLAT HEAD & TAPPING SCREW)



Nominal Size		A		H		J		T		F		G	M		Driver Size	Q		Punch Code	
		Max.	Min.	Reference		Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.		
0	1.52	3.02	2.51	0.89		0.58	0.41	0.38	0.25	0.66	0.41	1.98	1.75	1.42	0	0.91	0.51	-	
1	1.85	3.71	3.12	1.09		0.66	0.48	0.48	0.30	0.71	0.41	2.57	1.96	1.63	0	1.12	0.71	-	
2	2.18	4.37	3.73	1.30		0.79	0.58	0.58	0.38	0.74	0.43	3.15	2.59	2.26	1	1.42	1.02	E-1	
3	2.51	5.05	4.34	1.50		0.89	0.69	0.69	0.43	0.79	0.46	3.76	2.72	2.39	1	1.55	1.14	E-2	
4	2.84	5.72	4.95	1.70		0.99	0.79	0.76	0.51	0.81	0.48	4.37	3.25	2.92	1	2.08	1.68	AMF 4 #	
5	3.18	6.40	5.59	1.90		1.09	0.89	0.86	0.56	0.86	0.51	4.98	3.91	3.58	2	1.90	1.32	F-3	
6	3.51	7.09	6.20	2.11		1.22	0.99	0.97	0.61	0.91	0.53	5.59	4.42	4.09	2	2.41	1.83	F-7	
7	3.84	7.75	6.81	2.31		1.22	0.99	1.04	0.69	0.94	0.56	6.17	4.62	4.29	2	2.62	2.03	F-9	
8	4.17	8.43	7.42	2.54		1.37	1.14	1.14	0.74	0.99	0.58	6.78	4.80	4.47	2	2.79	2.21	F-11	
10	4.83	9.78	8.64	2.95		1.52	1.27	1.35	0.86	1.07	0.64	7.95	5.18	4.85	2	3.18	2.59	F-15	
12	5.49	11.13	9.88	3.35		1.70	1.42	1.52	0.99	1.14	0.69	9.19	6.81	6.48	3	3.53	2.95	G-3	
1/4	6.35	12.88	11.48	3.89		1.90	1.63	1.78	1.17	1.27	0.74	10.77	7.19	6.86	3	3.91	3.33	G-4	
5/16	7.94	16.13	14.43	4.85		2.13	1.83	2.24	1.47	1.45	0.86	13.69	9.27	8.94	4	4.98	4.42	H-1	
3/8	9.53	19.35	17.40	5.84		2.39	2.06	2.69	1.78	1.65	0.99	16.59	9.98	9.65	4	5.72	5.16	H-3	
7/16	11.11	20.62	18.36	5.66		2.39	2.06	2.62	1.68	1.85	1.12	17.53	10.39	10.06	4	6.12	5.56	AMF 7/16	
1/2	12.70	22.23	19.68	5.66		2.69	2.31	2.62	1.65	2.06	1.24	18.77	10.77	10.44	4	6.50	5.94	H-5	
Nominal Size		Max.	Min.	Ref.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	G	Max.	Min.	Driver Size	Max.	Min.	Punch Code
		A	H	J	T		F				M			Max.	Min.		Max.	Min.	

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

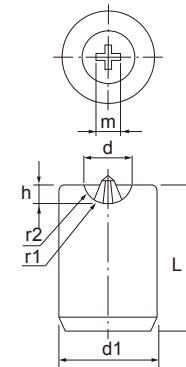
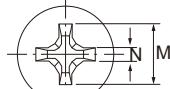
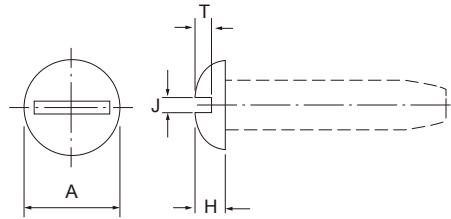
AMO (ANSI OVAL HEAD & TAPPING SCREW)



Nominal Size		A		H	O		J		T		M		Driver Size	Q		Punch Code
		Max.	Min.	Reference	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	
0	1.52	3.02	2.51	0.89	1.42	1.04	0.58	0.41	0.76	0.64	1.88	1.55	0	0.97	0.51	-
1	1.85	3.71	3.12	1.09	1.73	1.32	0.66	0.48	0.97	0.79	1.96	1.63	0	1.04	0.58	-
2	2.18	4.37	3.73	1.30	2.03	1.60	0.79	0.58	1.14	0.94	2.84	2.51	1	1.57	1.14	AMO 2#
3	2.51	5.05	4.34	1.50	2.34	1.85	0.89	0.69	1.32	1.09	3.15	2.82	1	1.88	1.45	AMO 3#
4	2.84	5.72	4.95	1.70	2.64	2.13	0.99	0.79	1.50	1.24	3.45	3.12	1	2.21	1.78	AMO 4#
5	3.18	6.40	5.59	1.90	2.95	2.41	1.09	0.89	1.70	1.40	4.01	3.68	2	1.88	1.27	AMO 5#
6	3.51	7.09	6.20	2.11	3.25	2.67	1.22	0.99	1.88	1.52	4.52	4.19	2	2.39	1.75	AMO 6#
7	3.84	7.75	6.81	2.31	3.56	2.95	1.22	0.99	2.06	1.68	4.65	4.32	2	2.54	1.90	AMO 7#
8	4.17	8.43	7.42	2.54	3.86	3.20	1.37	1.14	2.24	1.83	4.88	4.55	2	2.74	2.13	AMO 8#
10	4.83	9.78	8.64	2.95	4.47	3.76	1.52	1.27	2.62	2.13	5.31	4.98	2	3.20	2.59	AMO 10#
12	5.49	11.13	9.88	3.35	5.08	4.29	1.70	1.42	2.97	2.44	6.86	6.53	3	3.43	2.82	AMO 12#
1/4	6.35	12.88	11.48	3.89	5.89	5.00	1.90	1.63	3.45	2.84	7.37	7.04	3	3.96	3.33	AMO 1/4
5/16	7.94	16.13	14.43	4.85	7.37	6.32	2.13	1.83	4.34	3.58	9.91	9.58	4	5.54	4.93	AMO 5/16
3/8	9.53	19.35	17.40	5.84	8.81	7.62	2.39	2.06	5.23	4.32	10.41	10.08	4	6.02	5.41	AMO 3/8
7/16	11.11	20.62	18.36	5.66	8.76	7.49	2.39	2.06	5.33	4.42	10.72	10.39	4	6.32	5.72	AMO 7/16
1/2	12.70	22.23	19.68	5.66	8.99	7.59	2.69	2.31	5.49	4.47	11.10	10.77	4	6.68	6.07	AMO 1/2
Nominal Size		Max.	Min.	Ref.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code
		A		H	O		J		T		M			Q		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

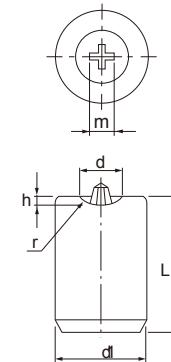
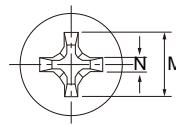
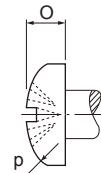
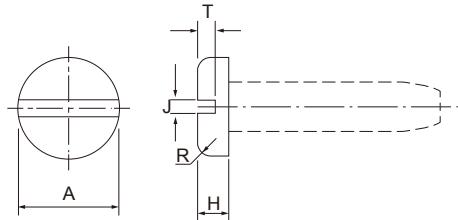
AMR (ANSI ROUND HEAD & TAPPING SCREW)



Nominal Size	A		H		J		T		M		Driver Size	Q		Punch Code	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		
0	1.52	2.87	2.51	1.35	1.09	0.58	0.41	0.99	0.74	1.85	1.52	0	0.89	0.38	-
1	1.85	3.51	3.10	1.55	1.30	0.66	0.48	1.12	0.84	2.08	1.75	0	1.14	0.66	-
2	2.18	4.11	3.71	1.75	1.50	0.79	0.58	1.22	0.94	2.54	2.21	1	1.17	0.69	AMR 2#
3	2.51	4.75	4.29	1.98	1.70	0.89	0.69	1.35	1.02	2.77	2.44	1	1.40	0.89	AMR 3#
4	2.84	5.36	4.90	2.18	1.90	0.99	0.79	1.47	1.12	3.00	2.67	1	1.65	1.17	AMR 4#
5	3.18	5.99	5.51	2.41	2.11	1.09	0.89	1.60	1.19	3.91	3.58	2	1.80	0.89	AMR 5#
6	3.51	6.60	6.10	2.62	2.31	1.22	0.99	1.73	1.30	4.11	3.78	2	1.85	1.14	AMR 6#
7	3.84	7.24	6.71	2.82	2.51	1.22	0.99	1.83	1.40	4.32	3.99	2	2.06	1.40	AMR 7#
8	4.17	7.85	7.29	3.05	2.72	1.37	1.14	1.96	1.47	4.52	4.19	2	2.29	1.63	AMR 8#
10	4.83	9.12	8.48	3.48	3.12	1.52	1.27	2.21	1.65	4.95	4.62	2	2.74	2.08	AMR 10#
12	5.49	10.36	9.70	3.89	3.53	1.70	1.42	2.44	1.85	6.32	5.99	3	2.74	2.08	AMR 12#
1/4	6.35	11.99	11.25	4.44	4.06	1.90	1.63	2.77	2.08	6.81	6.48	3	3.30	2.64	AMR 1/4
5/16	7.94	14.99	14.15	5.49	5.03	2.13	1.83	3.35	2.51	7.82	7.49	3	4.32	3.66	AMR 5/16
3/8	9.53	17.98	17.02	6.50	6.02	2.39	2.06	3.94	2.97	9.83	9.50	4	5.28	4.62	AMR 3/8
7/16	11.11	19.05	17.96	8.33	7.80	2.39	2.06	4.98	3.76	10.21	9.88	4	5.61	4.98	AMR 7/16
1/2	12.70	20.65	19.46	9.02	8.43	2.69	2.31	5.36	4.04	10.57	10.24	4	5.99	5.36	AMR 1/2
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
	A		H		J		T		M			Q			

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

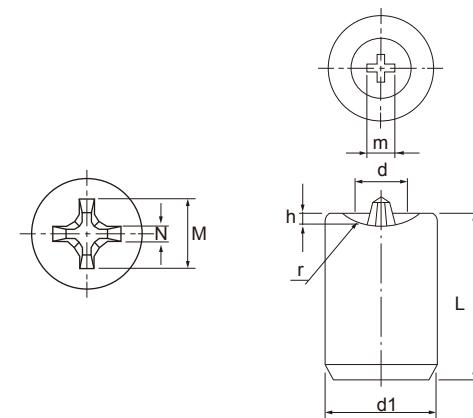
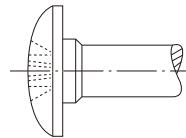
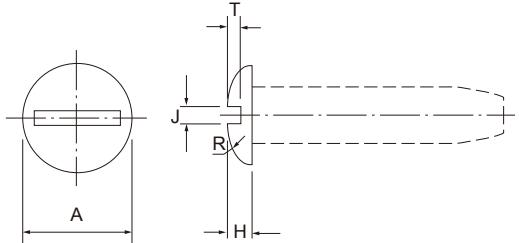
AMP (ANSI PAN HEAD MACHINE & TAPPING SCREW)



