

APX™



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Features & Benefits

- The APX Drill uses the GEN3SYS® or T-A® pilot insert to stabilize the tool through the cut and outboard carbide inserts to achieve the final cutting diameter
- Allows for higher spindle speeds and takes advantage of the power curve on modern CNC machines for maximum penetration rates on deep holes
- Diameter Range: 1.500" - 4.000" (38,00 - 101,6mm)
- Available in 3xD, 5xD, 8xD & 10xD





APX™

Reference Page

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

ASC 320

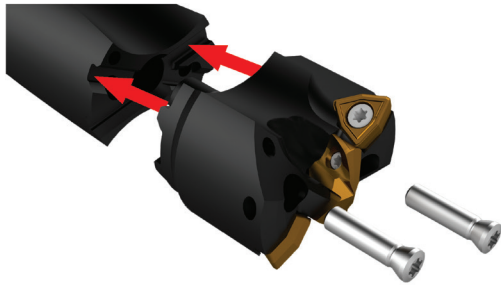
Special Tooling

APX Head

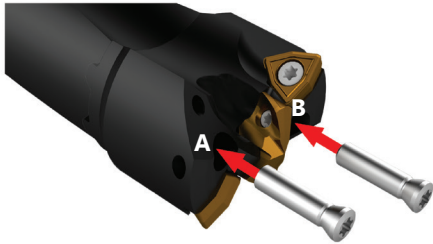
V	38	15	D	-	0116
↑	↑	↑	↑		↑
APX Head	Series	Pilot Series	Eff. Cutting		Major Diameter
	38	GEN3SYS® T-A®	D = Double Effective		Inch = 0116
	44	15 00	S = Single Effective		Decimal = 1.5153
	51	17 01			Metric = 68
	57	18 02			
	63	20			
	70	22			
	76	24			
	83	26			
	89	29			
	95				

APX Body

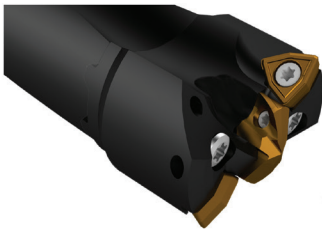
W	38	05	H	-	200F
↑	↑	↑	↑		↑
APX Body	Series	Depth to ø	Flute		Shank
	38	03	H = Helical		200F = 2" Flanged Shank
	44	05			50FM = 50mm Flanged Shank
	51	08			CV50 = CAT50 Integral
	57	10			
	63				
	70				
	76				
	83				
	89				
	95				



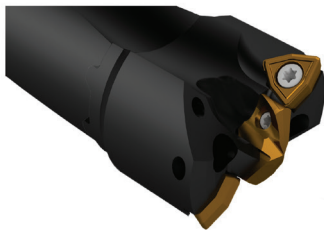
1) Lower the APX head assembly onto the APX Body



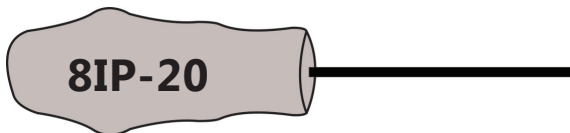
2) Insert Head Mounting Screws into points A and B and hand tighten until APX Head is properly secured to APX Body



3) Tighten with Head Mounting Driver using torque setting chart below



4) Finished Assembly. Follow proper APX Deep Hole Drilling Guidelines on pg 49



Torque Setting Chart

Series	Screw	Driver	Torque
38 - 63	75020-IP20	8IP-20	60 in-lb (678 N-cm)
70 - 95	78027-IP30	8IP-30B	250 in-lb (2825 N-cm)

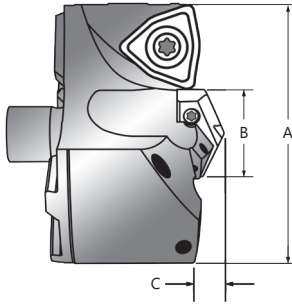


APX™ Heads

38 Series Range: 1.4961"-1.7322" (38,00mm-43,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

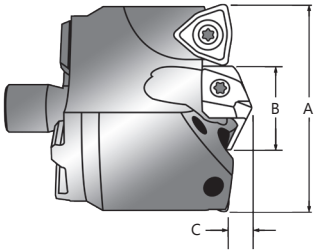


Item Number	A			Pilot Dia.	Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V3800D-38	-	1.4961	38,00	5/8"	19/64"	0	4C*0H-0020	72567-IP8-10	8IP-8	3/8"
V3800D-0116	1-1/2"	1.5000	38,10							
V3800D-0117	1-17/32"	1.5313	38,90							
V3800D-39	-	1.5354	39,00							
V3800D-0118	1-9/16"	1.5625	39,69	11/16"	19/64"	1	4C*1H-0024	7375-IP9-10	8IP-9	3/8"
V3800D-40	-	1.5748	40,00							
V3800D-0119	1-19/32"	1.5938	40,48							
V3800D-41	-	1.6142	41,00	3/4"	13/16"	1	4C*1H-0026	7375-IP9-10	8IP-9	3/8"
V3800D-0120	1-5/8"	1.6250	41,28							
V3801D-42	-	1.6535	42,00							
V3801D-0121	1-21/32"	1.6563	42,07	13/16"	13/16"	1	4C*1H-0026	7375-IP9-10	8IP-9	3/8"
V3801D-0122	1-11/16"	1.6875	42,86							
V3801D-43	-	1.6929	43,00	13/16"	13/16"	1	4C*1H-0026	7375-IP9-10	8IP-9	3/8"
V3801D-0123	1-23/32"	1.7188	43,66							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			Pilot Dia.	Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V3815D-38	-	1.4961	38,00	5/8"	19/64"	15	7C*15P-0020	7247-IP7-10	8IP-7	3/8"
V3815D-0116	1-1/2"	1.5000	38,10							
V3815D-0117	1-17/32"	1.5313	38,90							
V3815D-39	-	1.5354	39,00							
V3815D-0118	1-9/16"	1.5625	39,69	11/16"	19/64"	17	7C*17P-0022	72567-IP8-10	8IP-8	3/8"
V3817D-40	-	1.5748	40,00							
V3817D-0119	1-19/32"	1.5938	40,48							
V3817D-41	-	1.6142	41,00	3/4"	13/16"	18	7C*18P-0024	7375-IP9-10	8IP-9	3/8"
V3817D-0120	1-5/8"	1.6250	41,28							
V3818D-42	-	1.6535	42,00							
V3818D-0121	1-21/32"	1.6563	42,07	13/16"	13/16"	20	7C*20P-0026	7375-IP9-10	8IP-9	3/8"
V3818D-0122	1-11/16"	1.6875	42,86							
V3820D-43	-	1.6929	43,00	13/16"	13/16"	20	7C*20P-0026	7375-IP9-10	8IP-9	3/8"
V3820D-0123	1-23/32"	1.7188	43,66							

* denotes carbide grade

NOTE: Inserts are sold separately

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver
3/8"	C5	AM300*	OP-060408-PW	73595-IP15-10	8IP-15
	C1		OP-060408-1PW		
	C5		OP-060408-PWHR		

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

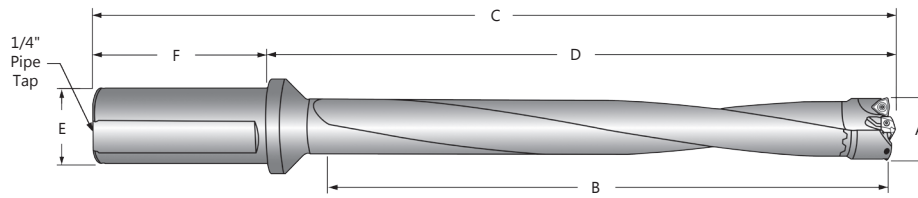
ASC 320

Special Tooling

APX™ Holders

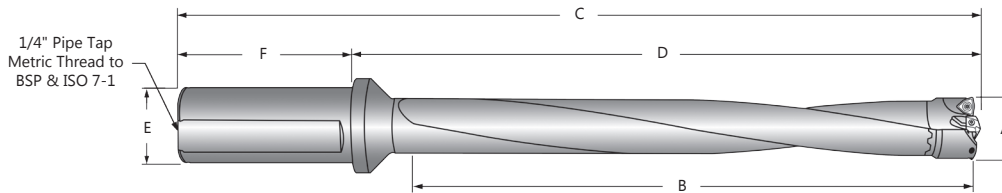


38 Series Range: 1.4961"-1.7322" (38,00mm-43,99mm)



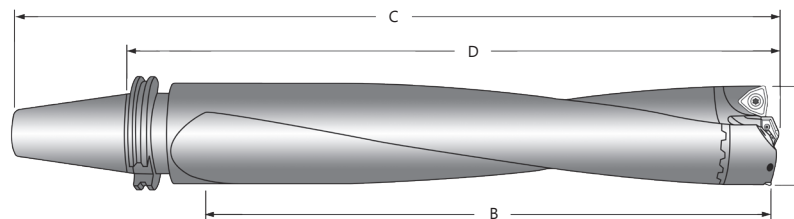
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W3803H-200F	38	1.4961"-1.7322"	38,00-43,99	5-1/8"	12-15/64"	7-47/64"	2"	4-1/2"
W3805H-200F				8-5/8"	15-45/64"	11-13/64"		
⚠ W3808H-200F				13-7/8"	20-57/64"	16-25/64"		
⚠ W3810H-200F				17-1/4"	24-59/64"	19-27/32"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W3803H-50FM	38	1.4961"-1.7322"	38,00-43,99	130,5	276,5	196,5	50,0	80,0
W3805H-50FM				220,0	364,5	284,5		
⚠ W3808H-50FM				352,0	496,3	416,3		
⚠ W3810H-50FM				439,9	583,9	503,9		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W3803H-CV50	38	1.4961"-1.7322"	38,00-43,99	5-1/8"	12-5/16"	8-5/16"	CV50
W3805H-CV50				8-5/8"	15-49/64"	11-49/64"	
⚠ W3808H-CV50				13-7/8"	20-31/32"	16-31/32"	
⚠ W3810H-CV50				17-1/4"	24-7/16"	20-7/16"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
75020-IP20-4	8IP-20	60 in-lb (678 N-cm)

