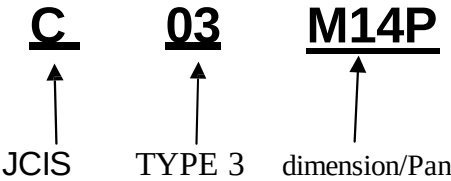
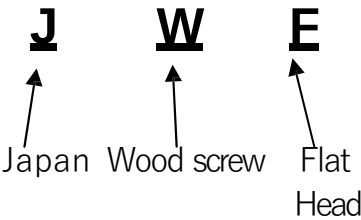
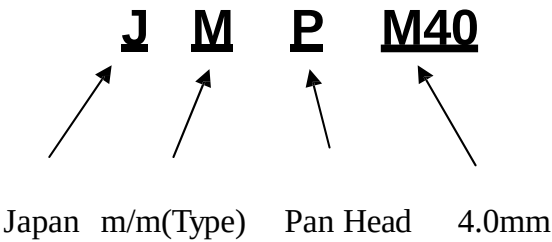


BOLTART TOOLING PUNCH



CODE NUMBER

Japanese specification



C01 M14P

Head Type

JIS(JIS specification) :

- JSS JMP
- JHS JMP
- ISO JMP

ANSI(ANSI Secification)

- AMP 8
- ASS AMP
- AHS AMP

DIN(DIN Secification) :

- DPH
- DPZ
- DSS
- DHS
- DZS

RECESS HEADER PUNCH

JIS



PAN HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	ISO MARK	DIA.
M2	JMP M20	JHS JMP M20	JSS JMP M20		12
(M2.2)	JMP M22	JHS JMP M22	JSS JMP M22		12
(M2.3)	JMP M23	JHS JMP M23	JSS JMP M23		12
M2.5	JMP M25	JHS JMP M25	JSS JMP M25		12
(M2.6)	JMP M26	JHS JMP M26	JSS JMP M26		12
M3	JMP M30	JHS JMP M30	JSS JMP M30	(ISO JMP M30) (IHS JMP M30)	12/14
(M3.5)	JMP M35	JHS JMP M35	JSS JMP M35		12/14
M4	JMP M40	JHS JMP M40	JSS JMP M40	(ISO JMP M40) (IHS JMP M40)	12/14
(M4.5)	JMP M45	JHS JMP M45	JSS JMP M45		14/18
M5	JMP M50	JHS JMP M50	JSS JMP M50	(ISO JMP M50) (IHS JMP M50)	14/18
M6	JMP M60	JHS JMP M60	JSS JMP M60		18
M8	JMP M80	JHS JMP M80	JSS JMP M80		23



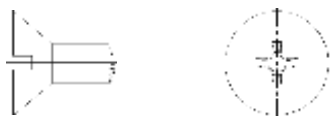
OVAL HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	ISO MARK	DIA.
M2	JMO M20	JHS JMO M20	JSS JMO M20		12
(M2.2)	JMO M22	JHS JMO M22	JSS JMO M22		12
(M2.3)	JMO M23	JHS JMO M23	JSS JMO M23		12
M2.5	JMO M25	JHS JMO M25	JSS JMO M25		12
(M2.6)	JMO M26	JHS JMO M26	JSS JMO M26		12
M3	JMO M30	JHS JMO M30	JSS JMO M30	(ISO JMO M30) (IHS JMO M30)	12/14
(M3.5)	JMO M35	JHS JMO M35	JSS JMO M35		12/14
M4	JMO M40	JHS JMO M40	JSS JMO M40	(ISO JMO M40) (IHS JMO M40)	12/14
(M4.5)	JMO M45	JHS JMO M45	JSS JMO M45		14/18
M5	JMO M50	JHS JMO M50	JSS JMO M50	(ISO JMO M50) (IHS JMO M50)	14/18
M6	JMO M60	JHS JMO M60	JSS JMO M60		18
M8	JMO M80	JHS JMO M80	JSS JMO M80		23

RECESS HEADER PUNCH

JIS



FLAT HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	ISO MARK	DIA.
M2	JMF M20	JHS JMF M20	JSS JMF M20		12
(M2.2)	JMF M22	JHS JMF M22	JSS JMF M22		12
(M2.3)	JMF M23	JHS JMF M23	JSS JMF M23		12
M2.5	JMF M25	JHS JMF M25	JSS JMF M25		12
(M2.6)	JMF M26	JHS JMF M26	JSS JMF M26		12
M3	JMF M30	JHS JMF M30	JSS JMF M30	ISO JMF M30	12/14
(M3.5)	JMF M35	JHS JMF M35	JSS JMF M35		12/14
M4	JMF M40	JHS JMF M40	JSS JMF M40	ISO JMF M40	12/14
(M4.5)	JMF M45	JHS JMF M45	JSS JMF M45		14/18
M5	JMF M50	JHS JMF M50	JSS JMF M50	ISO JMF M50	14/18
M6	JMF M60	JHS JMF M60	JSS JMF M60		18
M8	JMF M80	JHS JMF M80	JSS JMF M80		23



TRUSS HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	ISO MARK	DIA.
M2	JMT M20	JHS JMT M20	JSS JMT M20		12
(M2.2)	JMT M22	JHS JMT M22	JSS JMT M22		12
(M2.3)	JMT M23	JHS JMT M23	JSS JMT M23		12
M2.5	JMT M25	JHS JMT M25	JSS JMT M25		12
(M2.6)	JMT M26	JHS JMT M26	JSS JMT M26		12
M3	JMT M30	JHS JMT M30	JSS JMT M30	(ISO JMT M30) (IHS JMT M30)	12/14
(M3.5)	JMT M35	JHS JMT M35	JSS JMT M35		12/14
M4	JMT M40	JHS JMT M40	JSS JMT M40	(ISO JMT M40) (IHS JMT M40)	12/14
(M4.5)	JMT M45	JHS JMT M45	JSS JMT M45		14/18
M5	JMT M50	JHS JMT M50	JSS JMT M50	(ISO JMT M50) (IHS JMT M50)	14/18
M6	JMT M60	JHS JMT M60	JSS JMT M60		18
M8	JMT M80	JHS JMT M80	JSS JMT M80		23

RECESS HEADER PUNCH

JIS



ROUND HEAD

PUNCH CODES

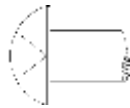
SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	ISO MARK	DIA.
M2	JMR M20	JHS JMR M20	JSS JMR M20		12
(M2.2)	JMR M22	JHS JMR M22	JSS JMR M22		12
(M2.3)	JMR M23	JHS JMR M23	JSS JMR M23		12
M2.5	JMR M25	JHS JMR M25	JSS JMR M25		12
(M2.6)	JMR M26	JHS JMR M26	JSS JMR M26		12
M3	JMR M30	JHS JMR M30	JSS JMR M30	(ISO JMR M30) (IHS JMR M30)	12/14
(M3.5)	JMR M35	JHS JMR M35	JSS JMR M35		12/14
M4	JMR M40	JHS JMR M40	JSS JMR M40	(ISO JMR M40) (IHS JMR M40)	12/14
(M4.5)	JMR M45	JHS JMR M45	JSS JMR M45		14/18
M5	JMR M50	JHS JMR M50	JSS JMR M50	(ISO JMR M50) (IHS JMR M50)	14/18
M6	JMR M60	JHS JMR M60	JSS JMR M60		18
M8	JMR M80	JHS JMR M80	JSS JMR M80		23



BINDING HEAD

PUNCH CODES

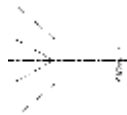
SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	ISO MARK	DIA.
M2	JMB M20	JHS JMB M20	JSS JMB M20		12
(M2.2)	JMB M22	JHS JMB M22	JSS JMB M22		12
(M2.3)	JMB M23	JHS JMB M23	JSS JMB M23		12
M2.5	JMB M25	JHS JMB M25	JSS JMB M25		12
(M2.6)	JMB M26	JHS JMB M26	JSS JMB M26		12
M3	JMB M30	JHS JMB M30	JSS JMB M30	(ISO JMB M30) (IHS JMB M30)	12/14
(M3.5)	JMB M35	JHS JMB M35	JSS JMB M35		12/14
M4	JMB M40	JHS JMB M40	JSS JMB M40	(ISO JMB M40) (IHS JMB M40)	12/14
(M4.5)	JMB M45	JHS JMB M45	JSS JMB M45		14/18
M5	JMB M50	JHS JMB M50	JSS JMB M50	(ISO JMB M50) (IHS JMB M50)	14/18
M6	JMB M60	JHS JMB M60	JSS JMB M60		18
M8	JMB M80	JHS JMB M80	JSS JMB M80		23



BRAZIER HEAD PUNCH CODE

SCREW SIZE	PHILLIPS	DIA.
M2	JMV M20	12
M2.5	JMV M25	12
M3	JMV M30	12/14
M4	JMV M40	12/14
M4.5	JMV M45	14/18
M5	JMV M50	18
M6	JMV M60	18

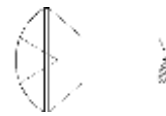
JIS WOOD SCREW



FLAT HEAD
PUNCH CODE



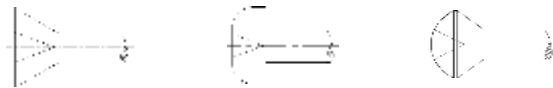
ROUND HEAD
PUNCH CODE



OVAL HEAD
PUNCH CODE

SCREW SIZE	PHILLIPS	PHILLIPS	PHILLIPS	DIA.
M2.1	JWF W21	JWR W21	JWO W21	12
M2.4	JWF W24	JWR W24	JWO W24	12
M2.7	JWF W27	JWR W27	JWO W27	12
M3.1	JWF W31	JWR W31	JWO W31	12
M3.5	JWF W35	JWR W35	JWO W35	12/14
M3.8	JWF W38	JWR W38	JWO W38	12/14
M4.1	JWF W41	JWR W41	JWO W41	14
M4.5	JWF W45	JWR W45	JWO W45	14
M4.8	JWF W48	JWR W48	JWO W48	14/18
M5.1	JWF W51	JWR W51	JWO W51	18
M5.5	JWF W55	JWR W55	JWO W55	18
M5.8	JWF W58	JWR W58	JWO W58	18
M6.2	JWF W62	JWR W62	JWO W62	18

JCIS (Japan Camera Industrial Standard)