Nominal Size	A		H		R	J		T		O		P	M		Driver Size	Q		Punch Code	
	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.		
0	1.52	2.95	2.64	0.99	0.79	0.51	0.58	0.41	0.56	0.36	1.12	0.91	0.13	1.70	1.37	0	0.81	0.36	-
1	1.85	3.61	3.30	1.17	0.97	0.64	0.66	0.48	0.69	0.46	1.35	1.12	0.13	1.88	1.55	0	1.02	0.56	-
2	2.18	4.24	3.94	1.35	1.14	0.89	0.79	0.58	0.79	0.56	1.57	1.35	0.25	2.64	2.31	1	1.32	0.86	AMP 2#
3	2.51	4.90	4.57	1.52	1.30	0.94	0.89	0.69	0.91	0.66	1.80	1.57	0.25	2.84	2.51	1	1.55	1.09	AMP 3#
4	2.84	5.56	5.21	1.73	1.47	1.07	0.99	0.79	1.02	0.76	2.03	1.78	0.25	3.10	2.77	1	1.80	1.35	AMP 4#
5	3.18	6.22	5.87	1.90	1.65	1.12	1.09	0.89	1.14	0.86	2.26	2.01	0.38	4.01	3.68	2	1.83	1.17	AMP 5#
6	3.51	6.86	6.50	2.08	1.83	1.17	1.22	0.99	1.27	0.94	2.46	2.21	0.38	4.22	3.89	2	2.03	1.40	AMP 6#
7	3.84	7.52	7.14	2.26	2.01	1.24	1.22	0.99	1.37	1.04	2.69	2.44	0.38	4.47	4.14	2	2.26	1.63	AMP 7#
8	4.17	8.18	7.77	2.44	2.16	1.32	1.37	1.14	1.47	1.14	2.92	2.67	0.38	4.62	4.29	2	2.46	1.80	AMP 8#
10	4.83	9.47	9.07	2.79	2.51	1.55	1.52	1.27	1.73	1.35	3.38	3.10	0.51	5.05	4.72	2	2.87	2.26	AMP 10#
12	5.49	10.80	10.34	3.18	2.84	1.98	1.70	1.42	1.96	1.55	3.84	3.53	0.64	6.58	6.25	3	3.15	2.49	AMP 12#
1/4	6.35	12.50	12.01	3.66	3.30	2.21	1.90	1.63	2.21	1.78	4.44	4.11	0.89	7.14	6.81	3	3.66	3.00	AMP 1/4
5/16	7.94	15.62	15.09	4.52	4.11	2.51	2.13	1.83	2.69	2.16	5.54	5.16	1.02	8.89	8.56	4	4.39	3.78	AMP 5/16
3/8	9.53	18.80	18.19	5.38	4.95	3.63	2.39	2.06	3.15	2.54	6.63	6.20	1.02	9.88	9.55	4	5.41	4.83	AMP 3/8
7/16	11.11	21.92	21.26	6.27	5.79	3.89	2.39	2.06	3.61	2.95	7.75	7.21	1.27	10.49	10.16	4	6.07	5.44	AMP 7/16
1/2	12.70	25.07	24.33	7.14	6.60	4.44	2.69	2.31	4.09	3.33	8.84	8.25	1.40	11.05	10.72	4	6.60	5.97	AMP 1/2
Nominal Size	Max.	Min.	Max.	Min.	R	Max.	Min.	Max.	Min.	Max.	Min.	P	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
	A		H			J		T		O			M			Q			

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

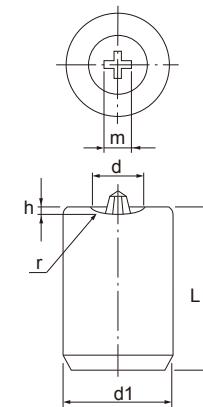
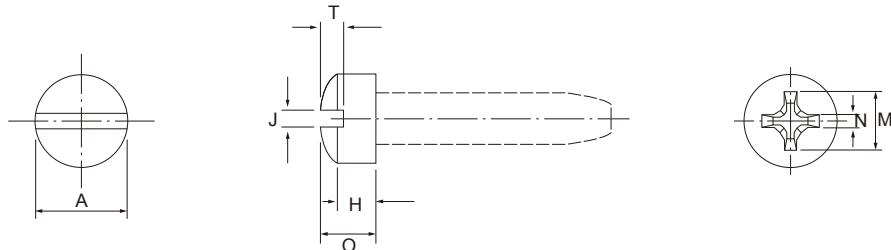
AMT (ANSI TRUSS HEAD MACHINE & TAPPING SCRREW)



Nominal Size	A		H		R	J		T		M		Driver Size	Q		Punch Code	
	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		
0	1.52	3.33	3.02	0.94	0.74	2.21	0.58	0.41	0.56	0.36	1.60	1.27	0	0.76	0.30	-
1	1.85	4.17	3.78	1.14	0.94	2.72	0.66	0.48	0.69	0.46	1.80	1.47	0	0.97	0.51	-
2	2.18	4.93	4.57	1.35	1.12	3.28	0.79	0.58	0.79	0.56	2.64	2.31	1	1.32	0.86	AMT 2#
3	2.51	5.74	5.36	1.55	1.30	3.84	0.89	0.69	0.91	0.66	2.79	2.46	1	1.50	1.07	AMT 3#
4	2.84	6.53	6.12	1.75	1.50	4.29	0.99	0.79	1.02	0.76	2.84	2.51	1	1.57	1.12	AMT 4#
5	3.18	7.34	6.91	1.98	1.69	4.85	1.09	0.89	1.14	0.86	3.25	2.92	1	1.98	1.52	AMT 5#
6	3.51	8.15	7.70	2.18	1.88	5.36	1.22	0.99	1.27	0.94	4.01	3.68	2	1.85	1.22	AMT 6#
7	3.84	8.94	8.46	2.39	2.06	5.87	1.22	0.99	1.37	1.04	4.19	3.86	2	2.03	1.40	AMT 7#
8	4.17	9.75	9.25	2.59	2.24	6.45	1.37	1.14	1.47	1.14	4.39	4.06	2	2.24	1.60	AMT 8#
10	4.83	11.38	10.80	3.00	2.62	7.19	1.52	1.27	1.73	1.35	4.78	4.44	2	2.64	2.01	AMT 10#
12	5.49	12.98	12.37	3.40	3.00	8.53	1.70	1.42	1.96	1.55	6.30	5.97	3	2.82	2.18	AMT 12#
1/4	6.35	14.55	13.87	3.81	3.38	9.53	1.90	1.63	2.21	1.78	6.68	6.35	3	3.20	2.57	AMT 1/4
5/16	7.94	17.73	16.92	4.65	4.11	11.61	2.13	1.83	2.69	2.16	8.94	8.61	4	4.39	3.76	AMT 5/16
3/8	9.53	20.90	19.99	5.46	4.85	13.67	2.39	2.06	3.15	2.54	9.73	9.40	4	5.23	4.62	AMT 3/8
7/16	11.11	24.08	23.04	6.30	5.61	15.72	2.39	2.06	3.61	2.95	10.52	10.19	4	6.02	3.38	AMT 7/16
1/2	12.70	27.25	26.11	7.11	6.35	17.81	2.69	2.31	4.09	3.33	11.28	10.95	4	6.81	6.17	AMT 1/2
Nominal Size	Max.	Min.	Max.	Min.	R	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
	A		H			J		T		M			Q			

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

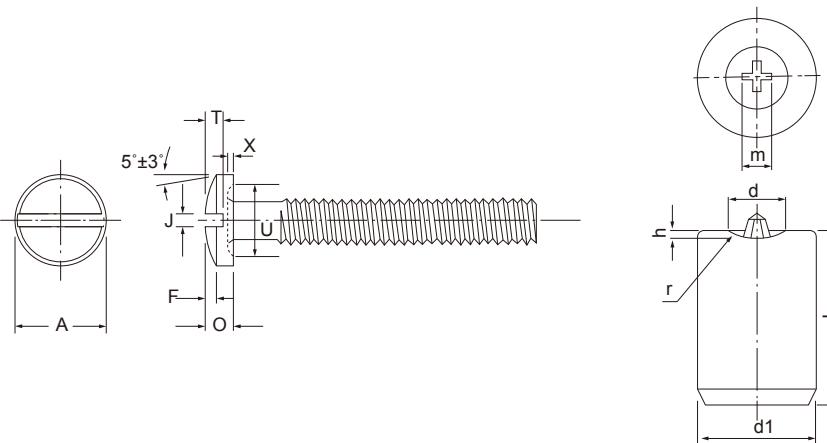
AML (ANSI FILLISTER HEAD MACHINE & TAPPING SCREW)



Nominal Size	A		H		O		J		T		M		Driver Size	Q		Punch Code	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		
0	1.52	2.44	2.11	1.09	0.97	1.40	1.19	0.58	0.41	0.64	0.38	1.70	1.37	0	0.81	0.36	-
1	1.85	3.00	2.64	1.35	1.14	1.68	1.47	0.66	0.48	0.79	0.51	1.88	1.55	0	1.02	0.56	-
2	2.18	3.56	3.15	1.57	1.35	2.11	1.68	0.79	0.58	0.94	0.64	2.64	2.31	1	1.32	0.86	AML 2#
3	2.51	4.09	3.68	1.78	1.55	2.41	1.96	0.89	0.69	1.09	0.76	2.84	2.51	1	1.55	1.09	AML 3#
4	2.84	4.65	4.22	2.01	1.75	2.72	2.24	0.99	0.79	1.22	0.89	3.10	2.77	1	1.80	1.35	AML 4#
5	3.18	5.21	4.75	2.24	1.98	3.05	2.54	1.09	0.89	1.37	1.02	3.63	3.30	1	1.42	0.79	AML 5#
6	3.51	5.74	5.28	2.44	2.18	3.35	2.82	1.22	0.99	1.52	1.14	4.22	3.89	2	2.03	1.40	AML 6#
7	3.84	6.30	5.82	2.67	2.39	3.66	3.10	1.22	0.99	1.65	1.24	4.47	4.14	2	2.26	1.63	AML 7#
8	4.17	6.86	6.35	2.87	2.59	3.96	3.38	1.37	1.14	1.80	1.37	4.62	4.29	2	2.46	1.80	AML 8#
10	4.83	7.95	7.42	3.30	3.00	4.57	3.96	1.52	1.27	2.11	1.63	5.05	4.72	2	2.87	2.26	AML 10#
12	5.49	9.07	8.48	3.76	3.40	5.21	4.52	1.70	1.42	2.39	1.88	6.58	6.25	3	3.15	2.49	AML 12#
1/4	6.35	10.52	9.88	4.32	3.94	6.02	5.26	1.90	1.63	2.77	2.21	7.14	6.81	3	3.66	3.00	AML 1/4
5/16	7.94	13.16	12.45	5.36	4.93	7.49	6.65	2.13	1.83	3.48	2.79	8.18	7.85	3	4.72	4.06	AML 5/16
3/8	9.53	15.80	14.99	6.43	5.92	9.02	8.00	2.39	2.06	4.17	3.38	9.88	9.55	4	5.41	4.83	AML 3/8
7/16	11.11	15.88	14.96	6.73	6.15	9.35	8.15	2.39	2.06	4.32	3.43	10.49	10.16	4	6.07	5.44	AML 7/16
1/2	12.70	19.05	18.03	7.54	6.93	10.46	9.19	2.69	2.31	4.83	3.84	11.05	10.72	4	6.60	5.97	AML 1/2
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
	A		H		O		J		T		M			Q			