⚠ WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

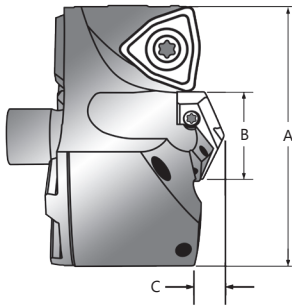


APX™ Heads

44 Series Range: 1.7323"-2.0075" (44,00mm-50,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

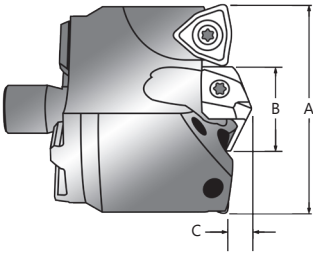


Item Number	A			B Pilot Dia.	C Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V4401D-44	-	1.7323"	44,00	7/8"			4C*1H-0028			3/8"
V4401D-0124	1-3/4"	1.7500"	44,45							
V4401D-45	-	1.7717"	45,00							
V4401D-0125	1-25/32"	1.7813"	45,25							
V4401D-46	-	1.8110"	46,00	15/16"		1	4C*1H-0030	7375-IP9-10	8IP-9	1/2"
V4401D-0126	1-13/16"	1.8125"	46,04							
V4401D-0127	1-27/32"	1.8438"	46,83							
V4401D-47	-	1.8504"	47,00	21/64"						
V4401D-0128	1-7/8"	1.8750"	47,63							
V4401D-48	-	1.8898"	48,00							
V4401D-0129	1-29/32"	1.9063"	48,42							
V4401D-49	-	1.9291"	49,00	45/64"			4C*1H-.703			1/2"
V4401D-0130	1-15/16"	1.9375"	49,21							
V4401D-50	-	1.9685"	50,00							
V4401D-0131	1-31/32"	1.9688"	50,01	47/64"			4C*1H-.734			
V4401D-0200	2"	2.000"	50,80							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B Pilot Dia.	C Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V4422D-44	-	1.7323"	44,00	7/8"			7C*22P-0028			3/8"
V4422D-0124	1-3/4"	1.7500"	44,45							
V4422D-45	-	1.7717"	45,00							
V4422D-0125	1-25/32"	1.7813"	45,25							
V4422D-46	-	1.8110"	46,00	15/16"		22	7C*22P-0030	739-IP9-10	8IP-9	1/2"
V4422D-0126	1-13/16"	1.8125"	46,04							
V4422D-0127	1-27/32"	1.8438"	46,83							
V4422D-47	-	1.8504"	47,00	21/64"						
V4422D-0128	1-7/8"	1.8750"	47,63							
V4417D-48	-	1.8898"	48,00							
V4417D-0129	1-29/32"	1.9063"	48,42							
V4417D-49	-	1.9291"	49,00	45/64"		17	7C*17P-.703	72567-IP8-10	8IP-8	1/2"
V4417D-0130	1-15/16"	1.9375"	49,21							
V4418D-50	-	1.9685"	50,00							
V4418D-0131	1-31/32"	1.9688"	50,01	47/64"		18	7C*18P-.734	7375-IP9-10	8IP-9	
V4418D-0200	2"	2.000"	50,80							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver
3/8"	C5	AM300*	OP-060408-PW OP-060408-1PW OP-060408-PWHR	73595-IP15-10	8IP-15
	C1				
1/2"	C5		OP-080508-PW OP-080508-1PW OP-080508-PWHR	74012-IP15-10	
	C1				
	C5				

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

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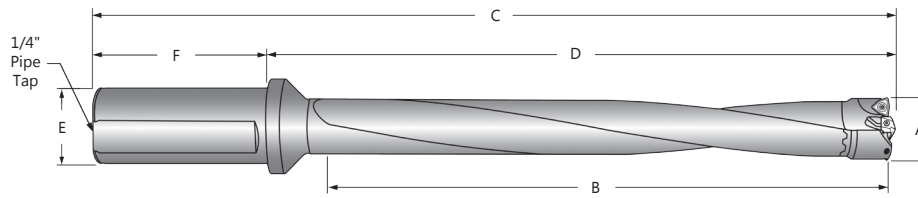
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Special Tooling

APX™ Holders

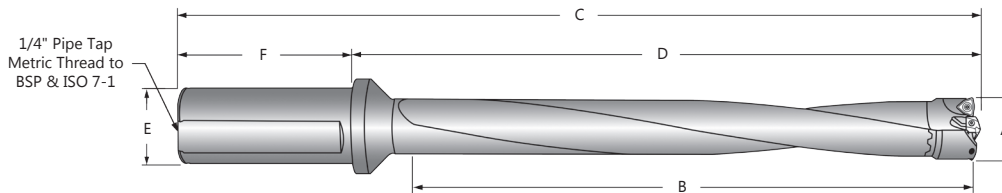


44 Series Range: 1.7323"-2.0075" (44,00mm-50,99mm)



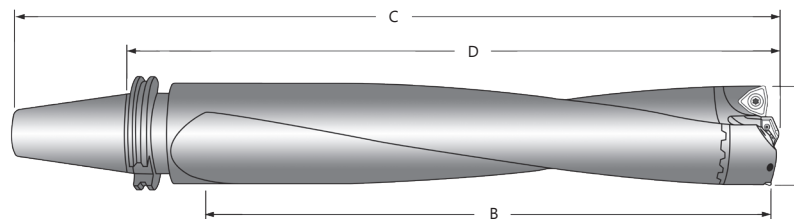
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W4403H-200F	44	1.7323"-2.0075"	44,00-50,99	6"	13-1/32"	8-33/64"	2"	4-1/2"
W4405H-200F				10"	17-3/64"	12-35/64"		
⚠ W4408H-200F				16"	23-5/64"	18-37/64"		
⚠ W4410H-200F				20-1/8"	27-3/32"	22-19/32"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W4403H-50FM	44	1.7323"-2.0075"	44,00-50,99	151,5	296,9	216,8	50,0	80,0
W4405H-50FM				255,0	398,8	318,8		
⚠ W4408H-50FM				407,9	551,7	471,7		
⚠ W4410H-50FM				510,0	653,8	573,8		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W4403H-CV50	44	1.7323"-2.0075"	44,00-50,99	6"	13-1/4"	9-1/4"	CV50
W4405H-CV50				10"	17-17/64"	13-17/64"	
⚠ W4408H-CV50				16"	23-19/64"	19-19/64"	
⚠ W4410H-CV50				20"	27-5/16"	23-5/16"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
75020-IP20-4	8IP-20	60 in-lb (678 N-cm)

⚠ WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

Allied Machine & Engineering Corp. patent information can be found at www.alliedmachine.com/patents

Revolution & Opening

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GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

ASC 320

Special Tooling

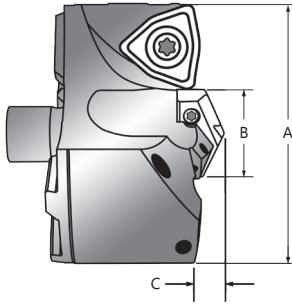


APX™ Heads

51 Series Range: 2.0076"-2.2438" (51,00mm-56,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

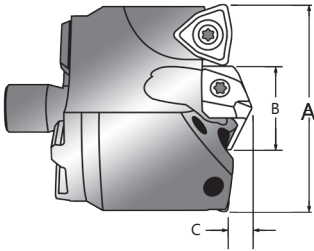


Item Number	A			B Pilot Dia.	C Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V5101D-51	-	2.0079"	51,00	25/32"			4C*1H-0025			
V5101D-0201	2-1/32"	2.0313"	51,59							
V5101D-52	-	2.0472"	52,00							
V5101D-0202	2-1/16"	2.0625"	52,39							
V5101D-53	-	2.0866"	53,00	27/32"						
V5101D-0203	2-3/32"	2.0938"	53,18							
V5101D-0204	2-1/8"	2.1250"	53,98	15/16"	11/32"	1		7375-IP9-10	8IP-9	1/2"
V5101D-54	-	2.1260"	54,00							
V5101D-0205	2-5/32"	2.1563"	54,77							
V5101D-55	-	2.1654"	55,00	13/16"						
V5101D-0206	2-3/16"	2.1875"	55,56							
V5101D-56	-	2.2047"	56,00							
V5101D-0207	2-7/32"	2.2188"	56,36				4C*1H-0026			9/16"