TYPE	SCREW SIZE	FLAT HAED	PAN HEAD	OVAL HEAD	DIA.
		PUNCH CODE	PUNCH CODE	PUNCH CODE	
TYPE 1	M1.4	C01M14F	C01M14P	C01M14O	12
	M1.7	C01M17F	C01M17P	C01M17O	12
	M2.0	C01M20F	C01M20P	C01M20O	12
	M2.3	C01M23F	C01M23P	C01M23O	12
	M2.6	C01M26F	C01M26P	C01M26O	12
TYPE 3	M1.4	C03M14F	C03M14P	C03M14O	12
	M1.7	C03M17F	C03M17P	C03M17O	12
	M2.0	C03M20F	C03M20P	C03M20O	12
	M2.3	C03M23F	C03M23P	C03M23O	12
	M2.6	C03M26F	C03M26P	C03M26O	12

RECESS HEADER PUNCH

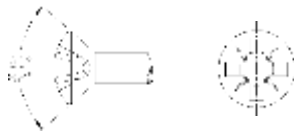
ANSI



PAN HEAD

PUNCH CODES

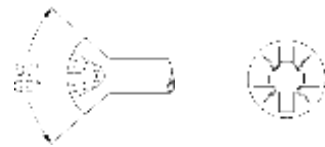
SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	POZIDRIV	POZIDRIV	DIA.
#0	AMP #0	AHS AMP #0	ASS AMP #0			12
#1	AMP #1	AHS AMP #1	ASS AMP #1			12
#2	AMP #2	AHS AMP #2	ASS AMP #2	1Z-130	1Z-1540	12
#3	AMP #3	AHS AMP #3	ASS AMP #3	1Z-140	1Z-1550	12
#4	AMP #4	AHS AMP #4	ASS AMP #4	1Z-150	1Z-1560	12
#5	AMP #5	AHS AMP #5	ASS AMP #5	2Z-200	2Z-5510	12
#6	AMP #6	AHS AMP #6	ASS AMP #6	2Z-210	2Z-5520	12
#7	AMP #7	AHS AMP #7	ASS AMP #7	2Z-220	2Z-5530	12/14
#8	AMP #8	AHS AMP #8	ASS AMP #8	2Z-230	2Z-5540	12/14
#10	AMP #10	AHS AMP #10	ASS AMP #10	2Z-250	2Z-5550	14/18
#12	AMP #12	AHS AMP #12	ASS AMP #12	3Z-210	3Z-2360	18
#14	AMP #14	AHS AMP #14	ASS AMP #14	3Z-2260		18
#1/4	AMP #1/4	AHS AMP #1/4	ASS AMP #1/4	3Z-220	3Z-2370	18
#16	AMP #16	AHS AMP #16	ASS AMP #16	3Z-1850		23/25
#18	AMP #18	AHS AMP #18	ASS AMP #18	4Z-2010		23/25
#5/16	AMP #5/16	AHS AMP #5/16	ASS AMP #5/16	4Z-90	4Z-2670	25/30
#20				4Z-90		
#24				4Z-260		
#3/8		AHS AMP #3/8	ASS AMP #3/8	4Z-260		25/30
#7/16				4Z-270		
#1/2				4Z-270		



OVAL HEAD

PUNCH CODES

MACHINE & METAL SCREW	TYPE A SCREW	OVAL HEAD 82° UNDERCUT (PZ)	DIA.
#2	#2	1Z-40	12
#3	#3	1Z-50	12
#4	#4	1Z-60	12
#5	#5	2Z-70	12
#6	#6	2Z-80	12
#7	#7	2Z-140	14
#8	#8	2Z-120	14
#10	#10	2Z-130	14
#12	#12	3Z-110	18
	#14	3Z-130	18
#1/4		3Z-120	18
	#16	3Z-1420	18/23
	#18	4Z-1450	23
#5/16		4Z-2540	
#3/8		4Z-2550	
	#20	4Z-130	
#7/16		4Z-2560	
	#24	4Z-70	
#1/2		4Z-2570	



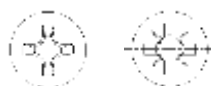
OVAL HEAD

PUNCH CODES

SCREW SIZE	HEAD SIZE	OVAL TRIM HEAD 82°(PZ)	DIA.
#4	#3	1Z-50	12
#5	#4	1Z-60	12
#6	#4	1Z-60	12
#6	#5	2Z-70	12/14
#8	#5	2Z-70	12/14
#8	#6	2Z-80	14
#10	#8	2Z-120	14
#12	#8	2Z-120	14
#12	#10	2Z-130	14/18
#1/4	#10	2Z-130	14/18
#1/4	#12	3Z-110	18
#5/16	#12	3Z-110	18
#5/16	#1/4	3Z-120	23
#3/8	#5/16	4Z-130	

RECESS HEADER PUNCH

ANSI



OVAL HEAD

PUNCH CODES

SCREW SIZE	OVAL HEAD 100° PHILLIPS	OVAL HEAD 100° (PZ)	DIA.
#0	AMO #0		12
#1	AMO #1		12
#2	AMO #2	1Z-820	12
#3	AMO #3	1Z-830	12
#4	AMO #4	1Z-840	12
#5	AMO #5	2Z-70	12
#6	AMO #6	2Z-80	12
#7	AMO #7	2Z-140	14
#8	AMO #8	2Z-120	14
#9		2Z-2030	
#10	AMO #10	2Z-130	14/18
#12	AMO #12	3Z-110	
#14	AMO #14	3Z-130	
#1/4	AMO #1/4	3Z-120	18
#16	AMO #16	3Z-1420	18
#5/16	AMO #5/16		
#18	AMO #18	4Z-60	18/23
#5/16		4Z-130	
#3/8		4Z-100	



FILLISTER HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	DIA.
#0	AML #0	12
#1	AML #1	12
#2	AML #2	12
#3	AML #3	12
#4	AML #4	12
#5	AML #5	12
#6	AML #6	12/14
#7	AML #7	12/14
#8	AML #8	12/14
#10	AML #10	14
#12	AML #12	18
#14	AML #14	
#1/4	AML #1/4	18
#5/16	AML #1/5	23



FLAT HEAD

PUNCH CODES

CUT THREAD WOOD SCREW	MACHINE & METAL SCREW	SELF-TAPPING TYPE A & ROLLED WOOD SCREW	FLAT HEAD 82° (PHILLIPS)	FLAT HEAD 82° UNDERCUT (PHILLIPS)	FLAT HEAD 100° (PHILLIPS)	FLAT TRIM HEAD (PHILLIPS)	DIA.
#2	#2	#2	AMF #2	AUF #2	ADF #2	ATF #2	12
#3	#3	#3	AMF #3	AUF #3	ADF #3	ATF #3	12
#4	#4	#4	AMF #4	AUF #4	ADF #4	ATF #4	12
#5	#5	#5	AMF #5	AUF #5	ADF #5	ATF #5	12
#6	#6	#6	AMF #6	AUF #6	ADF #6	ATF #6	12/14
	#7	#7	AMF #7	AUF #7	ADF #7	ATF #7	12/14
#7	#8	#8	AMF #8	AUF #8	ADF #8	ATF #8	12/14
#8	#10	#10	AMF #10	AUF #10	ADF #10	ATF #10	14
#9							
#10							
	#12	#12	AMF #12	AUF #12	ADF #12	ATF #12	18
#12	#1/4	#14	AMF #1/4	AUF #1/4	ADF #1/4	ATF #1/4	18
#14		#16					
#16							
	#5/16	#18	AMF #5/16	AUF #5/16	ADF #5/16	ATF #5/16	23
#18		#20					
#20	#3/8	#24					
	#7/16						
#24	#1/2						

RECESS HEADER PUNCH

ANSI



FLAT HEAD

PUNCH CODE

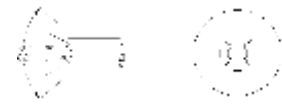
CUT THREAD WOOD SCREW	MACHINE & METAL SCREW	SELF-TAPPING TYPE A & ROLLED WOOD SCREW	FLAT HEAD 82° & 90° COUNTERSUNK	DIA.
#2	#2	#2	1Z-10	12
#3	#3	#3	1Z-20	12
#4	#4	#4	1Z-30	12
#5	#5	#5	2Z-10	12
#6	#6	#6	2Z-11	12
	#7	#7	2Z-60	12/14
#7	#8	#8	2Z-30	12/14
#8	#10	#10	2Z-40	12/14
#9			2Z-50	14
#10			3Z-10	18
	#12	#12	3Z-20	18
#12	#1/4	#14	3Z-30	18
#14		#16	3Z-40	18
#16			3Z-50	23



FLAT HEAD

PUNCH CODES

CUT THREAD WOOD SCREW	FLAT HEAD 100°	DIA.
#2	1Z-800	12
#3	1Z-10	12
#4	1Z-540	12
#5	1Z-1230	12
#6	2Z-10	12
#7	2Z-10	12
#8	2Z-1350	12
#9	2Z-11	12
#10	2Z-1360	12/14
#12		
#14	3Z-930	18
#1/4	3Z-930	18
#16	3Z-20	18
#18	3Z-30	18
#5/16	4Z-790	23
#3/8	4Z-1060	



FLAT HEAD

PUNCH COD

MACHINE & METAL SCREW	TYPE A SCREW	FLAT HEAD 82° UNDERCUT	DIA.
#2	#2	1Z-800	12
#3	#3	1Z-10	12
#4	#4	1Z-540	12
#5	#5	1Z-30	12
#6	#6	2Z-2850	12
#7	#7	2Z-10	12
#8	#8	2Z-11	12
#10	#10	2Z-30	12/14
#12	#12	3Z-1660	18
	#14	3Z-850	18
#1/4		3Z-850	18
	#16	3Z-20	18
	#18	4Z-790	23
#5/16		4Z-790	23
#3/8		4Z-40	
	#20	3PZ40-64	
#7/16		4Z-20	
	#24	4Z-40	
#1/2		4Z-50	



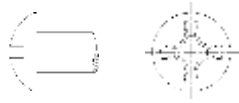
FLAT HEAD

PUNCH CODES

SCREW SIZE	HEAD SIZE	FLAT TRIM HEAD	DIA.
#4	#2	1Z-20	12
#5	#4	1Z-30	12
#6	#4	1Z-30	12
#6	#5	2Z-10	12
#8	#5	2Z-1340	12
#8	#6	2Z-60	12
#10	#8	2Z-30	12
#12	#8	2Z-2540	12
#12	#10	2Z-40	12/14
#1/4	#10	2Z-40	12/14
#1/4	#12	3Z-20	18
#5/16	#12	3Z-30	18
#5/16	#1/4	3Z-30	18