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

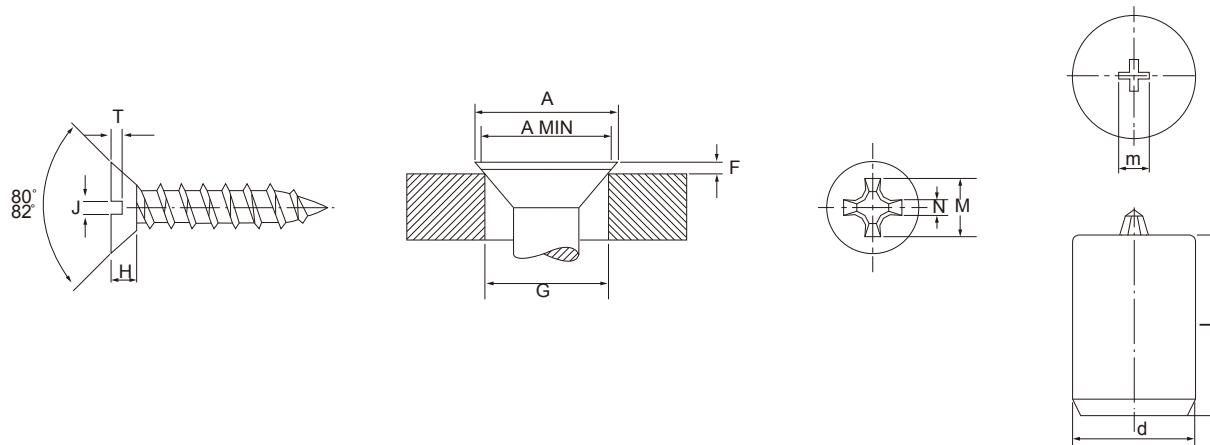
AMB (ANSI BINDING HEAD MACHINE SCREW)



Nominal Size	A		O		F		J		T		U		X		M		Driver Size	Q		Punch Code
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	
0000 0.53	1.17	1.02	0.36	0.23	0.15	0.08	0.20	0.10	0.23	0.13	-	-	-	-	-	-	-	-	-	
000 0.86	1.85	1.70	0.53	0.38	0.20	0.13	0.30	0.15	0.33	0.23	-	-	-	-	-	-	-	-	-	
00 1.19	2.49	2.29	0.71	0.58	0.28	0.18	0.43	0.25	0.46	0.30	-	-	-	-	-	-	-	-	-	
0 1.52	3.20	3.02	0.81	0.66	0.30	0.20	0.58	0.41	0.46	0.23	2.49	2.18	0.18	0.05	1.70	1.37	0	0.84	0.41	-
1 1.85	3.89	3.68	1.04	0.89	0.38	0.28	0.66	0.48	0.61	0.36	3.05	2.67	0.20	0.08	1.88	1.55	0	1.02	0.58	-
2 2.18	4.60	4.34	1.29	1.09	0.46	0.33	0.79	0.58	0.76	0.51	3.58	3.15	0.25	0.13	2.54	2.21	1	1.30	0.86	AMB 2#
3 2.51	5.28	5.00	1.50	1.32	0.56	0.41	0.89	0.69	0.91	0.64	4.11	3.63	0.28	0.15	2.79	2.46	1	1.55	1.12	AMB 3#
4 2.84	5.97	5.66	1.73	1.55	0.64	0.46	0.99	0.79	1.07	0.76	4.67	4.09	0.30	0.18	3.00	2.67	1	1.78	1.32	AMB 4#
5 3.18	6.68	6.32	1.98	1.75	0.74	0.53	1.09	0.89	1.22	0.89	5.21	4.57	0.36	0.23	3.76	3.43	2	1.63	1.02	AMB 5#
6 3.51	7.37	6.99	2.21	1.98	0.81	0.61	1.22	0.99	1.35	1.02	5.74	5.05	0.38	0.25	4.06	3.73	2	1.96	1.35	AMB 6#
8 4.17	8.74	8.28	2.67	2.41	0.99	0.74	1.37	1.14	1.65	1.27	6.83	5.99	0.43	0.30	4.72	4.39	2	2.62	2.01	AMB 8#
10 4.83	10.13	9.60	3.12	2.84	1.14	0.86	1.52	1.27	1.96	1.52	7.92	6.96	0.51	0.38	5.21	4.88	2	3.12	2.49	AMB 10#
12 5.49	11.53	10.92	3.58	3.30	1.32	0.99	1.70	1.42	2.26	1.78	8.99	7.90	0.58	0.46	6.78	6.45	3	3.40	2.77	AMB 12#
1/4 6.35	13.34	12.65	4.19	3.86	1.55	1.17	1.90	1.63	2.67	2.13	10.41	9.14	0.66	0.53	7.14	6.81	3	3.73	3.12	AMB 1/4
5/16 7.94	16.66	15.80	5.31	4.93	1.96	1.50	2.13	1.83	3.40	2.74	13.03	11.43	0.81	0.69	8.89	8.56	4	4.44	3.86	AMB 5/16
3/8 9.53	20.02	18.95	6.43	5.97	2.39	1.80	2.39	2.06	4.14	3.35	15.62	13.72	0.99	0.86	10.16	9.83	4	5.77	5.16	AMB 3/8
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code
	A		O		F		J		T		U		X		M			Q		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

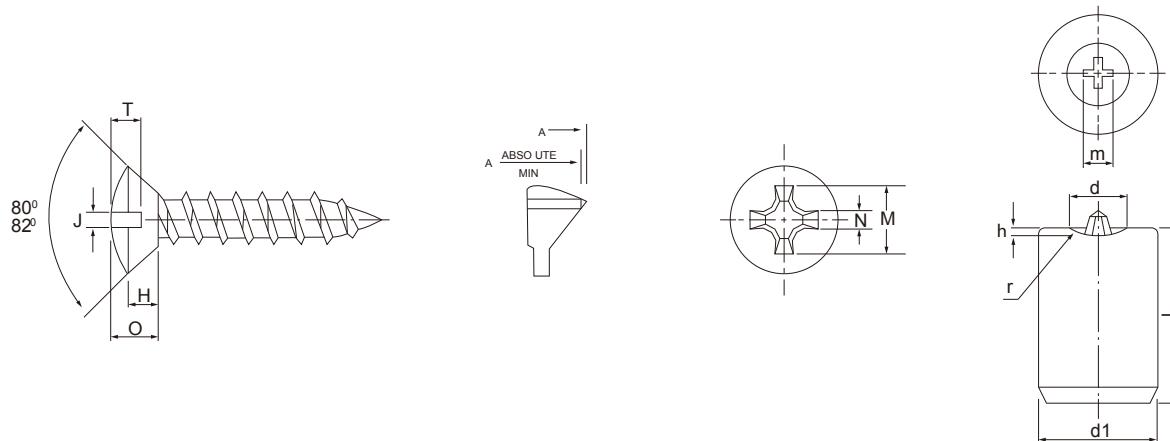
ATF (ANSI FLAT HEAD TAPPING SCREW)



Nominal Size	A			G	F		H	J		T		M		Driver Size	Q		Punch Code
	Max.	Min.	Abs.		Max.	Min.		Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	
14	12.47	11.71	11.10	10.41	1.24	0.74	3.76	1.90	1.63	1.73	1.12	7.19	6.86	3	3.91	3.33	G-4
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	13.82	13.00	12.32	11.61	1.32	0.79	4.17	1.90	1.63	1.90	1.24	7.70	7.37	3	4.42	3.84	G-5
18	15.16	14.30	13.56	12.83	1.40	0.84	4.57	2.13	1.83	2.11	1.37	9.27	8.94	4	4.98	4.42	H-1
20	16.51	15.60	14.78	14.05	1.47	0.89	4.98	2.13	1.83	2.29	1.50	9.60	9.27	4	5.33	4.78	H-2
24	19.20	18.19	17.25	16.46	1.65	0.99	5.79	2.39	2.06	2.67	1.75	9.98	9.65	4	5.72	5.16	H-3
Nominal Size	Max.	Min.	Abs.	G	Max.	Min.	H	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code
	A				F			J		T		M			Q		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

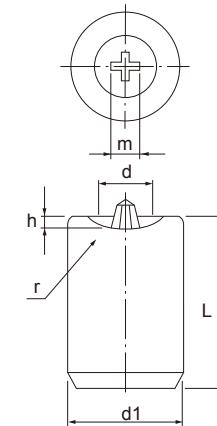
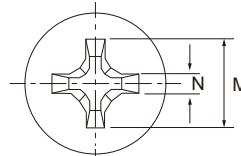
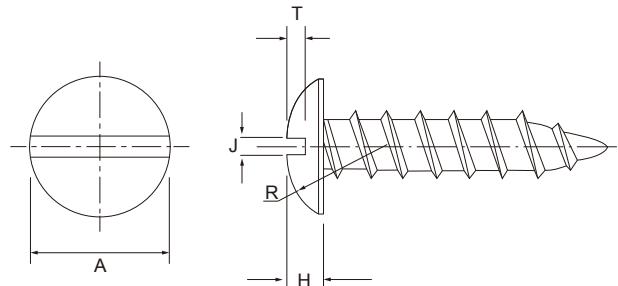
ATAO (ANSI OVAL HEAD TAPPING SCREW)



Nominal Size	A			H	O		J		T		M		Driver Size	Q		Punch Code
	Max.	Min.	Abs.		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	
14	12.47	11.71	11.10	3.76	5.69	4.83	1.9	1.63	3.35	2.74	7.32	6.99	3	3.76	3.12	ATAO 14#
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	13.82	13.00	12.32	4.17	6.30	5.38	1.9	1.63	3.71	3.05	8.43	8.10	3	5.00	4.37	ATAO 16#
18	15.16	14.30	13.56	4.57	6.91	5.92	2.13	1.83	4.06	3.35	9.68	9.35	4	5.23	4.62	ATAO 18#
20	16.51	15.60	14.78	4.98	7.52	6.45	2.13	1.83	4.44	3.66	10.16	9.83	4	5.72	5.11	ATAO 20#
24	19.20	18.19	17.25	5.79	8.74	7.54	2.39	2.06	5.18	4.27	11.07	10.47	4	6.65	6.05	ATAO 24#
Nominal Size	Max.	Min.	Abs.	H	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code
	A				O	J	T	M	Q							