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B Pilot Dia.	C Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V5118D-51	-	2.0079"	51,00	25/32"		18	7C*18P-0025	7375-IP9-10		
V5118D-0201	2-1/32"	2.0313"	51,59							
V5118D-52	-	2.0472"	52,00							
V5118D-0202	2-1/16"	2.0625"	52,39							
V5120D-53	-	2.0866"	53,00	27/32"		20	7C*20P-0027		8IP-9	1/2"
V5120D-0203	2-3/32"	2.0938"	53,18							
V5120D-0204	2-1/8"	2.1250"	53,98	15/16"	11/32"					
V5122D-54	-	2.1260"	54,00							
V5122D-0205	2-5/32"	2.1563"	54,77							
V5122D-55	-	2.1654"	55,00	13/16"		22	7C*22P-0030	739-IP9-10		
V5122D-0206	2-3/16"	2.1875"	55,56							
V5122D-56	-	2.2047"	56,00							
V5120D-0207	2-7/32"	2.2188"	56,36			20	7C*20P-0026	7375-IP9-10		9/16"

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver
1/2"	C5	AM300*	OP-080508-PW	74012-IP15-10	8IP-15
	C1		OP-080508-1PW		
	C5		OP-080508-PWHR		
9/16"	C5		OP-090608-PW	75014-IP20-10	8IP-20
	C1		OP-090608-1PW		
	C5		OP-090608-PWHR		

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

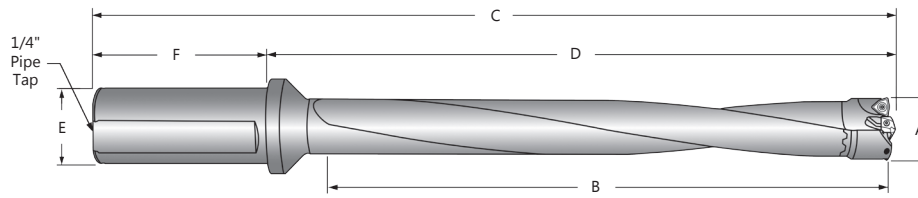
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APX™ Holders

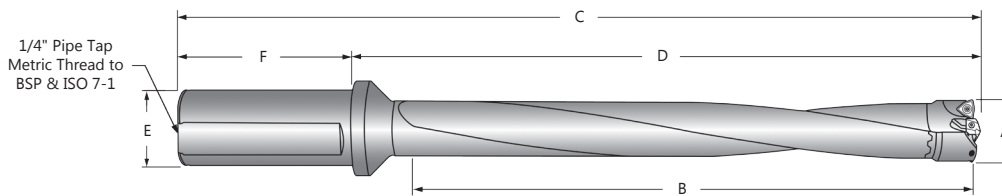


51 Series Range: 2.0076"-2.2438" (51,00mm-56,99mm)



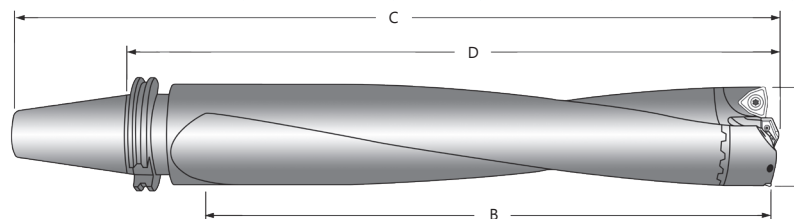
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W5103H-200F	51	2.0076"-2.2438"	51,00-56,99	6-3/8"	13-3/8"	8-7/8"	2"	4-1/2"
W5105H-200F				11-1/8"	17-7/8"	13-3/8"		
⚠ W5108H-200F				17-7/8"	24-19/32"	20-3/32"		
⚠ W5110H-200F				22-3/8"	29-3/32"	24-19/32"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W5103H-50FM	51	2.0076"-2.2438"	51,00-56,99	161,8	305,5	225,5	50,0	80,0
W5105H-50FM				285,0	419,6	339,6		
⚠ W5108H-50FM				455,9	590,5	510,5		
⚠ W5110H-50FM				570,0	704,6	624,6		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W5103H-CV50	51	2.0076"-2.2438"	51,00-56,99	6-3/8"	13-47/64"	9-47/64"	CV50
W5105H-CV50				11-1/4"	18-7/32"	14-7/32"	
⚠ W5108H-CV50				17-7/8"	24-61/64"	20-61/64"	
⚠ W5110H-CV50				22-3/8"	29-7/16"	25-7/16"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
75020-IP20-4	8IP-20	60 in-lb (678 N-cm)

⚠ WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

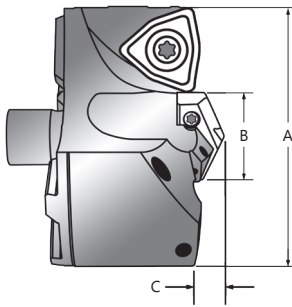


APX™ Heads

57 Series Range: 2.2439"-2.4799" (57,00mm-62,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

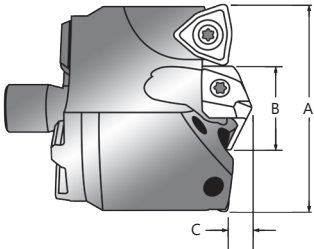


Item Number	A			Pilot Dia.	Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V5701D-57	-	2.2441"	57,00	29/32"	25/64"	1	4C*1H-0029	739-IP9-10	8IP-9	9/16"
V5701D-0208	2-1/4"	2.2500"	57,15							
V5701D-0209	2-9/32"	2.2813"	57,94							
V5701D-58	-	2.2835"	58,00							
V5701D-0210	2-5/16"	2.3125"	58,74	15/16"	25/64"	1	4C*1H-0030	739-IP9-10	8IP-9	9/16"
V5701D-59	-	2.3228"	59,00							
V5701D-0211	2-11/32"	2.3438"	59,53							
V5701D-60	-	2.3622"	60,00	1"	1"	2	4C*2H-0100	7495-IP15-10	8IP-15	9/16"
V5701D-0212	2-3/8"	2.3750"	60,33							
V5702D-61	-	2.4016"	61,00							
V5702D-0213	2-13/32"	2.4063"	61,12	1-1/16"	1-1/16"	2	4C*2H-0102	7495-IP15-10	8IP-15	9/16"
V5702D-0214	2-7/16"	2.4375"	61,91							
V5702D-62	-	2.4409"	62,00	1-1/16"	1-1/16"	2	4C*2H-0102	7495-IP15-10	8IP-15	9/16"
V5702D-0215	2-15/32"	2.4688"	62,71							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			Pilot Dia.	Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V5722D-57	-	2.2441"	57,00	29/32"	25/64"	22	7C*22P-0029	739-IP9-10	8IP-9	9/16"
V5722D-0208	2-1/4"	2.2500"	57,15							
V5722D-0209	2-9/32"	2.2813"	57,94							
V5722D-58	-	2.2835"	58,00							
V5722D-0210	2-5/16"	2.3125"	58,74	15/16"	25/64"	22	7C*22P-0030	739-IP9-10	8IP-9	9/16"
V5722D-59	-	2.3228"	59,00							
V5722D-0211	2-11/32"	2.3438"	59,53							
V5722D-60	-	2.3622"	60,00	1"	1"	24	7C*24P-0100	7495-IP15-10	8IP-15	9/16"
V5722D-0212	2-3/8"	2.3750"	60,33							
V5724D-61	-	2.4016"	61,00							
V5724D-0213	2-13/32"	2.4063"	61,12	1-1/16"	1-1/16"	26	7C*26P-0102	7495-IP15-10	8IP-15	9/16"
V5724D-0214	2-7/16"	2.4375"	61,91							
V5726D-62	-	2.4409"	62,00	1-1/16"	1-1/16"	26	7C*26P-0102	7495-IP15-10	8IP-15	9/16"
V5726D-0215	2-15/32"	2.4688"	62,71							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver
9/16"	C5	AM300*	OP-090608-PW	75014-IP20-10	8IP-20
	C1		OP-090608-1PW		
	C5		OP-090608-PWHR		