RECESS HEADER PUNCH

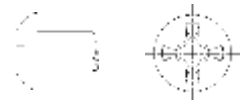
ANSI



TRUSS HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	DIA.
#0	AMT #0	AHS AMT #0	ASS AMT #0	12
#1	AMT #1	AHS AMT #1	ASS AMT #1	12
#2	AMT #2	AHS AMT #2	ASS AMT #2	12
#3	AMT #3	AHS AMT #3	ASS AMT #3	12
#4	AMT #4	AHS AMT #4	ASS AMT #4	12
#5	AMT #5	AHS AMT #5	ASS AMT #5	12
#6	AMT #6	AHS AMT #6	ASS AMT #6	12/14
#7	AMT #7	AHS AMT #7	ASS AMT #7	12/14
#8	AMT #8	AHS AMT #8	ASS AMT #8	14
#9	AMT #9	AHS AMT #9		
#10	AMT #10	AHS AMT #10	ASS AMT #10	18
#12	AMT #12	AHS AMT #12	ASS AMT #12	18
#14	AMT #14	AHS AMT #14		23
#1/4	AMT #1/4	AHS AMT #1/4	ASS AMT #1/4	23
#5/16	AMT #5/16	AHS AMT #5/16	ASS AMT #5/16	23
			ASS AMT #3/8	25/30



TRUSS FLAT TOP

PUNCH CODES

SCREW SIZE	PHILLIPS	POZIDRIV	DIA.
#2	AMD #2	3PZ10-100	12
#3	AMD #3	3PZ10-101	12
#4	AMD #4	3PZ10-102	12
#5	AMD #5	3PZ10-103	12
#6(9/16)	AMD #6-1	3PZ20-321	12/14
#6(7/16)	AMD #6-8	3PZ20-338	12/14
#7	AMD #7	3PZ20-322	14
#8	AMD #8	3PZ20-323	14
#10(7/8)	AMD #10-4	3PZ20-324	14
#10(3/4)	AMD #10-9	3PZ20-339	14
#12	AMD #12	3PZ30-167	18
#14(7/8)	AMD #14-7	3PZ30-227	18
#14(1)	AMD #14-8	3PZ30-228	23
#1/4(7/8)	AMD #1/4-8	3PZ30-168	23
#1/4(1)	AMD #1/4-0	3PZ30-180	23



ROUND HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS(DOUBLE)	PHILLIPS COMBI	STRUCK SLOT	DIA.
#0	AMR #0	AHS AMR #0	ASS AMR #0	12
#1	AMR #1	AHS AMR #1	ASS AMR #1	12
#2	AMR #2	AHS AMR #2	ASS AMR #2	12
#3	AMR #3	AHS AMR #3	ASS AMR #3	12
#4	AMR #4	AHS AMR #4	ASS AMR #4	12
#5	AMR #5	AHS AMR #5	ASS AMR #5	12
#6	AMR #6	AHS AMR #6	ASS AMR #6	12/14
#7	AMR #7	AHS AMR #7	ASS AMR #7	14
#8	AMR #8	AHS AMR #8	ASS AMR #8	14
#10	AMR #10	AHS AMR #10	ASS AMR #10	14/18
#12	AMR #12	AHS AMR #12	ASS AMR #12	18
#14	AMR #14	AHS AMR #14	ASS AMR #14	
#1/4	AMR #1/4	AHS AMR #1/4	ASS AMR #1/4	18/23
#5/16	AMR #5/16	AHS AMR #5/16	ASS AMR #5/16	23
#3/8		AHS AMR #3/8	ASS AMR #3/8	

RECESS HEADER PUNCH

ANSI



BINDING HEAD

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	STRUCK SLOT	DIA.
#0	AMB #0	AHS AMB #0	ASS AMB #0	12
#1	AMB #1	AHS AMB #1	ASS AMB #1	12
#2	AMB #2	AHS AMB #2	ASS AMB #2	12
#3	AMB #3	AHS AMB #3	ASS AMB #3	12
#4	AMB #4	AHS AMB #4	ASS AMB #4	12
#5	AMB #5	AHS AMB #5	ASS AMB #5	12
#6	AMB #6	AHS AMB #6	ASS AMB #6	12/14
#7		AHS AMB #7	ASS AMB #7	14
#8	AMB #8	AHS AMB #8	ASS AMB #8	14
#10	AMB #10	AHS AMB #10	ASS AMB #10	18
#12	AMB #12	AHS AMB #12	ASS AMB #12	23
#14	AMB #14			
#1/4	AMB #1/4	AHS AMB #1/4	ASS AMB #1/4	23
#5/16		AHS AMB #5/6	ASS AMB #5/6	23

BINDING HEAD

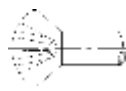
PUNCH CODES

SCREW SIZE	POZIDRIV	DIA.
#2	3PZ10-63	12
#3	3PZ10-64	12
#4	3PZ10-62	12
#5	3PZ20-144	12
#6	3PZ20-133	12/14
#8	3PZ20-145	12/14
#10	3PZ20-143	14/18
#12	3PZ30-96	18
#1/4	3PZ30-97	18
#5/16	3PZ40-107	23
#3/8	3PZ40-108	23

ANSI WOOD SCREW



FLAT HEAD



OVAL HEAD

PUNCH CODE

PUNCH CODE

SCREW SIZE	PHILLIPS	PHILLIPS	DIA.
#0	AWF #0	AWO #0	12
#1	AWF #1	AWO #1	12
#2	AWF #2	AWO #2	12
#3	AWF #3	AWO #3	12
#4	AWF #4	AWO #4	12
#5	AWF #5	AWO #5	12
#6	AWF #6	AWO #6	12/14
#7	AWF #7	AWO #7	12/14
#8	AWF #8	AWO #8	14
#9	AWF #9	AWO #9	14
#10	AWF #10	AWO #10	14/18
#12	AWF #12	AWO #12	18
#14	AWF #14	AWO #14	18
#16	AWF #16	AWO #16	18



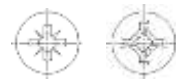
ROUND HEAD(DOUBLER)

PUNCH CODE

SCREW SIZE	PHILLIPS	SLOT	DIA.
#0	AWR #0	ASS AWR #0	12
#1	AWR #1	ASS AWR #1	12
#2	AWR #2	ASS AWR #2	12
#3	AWR #3	ASS AWR #3	12
#4	AWR #4	ASS AWR #4	12
#5	AWR #5	ASS AWR #5	12
#6	AWR #6	ASS AWR #6	12
#7	AWR #7	ASS AWR #7	14
#8	AWR #8	ASS AWR #8	14
#9	AWR #9	ASS AWR #9	14/18
#10	AWR #10	ASS AWR #10	14/18
#12	AWR #12	ASS AWR #12	18
#14	AWR #14	ASS AWR #14	18/23
#16	AWR #16	ASS AWR #16	23

RECESS HEADER PUNCH

DIN



DIN 965

PUNCH CODES

DIN 966

PUNCH CODES

SCREW SIZE	PHILLIPS	POZI DRIVE	PHILLIPS	POZI DRIVE	DIA.
M2.5	DPH965 M25	DPZ965 M25	DPH966 M25	DPZ966 M25	12
M3	DPH965 M30	DPZ965 M30	DPH966 M30	DPZ966 M30	12/14
M3.5	DPH965 M35	DPZ965 M35	DPH966 M35	DPZ966 M35	12/14
M4	DPH965 M40	DPZ965 M40	DPH966 M40	DPZ966 M40	12/14
M5	DPH965 M50	DPZ965 M50	DPH966 M50	DPZ966 M50	14/18
M6	DPH965 M60	DPZ965 M60	DPH966 M60	DPZ966 M60	18
M8	DPH965 M80	DPZ965 M80	DPH966 M80	DPZ966 M80	23
M10	DPH965 M10	DPZ965 M10	DPH966 M10	DPZ966 M10	23



DIN 967

PUNCH CODES

SCREW SIZE	PHILLIPS	POZI DRIVE	DIA.
M3	DPH967 M30	DPZ967 M30	12/14
M3.5	DPH967 M35	DPZ967 M35	12/14
M4	DPH967 M40	DPZ967 M40	12/14
M5	DPH967 M50	DPZ967 M50	14/18
M6	DPH967 M60	DPZ967 M60	18
M8	DPH967 M80	DPZ967 M80	23



DIN 968

PUNCH CODES

SCREW SIZE	PHILLIPS	POZI DRIVE	DIA.
M2.9	DPH968 M29	DPZ968 M29	12/14
M3.5	DPH968 M35	DPZ968 M35	14
M3.9	DPH968 M39	DPZ968 M39	14/18
M4.2	DPH968 M42	DPZ968 M42	14/18
M4.8	DPH968 M48	DPZ968 M48	18
M5.5	DPH968 M55	DPZ968 M55	18
M6.3	DPH968 M63	DPZ968 M63	18/23



DIN 7981

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	POZI DRIVE	POZI COMBI	DIA.
M2.2	DPH7981 M22	DHS7981 M22	DPZ7981 M22	DZS7981 M22	12
M2.9	DPH7981 M29	DHS7981 M29	DPZ7981 M29	DZS7981 M29	12
M3.5	DPH7981 M35	DHS7981 M35	DPZ7981 M35	DZS7981 M35	12
M3.9	DPH7981 M39	DHS7981 M39	DPZ7981 M39	DZS7981 M39	12/14
M4.2	DPH7981 M42	DHS7981 M42	DPZ7981 M42	DZS7981 M42	14/18
M4.8	DPH7981 M48	DHS7981 M48	DPZ7981 M48	DZS7981 M48	14/18
M5.5	DPH7981 M55	DHS7981 M55	DPZ7981 M55	DZS7981 M55	18
M6.3	DPH7981 M63	DHS7981 M63	DPZ7981 M63	DZS7981 M63	18/23