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

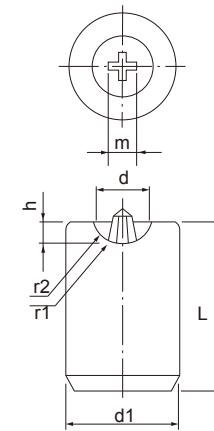
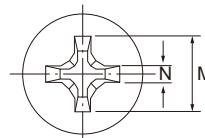
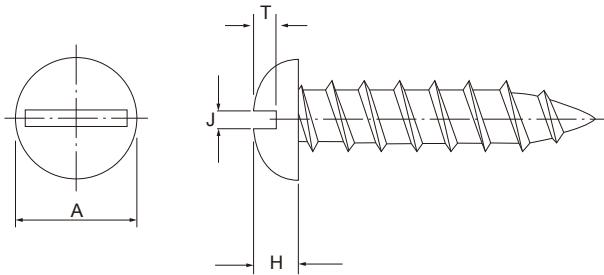
ATAT (ANSI TRUSS HEAD TAPPING SCREW)



Nominal Size	A		H		J		T		R	M		Driver Size	Q		Punch Code
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.	
14	14.15	13.46	3.71	3.28	1.90	1.63	2.16	1.73	9.53	6.68	6.35	3	3.20	2.57	ATAT 14#
16	15.47	14.73	4.04	3.58	1.90	1.63	2.36	1.88	10.41	6.78	6.45	3	3.40	2.77	ATAT 16#
18	16.79	16.00	4.39	3.89	2.13	1.83	2.54	2.03	11.33	8.20	7.87	4	3.68	3.07	ATAT 18#
20	18.11	17.27	4.72	4.19	2.13	1.83	2.74	2.21	12.29	9.04	8.71	4	4.50	3.84	ATAT 20#
24	20.75	19.81	5.41	4.83	2.39	2.06	3.12	2.54	14.15	9.86	9.53	4	5.56	4.93	ATAT 24#
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	R	Max.	Min.	Driver Size	Max.	Min.	Punch Code
	A		H		J		T			Max.	Min.		Max.	Min.	

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

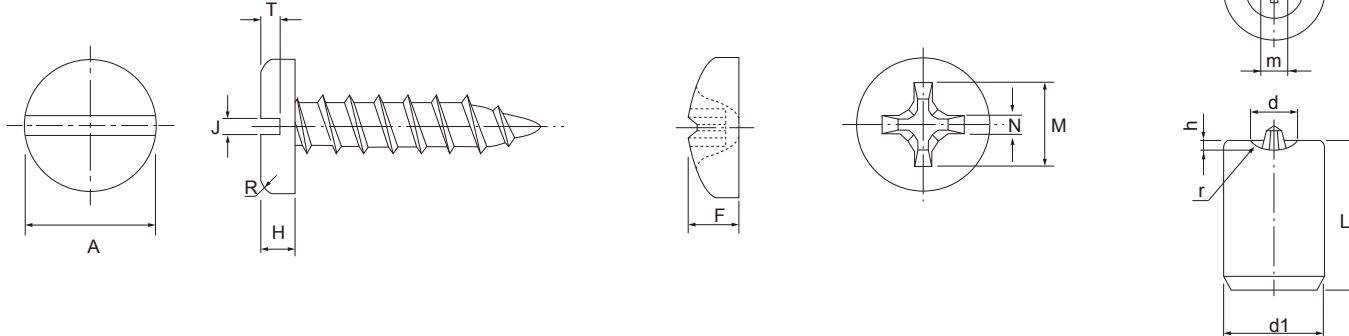
ATAR (ANSI ROUND HEAD TAPPING SCREW)



Nominal Size	A		H		J		T		M		Driver Size	Q		Punch Code
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	
14	11.61	10.90	4.32	3.94	1.90	1.63	2.69	2.03	6.73	6.40	3	3.18	2.51	ATAR 14#
16	12.85	12.09	4.75	4.34	1.90	1.63	2.92	2.21	7.14	6.81	3	3.61	3.02	ATAR 16#
18	14.10	13.28	5.18	4.75	2.13	1.83	3.18	2.39	8.36	8.03	4	3.73	3.07	ATAR 18#
20	15.34	14.48	5.59	5.16	2.13	1.83	3.40	2.57	8.74	8.41	4	4.14	3.48	ATAR 20#
24	17.83	16.87	6.45	5.97	2.39	2.06	3.91	2.95	9.83	9.05	4	5.28	4.62	ATAR 24#
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code
	A		H		J		T		M			Q		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

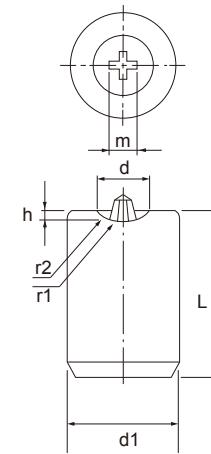
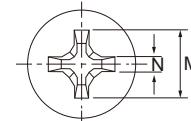
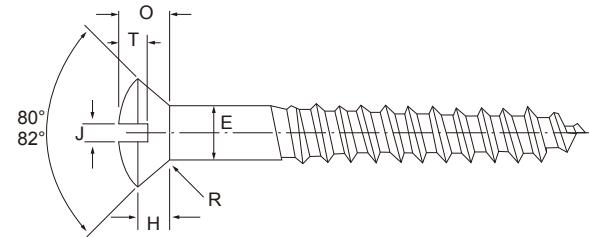
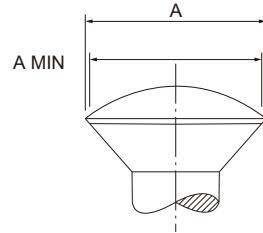
ATAP (ANSI PAN HEAD TAPPING SCREW)



Nominal Size	A		H		J		T		R	F		M		Driver Size	Q		Punch Code
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.		Max.	Min.	
14	12.09	11.61	3.53	3.20	1.90	1.63	2.16	1.73	2.21	4.29	3.96	7.14	6.81	3	3.66	3.00	ATAP 14#
16	13.41	12.90	3.89	3.53	1.88	1.63	2.36	1.78	2.39	4.75	4.39	7.42	7.09	3	4.01	3.35	ATAP 16#
18	14.71	14.17	4.27	3.89	2.13	1.83	2.54	2.03	2.51	5.21	4.85	8.51	8.18	4	4.01	3.40	ATAP 18#
20	16.03	15.44	4.62	4.22	2.13	1.83	2.74	2.21	3.07	5.66	5.28	8.89	8.56	4	4.39	3.78	ATAP 20#
24	18.64	18.01	5.36	4.90	2.39	2.06	3.12	2.54	3.63	6.58	6.15	9.98	9.65	4	5.41	4.83	ATAP 24#
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	R	Max.	Min.	Max.	Min.	Driver Size	Max.	Min.	Punch Code
	A		H		J		T			F		M			Q		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

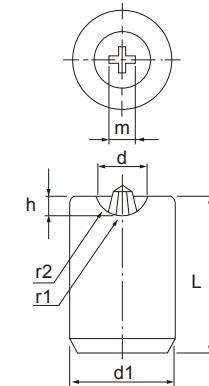
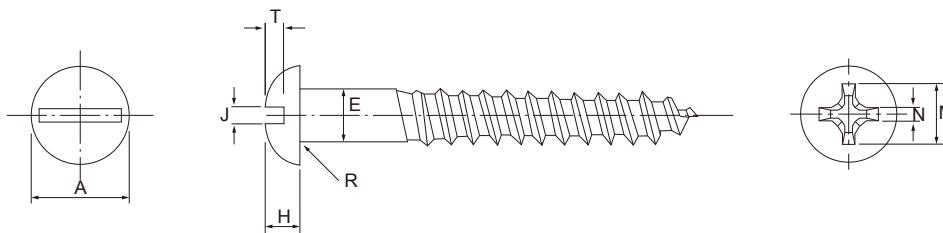
AWO (ANSI OVAL HEAD WOOD SCREW)



Nominal Size	TPI	E		A		H	O		J		T		R	M		Driver Size	Q		Punch Code	
		Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.		
0	1.52	32	1.63	1.35	3.02	2.51	0.89	1.42	1.04	0.58	0.41	0.76	0.64	0.79	1.88	1.55	0	0.97	0.51	-
1	1.85	28	1.96	1.68	3.71	3.12	1.09	1.73	1.32	0.66	0.48	0.97	0.79	0.79	1.96	1.63	0	1.04	0.58	-
2	2.18	26	2.29	2.01	4.37	3.73	1.30	2.03	1.60	0.79	0.58	1.14	0.94	0.79	2.84	2.51	1	1.57	1.14	AWO 2#
3	2.51	24	2.62	2.34	5.05	4.34	1.50	2.34	1.85	0.89	0.69	1.32	1.09	0.79	3.15	2.82	1	1.88	1.45	AWO 3#
4	2.84	22	2.95	2.67	5.72	4.95	1.70	2.64	2.13	0.99	0.79	1.50	1.24	0.79	3.45	3.12	1	2.21	1.78	AWO 4#
5	3.18	20	3.28	3.00	6.40	5.59	1.90	2.95	2.41	1.09	0.89	1.70	1.40	1.57	4.01	3.68	2	1.88	1.27	AWO 5#
6	3.51	18	3.61	3.33	7.09	6.20	2.11	3.25	2.67	1.22	0.99	1.88	1.52	1.57	4.52	4.19	2	2.39	1.75	AWO 6#
7	3.84	16	3.94	3.66	7.75	6.81	2.31	3.56	2.95	1.22	0.99	2.06	1.68	1.57	4.80	4.47	2	2.64	2.06	AWO 7#
8	4.17	15	4.27	3.99	8.43	7.42	2.54	3.86	3.20	1.37	1.14	2.24	1.83	1.57	5.21	4.88	2	3.05	2.41	AWO 8#
9	4.50	14	4.60	4.32	9.09	8.03	2.74	4.17	3.48	1.37	1.14	2.41	1.98	1.57	5.49	5.16	2	3.38	2.74	AWO 9#
10	4.83	13	4.93	4.65	9.78	8.64	2.95	4.47	3.76	1.52	1.27	2.62	2.13	1.57	6.63	6.30	3	3.18	2.57	AWO 10#
12	5.49	11	5.59	5.31	11.13	9.88	3.35	5.08	4.29	1.70	1.42	2.97	2.44	1.57	7.19	6.86	3	3.76	3.12	AWO 12#
14	6.15	10	6.25	5.97	12.47	11.10	3.76	5.69	4.83	1.90	1.63	3.35	2.74	2.36	7.75	7.42	3	4.34	3.71	AWO 14#
16	6.81	9	6.91	6.63	13.82	12.32	4.17	6.30	5.38	1.90	1.63	3.71	3.05	2.36	8.43	8.10	3	5.00	4.37	AWO 16#
18	7.47	8	7.57	7.29	15.16	13.56	4.57	6.91	5.92	2.13	1.83	4.06	3.35	2.36	9.68	9.35	4	5.23	4.62	AWO 18#
20	8.13	8	8.23	7.95	16.51	14.78	4.98	7.52	6.45	2.13	1.83	4.44	3.66	2.36	10.16	9.83	4	5.72	5.11	AWO 20#
24	9.45	7	9.55	9.27	19.20	17.25	5.79	8.74	7.54	2.39	2.06	5.18	4.27	2.36	11.07	10.74	4	6.65	6.05	AWO 24#
Nominal Size	TPI	Max.	Min.	Max.	Min.	H	Max.	Min.	Max.	Min.	Max.	Min.	R	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
		E		A			O		J		T			Max.	Min.		Max.	Min.		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