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

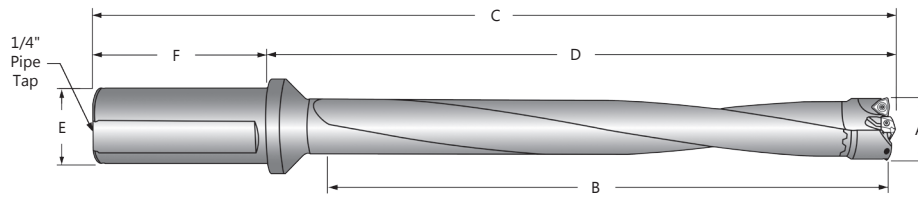
ASC 320

Special Tooling

APX™ Holders

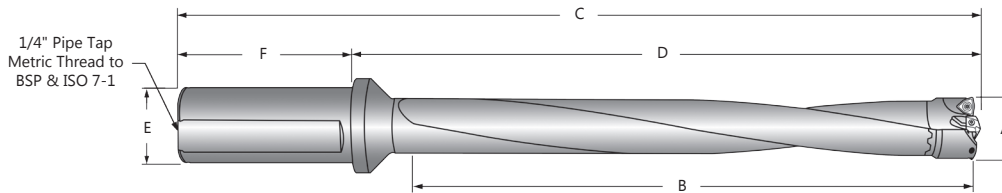


57 Series Range: 2.2439"-2.4799" (57,00mm-62,99mm)



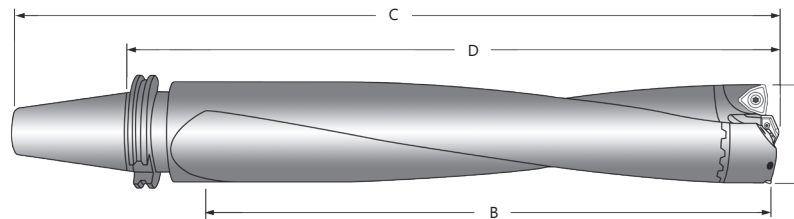
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W5703H-200F	57	2.2439"-2.4799"	57,00-62,99	7-1/8"	14-1/16"	9-35/64"	2"	4-1/2"
W5705H-200F				12-3/8"	19-1/64"	14-33/64"		
⚠ W5708H-200F				19-3/4"	26-15/32"	21-31/32"		
⚠ W5710H-200F				24-3/4"	31-27/64"	26-59/64"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W5703H-50FM	57	2.2439"-2.4799"	57,00-62,99	179,9	322,7	242,7	50,0	80,0
W5705H-50FM				315,0	448,6	368,6		
⚠ W5708H-50FM				503,9	637,8	557,8		
⚠ W5710H-50FM				626,9	763,8	683,8		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W5703H-CV50	57	2.2439"-2.4799"	57,00-62,99	7-1/8"	14-17/32"	10-17/32"	CV50
W5705H-CV50				12-3/8"	19-31/64"	15-31/64"	
⚠ W5708H-CV50				19-7/8"	26-15/16"	22-15/16"	
⚠ W5710H-CV50				24-3/4"	31-57/64"	27-57/64"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
75020-IP20-4	8IP-20	60 in-lb (678 N-cm)

⚠ WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

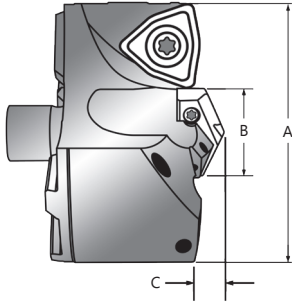


APX™ Heads

63 Series Range: 2.4800"-2.7555" (63,00mm-69,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

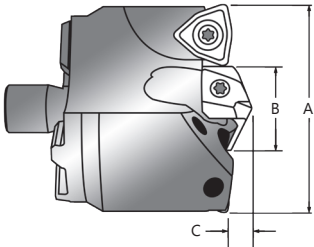


Item Number	A			Pilot Dia.	Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V6302D-63	-	2.4803"	63,00	1-1/8"	7/16"	2	4C*2H-0104	7495-IP15-10	8IP-15	9/16"
V6302D-0216	2-1/2"	2.5000"	63,50							
V6302D-64	-	2.5197"	64,00							
V6302D-0217	2-17/32"	2.5313"	64,29							
V6302D-65	-	2.5591"	65,00							
V6302D-0218	2-9/16"	2.5625"	65,09	1-3/16"	7/16"	2	4C*2H-0106	7495-IP15-10	8IP-15	9/16"
V6302D-0219	2-19/32"	2.5938"	65,88							
V6302D-66	-	2.5984"	66,00							
V6302D-0220	2-5/8"	2.6250"	66,68	1-1/4"	7/16"	2	4C*2H-0108	7495-IP15-10	8IP-15	9/16"
V6302D-67	-	2.6378"	67,00							
V6302D-0221	2-21/32"	2.6563"	67,47							
V6302D-68	-	2.6772"	68,00							
V6302D-0222	2-11/16"	2.6875"	68,26	1-5/16"	7/16"	2	4C*2H-0110	7495-IP15-10	8IP-15	9/16"
V6302D-69	-	2.7165"	69,00							
V6302D-0223	2-23/32"	2.7188"	69,06							
V6302D-0224	2-3/4"	2.7500"	69,85							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			Pilot Dia.	Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V6326D-63	-	2.4803"	63,00	1-1/8"	7/16"	26	7C*26P-0104	7495-IP15-10	8IP-15	9/16"
V6326D-0216	2-1/2"	2.5000"	63,50							
V6326D-64	-	2.5197"	64,00							
V6326D-0217	2-17/32"	2.5313"	64,29							
V6326D-65	-	2.5591"	65,00							
V6329D-0218	2-9/16"	2.5625"	65,09	1-3/16"	7/16"	29	7C*29P-0106	7495-IP15-10	8IP-15	9/16"
V6329D-0219	2-19/32"	2.5938"	65,88							
V6329D-66	-	2.5984"	66,00							
V6329D-0220	2-5/8"	2.6250"	66,68	1-1/4"	7/16"	29	7C*29P-0108	7495-IP15-10	8IP-15	9/16"
V6329D-67	-	2.6378"	67,00							
V6329D-0221	2-21/32"	2.6563"	67,47							
V6329D-68	-	2.6772"	68,00							
V6329D-0222	2-11/16"	2.6875"	68,26	1-5/16"	7/16"	32	7C*32P-0110	7495-IP15-10	8IP-15	9/16"
V6332D-69	-	2.7165"	69,00							
V6332D-0223	2-23/32"	2.7188"	69,06							
V6332D-0224	2-3/4"	2.7500"	69,85							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver
9/16"	C5	AM300*	OP-090608-PW	75014-IP20-10	8IP-20
	C1		OP-090608-1PW		
	C5		OP-090608-PWHR		

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

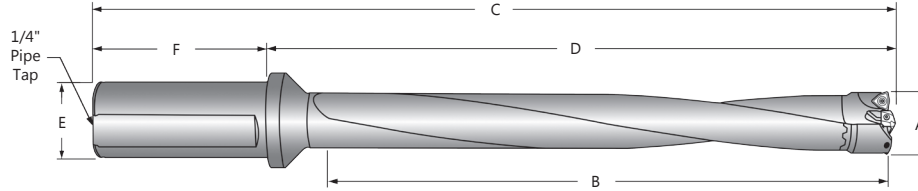
ASC 320

Special Tooling

APX™ Holders

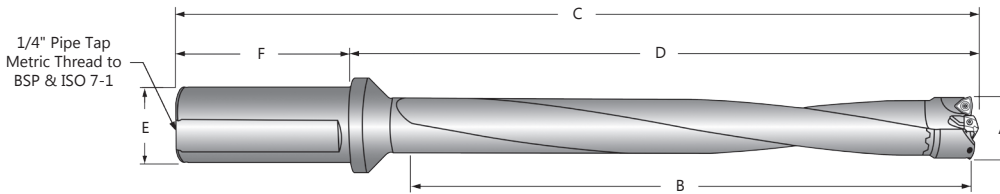


63 Series Range: 2.4800"-2.7555" (63,00mm-69,99mm)



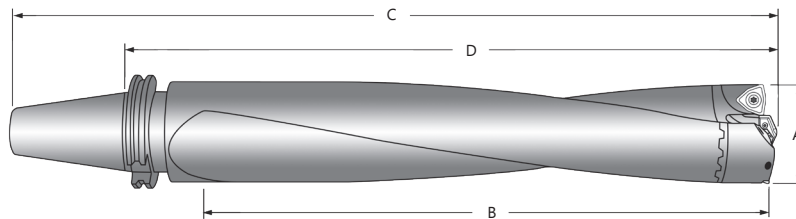
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W6303H-200F	63	2.4800"-2.7555"	63,00-69,99	7-7/8"	14-27/32"	10-11/32"	2"	4-1/2"
W6305H-200F				13-3/4"	20-11/32"	15-27/32"		
⚠ W6308H-200F				22-1/8"	28-5/8"	24-1/8"		
⚠ W6310H-200F				27-1/8"	33-43/64"	29-11/64"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W6303H-50FM	63	2.4800"-2.7555"	63,00-69,99	200,8	342,6	262,6	50,0	80,0
W6305H-50FM				350,0	482,6	402,6		
⚠ W6308H-50FM				560,0	692,6	612,6		
⚠ W6310H-50FM				688,3	820,9	740,9		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W6303H-CV50	63	2.4800"-2.7555"	63,00-69,99	7-7/8"	15-7/16"	11-7/16"	CV50
W6305H-CV50				13-3/4"	20-15/16"	16-15/16"	
⚠ W6308H-CV50				22"	29-13/64"	25-13/64"	
⚠ W6310H-CV50				26-1/2"	33-43/64"	29-43/64"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
75020-IP20-4	8IP-20	60 in-lb (678 N-cm)