RECESS HEADER PUNCH

DIN



DIN 7982			DIN 7983		
PUNCH CODES			PUNCH CODES		
SCREW SIZE	PHILLIPS	POZI DRIVE	PHILLIPS	POZI DRIVE	DIA.
M2.2	DPH7982 M22	DPZ7982 M22	DPH7983 M22	DPZ7983 M22	12
M2.9	DPH7982 M29	DPZ7982 M29	DPH7983 M29	DPZ7983 M29	12
M3.5	DPH7982 M35	DPZ7982 M35	DPH7983 M35	DPZ7983 M35	12
M3.9	DPH7982 M39	DPZ7982 M39	DPH7983 M39	DPZ7983 M39	12/14
M4.2	DPH7982 M42	DPZ7982 M42	DPH7983 M42	DPZ7983 M42	14
M4.8	DPH7982 M48	DPZ7982 M48	DPH7983 M48	DPZ7983 M48	14/18
M5.5	DPH7982 M55	DPZ7982 M55	DPH7983 M55	DPZ7983 M55	18
M6.3	DPH7982 M63	DPZ7982 M63	DPH7983 M63	DPZ7983 M63	18/23



DIN 7985

PUNCH CODES

SCREW SIZE	PHILLIPS	PHILLIPS COMBI	POZI DRIVE	POZI COMBI	DIA.
M2.5	DPH7985 M25	DHS7985 M25	DPZ7985 M25	DZS7985 M25	12
M3	DPH7985 M30	DHS7985 M30	DPZ7985 M30	DZS7985 M30	12
M3.5	DPH7985 M35	DHS7985 M35	DPZ7985 M35	DZS7985 M35	12
M4	DPH7985 M40	DHS7985 M40	DPZ7985 M40	DZS7985 M40	14
M5	DPH7985 M50	DHS7985 M50	DPZ7985 M50	DZS7985 M50	14/18
M6	DPH7985 M60	DHS7985 M60	DPZ7985 M60	DZS7985 M60	18
M8	DPH7985 M80	DHS7985 M80	DPZ7985 M80	DZS7985 M80	23
M10	DPH7985 M10	DHS7985 M10		DZS7985 M10	30



DIN 7995			DIN 7996		
PUNCH CODES			PUNCH CODES		
SCREW SIZE	PHILLIPS	POZI DRIVE	PHILLIPS	STRUCK SLOT	DIA.
M2.5	DPH7995 M25	DPZ7995 M25	DPH7996 M25	DPZ7996 M25	12
M3	DPH7995 M30	DPZ7995 M30	DPH7996 M30	DPZ7996 M30	12/14
M3.5	DPH7995 M35	DPZ7995 M35	DPH7996 M35	DPZ7996 M35	12/14
M4	DPH7995 M40	DPZ7995 M40	DPH7996 M40	DPZ7996 M40	14
M4.5	DPH7995 M45	DPZ7995 M45	DPH7996 M45	DPZ7996 M45	14
M5	DPH7995 M50	DPZ7995 M50	DPH7996 M50	DPZ7996 M50	18
M5.5	DPH7995 M55	DPZ7995 M55	DPH7996 M55	DPZ7996 M55	18
M6	DPH7995 M60	DPZ7995 M60	DPH7996 M60	DPZ7996 M60	18
M7	DPH7995 M70	DPZ7995 M70	DPH7996 M70	DPZ7996 M70	23
M8	DPH7995 M80	DPZ7995 M80	DPH7996 M80	DPZ7996 M80	30



RECESS HEADER PUNCH

DIN



DIN 7997

PUNCH CODES

SCREW SIZE	PHILLIPS	POZI DRIVE	DIA.
M2.5	DPH7997 M25	DPZ7997 M25	12
M3	DPH7997 M30	DPZ7997 M30	12/14
M3.5	DPH7997 M35	DPZ7997 M35	12/14
M4	DPH7997 M40	DPZ7997 M40	12/14
M4.5	DPH7997 M45	DPZ7997 M45	12/14
M5	DPH7997 M50	DPZ7997 M50	14/18
M5.5	DPH7997 M55	DPZ7997 M55	14/18
M6	DPH7997 M60	DPZ7997 M60	18
M7	DPH7997 M70	DPZ7997 M70	23
M8	DPH7997 M80	DPZ7997 M80	25/30



DIN 84

PUNCH CODE

DIN 84 MODIFIED

PUNCH CODE

SCREW SIZE	STRUCK SLOT	STRUCK SLOT	DIA.
M2	DSS84 M20	DSS84 M20	12
M2.5	DSS84 M25	DSS84 M25	12
M3	DSS84 M30	DSS84 M30	12
M3.5	DSS84 M35	DSS84 M35	12
M4	DSS84 M40	DSS84 M40	14
M5	DSS84 M50	DSS84 M50	14/18
M6	DSS84 M60	DSS84 M60	18
M8	DSS84 M80	DSS84 M80	23
M10	DSS84 M10	DSS84 M10	25/30



DIN 85

PUNCH CODE

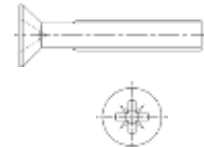
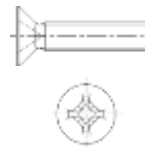
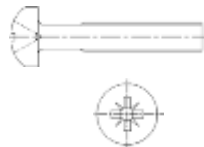
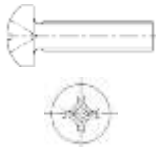
SCREW SIZE	STRUCK SLOT	DIA.
M2	DSS85 M20	12
M2.5	DSS85 M25	12
M3	DSS85 M30	12
M3.5	DSS85 M35	12
M4	DSS85 M40	14
M5	DSS85 M50	14/18
M6	DSS85 M60	18
M8	DSS85 M80	23
M10	DSS85 M10	25/30

RECESS HEADER PUNCH

ISO



DIN 96 MODIFIED		PUNCH CODE	DIN 7971		PUNCH CODE
SCREW SIZE	STRUCK SLOT		STRUCK SLOT	DIA.	
M2	DSS96 M20			12	
M2.2			DSS7971 M22		
M2.5	DSS96 M25			12	
M2.9			DSS7971 M29		
M3	DSS96 M30			12	
M3.5	DSS96 M35		DSS7971 M35	12	
M3.9			DSS7971 M39	14	
M4	DSS96 M40			14	
M4.2			DSS7971 M42	14	
M4.5	DSS96 M45			14	
M4.8			DSS7971 M48	14/18	
M5	DSS96 M50			14/18	
M5.5	DSS96 M55		DSS7971 M55	18	
M6	DSS96 M60			18/23	
M6.3			DSS7971 M63	18/23	
M7	DSS96 M70				
M8	DSS96 M80				

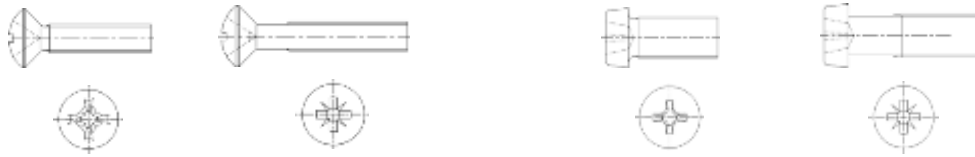


ISO 7045		PUNCH CODES		ISO 7046-1		PUNCH CODES	
SCREW SIZE	PHILLIPS	POZI DRIVE		PHILLIPS	POZI DRIVE	DIA.	
M1.6	ISO-H 7045 M1.6	ISO-Z 7045 M1.6		ISO-H 7046-1 M1.6	ISO-Z 7046-1 M1.6	12	
M2	ISO-H 7045 M2	ISO-Z 7045 M2		ISO-H 7046-1 M2	ISO-Z 7046-1 M2	12	
M2.5	ISO-H 7045 M2.5	ISO-Z 7045 M2.5		ISO-H 7046-1 M2.5	ISO-Z 7046-1 M2.5	12	
M3	ISO-H 7045 M3	ISO-Z 7045 M3		ISO-H 7046-1 M3	ISO-Z 7046-1 M3	12	
(M3.5)	ISO-H 7045 M3.5	ISO-Z 7045 M3.5		ISO-H 7046-1 M3.5	ISO-Z 7046-1 M3.5	12/14	
M4	ISO-H 7045 M4	ISO-Z 7045 M4		ISO-H 7046-1 M4	ISO-Z 7046-1 M4	14	
M5	ISO-H 7045 M5	ISO-Z 7045 M5		ISO-H 7046-1 M5	ISO-Z 7046-1 M5	14/18	
M6	ISO-H 7045 M6	ISO-Z 7045 M6		ISO-H 7046-1 M6	ISO-Z 7046-1 M6	18	
M8	ISO-H 7045 M8	ISO-Z 7045 M8		ISO-H 7046-1 M8	ISO-Z 7046-1 M8	23	
M10	ISO-H 7045 M10	ISO-Z 7045 M10		ISO-H 7046-1 M10	ISO-Z 7046-1 M10	23/25	



RECESS HEADER PUNCH

ISO



ISO 7047		PUNCH CODES		ISO 7048		PUNCH CODES	
SCREW SIZE	PHILLIPS	POZI DRIVE		PHILLIPS	POZI DRIVE		DIA.
M1.6	ISO-H 7047 M1.6	ISO-Z 7047 M1.6		ISO-H 7048 M1.6	ISO-Z 7048 M1.6		12
M2	ISO-H 7047 M2	ISO-Z 7047 M2		ISO-H 7048 M2	ISO-Z 7048 M2		12
M2.5	ISO-H 7047 M2.5	ISO-Z 7047 M2.5		ISO-H 7048 M2.5	ISO-Z 7048 M2.5		12
M3	ISO-H 7047 M3	ISO-Z 7047 M3		ISO-H 7048 M3	ISO-Z 7048 M3		12
(M3.5)	ISO-H 7047 M3.5	ISO-Z 7047 M3.5		ISO-H 7048 M3.5	ISO-Z 7048 M3.5		12/14
M4	ISO-H 7047 M4	ISO-Z 7047 M4		ISO-H 7048 M4	ISO-Z 7048 M4		14
M5	ISO-H 7047 M5	ISO-Z 7047 M5		ISO-H 7048 M5	ISO-Z 7048 M5		14/18
M6	ISO-H 7047 M6	ISO-Z 7047 M6		ISO-H 7048 M6	ISO-Z 7048 M6		18
M8	ISO-H 7047 M8	ISO-Z 7047 M8		ISO-H 7048 M8	ISO-Z 7048 M8		23
M10	ISO-H 7047 M10	ISO-Z 7047 M10		ISO-H 7048 M10	ISO-Z 7048 M10		23/25