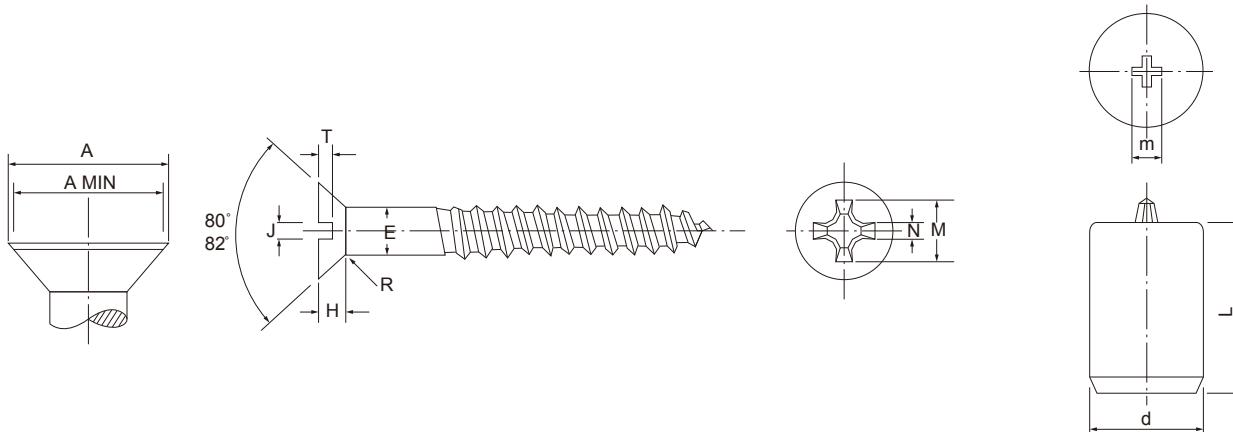
AWR (ANSI ROUND HEAD WOOD SCREW)



Nominal Size	TPI	E		A		H		J		T		R	M		Driver Size	Q		Punch Code	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.		
0	1.52	32	1.63	1.35	2.87	2.51	1.35	1.09	0.58	0.41	0.99	0.74	0.41	1.85	1.52	0	0.89	0.38	-
1	1.85	28	1.96	1.68	3.15	3.10	1.55	1.30	0.66	0.48	1.12	0.84	0.41	2.08	1.75	0	1.14	0.66	-
2	2.18	26	2.29	2.01	4.11	3.71	1.75	1.50	0.79	0.58	1.22	0.94	0.41	2.90	2.57	1	1.45	0.89	AWR 2#
3	2.51	24	2.62	2.34	4.75	4.29	1.98	1.70	0.89	0.69	1.35	1.02	0.41	3.10	2.77	1	1.68	1.14	AWR 3#
4	2.84	22	2.95	2.67	5.36	4.90	2.18	1.90	0.99	0.79	1.47	1.12	0.41	3.30	2.97	1	1.93	1.42	AWR 4#
5	3.18	20	3.28	3.00	5.99	5.51	2.41	2.11	1.09	0.89	1.60	1.19	0.79	3.91	3.58	2	1.60	0.89	AWR 5#
6	3.51	18	3.61	3.33	6.60	6.10	2.62	2.31	1.22	0.99	1.73	1.30	0.79	4.11	3.78	2	1.85	1.14	AWR 6#
7	3.84	16	3.94	3.66	7.24	6.71	2.82	2.51	1.22	0.99	1.83	1.40	0.79	4.32	3.99	2	2.06	1.40	AWR 7#
8	4.17	15	4.27	3.99	7.85	7.29	3.05	2.72	1.37	1.14	1.96	1.47	0.79	4.52	4.19	2	2.29	1.63	AWR 8#
9	4.50	14	4.60	4.32	8.48	7.90	3.25	2.92	1.37	1.14	2.08	1.57	0.79	4.72	4.39	2	2.51	1.85	AWR 9#
10	4.83	13	4.93	4.65	9.12	8.48	3.48	3.12	1.52	1.27	2.21	1.65	0.79	4.95	4.62	2	2.74	2.08	AWR 10#
12	5.49	11	5.59	5.31	10.36	9.70	3.89	3.53	1.70	1.42	2.44	1.85	0.79	6.32	5.99	3	2.74	2.08	AWR 12#
14	6.15	10	6.25	5.97	11.61	10.90	4.32	3.94	1.90	1.63	2.69	2.03	1.17	6.73	6.40	3	3.18	2.51	AWR 14#
16	6.81	9	6.91	6.63	12.85	12.09	4.75	4.34	1.90	1.63	2.92	2.21	1.17	7.14	6.81	3	3.61	3.02	AWR 16#
18	7.47	8	7.57	7.29	14.10	13.28	5.18	4.75	2.13	1.83	3.18	2.39	1.17	8.61	8.28	4	3.96	3.33	AWR 18#
20	8.13	8	8.23	7.95	15.34	14.48	5.59	5.16	2.13	1.83	3.40	2.57	1.17	9.04	8.71	4	4.42	3.76	AWR 20#
24	9.45	7	9.55	9.27	17.83	16.87	6.45	5.97	2.39	2.06	3.91	2.95	1.17	9.83	9.50	4	5.28	4.62	AWR 24#
Nominal Size	TPI	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	R	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
		E		A		H		J		T			Max.	Min.		Max.	Min.		

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

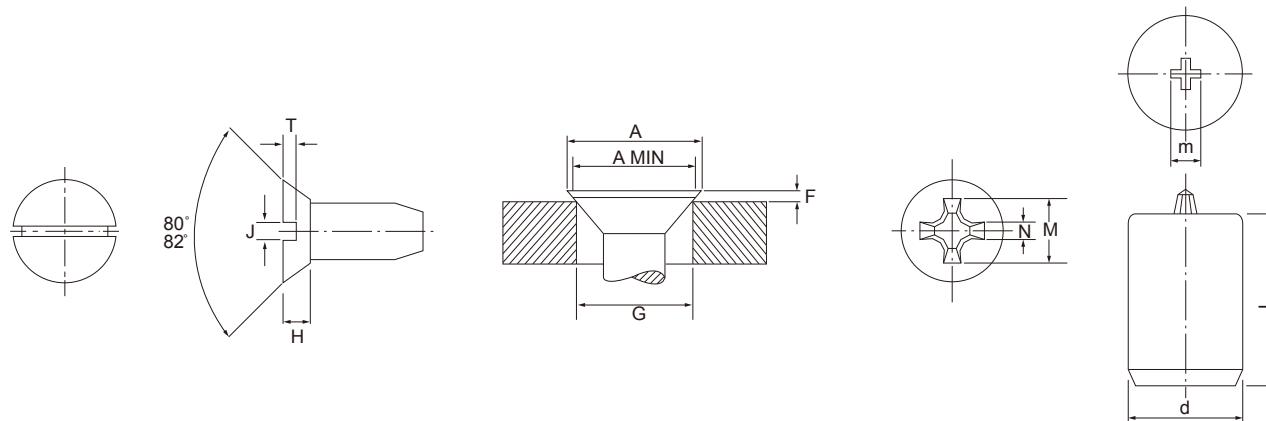
AWF (ANSI FLAT HEAD WOOD SCREW)



Nominal Size	TPI	E		A		H	J		T		R	M		Driver Size	Q		Punch Code	
		Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.		
0	1.52	32	1.63	1.35	3.02	2.51	0.89	0.58	0.41	0.38	0.25	0.79	1.75	1.42	0	0.91	0.51	-
1	1.85	28	1.96	1.68	3.71	3.12	1.09	0.66	0.48	0.48	0.30	0.79	1.96	1.63	0	1.12	0.71	-
2	2.18	26	2.29	2.01	4.37	3.73	1.30	0.79	0.58	0.58	0.38	0.79	2.59	2.26	1	1.42	1.02	E-1
3	2.51	24	2.62	2.34	5.05	4.34	1.50	0.89	0.69	0.69	0.43	0.79	2.72	2.39	1	1.55	1.14	E-2
4	2.84	22	2.95	2.67	5.72	4.95	1.70	0.99	0.79	0.76	0.51	0.79	3.25	2.92	1	2.08	1.68	AMF 4#
5	3.18	20	3.28	3.00	6.40	5.59	1.90	1.09	0.89	0.86	0.56	1.57	3.91	3.58	2	1.90	1.32	F-3
6	3.51	18	3.61	3.33	7.09	6.20	2.11	1.22	0.99	0.97	0.61	1.57	4.42	4.09	2	2.41	1.83	F-7
7	3.84	16	3.94	3.66	7.75	6.81	2.31	1.22	0.99	1.04	0.69	1.57	4.80	4.47	2	2.79	2.21	F-11
8	4.17	15	4.27	3.99	8.43	7.42	2.54	1.37	1.14	1.14	0.74	1.57	5.18	4.85	2	3.18	2.59	F-15
9	4.50	14	4.60	4.32	9.09	8.03	2.74	1.37	1.14	1.24	0.81	1.57	5.44	5.11	2	3.43	2.84	F-18
10	4.83	13	4.93	4.65	9.78	8.64	2.95	1.52	1.27	1.35	0.86	1.57	6.55	6.22	3	3.28	2.69	G-1
12	5.49	11	5.59	5.31	11.13	9.88	3.35	1.70	1.42	1.52	0.99	1.57	7.19	6.86	3	3.91	3.33	G-4
14	6.15	10	6.25	5.97	12.47	11.10	3.76	1.90	1.63	1.73	1.12	2.36	7.70	7.37	3	4.42	3.84	G-5
16	6.81	9	6.91	6.63	13.82	12.32	4.17	1.90	1.63	1.90	1.24	2.36	8.31	7.98	3	5.05	4.47	AMF 16#
18	7.47	8	7.57	7.29	15.16	13.56	4.57	2.13	1.83	2.11	1.37	2.36	9.60	9.27	4	5.33	4.78	H-2
20	8.13	8	8.23	7.95	16.51	14.78	4.98	2.13	1.83	2.29	1.50	2.36	9.98	9.65	4	5.72	5.16	H-3
24	9.45	7	9.55	9.27	19.20	17.25	5.79	2.39	2.06	2.67	1.75	2.36	10.77	10.44	4	6.50	5.94	H-5
Nominal Size	TPI	Max.		Min.		H	Max.		Min.		R	Max.		Driver Size	Max.		Punch Code	
		E		A			J		T			M			Max.			