⚠ WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

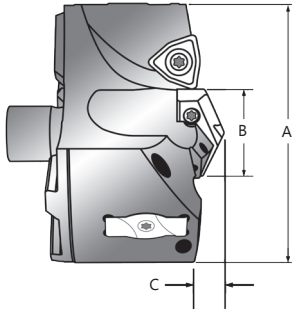


APX™ Heads

70 Series Range: 2.7556"-2.9917" (70,00mm-75,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

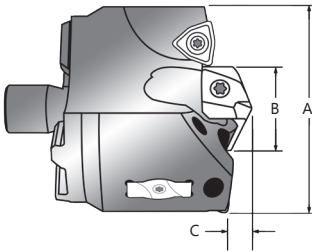


Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V7002S-70	-	2.7559"	70,00	1-7/32"	25/64"	2	4C*2H-0107	7495-IP15-10	8IP-15	3/8"
V7002S-0226	2-13/16"	2.8125"	71,44							
V7002S-72	-	2.8346"	72,00							
V7002S-0228	2-7/8"	2.8750"	73,03							
V7002S-74	-	2.9134"	74,00							
V7002S-0230	2-15/16"	2.9375"	74,61							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V7029S-70	-	2.7559"	70,00	1-7/32"	25/64"	29	7C*29P-0107	7495-IP15-10	8IP-15	3/8"
V7029S-0226	2-13/16"	2.8125"	71,44							
V7029S-72	-	2.8346"	72,00							
V7029S-0228	2-7/8"	2.8750"	73,03							
V7029S-74	-	2.9134"	74,00							
V7029S-0230	2-15/16"	2.9375"	74,61							

* denotes carbide grade

Accessories

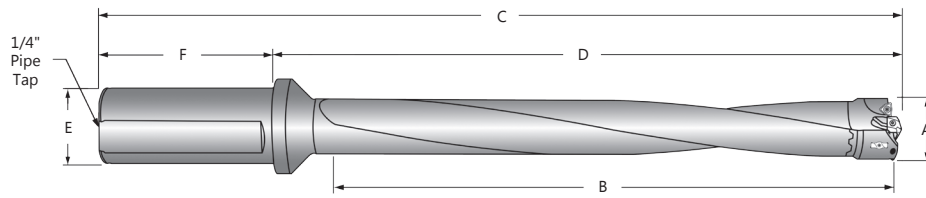
IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver	Wear Pad (2pc. package)	Wear Pad Screw	Wear Pad Driver
3/8"	C5	AM300*	OP-060408-PW	73595-IP15-10	8IP-15	WP7095	7358-IP10-4	8IP-10
	C1		OP-060408-1PW					
	C5		OP-060408-PWHR					

70-95 Series APX Heads are supplied with wear pads. Replacement wear pads are available for purchase.

APX™ Holders

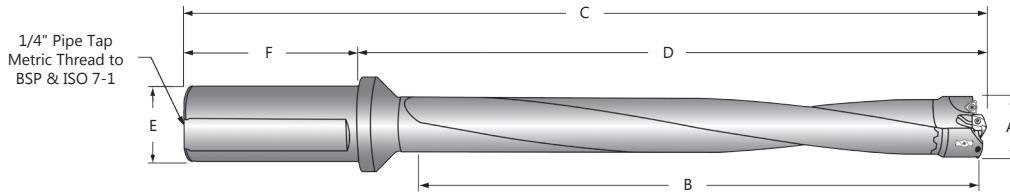


70 Series Range: 2.7556"-2.9917" (70,00mm-75,99mm)



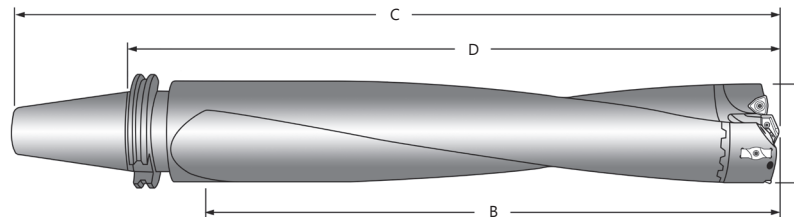
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W7003H-200F	70	2.7556"-2.9917"	70,00-75,99	8-3/4"	15-3/32"	10-19/32"	2"	4-1/2"
W7005H-200F				14-7/8"	21-5/64"	16-37/64"		
⚠ W7008H-200F				23-7/8"	30-3/64"	25-35/64"		
⚠ W7010H-200F				27-7/8"	34-3/64"	29-35/64"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W7003H-50FM	70	2.7556"-2.9917"	70,00-75,99	218,8	349,0	269,0	50,0	80,0
W7005H-50FM				380,0	501,1	421,1		
⚠ W7008H-50FM				608,0	729,0	649,0		
⚠ W7010H-50FM				709,4	830,3	750,3		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W7003H-CV50	70	2.7556"-2.9917"	70,00-75,99	8-3/4"	16-7/32"	12-7/32"	CV50
W7005H-CV50				14-7/8"	22-13/64"	18-13/64"	
⚠ W7008H-CV50				23-7/8"	31-5/32"	27-5/32"	
⚠ W7010H-CV50				26-3/4"	33-61/64"	29-61/64"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
78027-IP30-4	8IP-30B	250 in-lb (2825 N-cm)

⚠ WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

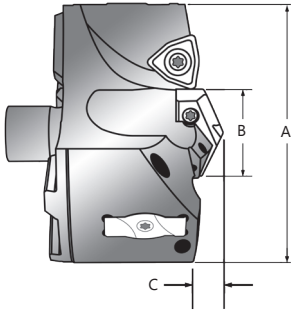


APX™ Heads

76 Series Range: 2.9918"-3.2673" (76,00mm-82,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

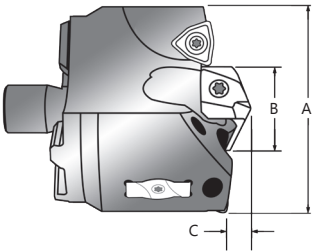


Item Number	A			B Pilot Dia.	C Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V7602S-76	-	2.9921"	76,00	1-7/32"	13/32"	2	4C*2H-0107	7495-IP15-10	8IP-15	1/2"
V7602S-0300	3"	3.0000"	76,20							
V7602S-0302	3-1/16"	3.0625"	77,79							
V7602S-78	-	3.0709"	78,00							
V7602S-0304	3-1/8"	3.1250"	79,38							
V7602S-80	-	3.1496"	80,00							
V7602S-0306	3-3/16"	3.1875"	80,96							
V7602S-82	-	3.2282"	82,00							
V7602S-0308	3-1/4"	3.2500"	82,55							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B Pilot Dia.	C Pilot Length	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)							
V7629S-76	-	2.9921"	76,00	1-7/32"	13/32"	29	7C*29P-0107	7495-IP15-10	8IP-15	1/2"
V7629S-0300	3"	3.0000"	76,20							
V7629S-0302	3-1/16"	3.0625"	77,79							
V7629S-78	-	3.0709"	78,00							
V7629S-0304	3-1/8"	3.1250"	79,38							
V7629S-80	-	3.1496"	80,00							
V7629S-0306	3-3/16"	3.1875"	80,96							
V7629S-82	-	3.2282"	82,00							
V7629S-0308	3-1/4"	3.2500"	82,55							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver	Wear Pad (2pc. package)	Wear Pad Screw	Wear Pad Driver
1/2"	C5	AM300*	OP-080508-PW	74012-IP15-10	8IP-15	WP7095	7358-IP10-4	8IP-10
	C1		OP-080508-1PW					
	C5		OP-080508-PWHR					

70-95 Series APX Heads are supplied with wear pads. Replacement wear pads are available for purchase.