HEXAGON SOCKET



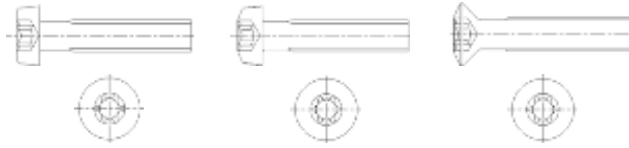
ISO 7380

SCREW SIZE	PUNCH CODE	DIA.
M3	ISO 7380 M3	12
M4	ISO 7380 M4	14
M5	ISO 7380 M5	14/18
M6	ISO 7380 M6	18
M8	ISO 7380 M8	23
M10	ISO 7380 M10	25
M12	ISO 7380 M12	30
M16	ISO 7380 M16	35

RECESS HEADER PUNCH

ISO

TORX

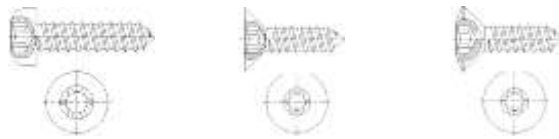


ISO 14580

ISO 14583

ISO 14584

SCREW SIZE	PUNCH CODE	PUNCH CODE	PUNCH CODE	DIA.
M2	ISO 14580 M2	ISO 14583 M2	ISO 14584 M2	12
M2.5	ISO 14580 M2.5	ISO 14583 M2.5	ISO 14584 M2.5	12
M3	ISO 14580 M3	ISO 14583 M3	ISO 14584 M3	12
(M3.5)	ISO 14580 M3.5	ISO 14583 M3.5	ISO 14584 M3.5	12/14
M4	ISO 14580 M4	ISO 14583 M4	ISO 14584 M4	14
M5	ISO 14580 M5	ISO 14583 M5	ISO 14584 M5	14/18
M6	ISO 14580 M6	ISO 14583 M6	ISO 14584 M6	18
M8	ISO 14580 M8	ISO 14583 M8	ISO 14584 M8	18/23
M10	ISO 14580 M10	ISO 14583 M10	ISO 14584 M10	23/25



ISO 14585

ISO 14586

ISO 14587

SCREW SIZE	PUNCH CODE	PUNCH CODE	PUNCH CODE	DIA.
ST2,9	ISO 14585 ST2,9	ISO 14586 ST2,9	ISO 14587 ST2,9	12
ST3,5	ISO 14585 ST3,5	ISO 14586 ST3,5	ISO 14587 ST3,5	12/14
ST4,2	ISO 14585 ST4,2	ISO 14586 ST4,2	ISO 14587 ST4,2	14
ST4,8	ISO 14585 ST4,8	ISO 14586 ST4,8	ISO 14587 ST4,8	14/18
ST5,5	ISO 14585 ST5,5	ISO 14586 ST5,5	ISO 14587 ST5,5	18
ST6,3	ISO 14585 ST6,3	ISO 14586 ST6,3	ISO 14587 ST6,3	18



ISO 15481

PUNCH CODES

ISO 15482

PUNCH CODES

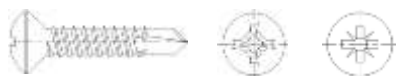
SCREW SIZE	PHILLIPS	POZI DRIVE	PHILLIPS	POZI DRIVE	DIA.
ST2,9	ISO-H 15481 ST2,9	ISO-Z 15481 ST2,9	ISO-H 15482 ST2,9	ISO-Z 15482 ST2,9	12
ST3,5	ISO-H 15481 ST3,5	ISO-Z 15481 ST3,5	ISO-H 15482 ST3,5	ISO-Z 15482 ST3,5	12/14
ST4,2	ISO-H 15481 ST4,2	ISO-Z 15481 ST4,2	ISO-H 15482 ST4,2	ISO-Z 15482 ST4,2	14
ST4,8	ISO-H 15481 ST4,8	ISO-Z 15481 ST4,8	ISO-H 15482 ST4,8	ISO-Z 15482 ST4,8	14/18
ST5,5	ISO-H 15481 ST5,5	ISO-Z 15481 ST5,5	ISO-H 15482 ST5,5	ISO-Z 15482 ST5,5	18
ST6,3	ISO-H 15481 ST6,3	ISO-Z 15481 ST6,3	ISO-H 15482 ST6,3	ISO-Z 15482 ST6,3	18



RECESS HEADER PUNCH

ISO

TORX



ISO 15483

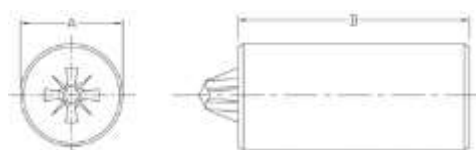
PUNCH CODES

SCREW SIZE	PHILLIPS	POZI DRIVE	DIA.
ST2,9	ISO-H 15483 ST2,9	ISO-Z 15483 ST2,9	12
ST3,5	ISO-H 15483 ST3,5	ISO-Z 15483 ST3,5	12/14
ST4,2	ISO-H 15483 ST4,2	ISO-Z 15483 ST4,2	14
ST4,8	ISO-H 15483 ST4,8	ISO-Z 15483 ST4,8	14/18
ST5,5	ISO-H 15483 ST5,5	ISO-Z 15483 ST5,5	18
ST6,3	ISO-H 15483 ST6,3	ISO-Z 15483 ST6,3	18

COMPARISON TABLE

DIN

Inch size



DIMENSION

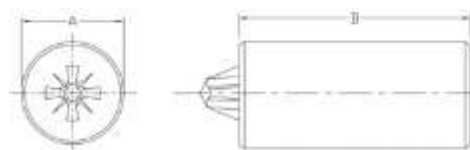
A x B

DIA. x 25.4mm

DIA.

DIN POZI	POZI	INCH	METER
965 M2.5	1Z-20	7/16"	12Φ
965 M3	1Z-540	7/16"	12Φ
965 M3.5	2Z-10	7/16"	12Φ
965 M4	2Z-48	9/16"	14Φ
965 M5	2Z-60	9/16"	14Φ
965 M6	3Z-850	7/8"	23Φ
965 M8	4Z-1060	7/8"	23Φ
965 M10	4Z-10	1"	23Φ
966 M2.5	1Z-22	7/16"	12Φ
966 M3	1Z-14	7/16"	12Φ
966 M3.5	2Z-16	7/16"	12Φ
966 M4	2Z-18	9/16"	14Φ
966 M5		9/16"	14Φ
966 M6	3Z-14	7/8"	23Φ
966 M8	4Z-19	7/8"	23Φ
966 M10	4Z-35	1"	23Φ
7981 M2.2	1Z-130	7/16"	12Φ
7981 M2.9	1Z-130	7/16"	12Φ
7981 M3.5	2Z-210	7/16"	12Φ
7981 M3.9	2Z-220	9/16"	14Φ
7981 M4.2	2Z-230	9/16"	14Φ
7981 M4.8	2Z-250	7/8"	23Φ
7981 M5.5	3Z-210	9/16"	14Φ
7981 M6.3	3Z-220	7/8"	23Φ
7982 M2.2	1Z-10	7/16"	12Φ
7982 M2.9	1Z-540	7/16"	12Φ
7982 M3.5	2Z-48	7/16"	12Φ
7982 M3.9	2Z-11	9/16"	14Φ
7982 M4.2	2Z-60	9/16"	14Φ
7982 M4.8	2Z-40	9/16"	14Φ
7982 M5.5	3Z-11	7/8"	23Φ
7982 M6.3	3Z-30	7/8"	23Φ
7983 M2.2	1Z-11	7/16"	12Φ
7983 M2.9	1Z-13	7/16"	12Φ
7983 M3.5	2Z-15	7/16"	12Φ
7983 M3.9	2Z-17	9/16"	14Φ
7983 M4.2	2Z-18	9/16"	14Φ
7983 M4.8	2Z-21	9/16"	14Φ
7983 M5.5	3Z-12	7/8"	23Φ
7983 M6.3	3Z-15	7/8"	23Φ

Meter size



DIMENSION

A x B

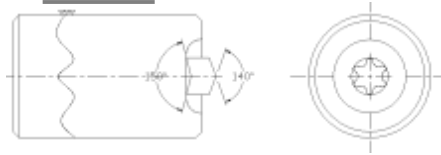
DIA. x 25mm

DIA.

DIN POZI	POZI	INCH	METER
7985 M2	1Z-11	7/16"	12Φ
7985 M2.5	1Z-21	7/16"	12Φ
7985 M3	1Z-23	7/16"	12Φ
7985 M3.5	2Z-47	7/16"	12Φ
7985 M4	2Z-35	9/16"	14Φ
7985 M5	2Z-37	9/16"	14Φ
7985 M6	3Z-70	7/8"	23Φ
7985 M8	4Z-19	1"	23Φ
7985 M10	4Z-86	1"	23Φ
7995 M2.5	1Z-22	7/16"	12Φ
7995 M3	1Z-14	7/16"	12Φ
7995 M3.5	2Z-16	7/16"	12Φ
7995 M4	2Z-18	9/16"	14Φ
7995 M4.5	2Z-21	9/16"	14Φ
7995 M5	2Z-22	9/16"	14Φ
7995 M5.5	3Z-12	7/8"	23Φ
7995 M6	3Z-14	7/8"	23Φ
7995 M7	3Z-17	7/8"	23Φ
7995 M8	4Z-19	1"	23Φ
7997 M2.5	1Z-540	7/16"	12Φ
7997 M3	1Z-30	7/16"	12Φ
7997 M3.5	2Z-48	9/16"	14Φ
7997 M4	2Z-11	9/16"	14Φ
7997 M4.5	2Z-60	9/16"	14Φ
7997 M5	2Z-40	9/16"	14Φ
7997 M5.5	3Z-850	7/8"	23Φ
7997 M6	3Z-11	7/8"	23Φ
7997 M7	3Z-30	7/8"	23Φ
7997 M8	4Z-1060	1"	23Φ

DIN MEX 7985

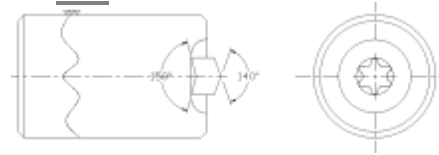
FILLISTER



SCREW SIZE	DRIVE SIZE	PUNCH CODE
M2	T6	T6-7985 M20
M2.5	T8	T8-7985 M25
M3	T10	T10-7985 M30
M3.5	T15	T15-7985 M35
M4	T20	T20-7985 M40
M5	T25	T25-7985 M50
M6	T30	T30-7985 M60