ANSI | CABEÇA PARAFUSO TIPO ANSI / ANSI SCREW HEAD STYLES

AUF (ANSI FLAT UNDERCUT HEAD MACHINE & TAPPING SCREW)



Nominal Size	A		H		J		T		F		G	M		Driver Size	Q		Punch Code	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		Max.	Min.		Max.	Min.		
0	1.52	3.02	2.51	0.64	0.46	0.58	0.41	0.28	0.18	**	**	**	1.75	1.42	0	0.91	0.51	—
1	1.85	3.71	3.12	0.79	0.58	0.66	0.48	0.36	0.23	**	**	**	1.96	1.63	0	1.12	0.71	—
2	2.18	4.37	3.73	0.91	0.71	0.79	0.58	0.41	0.28	0.74	0.43	3.15	2.41	2.08	1	1.24	0.84	JMF-2.2
3	2.51	5.05	4.34	1.07	0.84	0.89	0.69	0.48	0.30	0.79	0.46	3.76	2.59	2.26	1	1.42	1.02	E-1
4	2.84	5.72	4.95	1.19	0.97	0.99	0.79	0.56	0.36	0.81	0.48	4.37	2.97	2.64	1	1.80	1.40	E-5
5	3.18	6.40	5.59	1.35	1.09	1.09	0.89	0.61	0.41	0.86	0.51	4.98	3.25	2.92	1	2.08	1.68	AMF 4#
6	3.51	7.09	6.20	1.50	1.22	1.22	0.99	0.69	0.43	0.91	0.53	5.59	3.71	3.38	2	1.70	1.12	F-2
7	3.84	7.75	6.81	1.63	1.35	1.22	0.99	0.76	0.48	0.94	0.56	6.17	3.91	3.58	2	1.90	1.32	F-4
8	4.17	8.43	7.42	1.78	1.47	1.37	1.14	0.81	0.53	0.99	0.58	6.78	4.42	4.09	2	2.41	1.83	F-8
10	4.83	9.78	8.64	2.06	1.73	1.52	1.27	0.94	0.61	1.07	0.64	7.95	4.80	4.47	2	2.79	2.21	F-12
12	5.49	11.13	9.88	2.34	1.98	1.70	1.42	1.09	0.71	1.14	0.69	9.19	5.92	5.59	3	2.64	2.06	G-03
1/4	6.35	12.88	11.48	2.72	2.34	1.90	1.63	1.27	0.81	1.27	0.74	10.77	6.35	6.02	3	3.02	2.44	G-0
5/16	7.94	16.13	14.43	3.40	2.95	2.13	1.83	1.57	1.04	1.45	0.86	13.69	8.05	7.72	4	3.76	3.20	AUF 5/16
3/8	9.53	19.35	17.40	4.09	3.56	2.39	2.06	1.90	1.24	1.65	0.99	16.59	9.27	8.94	4	4.98	4.42	H-1
7/16	11.11	20.62	18.36	3.96	3.38	2.39	2.06	1.83	1.14	1.85	1.12	17.53	9.98	9.65	4	5.72	5.16	H-3
1/2	12.70	22.23	19.68	3.96	3.30	2.69	2.31	1.83	1.17	2.06	1.24	18.77	10.39	10.05	4	6.12	5.56	AMF 7/16
Nominal Size	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	G	Max.	Min.	Driver Size	Max.	Min.	Punch Code	
	A		H		J		T		F			M			Q			

PADRÃO PENETRAÇÃO (Q) PARA PUNÇÃO PHILIPS CABEÇA CHATA / RECESS GAGING DEPTH(Q) CONTROLLED

PUNCHES FOR FLAT HEAD

PUNCHES FOR FLAT HEAD SCREWS

E-SERIES (NO.0 RECESS)

Driver Size	Punch Code	Q	About	Ø	Driver Size	Punch Code	Q	M / About	Ø
00	JMF-1 M1.0	0.2~0.3	1.1	12	00	S-02	0.27~0.35	1.20	12
00	JMF-1 M1.2	0.3~0.4	1.2	12	00	S-01	0.40~0.48	1.27	12
0	JMF-1 M1.4	0.7~0.8	1.6	12	0	S-0	0.47~0.54	1.30	12
0	JMF-3 M1.4	0.8~0.9	1.7	12	0	S-1	0.51~0.61	1.40	12
0	JMF-1 M1.7	0.85~0.95	1.75	12	0	S-2	0.56~0.66	1.45	12
0	JMF-3 M1.7	1.05~1.15	1.95	12	0	S-3	0.61~0.71	1.50	12
0	JMF-1 M2.0	1.10~1.20	2.0	12	0	S-4	0.71~0.81	1.60	12
0	JMF-1 M2-001	1.15~1.25	2.0	12	0	S-4.5	0.75~0.85	1.65	12
0	JMF-3 M2.0	1.20~1.30	2.05	12	0	01-17F	0.70~0.80	1.60	12
-	-	-	-	-	0	03-17F	0.90~1.00	1.80	12

PADRÃO PENETRAÇÃO (Q) PARA PUNÇÃO PHILIPS CABEÇA CHATA / RECESS GAGING DEPTH(Q) CONTROLLED

PUNCHES FOR FLAT HEAD

PUNCHES FOR FLAT HEAD SCREWS

E-SERIES(NO.1 RECESS)

Punch Code	Size	JMF		JWF		AMF		AWF		DMF DIN 965		DTF DIN 7982		DWF DIN 7997		\emptyset
		S	R	S	R	S	R	S	R	S	R	S	R	S	R	
E-04	0.75~0.85	2														12
E-03	0.85~0.95		2													12
E-02	0.95~1.05	2.2 2.3														12
E-01	1.05~1.15		2.2 2.3	2.1							2					12
E-0	1.15~1.25	2.5 2.6			2.1	2#		2#			2	2.2				12
E-1	1.25~1.35		2.5 2.6	2.4		3#	2#	3#	2#				2.2			12
E-2	1.35~1.45				2.4		3#		3#	2.5				2.5		12
E-3	1.45~1.55			2.7							2.5				2.5	12
E-4	1.55~1.65				2.7							2.9				12
E-5	1.65~1.75									3			2.9	3		12
E-6	1.75~1.85					4#		4#			3				3	12
E-7	1.85~1.95						4#		4#							12

PADRÃO PENETRAÇÃO (Q) PARA PUNÇÃO PHILIPS CABEÇA CHATA / RECESS GAGING DEPTH(Q) CONTROLLED

PUNCHES FOR FLAT HEAD

PUNCHES FOR FLAT HEAD SCREWS

E-SERIES(NO.2 RECESS)

Punch Code	Size	JMF		JWF		AMF		AWF		DMF DIN 965		DTF DIN 7982		DWF DIN 7997		Ø
		S	R	S	R	S	R	S	R	S	R	S	R	S	R	
F-1	1.16~1.26	3	3													12
F-1.5	1.30~1.40			3.1												12
F-2	1.45~1.55				3.1	5#										12
F-3	1.58~1.68	3.5					5#			3.5				3.5		12
F-4	1.65~1.75		3.5								3.5				3.5	12
F-4.5	1.75~1.85			3.5									3.5			12-14
F-5	1.87~1.97	4			3.5									3.5		12-14
F-6	2.04~2.14		4	3.8		6#				4				4		12-14
F-7	2.08~2.18						6#									12-14
F-8	2.15~2.25				3.8	7#					4	3.9			4	12-14
F-9	2.29~2.39	4.5		4.1			7#			5		4.2	3.9	4.5		12-14
F-10	2.36~2.46					8#		7#			5		4.2		4.5	12-14
F-11	2.44~2.54		4.5		4.1		8#		7#						5.0	12-14
F-12	2.54~2.64	5													5.0	12-14
F-13	2.63~2.73		5	4.5												12-14
F-14	2.74~2.84					10#		8#					4.8			12-14
F-15	2.85~2.95				4.5		10#		8#					4.8		12-14
F-16	2.94~3.04			4.8												14
F-17	3.02~3.12				4.8				9#							14
F-18	3.10~3.20									9#						14-18

PADRÃO PENETRAÇÃO (Q) PARA PUNÇÃO PHILIPS CABEÇA CHATA / RECESS GAGING DEPTH(Q) CONTROLLED

PUNCHES FOR FLAT HEAD
 PUNCHES FOR FLAT HEAD SCREWS
 E-SERIES(NO.3 NO.4 RECESS)

Punch Code	Size	JMF		JWF		AMF		AWF		DMF DIN 965		DTF DIN 7982		DTF DIN 7997		Ø
		S	R	S	R	S	R	S	R	S	R	S	R	S	R	
G-03	2.30~2.40															18
G-02	2.50~2.60															18
G-01	2.71~2.81			5.1										5.5	5.5	18
G-0	2.85~2.95	6			5.1			10#								18
G-1	3.05~3.15		6	5.5					10#	6				6		18
G-2	3.15~3.25				5.5	12#					6	5.5		7	6	18
G-3	3.30~3.40			5.8			12#						5.5		7	18
G-3.5	3.44~3.54				5.8											18
G-4	3.68~3.78			6.2		1/4	1/4	12#	12#			6.3				18-23
G-4.5	3.74~3.84				6.2								6.3			18-23
G-5	4.22~4.32			6.8	6.8			14#	14#							18-23
G-6	4.71~4.81	8	8					16#								23
G-7	4.80~4.90							16#								23
H-0	4.30~4.40			7.5						8	8			8	8	23
H-0.5	4.46~4.56				7.5											23
H-1	4.76~4.86			8	8	5/16	5/16									23
H-2	5.15~5.25							18#	18#	10	10					23-30
H-3	5.51~5.61					3/8	3/8	20#	20#							30
H-4	5.74~5.84			9.5	9.5	7/16										30
H-4.5	5.92~6.02						7/16									30
H-5	6.30~6.40					1/2	1/2	24#	24#							30

POZI | POZI CABEÇA TIPO POZI / POZI HEAD STYLES

ANSI MACHINE & TAPPING

Nominal Size	FLAT	OVAL	ROUND	PAN	TRUSS	BINDING	FILLISTER
#2	1Z-10	1Z-40	-	1Z-130	1Z-1000	1Z-630	1Z-130
#3	1Z-20	1Z-50	-	1Z-140	1Z-190	1Z-640	1Z-140
#4	1Z-30	1Z-60	1Z-440	1Z-150	1Z-1020	1Z-620	1Z-150
#5	2Z-10	2Z-70	2Z-300	2Z-200	1Z-1030	2Z-1440	2Z-3460
#6	2Z-11	2Z-80	2Z-150	2Z-210	2Z-3210	2Z-1330	2Z-210
#7	2Z-60	2Z-140	2Z-160	2Z-220	2Z-3220	-	2Z-220
#8	2Z-30	2Z-120	2Z-170	2Z-230	2Z-3230	2Z-1450	2Z-230
#10	2Z-40	2Z-130	2Z-190	2Z-250	2Z-3240	2Z-1430	2Z-250
#12	3Z-20	3Z-110	3Z-160	3Z-210	3Z-1670	3Z-960	3Z-210
1/4	3Z-30	3Z-120	3Z-190	3Z-220	3Z-1680	3Z-970	3Z-220