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

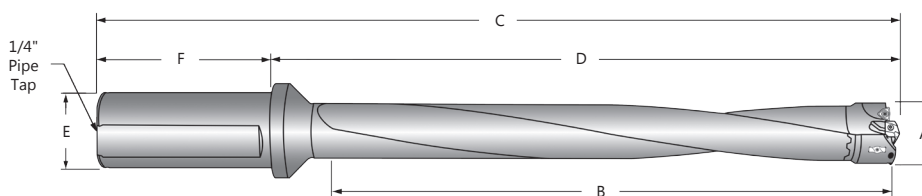
ASC 320

Special Tooling

APX™ Holders

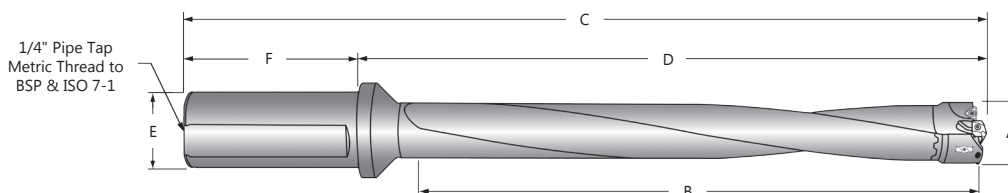


76 Series Range: 2.9918"-3.2673" (76,00mm-82,99mm)



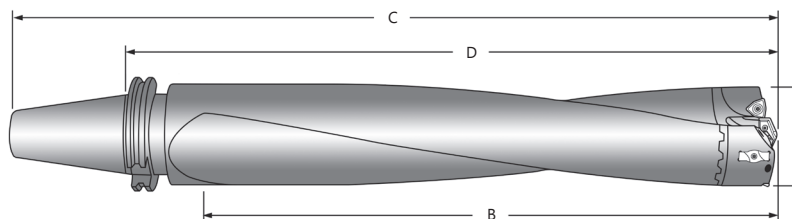
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W7603H-200F	76	2.9918"-3.2673"	76,00-82,99	9-1/2"	16-1/64"	11-33/64"	2"	4-1/2"
W7605H-200F				16-3/8"	22-35/64"	18-3/64"		
W7608H-200F				26-1/8"	32-11/32"	27-27/32"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W7603H-50FM	76	2.9918"-3.2673"	76,00-82,99	239,9	372,4	292,4	50,0	80,0
W7605H-50FM				415,0	538,2	458,2		
W7608H-50FM				664,0	787,1	707,1		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W7603H-CV50	76	2.9918"-3.2673"	76,00-82,99	9-1/2"	16-57/64"	12-57/64"	CV50
W7605H-CV50				16-3/8"	23-27/64"	19-27/64"	
W7608H-CV50				26-1/8"	33-7/32"	29-7/32"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
78027-IP30-4	8IP-30B	250 in-lb (2825 N-cm)

WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

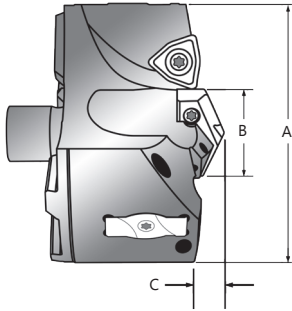


APX™ Heads

83 Series Range: 3.2674"-3.5035" (83,00mm-88,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

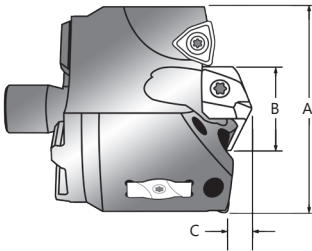


Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V8302S-84	-	3.3071"	84,00	1-3/8"	7/16"	2	4C*2H-0112	7495-IP15-10	8IP-15	1/2"
V8302S-0310	3-5/16"	3.3125"	84,14							
V8302S-0312	3-3/8"	3.3750"	85,73							
V8302S-86	-	3.3859"	86,00							
V8302S-0314	3-7/16"	3.4375"	87,31							
V8302S-88	-	3.4646"	88,00							
V8302S-0316	3-1/2"	3.500"	88,90							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V8332S-84	-	3.3071"	84,00	1-3/8"	7/16"	32	7C*32P-0112	7495-IP15-10	8IP-15	1/2"
V8332S-0310	3-5/16"	3.3125"	84,14							
V8332S-0312	3-3/8"	3.3750"	85,73							
V8332S-86	-	3.3859"	86,00							
V8332S-0314	3-7/16"	3.4375"	87,31							
V8332S-88	-	3.4646"	88,00							
V8332S-0316	3-1/2"	3.500"	88,90							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver	Wear Pad (2pc. package)	Wear Pad Screw	Wear Pad Driver
1/2"	C5	AM300®	OP-080508-PW	74012-IP15-10	8IP-15	WP7095	7358-IP10-4	8IP-10
	C1		OP-080508-1PW					
	C5		OP-080508-PWHR					

70-95 Series APX Heads are supplied with wear pads. Replacement wear pads are available for purchase.

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

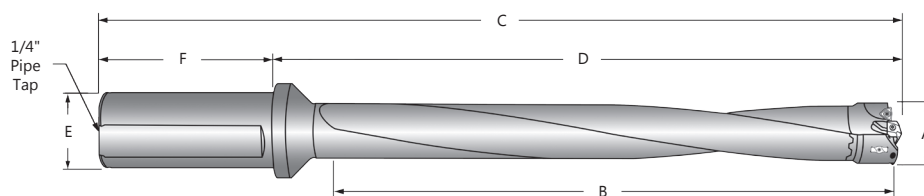
ASC 320

Special Tooling

APX™ Holders

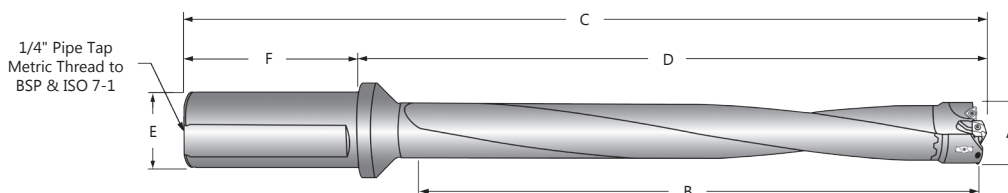


83 Series Range: 3.2674"-3.5035" (83,00mm-88,99mm)



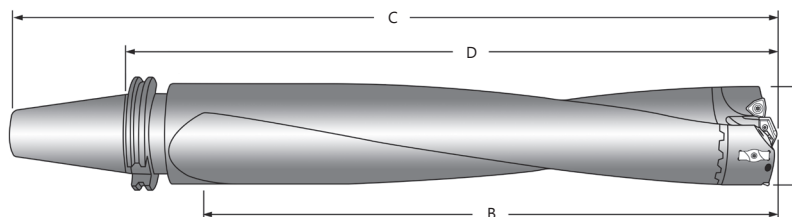
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W8303H-200F	83	3.2674"-3.5035"	83,00-88,99	10-1/8"	16-13/16"	12-5/16"	2"	4-1/2"
W8305H-200F				17-1/2"	23-13/16"	19-5/16"		
W8308H-200F				27-3/4"	34-3/64"	29-35/64"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W8303H-50FM	83	3.2674"-3.5035"	83,00-88,99	257,8	392,6	312,5	50,0	80,0
W8305H-50FM				445,0	570,5	490,5		
W8308H-50FM				704,9	830,3	750,3		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W8303H-CV50	83	3.2674"-3.5035"	83,00-88,99	10-1/8"	17-11/16"	13-11/16"	CV50
W8305H-CV50				17-1/2"	24-11/16"	20-11/16"	
W8308H-CV50				26-7/8"	34-3/64"	30-3/64"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
78027-IP30-4	8IP-30B	250 in-lb (2825 N-cm)

WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

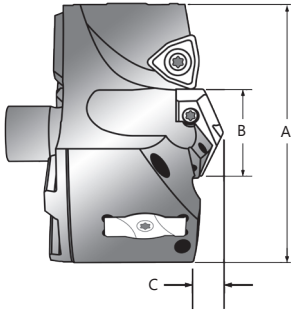


APX™ Heads

89 Series Range: 3.5036"-3.7400" (89,00mm-94,99mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

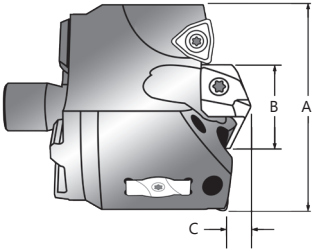


Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V8902S-90	-	3.5433"	90,00	1-1/4"	27/64"	2	4C*2H-0108	7495-IP15-10	8IP-15	9/16"
V8902S-0318	3-9/16"	3.5625"	90,49							
V8902S-92	-	3.6220"	92,00							
V8902S-0320	3-5/8"	3.6250"	92,08							
V8902S-0322	3-11/16"	3.6875"	93,66							
V8902S-94	-	3.7008"	94,00							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V8929S-90	-	3.5433"	90,00	1-1/4"	27/64"	29	7C*29P-0108	7495-IP15-10	8IP-15	9/16"
V8929S-0318	3-9/16"	3.5625"	90,49							
V8929S-92	-	3.6220"	92,00							
V8929S-0320	3-5/8"	3.6250"	92,08							
V8929S-0322	3-11/16"	3.6875"	93,66							
V8929S-94	-	3.7008"	94,00							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver	Wear Pad (2pc. package)	Wear Pad Screw	Wear Pad Driver
9/16"	C5	AM300*	OP-090608-PW	75014-IP20-10	8IP-20	WP7095	7358-IP10-4	8IP-10
	C1		OP-090608-1PW					
	C5		OP-090608-PWHR					

70-95 Series APX Heads are supplied with wear pads. Replacement wear pads are available for purchase.