DIN MEX 7981 PAN

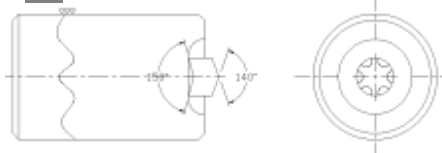
HEAD



SCREW SIZE	DRIVE SIZE	PUNCH CODE
2.9	T8	T8-7981 M29
3.5	T10	T10-7981 M35
3.9	T15	T15-7981 M39
4.2	T20	T20-7981 M42
4.8	T25	T25-7981 M48
5.5	T25	T25-7981 M55
6.3	T30	T30-7981 M63

JASO BINDING HEAD

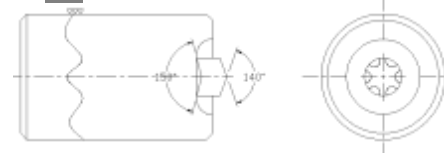
MEX



SCREW SIZE		DRIVE SIZE	PUNCH CODE
TAPPING	MACHINE		
2	M2	T6	JBMX M20
2.5	M2.5	T8	JBMX M25
3	M3	T10	JBMX M30
	M3.5	T15	JBMX M35
4	M4	T20	JBMX M40
	M4.6	T20	JBMX M45
5	M5	T25	JBMX M50
M8	M8	T30	JBMX M80
M8	M8	T40	JBMX M80

JASO OVAL HEAD

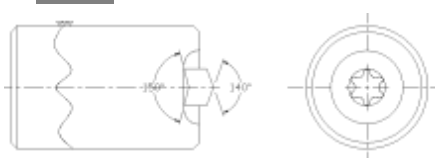
MEX



SCREW SIZE		DRIVE SIZE	PUNCH CODE
TAPPING	MACHINE		
2	M2	T6	JOMX M20
2.5	M2.5	T8	JOMX M25
3	M3	T10	JOMX M30
	M3.5	T15	JOMX M35
4	M4	T20	JOMX M40
	M4.6	T20	JOMX M45
5	M5	T25	JOMX M50
M8	M8	T30	JOMX M80
M8	M8	T40	JOMX M80

MEX ANSI PAN HEAD

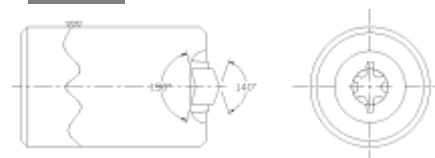
METRIC



SCREW SIZE		DRIVE SIZE	PUNCH CODE
TAPPING	MACHINE		
2.2	M2	T6	MPMX M20
	M2.5	T8	MPMX M25
2.9	M3	T10	MPMX M30
3.5	M3.5	T15	MPMX M35
4.2	M4	T20	MPMX M40
4.8	M5	T25	MPMX M50
	M6	T30	MPMX M50

ANSI HEAD MEX/SLOT

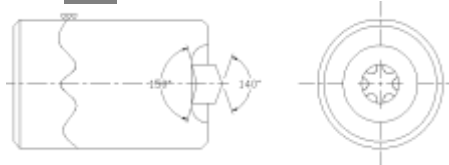
COMEBI



SCREW SIZE	DRIVE SIZE	PUNCH CODE
#2	T8	APMXD #2
#3	T8	APMXD #3
#4	T10	APMXD #4
#5	T10	APMXD #5
#6	T15	APMXD #6
#8	T20	APMXD #8
#10	T25	APMXD #10
#12	T27	APMXD #12
1/4	T30	APMXD 1/4

ANSI MEX BUTTON

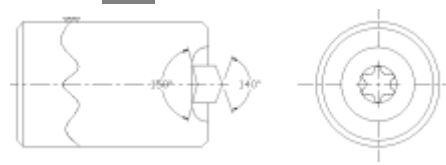
HEAD



SCREW SIZE	DRIVE SIZE	PUNCH CODE
#0	T5	ABMX #0
#2	T6	ABMX #2
#4	T8	ABMX #4
#5	T10	ABMX #5
#6	T10	ABMX #6
#8	T15	ABMX #8
#10	T25	ABMX #10
#1/4	T27	ABMX #1/4

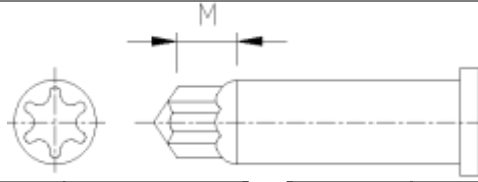
ANSI MEX PAN

HEAD



SCREW SIZE	DRIVE SIZE	PUNCH CODE
#2	T8	APMX #2
#3	T8	APMX #3
#4	T10	APMX #4
#5	T10	APMX #5
#6	T15	APMX #6
#7	T20	APMX #7
#8	T25	APMX #8
#10	T25	APMX #10
#12	T27	APMX #12
#1/4	T30	APMX #1/4

TORX® PUNCH PINS

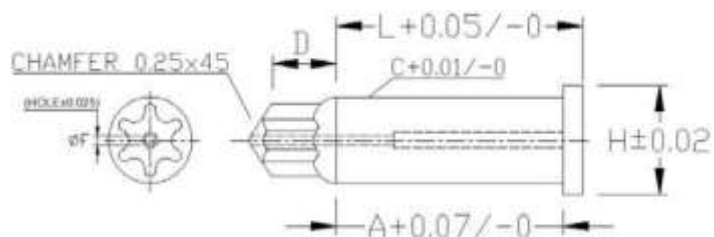


DRIVE SIZE	M INCH	M METER	PIN CODE
T5	0.031	0.787	5-TXI-250
T5	0.017	0.432	5-TXI-251
T5	0.025	0.635	5-TXI-252
T6	0.041	1.041	6-TXI-250
T6	0.022	0.559	6-TXI-251
T6	0.030	0.762	6-TXI-252
T6	0.033	0.838	6-TXI-253
T7	0.033	0.838	7-TXI-250
T7	0.038	0.966	7-TXI-251
T7	0.043	1.092	7-TXI-252
T7	0.030	0.762	7-TXI-253
T7	0.025	0.635	7-TXI-254
T7	0.035	0.889	7-TXI-255
T8	0.033	0.838	8-TXI-250
T8	0.041	1.041	8-TXI-258
T8	0.051	1.295	8-TXI-252
T8	0.038	0.965	8-TXI-253
T8	0.030	0.762	8-TXI-254
T8	0.028	0.711	8-TXI-255
T8	0.043	1.092	8-TXI-256
T8	0.035	0.889	8-TXI-257
T9	0.040	1.016	9-TXI-250
T9	0.055	1.397	9-TXI-251
T9	0.046	1.168	9-TXI-252
T9	0.037	0.940	9-TXI-253
T10	0.050	1.270	10-TXI-250
T10	0.040	1.016	10-TXI-251
T10	0.060	1.524	10-TXI-252
T10	0.035	0.889	10-TXI-253
T10	0.045	1.143	10-TXI-254
T10	0.030	0.762	10-TXI-255
T10	0.033	0.840	10-TXI-256
T15	0.060	1.524	15-TXI-250
T15	0.045	1.143	15-TXI-251
T15	0.070	1.778	15-TXI-252
T15	0.035	0.889	15-TXI-253
T15	0.050	1.270	15-TXI-254
T15	0.033	0.840	15-TXI-255
T15	0.040	1.040	15-TXI-256
T20	0.089	2.260	20-TXI-250
T20	0.080	2.032	20-TXI-252
T20	0.050	1.270	20-TXI-253
T20	0.038	0.965	20-TXI-254
T20	0.060	1.524	20-TXI-255
T20	0.056	1.420	20-TXI-256
T20	0.036	0.920	20-TXI-257
T20	0.045	1.143	20-TXI-258

DRIVE SIZE	M INCH	M METER	PIN CODE
T25	0.115	2.921	25-TXI-250
T25	0.065	1.651	25-TXI-251
T25	0.090	2.286	25-TXI-252
T25	0.055	1.397	25-TXI-253
T25	0.075	1.905	25-TXI-254
T25	0.044	1.120	25-TXI-255
T25	0.060	1.524	25-TXI-256
T27	0.120	3.048	27-TXI-250
T27	0.065	1.651	27-TXI-251
T27	0.105	2.667	27-TXI-252
T27	0.085	2.159	27-TXI-253
T27	0.075	1.905	27-TXI-254
T27	0.050	1.270	27-TXI-255
T27	0.060	1.524	27-TXI-258
T27	0.090	2.286	27-TXI-259
T30	0.125	3.175	30-TXI-250
T30	0.090	2.286	30-TXI-251
T30	0.105	2.667	30-TXI-252
T30	0.070	1.778	30-TXI-253
T30	0.055	1.397	30-TXI-254
T30	0.043	1.092	30-TXI-255
T30	0.080	2.032	30-TXI-256
T30	0.075	1.905	30-TXI-257
T30	0.060	1.524	30-TXI-258
T30	0.065	1.651	30-TXI-260
T40	0.135	3.429	40-TXI-250
T40	0.110	2.794	40-TXI-251
T40	0.125	3.175	40-TXI-252
T40	0.120	3.048	40-TXI-253
T40	0.097	2.463	40-TXI-254
T40	0.085	2.159	40-TXI-255
T40	0.070	1.778	40-TXI-256
T40	0.090	2.286	40-TXI-257
T40	0.080	2.032	40-TXI-260
T45	0.155	3.937	45-TXI-250
T45	0.115	2.921	45-TXI-251
T45	0.14	3.556	45-TXI-252
T45	0.116	2.794	45-TXI-253
T45	0.085	2.159	45-TXI-254
T45	0.105	2.667	45-TXI-256
T50	0.154	3.911	50-TXI-250
T50	0.14	3.429	50-TXI-251
T50	0.16	4.064	50-TXI-252
T50	0.095	2.413	50-TXI-253
T50	0.176	4.470	50-TXI-255
T50	0.129	3.276	50-TXI-256
T50	0.11	2.794	50-TXI-257
T50	0.143	3.632	50-TXI-258
T50	0.12	3.048	50-TXI-259