ANSI WOOD

Nominal Size	FLAT	OVAL	ROUND
#2	1Z-10	1Z-40	-
#3	1Z-20	1Z-50	-
#4	1Z-30	1Z-60	-
#5	2Z-10	2Z-70	2Z-300
#6	2Z-11	2Z-80	2Z-150
#7	2Z-30	2Z-90	2Z-160
#8	2Z-40	2Z-100	2Z-170
#9	2Z-50	2Z-110	-
#10	3Z-10	3Z-60	2Z-190
#12	3Z-30	3Z-80	3Z-160
1/4	3Z-40	3Z-90	3Z-170

DIN MACHINE

Nominal Size	F DIN965	O DIN966	L DIN7985
M2	EZ-2	-	-
M2.5	1Z-20	1Z-22	1Z-21
M3	1Z-540	1Z-14	1Z-23
M3.5	2Z-10	2Z-16	2Z-47
M4	2Z-48	2Z-18	2Z-35
M5	2Z-60	2Z-22	2Z-37
M6	3Z-850	3Z-14	3Z-220
M8	4Z-1060	4Z-19	4Z-19
M10	4Z-10	4Z-85	4Z-86

DIN TAPPING

Nominal Size	F DIN7982	O DIN7983	P DIN7981
2.2	1Z-10	1Z-11	1Z-130
2.9	1Z-540	1Z-13	1Z-150
3.5	2Z-48	2Z-15	2Z-210
3.9	2Z-11	2Z-17	2Z-220
4.2	2Z-60	2Z-18	2Z-230
4.8	2Z-40	2Z-21	2Z-250
5.5	3Z-11	3Z-12	3Z-210
6.3	3Z-30	3Z-15	3Z-220

DIN WOOD

Nominal Size	F DIN7997	O DIN7995	R DIN7996
2.5	1Z-540	1Z-22	1Z-130
3	1Z-30	1Z-14	1Z-150
3.5	2Z-48	2Z-16	2Z-210
4	2Z-60	2Z-18	2Z-220
4.5	2Z-76	2Z-22	2Z-230
5	2Z-75	2Z-21	2Z-250
5.5	3Z-11	3Z-12	3Z-210
6	3Z-20	3Z-14	3Z-220
7	3Z-30	3Z-17	3Z-1850
8	4Z-1060	4Z-19	-

POZI | POZI CABEÇA TIPO POZI / POZI HEAD STYLES

POZI | HEAD STYLES POZI

FLAT

Nominal Size	Q	M	Nominal Size	Q	M	Nominal Size	Q	M
EZ-2	0.92 – 1.17	2.2	2Z-2850	1.14 – 1.60	3.65	2Z-40	2.64 – 3.10	5.0
1Z-10	1.10 – 1.35	2.4	2Z-10	1.34 – 1.80	3.7	2Z-75	2.99 – 3.45	5.3
1Z-20	1.22 – 1.47	2.5	2Z-48	1.60 – 2.06	4.0	3Z-850	2.46 – 2.92	6.1
1Z-540	1.48 – 1.73	2.8	2Z-11	1.85 – 2.31	4.2	3Z-11	2.72 – 3.18	6.3
1Z-30	1.76 – 2.01	3.1	2Z-60	2.05 – 2.51	4.4	3Z-20	2.99 – 3.45	6.6
-	-	-	2Z-30	2.50 – 2.72	4.7	3Z-30	3.38 – 3.84	7.0
-	-	-	2Z-76	2.46 – 2.92	4.8	-	-	-

PAN

Nominal Size	D	Q	M	Nominal Size	D	Q	M	Nominal Size	D	Q	M
1Z-130	4.6	1.10 – 1.35	2.4	2Z-200	6.7	1.27 – 1.72	3.8	3Z-210	11.32	2.51 – 2.97	6.2
1Z-140	4.7 – 5	1.18 – 1.59	2.7	2Z-210	7.25	1.47 – 1.93	3.9	3Z-220	13	3.02 – 3.48	6.7
1Z-150	6.0	1.58 – 1.83	2.9	2Z-220	7.84	1.70 – 2.16	4.1	3Z-1850	14	3.32 – 3.78	7.0
-	-	-	-	2Z-230	8.55	1.88 – 2.34	4.3	4Z-90	-	3.71 – 4.17	8.5
-	-	-	-	2Z-43	9	2.07 – 2.53	4.5	-	-	-	-
-	-	-	-	2Z-250	10	2.28 – 2.74	4.7	-	-	-	-

POZI | POZI CABEÇA TIPO POZI / POZI HEAD STYLES

POZI | HEAD STYLES POZI

DIN 7985 (DMLZ)

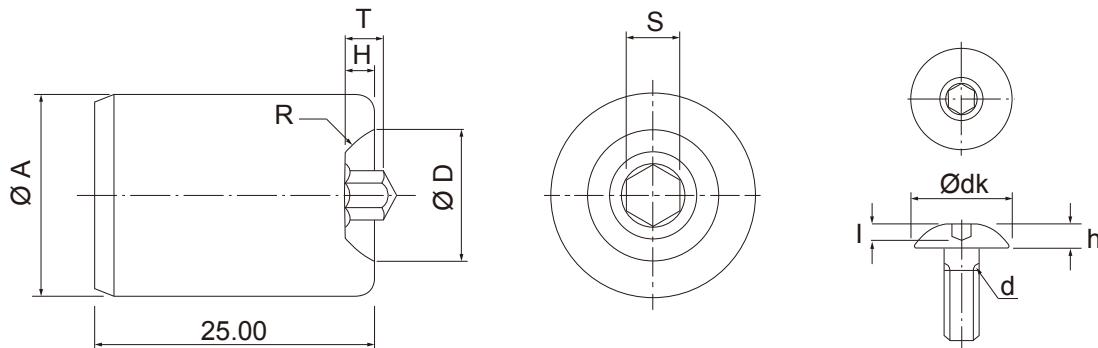
Nominal Size	D	Q	M	Nominal Size	D	Q	M	Nominal Size	D	Q	M
M2	3.7–4	1.10–1.35	2.4	2Z-47	6.64–7	1.65–2.11	4.0	3Z-220	11.57–12	3.02–3.48	6.7
1Z-21	4.7–5	1.27–1.52	2.6	2Z-35	7.64–8	1.90–2.36	4.3	M8	15.57–16	4.06–4.52	8.8
1Z-23	5.7–6	1.68–1.93	3.0	2Z-37	9.64–10	2.64–3.11	5.0	-	-	-	-

OVAL

Nominal Size	D	Q	M	Nominal Size	D	Q	M	Nominal Size	D	Q	M
1Z-40	4.1	1.50–1.57	2.78	2Z-80	6.8	2.21–2.36	4.42	2Z-21	9.7	2.69–3.15	5.10
1Z-11	4.4	1.10–1.35	2.40	2Z-15	6.9	1.88–2.34	4.30	PZ7995 5	9.7	3.19–3.30	5.30
1Z-22	4.7	1.50–1.75	2.80	2Z-140	7.4	2.36–2.51	4.57	3Z-110	10.7	3.27–3.42	6.76
1Z-50	4.8	1.80–1.87	3.08	2Z-18	7.5	2.26–2.72	4.50	3Z-12	10.7	2.92–3.38	6.60
1Z-60	5.5	2.11–2.18	3.39	2Z-120	8.1	2.59–2.74	4.80	PZ7995 5.5	10.7	3.22–3.38	6.72
1Z-14	5.6	1.83–2.08	3.10	PZ7983 4.2	8.2	2.56–2.72	4.78	3Z-14	11.0	3.30–3.76	7.00
1Z-13	5.6	1.83–2.08	3.10	PZ7995 4.5	8.6	3.0–3.15	5.21	3Z-120	12.4	3.78–3.93	7.27
2Z-70	6.1	1.72–1.87	3.93	2Z-22	9.2	2.89–3.35	5.30	3Z-15	12.6	3.40–3.86	7.10
2Z-16	6.5	1.93–2.39	4.20	2Z-130	9.4	3.02–3.17	5.23	3Z-17	13.0	4.34–4.80	8.00

CABEÇA TIPO HEXAGONAL / HEXAGON HEAD STYLES

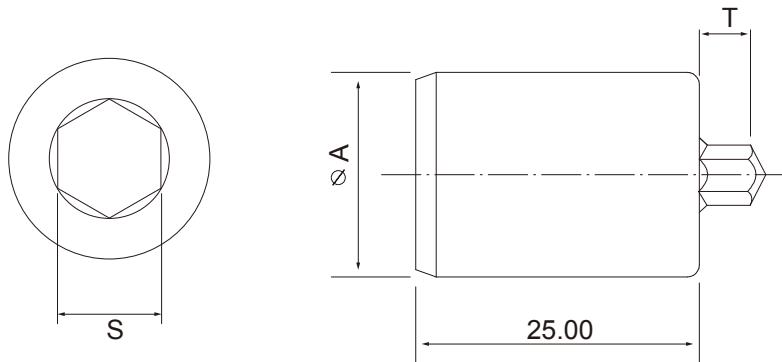
6HABH | HEX.ANSI BUTTON HEAD



Nominal Size	S HEXAGON	Punch size						Screw Size				
		S	D ^{+0.05} -0.05	H ^{±0.05}	R REF	T ^{+0.1} -0	A	dk max.	dk min.	h max.	h min.	l min.
#2	0.05"	1.28~1.3	4.15	0.80	2.70	0.80	12	4.17	3.91	1.17	0.97	0.71
#4	1/16"	1.6~1.62	5.4	1.10	3.40	1.00	12	5.41	5.11	1.50	1.30	0.89
#6	5/64"	1.99~2.01	6.65	1.40	4.10	1.20	12	6.65	6.35	1.85	1.60	1.12
#8	3/32"	2.39~2.42	7.9	1.7	4.80	1.40	14	7.92	7.57	2.21	1.96	1.32
#10	1/8"	3.2~3.23	9.15	1.95	5.40	1.90	14	9.17	8.81	2.57	2.31	1.78
1/4	5/32"	4.0~4.03	11.1	2.45	6.20	2.30	18	11.10	10.64	3.35	3.10	2.21
5/16	3/16"	4.8~4.83	13.9	3.25	7.80	2.80	23	13.90	13.39	4.22	3.86	2.67
3/8	7/32"	5.6~5.64	16.55	4.1	9.40	3.20	30	16.67	16.15	5.05	4.70	3.10