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

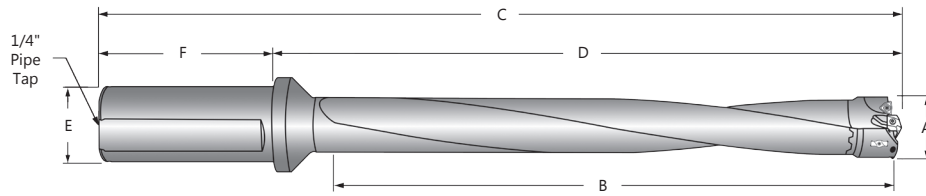
ASC 320

Special Tooling

APX™ Holders

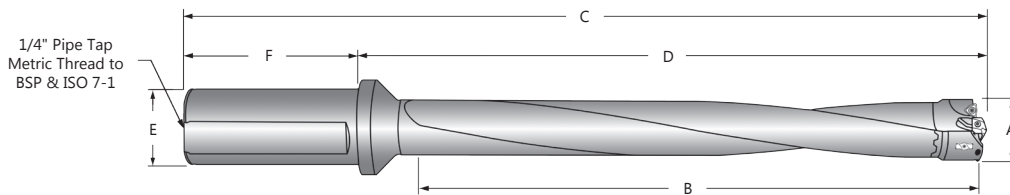


89 Series Range: 3.5036"-3.7400" (89,00mm-94,99mm)



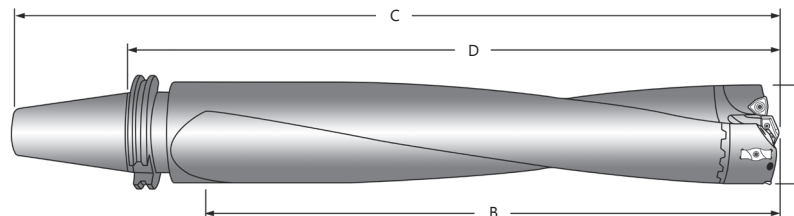
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W8903H-200F	89	3.5036"-3.7400"	89,00-94,99	10-7/8"	17-5/8"	13-1/8"	2"	4-1/2"
W8905H-200F				18-5/8"	25-1/8"	20-5/8"		
W8908H-200F				27-5/8"	34-3/64"	29-35/64"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W8903H-50FM	89	3.5036"-3.7400"	89,00-94,99	275,8	413,6	333,6	50,0	80,0
W8905H-50FM				475,0	603,7	523,7		
W8908H-50FM				701,8	830,3	750,3		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W8903H-CV50	89	3.5036"-3.7400"	89,00-94,99	10-7/8"	18-33/64"	14-33/64"	CV50
W8905H-CV50				18-5/8"	26"	22"	
W8908H-CV50				26-3/4"	34-1/32"	30-1/32"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
78027-IP30-4	8IP-30B	250 in-lb (2825 N-cm)

WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.

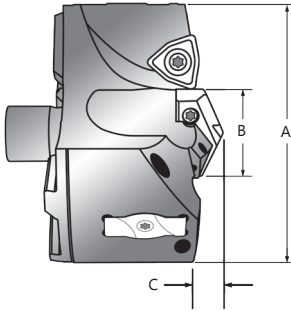


APX™ Heads

95 Series Range: 3.7401"-4.0000" (95,00mm-101,60mm)

T-A® Pilot Heads

NOTE: Inserts are sold separately

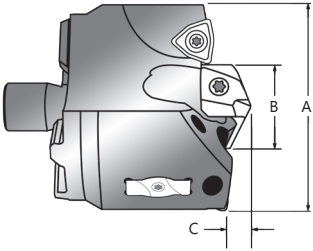


Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V9502S-0324	3-3/4"	3.7500"	95,25	1-3/8"	29/64"	2	4C*2H-0112	7495-IP15-10	8IP-15	9/16"
V9502S-96	-	3.7795"	96,00							
V9502S-0326	3-13/16"	3.8125"	96,84							
V9502S-98	-	3.8583"	98,00							
V9502S-0328	3-7/8"	3.8750"	98,43							
V9502S-100	-	3.9370"	100,00							
V9502S-0330	3-15/16"	3.9375"	100,01							
V9502S-0400	4"	4.000"	101,60							

* denotes carbide grade

GEN3SYS® Pilot Heads

NOTE: Inserts are sold separately



Item Number	A			B	C	Pilot Series	Pilot Insert	Drill Insert Screw	Drill Insert Driver	IC Insert Size
	Major Cutting Dia. (Fractional)	Major Cutting Dia. (inch)	Major Cutting Dia. (mm)	Pilot Dia.	Pilot Length					
V9532S-0324	3-3/4"	3.7500"	95,25	1-3/8"	29/64"	32	7C*32P-0112	7495-IP15-10	8IP-15	9/16"
V9532S-96	-	3.7795"	96,00							
V9532S-0326	3-13/16"	3.8125"	96,84							
V9532S-98	-	3.8583"	98,00							
V9532S-0328	3-7/8"	3.8750"	98,43							
V9532S-100	-	3.9370"	100,00							
V9532S-0330	3-15/16"	3.9375"	100,01							
V9532S-0400	4"	4.000"	101,60							

* denotes carbide grade

Accessories

IC Size	Grade	Coating	IC Insert (2pc. package)	IC Insert Screw	IC Insert Driver	Wear Pad (2pc. package)	Wear Pad Screw	Wear Pad Driver
9/16"	C5	AM300*	OP-090608-PW	75014-IP20-10	8IP-20	WP7095	7358-IP10-4	8IP-10
	C1		OP-090608-1PW					
	C5		OP-090608-PWHR					

70-95 Series APX Heads are supplied with wear pads. Replacement wear pads are available for purchase.

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

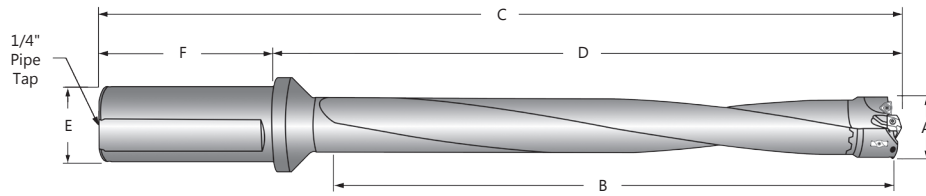
ASC 320

Special Tooling

APX™ Holders

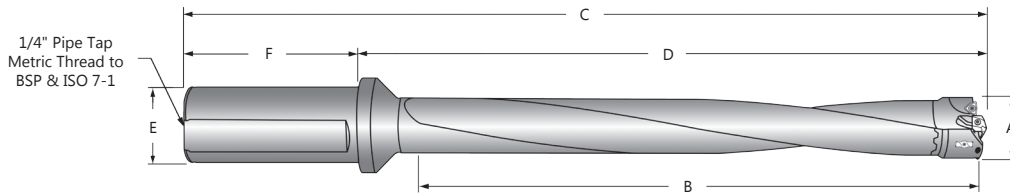


95 Series Range: 3.7401"-4.0000" (95,00mm-101,60mm)



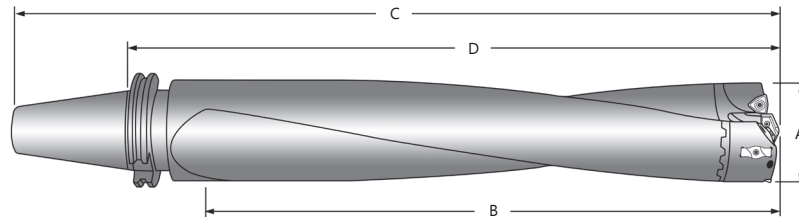
Holders with Inch Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W9503H-200F	95	3.7401"-4.0000"	95,00-101,60	11-7/8"	18-25/32"	14-9/32"	2"	4-1/2"
W9505H-200F				20"	26-51/64"	22-19/64"		
W9508H-200F				27-1/2"	34-19/64"	29-51/64"		



Holders with Metric Shank

Item Number	Series	A		B	C	D	E	F
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	Shank Dia.	Shank Length
W9503H-50FM	95	3.7401"-4.0000"	95,00-101,60	302,0	442,8	362,8	50,0	80,0
W9505H-50FM				508,0	646,2	566,2		
W9508H-50FM				698,5	836,7	756,7		



Holders with CAT50 Shank

Item Number	Series	A		B	C	D	Shank
		Dia. Range (inch)	Dia. Range (mm)	Drill Depth	Assembled OAL	Assembled Reference Length	
W9503H-CV50	95	3.7401"-4.0000"	95,00-101,60	11-7/8"	19-43/64"	15-43/64"	CV50
W9505H-CV50				20"	27-43/64"	23-43/64"	
W9508H-CV50				26-5/8"	34-9/32"	30-9/32"	

Head Mounting Screw	Head Mounting Screw Driver	Admissible Tightening Torque
78027-IP30-4	8IP-30B	250 in-lb (2825 N-cm)

WARNING Refer to page 49 for APX Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is available for your specific applications through our Application Engineering Team.



APX™

Recommended Speeds and Feeds - Inch

IMPORTANT: The speeds and feeds listed below are a general starting point for all applications. Refer to the Coolant Recommendation charts for coolant requirements to run at the recommended speeds and feeds. Factory technical assistance is also available through our Application Engineering Team.