SEE CAMCAR TORX MANUAL
FOR OTHER PIN DIMENSIONS

TAMPER TORX® PUNCH PINS

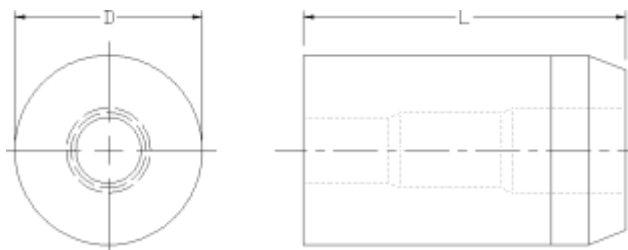


PUNCH CODE	ΦF mm	A mm	ΦC mm	ΦH mm	L mm
TT8	0.533	11.200	2.54	2.87	15.98
TT10	0.711	11.200	2.92	3.25	15.98
TT15	0.965	11.200	3.45	3.78	15.98
TT20	1.346	11.200	4.04	4.65	15.98
TT25	1.727	11.277	4.62	5.18	16.05
TT27	1.980	11.277	5.28	5.71	16.05
TT30	2.235	11.277	5.72	6.45	16.05
TT40	2.590	14.523	6.88	7.62	19.30
TT45	3.124	20.879	8.38	9.50	25.65

TORX® PUNCH PIN HOLDERS

TORX® PUNCH PIN HOLDERS TXP-22

DRIVE SIZE	HOLDER CODE	D ± 0.0005	L $+0.00$ -0.004
T10	10TXI-201	14.287	15.875
T15	15TXI-201	14.287	15.875
T20	20TXI-201	14.287	15.875
T25	25TXI-201	22.225	15.875
T27	27TXI-201	22.225	15.875
T30	30TXI-201	22.225	15.875
T40	40TXI-201	22.225	19.05
T45	45TXI-201	25.4	25.4
T50	50TXI-201	25.4	25.4
T55	55TXI-102	31.75	25.4
T60	60TXI-201	38.1	25.4
T70	70TXI-201	38.1	38.1
T80	80TXI-201	38.1	38.1
T90	90TXI-201	50.8	38.1
T100	100TXI-201	50.8	38.1



NOTE :

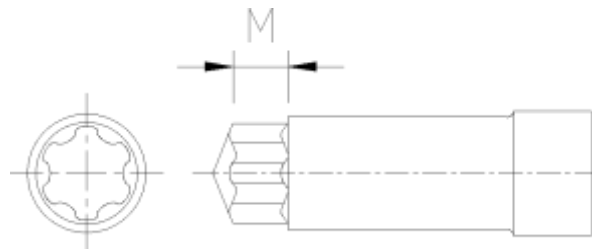
Pin holders in the other head styles are also available. (Please consult Camcar Torx manual)

Button Head — TXI-30

Pan Head — TXI-303

Trues Head — TXI-360

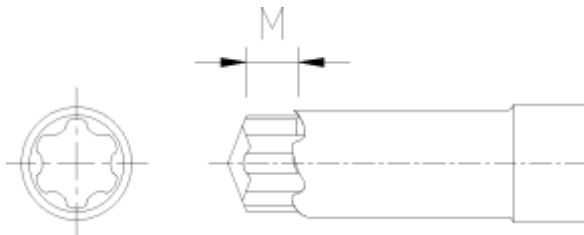
TORX PLUS® PUNCH PINS



DRIVE SIZE	M INCH	M METER	PIN CODE
5IP	0.028	0.711	5-PLI-531
5IP	0.025	0.635	5-PLI-532
5IP	0.022	0.559	5-PLI-533
5IP	0.019	0.483	5-PLI-534
6IP	0.033	0.838	6-PLI-531
6IP	0.029	0.737	6-PLI-532
6IP	0.026	0.660	6-PLI-533
6IP	0.022	0.559	6-PLI-534
7IP	0.038	0.965	7-PLI-531
7IP	0.034	0.864	7-PLI-532
7IP	0.030	0.762	7-PLI-533
7IP	0.026	0.660	7-PLI-534
8IP	0.045	1.143	8-PLI-531
8IP	0.040	1.016	8-PLI-532
8IP	0.035	0.889	8-PLI-533
8IP	0.030	0.762	8-PLI-534
9IP	0.048	1.219	9-PLI-531
9IP	0.043	1.092	9-PLI-532
9IP	0.038	0.965	9-PLI-533
9IP	0.033	0.838	9-PLI-534
10IP	0.052	1.321	10-PLI-531
10IP	0.046	1.168	10-PLI-532
10IP	0.041	1.041	10-PLI-533
10IP	0.035	0.889	10-PLI-534
15IP	0.062	1.575	15-PLI-531
15IP	0.055	1.397	15-PLI-532
15IP	0.049	1.245	15-PLI-533
15IP	0.042	1.067	15-PLI-534
20IP	0.073	1.854	20-PLI-531
20IP	0.065	1.651	20-PLI-532
20IP	0.057	1.448	20-PLI-533
20IP	0.049	1.245	20-PLI-534

DRIVE SIZE	M INCH	M METER	PIN CODE
25IP	0.084	2.134	25-PLI-531
25IP	0.075	1.905	25-PLI-532
25IP	0.066	1.676	25-PLI-533
25IP	0.057	1.448	25-PLI-534
27IP	0.094	2.388	27-PLI-531
27IP	0.084	2.134	27-PLI-532
27IP	0.074	1.880	27-PLI-533
27IP	0.064	1.626	27-PLI-534
30IP	0.104	2.642	30-PLI-531
30IP	0.093	2.362	30-PLI-532
30IP	0.082	2.083	30-PLI-533
30IP	0.070	1.778	30-PLI-534
40IP	0.125	3.175	40-PLI-531
40IP	0.112	2.845	40-PLI-532
40IP	0.098	2.490	40-PLI-533
40IP	0.085	2.159	40-PLI-534
45IP	0.146	3.708	45-PLI-531
45IP	0.131	3.327	45-PLI-532
45IP	0.115	2.921	45-PLI-533
45IP	0.100	2.540	45-PLI-534
50IP	0.165	4.191	50-PLI-531
50IP	0.148	3.760	50-PLI-532
50IP	0.130	3.302	50-PLI-533
50IP	0.112	2.845	50-PLI-534
55IP	0.209	5.309	55-PLI-531
55IP	0.187	4.750	55-PLI-532
55IP	0.164	4.166	55-PLI-533
55IP	0.142	3.607	55-PLI-534

TORX PLUS® PUNCH PINS(Autoser)

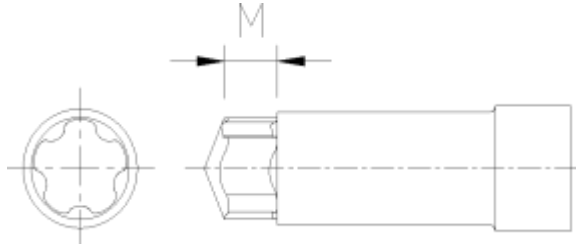


DRIVE SIZE	PIN CODE
5IP	5-PLI-53_R
6IP	6-PLI-53_R
7IP	7-PLI-53_R
8IP	8-PLI-53_R
9IP	9-PLI-53_R
10IP	10-PLI-53_R
15IP	15-PLI-53_R
20IP	20-PLI-53_R
25IP	25-PLI-53_R
27IP	27-PLI-53_R
30IP	30-PLI-53_R
40IP	40-PLI-53_R
45IP	45-PLI-53_R
50IP	50-PLI-53_R
55IP	55-PLI-53_R

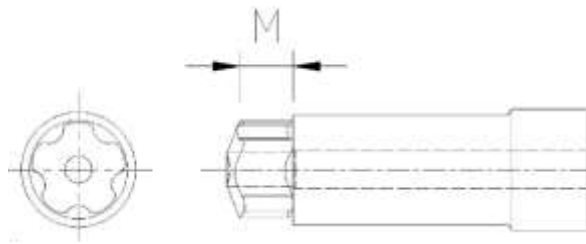
NOTE :

See page 24 for dimension "M"

TORX PLUS® PUNCH PINS



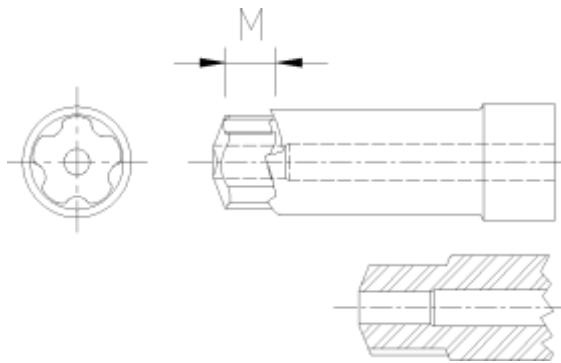
DRIVE SIZE	M INCH	M METER	PIN CODE
5IPR	0.028	0.711	5-PLI-631
5IPR	0.025	0.635	5-PLI-632
5IPR	0.022	0.559	5-PLI-633
5IPR	0.019	0.483	5-PLI-634
6IPR	0.033	0.838	6-PLI-631
6IPR	0.029	0.737	6-PLI-632
6IPR	0.026	0.660	6-PLI-633
6IPR	0.022	0.559	6-PLI-634
7IPR	0.038	0.965	7-PLI-631
7IPR	0.034	0.864	7-PLI-632
7IPR	0.030	0.762	7-PLI-633
7IPR	0.026	0.660	7-PLI-634



DRIVE SIZE	M INCH	M METER	PIN CODE
8IPR	0.040	1.016	8-PLI-632
8IPR	0.035	0.889	8-PLI-633
8IPR	0.030	0.762	8-PLI-634
9IPR	0.043	1.092	9-PLI-632
9IPR	0.038	0.965	9-PLI-633
9IPR	0.033	0.838	9-PLI-634
10IPR	0.046	1.168	10-PLI-632
10IPR	0.041	1.041	10-PLI-633
10IPR	0.035	0.889	10-PLI-634
15IPR	0.055	1.397	15-PLI-632
15IPR	0.049	1.245	15-PLI-633
15IPR	0.042	1.067	15-PLI-634
20IPR	0.065	1.905	20-PLI-632
20IPR	0.057	1.448	20-PLI-633
20IPR	0.049	1.245	20-PLI-634
25IPR	0.075	1.905	25-PLI-632
25IPR	0.066	1.676	25-PLI-633
25IPR	0.057	1.448	25-PLI-634