CABEÇA TIPO HEXAGONAL / HEXAGON HEAD STYLES

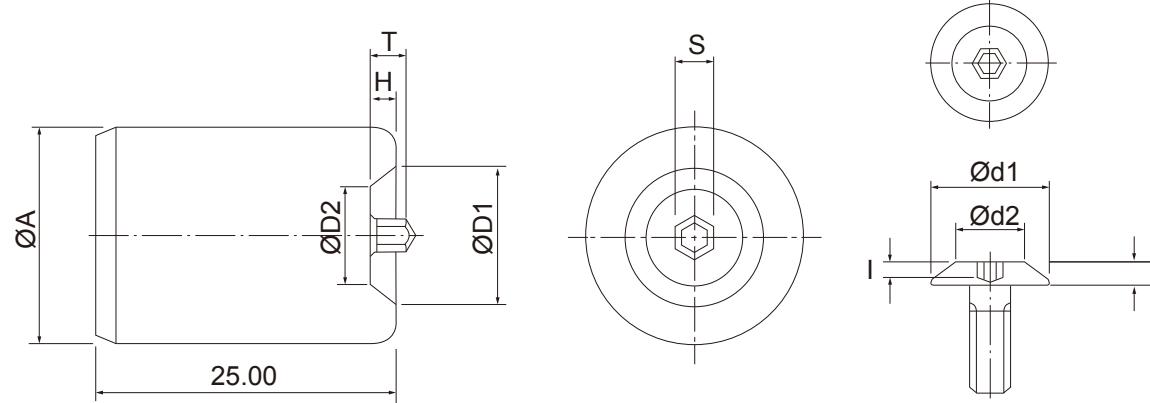
► 6HAMF | HEX. ANSI HEAD CAP SCREW



Nominal Size	S	T	A
6HAMF-2#	1.28~1.30	1.05~1.15	12
6HAMF-4#	1.60~1.62	1.50~1.60	12
6HAMF-6#	1.99~2.01	1.85~1.95	12
6HAMF-8#	2.40~2.43	2.15~2.25	14
6HAMF-10#	3.20~3.23	2.40~2.50	14
6HAMF-1/4	4.00~4.03	3.05~3.15	18
6HAMF-5/16	4.80~4.83	3.65~3.75	23
6HAMF-3/8	5.60~5.64	4.25~4.35	30
6HAMF-7/16	6.39~6.43	4.25~4.35	30
6HAMF-1/2	7.98~8.03	4.55~4.65	30

CABEÇA TIPO HEXAGONAL / HEXAGON HEAD STYLES

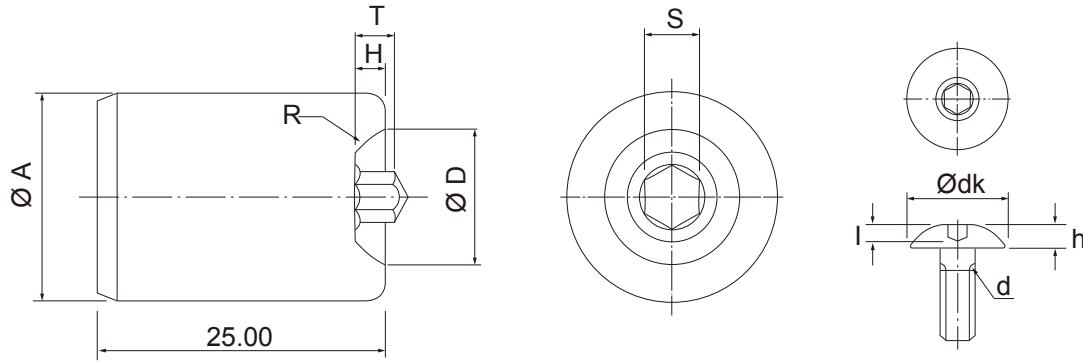
6HDMC | HEX.PF.HEAD



Nominal Size	Punch Size						Screw Size			
	D ₁ MAX.	D ₂ ±0.10	H ±0.10	S _{HEX}	T MIN.	A	d ₁ max.	d ₂ ±0.10	h min.	I min.
6HDMC-7 M6	10.30	7.00	1.00	4.00	2.50	14	10.00	7.00	2.60	2.30
6HDMC-8 M6	11.30	8.00	1.00	4.00	2.50	18	11.00	8.00	2.60	2.30
6HDMC-9 M6	12.30	9.00	1.00	4.00	2.50	18	12.00	9.00	2.60	2.30
6HDMC-10 M6	13.30	10.00	1.00	4.00	2.50	18	13.00	10.00	3.00	2.30
6HDMC-11 M6	14.30	11.00	1.00	4.00	2.50	18	14.00	11.00	3.00	2.30
6HDMC-12 M6	15.50	12.00	1.20	4.00	2.50	18	15.00	12.00	3.00	2.30
6HDMC-13 M8	16.50	13.00	1.20	5.00	3.00	23	16.00	13.00	3.40	2.80
6HDMC-14 M8	17.50	14.00	1.20	5.00	3.00	23	17.00	14.00	3.40	2.80
6HDMC-15 M10	18.50	15.00	1.20	6.00	3.30	23	18.00	15.00	3.80	3.10

CABEÇA TIPO HEXAGONAL / HEXAGON HEAD STYLES

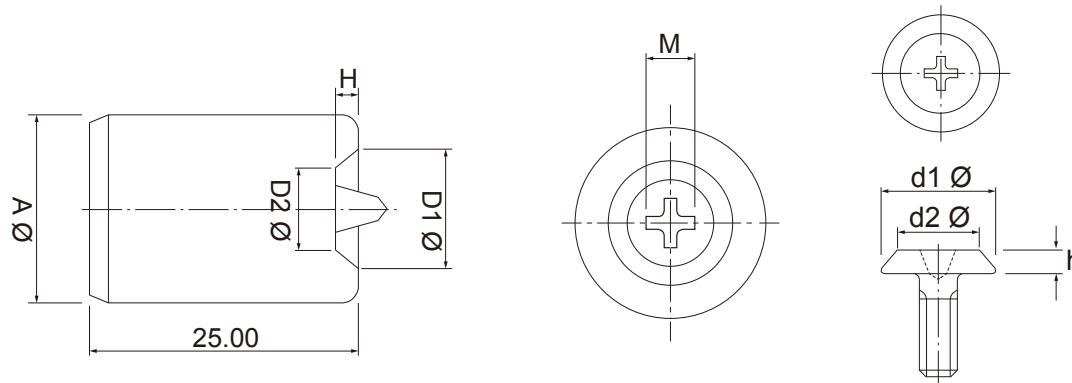
6HBSB | HEX.ISO 7380 BUTTON HEAD



Nominal Size	Punch Size						Screw Size				
	S	D ^{+0.10} ₋₀	H ⁺⁰ _{-0.10}	R REF	T ^{+0.1} ₋₀	A	dK max.	dK min.	h max.	h min.	I min.
M2.0	1.30	3.60	0.96	1.90	0.75	12	3.50	3.30	1.30	1.16	0.60
M2.5	1.50	4.80	1.16	2.60	0.95	12	4.70	4.50	1.50	1.36	0.80
M3.0	2.04~2.06	5.7	1.20	3.30	1.15	12	5.70	5.40	1.65	1.40	1.04
M4.0	2.54~2.57	7.6	1.75	4.50	1.4	14	7.60	7.24	2.20	1.95	1.30
M5.0	3.06~3.09	9.5	2.3	5.50	1.65	14	9.50	9.14	2.75	2.50	1.56
M6.0	4.06~4.1	10.5	2.8	5.80	2.2	18	10.50	10.07	3.30	3.00	2.08
M8.0	5.06~5.1	14.0	3.9	7.60	2.7	23	14.00	13.57	4.40	4.10	2.60
M10.0	6.06~6.11	17.5	4.70	9.60	3.25	30	17.50	17.07	5.50	5.20	3.12

CABEÇA TIPO HEXAGONAL / PHILLIPS HEAD STYLES

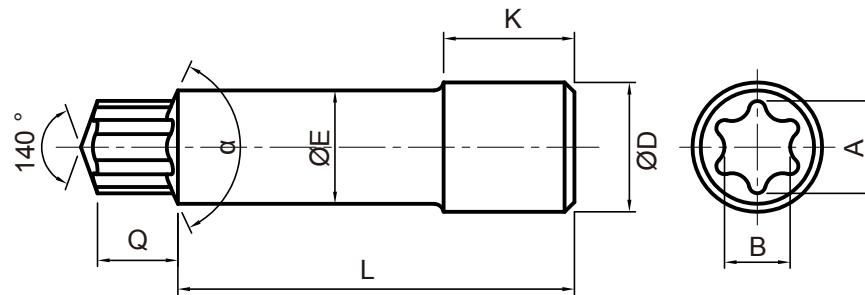
DMC | PHILLIPS PF. HEAD



Nominal Size	Punch Size					Driver Size	Screw Size		
	M MAX.	D1 MAX.	D2 ±0.10	H ±0.10	A		d1 max.	d2 ±0.10	h min.
M40	4.40	10.30	7.00	1.00	14	PH #2	10.00	7.00	2.60
M45	4.80	11.30	8.00	1.00	18		11.00	8.00	2.60
M45	4.80	12.30	9.00	1.00	18		12.00	9.00	2.60
M50	5.00	13.30	10.00	1.00	18		13.00	10.00	2.60
M55	6.00	13.30	10.00	1.00	18		13.00	10.00	3.00
M58	6.20	14.30	11.00	1.00	18		14.00	11.00	3.00
M58	6.20	15.50	12.00	1.20	18		15.00	12.00	3.00
M60	6.60	16.50	13.00	1.20	23		16.00	13.00	3.40
M60	6.60	17.50	14.00	1.20	23		17.00	14.00	3.40
M80	7.00	18.50	15.00	1.20	23		18.00	15.00	3.80

CABEÇA TIPO HEXALOBULAR / SIX-LOBE HEAD STYLES

SIX - LOBE |



SIX-LOBE (TX)				$\text{ØE}^{+0}_{-0,01}$	$\text{ØD}^{+0}_{-0,10}$	$L^{+0}_{-0,05}$	$K^{+0}_{-0,20}$	α	Punch Code		
Nº	A	B	Q								
T6	1,77	1,29	1,04	1,87	2,18	9,55	150°	150°	T6 - 250		
T8	2,41	1,75	1,29	2,51	2,81				T8 - 252		
T10	2,82	2,05	1,52	2,92	3,27	16,05			T10 - 252		
T15	3,35	2,43	1,77	3,45	3,78				T15 - 252		
T20	3,93	2,84	2,03	4,03	4,64	4,8			T20 - 252		
T25	4,52	3,27	2,28	4,62	5,18				T25 - 252		
T27	5,08	3,65	2,66	5,28	5,71	19,35			T27 - 252		
T30	5,61	4,06	2,66	5,71	6,45				T30 - 252		
T40	6,78	4,87	3,17	6,88	7,62	26,65			T40 - 252		
T45	7,95	5,68	3,55	6,38	9,49				T45 - 252		
T50	8,46	6,50	4,47	9,49	10,59				T50 - 252		
T55	11,35	8,07	5,08	11,91	13,08				T55 - 252		