DRIVE SIZE	M INCH	M METER	PIN CODE
27IPR	0.084	2.134	27-PLI-632
27IPR	0.074	1.880	27-PLI-633
27IPR	0.064	1.626	27-PLI-634
30IPR	0.093	2.362	30-PLI-632
30IPR	0.082	2.083	30-PLI-633
30IPR	0.070	1.778	30-PLI-634
40IPR	0.112	2.845	40-PLI-632
40IPR	0.098	2.490	40-PLI-633
40IPR	0.085	2.159	40-PLI-634
45IPR	0.131	3.327	45-PLI-632
45IPR	0.115	2.921	45-PLI-633
45IPR	0.100	2.540	45-PLI-634
50IPR	0.148	3.760	50-PLI-632
50IPR	0.130	3.302	50-PLI-633
50IPR	0.112	2.845	50-PLI-634
55IPR	0.187	4.750	55-PLI-632
55IPR	0.164	4.166	55-PLI-633
55IPR	0.142	3.607	55-PLI-634

TORX PLUS® PUNCH PINS(Autoser)



DRIVE SIZE	PIN CODE
8IPR	8-PLI-63_R
9IPR	9-PLI-63_R
10IPR	10-PLI-63_R
15IPR	15-PLI-63_R
20IPR	20-PLI-63_R
25IPR	25-PLI-63_R
27IPR	27-PLI-63_R
30IPR	30-PLI-63_R
40IPR	40-PLI-63_R
45IPR	45-PLI-63_R
50IPR	50-PLI-63_R
55IPR	55-PLI-63_R

NOTE :

See page 26 for dimension "M"

SQUARE / Q CONTROL(PHILLIPS HEAD)



SQUARE RECESS SCREWS

SCREW HEAD SHAPE		NOMINAL SCREW DIAMETER										
		#3	#4	#5	#6	#7	#8	#9	#10	#12	#14(1/4)	5/16
FLAT HEAD	code	SFH-01	SFH-01	SFH-13	SFH-14 SFH-24	SFH-15 SFH-25	SFH-26	SFH-27	SFH-27	SFH-33	SFH-34	SFH-41
	punch dia.	12	12	12 / 14	14	14	14	14	14	18	18 / 23	23
OVAL HEAD	code	SOH-3-01	SOH-4-01	SOH-4-13	SOH-6-14 SOH-6-24	SOH-7-14 SOH-7-25	SOH-8-26	SOH-9-27	SOH-10-27	SOH-12-33	SOH-14-34 SOH-1/4-34	SOH-5/16-41
	punch dia.	12	12	12 / 14	14	14	14	14	14	18	23	23
PAN HEAD	code	SPH-3-01	SPH-4-01	SPH-5-13	SPH-6-14 SPH-6-24	SPH-7-14 SPH-7-25	SPH-8-26		SPH-10-27	SPH-12-33	SPH-14-34	SPH-5/16-41
	punch dia.	12	12	12 / 14	14	14	14		14	18	23	23
TRUSS HEAD	code	STH-3-01	STH-4-01	STH-5-13	STH-6-13 STH-6-24	STH-7-14 STH-7-25	STH-8-24 STH-8-26		STH-10-26 STH-10-27	STH-12-33	STH-14-34 STH-1/4-34	STH-5/16-41
	punch dia.	12	12	12 / 14	14	14	14		14 / 18	18	23	23
ROUND HEAD	code	SRH-3-01	SRH-4-01	SRH-5-13	SRH-6-14 SRH-6-24	SRH-7-14 SRH-7-25	SRH-8-26	SRH-9-27	SRH-10-27	SRH-12-33	SRH-14-34 SRH-1/4-34	SRH-5/16-41
	punch dia.	12	12	12 / 14	14	14	14	14	18	23	23	23

SQUARE / SLOT COMBINATION SCREWS

SCREW HEAD SHAPE		NOMINAL SCREW DIAMETER										
		#3	#4	#5	#6	#7	#8	#9	#10	#12	#14(1/4)	5/16
PAN HEAD	code	SPHD-3-01	SPHD-4-01	SPHD-5-13	SPHD-6-14 SPHD-6-24	SPHD-7-14 SPHD-7-25	SPHD-8-26		SPHD-10-27	SPHD-12-33	SPHD-14-34	SPHD-5/16-41
	punch dia.	12	12	12 / 14	14	14	14		14	18	23	23
TRUSS HEAD	code	STHD-3-01	STHD-4-01	STHD-5-13	STHD-6-13 STHD-6-23	STHD-7-14 STHD-7-25	STHD-8-24 STHD-8-26		STHD-10-26 STHD-10-27	STHD-12-33	STHD-14-34 STHD-1/4-34	STHD-5/16-41
	punch dia.	12	12	12 / 14	14	14	14		14 / 18	18	23	23
ROUND HEAD	code	SRHD-3-01	SRHD-4-01	SRHD-5-13	SRHD-6-14 SRHD-6-24		SRHD-8-26	SRHD-9-27	SRHD-10-27	SRHD-12-33	SRHD-14-34 SRHD-1/4-34	SRHD-5/16-41
	punch dia.	12	12	12 / 14	14		14	14	14	18	23	23



HEXAGON

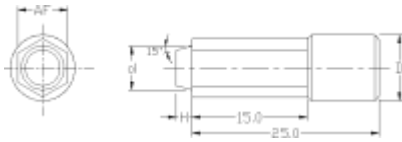
DIN HEXAGONAL(6H) RECESS SECOND PUNCHES

DIN 7991 6H(HEX) RECESS			
PUNCH CODE	RECESS WAF	RECESS DIAG	PUNCH DIA.
H7991 M3	2.0 ^{+0.1} _{+0.06}	1.15	12
H7991 M4	2.1 ^{+0.1} _{+0.06}	1.75	12
H7991 M5	2.2 ^{+0.1} _{+0.06}	2.25	14
H7991 M6	2.3 ^{+0.1} _{+0.06}	2.45	18
H7991 M8	2.4 ^{+0.12} _{+0.08}	3.4	23

DIN 912 6H(HEX) RECESS			
PUNCH CODE	RECESS WAF	RECESS DIAG	PUNCH DIA.
H912 M3	2.5 ^{+0.08} _{+0.04}	1.3	12
H912 M4	3.0 ^{+0.08} _{+0.04}	2.0	12
H912 M5	4.0 ^{+0.09} _{+0.05}	2.5	12
H912 M6	5.0 ^{+0.12} _{+0.08}	3.0	14
H912 M8	6.0 ^{+0.12} _{+0.08}	4.0	18
H912 M10	8.0 ^{+0.15} _{+0.1}	5.0	23
H912 M12	10.0 ^{+0.15} _{+0.1}	6.0	23

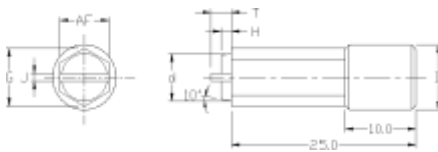
PUNCH PINS FOR INDENTED HEX WASHER

PUNCH PINS FOR INDENTED HEX WASHER / INDENTED HEX WASHER SLOT SCREWS



INDENTED HEX WASHER HEAD SCREWS(UNSLOTTED)(mm)

SCREW SIZE	PUNCH CODE	D $\phi \pm 0.1$	AF $^{+0.05}_{-0}$	d $\phi \pm 0.1$	H $^{+0}_{-0.1}$
#6 #8	IND #6 IND #8	8.0	6.2	5.0	0.8
#10 #12	IND #10 IND #12	10.0	7.75	6.5	1.1
#14 #1/4	IND #14 IND #1/4	12.0	9.35	7.8	1.4



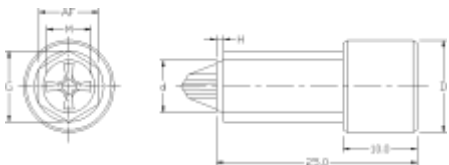
INDENTED HEX WASHER HEAD SCREWS(UNSLOTTED)(mm)

SCREW SIZE	PUNCH CODE	D $\phi \pm 0.1$	AF $^{+0.05}_{-0}$	d $\phi \pm 0.1$	G (APPRX)	J $^{+0.05}_{-0}$	T ± 0.05	H ± 0.1
#4	IND-C #4	7	4.58	4.0	5.4	0.85	0.8	0.5
#6	IND-C #6	8	6.20	5.5	6.9	1.1	1.1	0.6
#7	IND-C #7	8	6.20	5.5	6.9	1.1	1.3	0.6
#8	IND-C #8	8	6.20	5.5	6.9	1.25	1.6	0.65
#10	IND-C #10	10	7.75	6.8	8.9	1.4	1.75	0.9
#12	IND-C #12	10	7.75	6.8	8.9	1.6	2.3	1.0
#14 / 1/4	IND-C #14 / 1/4	12	9.30	8.3	10.3	1.75	2.45	1.0

PUNCH PINS FOR INDENTED HEX WASHER CROSS RECESSED(PHILLIPS) SCREWS

JIS INDENTED HEX WASHER HEAD SCREWS(PHILLIPS)(mm)

SCREW SIZE	RECESS SIZE	PUNCH CODE	D $\phi \pm 0.05$	AF $^{+0}_{-0.05}$	d ± 0.05	H ± 0.05	G (APPRX)	M ± 0.05
M3	1	JIW M30	12	4.8	4.0	0.3	5.5	2.4
M3.5	2	JIW M35	12	5.3	4.5	0.45	6.05	3.4
M4	2	JIW M40	12/14	6.8	5.6	0.5	7.7	3.9
M4.5	2	JIW M45	12/14	6.8	5.6	0.55	7.7	4.1
M5	2	JIW M50	14	7.8	6.4	0.6	8.7	4.3
M6	3	JIW M60	18	9.8	8.4	0.7	10.9	6.1
M8	3	JIW M80	18	11.75	10.0	1.0	13.1	7.1



ANSI INDENTED HEX WASHER HEAD SCREWS(PHILLIPS)(mm)

SCREW SIZE	RECESS SIZE	PUNCH CODE	D $\phi \pm 0.05$	AF $^{+0.05}_{-0}$	d ± 0.05	H ± 0.05	G (APPRX)	M ± 0.05
4	1	AIW #4	12	4.6	3.8	0.4	5.4	2.2
5	1	AIW #5	12	4.6	3.8	0.5	5.4	2.4
6	2	AIW #6	12	6.2	5.1	0.5	6.9	3.4
8	2	AIW #8	12	6.2	5.1	0.6	6.9	3.7
10	2	AIW #10	12	7.75	6.4	0.6	8.9	4.3
12	2	AIW #12	14	7.75	6.4	0.7	8.9	4.55
1/4	3	AIW 1/4	18	9.35	8.0	0.8	10.9	5.8