Material	Hardness (BHN)	Outboard Insert		FEED (IPR)					
		Series		3-8" IC	1-2" IC	9-16" IC	3-8" IC	1-2" IC	9-16" IC
		Speed (SFM)	Pilot Drill	38-44	44-51	51-57-63	70	76-83	89-95
Free Machining Steel 1118, 1215, 12L14, etc.	100-250	450 - 750	T-A or GEN3SYS	.007 - .012	.009 - .012	.009 - .012	.006 - .010	.007 - .011	.007 - .012
Low Carbon Steel 1010, 1020, 1025, 1522, 1144, etc.	85-275	450 - 750	T-A or GEN3SYS	.007 - .012	.009 - .012	.009 - .012	.006 - .010	.007 - .011	.007 - .012
Medium Carbon Steel 1030, 1040, 1050, 1527, 1140, 1151, etc.	125-325	450 - 750	T-A or GEN3SYS	.007 - .012	.009 - .012	.009 - .012	.006 - .010	.007 - .011	.007 - .012
Alloy Steel 4140, 5140, 8640, etc.	125-375	400 - 700	T-A or GEN3SYS	.005 - .009	.007 - .010	.007 - .011	.005 - .009	.006 - .010	.006 - .010
High Strength Alloy 4340, 4330V, 300M, etc.	225-400	300 - 500	T-A	.005 - .007	.005 - .008	.006 - .009	.005 - .007	.005 - .008	.006 - .008
Structural Steel A36, A285, A516, etc.	100-350	450 - 750	T-A or GEN3SYS	.007 - .009	.008 - .010	.009 - .011	.005 - .009	.006 - .010	.007 - .010
Tool Steel H-13, H-21, A-4, O-2, S-3, etc.	150-250	300 - 500	T-A or GEN3SYS	.005 - .007	.007 - .009	.008 - .010	.005 - .007	.006 - .009	.007 - .010
High Temp. Alloy Hastelloy B, Inconel 600, etc.	140-310	200 - 400	T-A	.004 - .007	.006 - .009	.007 - .009	.004 - .006	.005 - .007	.005 - .007
Titanium Alloy	140-310	300 - 500	T-A	.006 - .008	.007 - .009	.008 - .010	.004 - .006	.005 - .007	.005 - .007
Aerospace Alloy S82	185-350	400 - 600	T-A	.005 - .007	.006 - .008	.006 - .008	.004 - .006	.005 - .007	.005 - .007
Stainless Steel 400 Series 416, 420, etc.	185-350	300 - 500	T-A or GEN3SYS	.007 - .009	.008 - .010	.009 - .011	.005 - .007	.007 - .009	.007 - .010
Stainless Steel 300 Series 304, 316, 17-4PH, etc.	135-275	300 - 500	T-A or GEN3SYS	.006 - .008	.007 - .009	.008 - .010	.004 - .008	.006 - .010	.006 - .010
Super Duplex Stainless Steel	135-275	250 - 450	T-A or GEN3SYS	.005 - .007	.007 - .009	.007 - .009	.004 - .007	.006 - .009	.007 - .010
Wear Plate Hardox, AR400, T-1, etc.	400-600	300 - 500	T-A	.004 - .006	.006 - .008	.007 - .009	.003 - .005	.004 - .006	.004 - .006
Hardened Steel	300-500	300 - 500	T-A	.005 - .006	.006 - .008	.006 - .008	.003 - .005	.004 - .006	.004 - .006
Nodular, Grey, Ductile Cast Iron	120-320	500 - 800	T-A or GEN3SYS	.006 - .010	.008 - .012	.010 - .012	.008 - .010	.009 - .011	.010 - .012
Cast Aluminum	30-180	600 - 800	T-A or GEN3SYS	.010 - .014	.012 - .016	.012 - .016	.006 - .009	.008 - .011	.008 - .012
Wrought Aluminum	30-180	600 - 800	T-A or GEN3SYS	.008 - .012	.010 - .014	.010 - .014	.006 - .009	.008 - .011	.008 - .012
Aluminum Bronze	100-250	400 - 700	T-A or GEN3SYS	.005 - .008	.007 - .010	.009 - .011	.006 - .009	.007 - .010	.008 - .012
Brass	30-100	800	T-A or GEN3SYS	.007 - .009	.008 - .010	.009 - .012	.006 - .008	.007 - .009	.008 - .010
Copper	60	700	T-A or GEN3SYS	.003 - .006	.006 - .008	.008 - .010	.003 - .006	.006 - .008	.006 - .008

SFM = RPM • 0.262 • Dia.

RPM = SFM • 3.82/Dia.

IPM = RPM • IPR

WARNING

Tool failure can cause serious injury. To prevent:

- For APX Bodies 8xD or longer, do not rotate tool more than 50 RPM unless it is engaged with workpiece or fixture.

Refer to page 49 for Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is also available for your specific applications.

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

ASC 320

Special Tooling

Recommended Speeds and Feeds - Metric

IMPORTANT: The speeds and feeds listed below are a general starting point for all applications. Refer to the Coolant Recommendation charts for coolant requirements to run at the recommended speeds and feeds. Factory technical assistance is also available through our Application Engineering Team.

Material	Hardness (BHN)	Outboard Insert		FEED (mm/rev)					
		Series		3-8" IC	1-2" IC	9-16" IC	3-8" IC	1-2" IC	9-16" IC
		Speed (M/min)	Pilot Drill	38,00 - 47,88	47,89 - 56,13	56,14 - 69,99	70,00 - 75,99	76,00 - 88,99	89,00 - 101,60
Free Machining Steel 1118, 1215, 12L14, etc.	100-250	137 - 229	T-A or GEN3SYS	0,18 - 0,30	0,23 - 0,30	0,23 - 0,30	0,15 - 0,25	0,18 - 0,28	0,18 - 0,30
Low Carbon Steel 1010, 1020, 1025, 1522, 1144, etc.	85-275	137- 229	T-A or GEN3SYS	0,18 - 0,30	0,23 - 0,30	0,23 - 0,30	0,15 - 0,25	0,18 - 0,28	0,18 - 0,30
Medium Carbon Steel 1030, 1040, 1050, 1527, 1140, 1151, etc.	125-325	137 - 229	T-A or GEN3SYS	0,18 - 0,30	0,23 - 0,30	0,23 - 0,30	0,15 - 0,25	0,18 - 0,28	0,18 - 0,30
Alloy Steel 4140, 5140, 8640, etc.	125-375	122 - 213	T-A or GEN3SYS	0,13 - 0,23	0,18 - 0,25	0,18 - 0,28	0,13 - 0,23	0,15 - 0,25	0,15 - 0,25
High Strength Alloy 4340, 4330V, 300M, etc.	225-400	91 - 152	T-A	0,13 - 0,18	0,13 - 0,20	0,15 - 0,23	0,13 - 0,18	0,13 - 0,20	0,15 - 0,20
Structural Steel A36, A285, A516, etc.	100-350	137 - 229	T-A or GEN3SYS	0,18 - 0,23	0,20 - 0,25	0,23 - 0,28	0,13 - 0,23	0,15 - 0,25	0,18 - 0,25
Tool Steel H-13, H-21, A-4, O-2, S-3, etc.	150-250	91 - 152	T-A or GEN3SYS	0,13 - 0,18	0,18 - 0,23	0,20 - 0,25	0,13 - 0,18	0,15 - 0,23	0,18 - 0,25
High Temp. Alloy Hastelloy B, Inconel 600, etc.	140-310	61 - 122	T-A	0,10 - 0,18	0,15 - 0,23	0,18 - 0,23	0,10 - 0,15	0,13 - 0,18	0,13 - 0,18
Titanium Alloy	140-310	91 - 152	T-A	0,15 - 0,20	0,18 - 0,23	0,20 - 0,25	0,10 - 0,15	0,13 - 0,18	0,13 - 0,18
Aerospace Alloy S82	185-350	122 - 183	T-A	0,13 - 0,18	0,15 - 0,20	0,15 - 0,20	0,10 - 0,15	0,13 - 0,18	0,13 - 0,18
Stainless Steel 400 Series 416, 420, etc.	185-350	91 - 152	T-A or GEN3SYS	0,18 - 0,23	0,20 - 0,25	0,23 - 0,28	0,13 - 0,18	0,18 - 0,23	0,18 - 0,25
Stainless Steel 300 Series 304, 316, 17-4PH, etc.	135-275	91 - 152	T-A or GEN3SYS	0,15 - 0,20	0,18 - 0,23	0,20 - 0,25	0,10 - 0,20	0,15 - 0,25	0,15 - 0,25
Super Duplex Stainless Steel	135-275	76 - 137	T-A or GEN3SYS	0,13 - 0,18	0,18 - 0,23	0,18 - 0,23	0,10 - 0,18	0,15 - 0,23	0,18 - 0,25
Wear Plate Hardox, AR400, T-1, etc.	400-600	91 - 152	T-A	0,10 - 0,15	0,15 - 0,20	0,18 - 0,23	0,08 - 0,13	0,10 - 0,15	0,10 - 0,15
Hardened Steel	300-500	91 - 152	T-A	0,13 - 0,15	0,15 - 0,20	0,15 - 0,20	0,08 - 0,13	0,10 - 0,20	0,10 - 0,20
Nodular, Grey, Ductile Cast Iron	120-320	152 - 244	T-A or GEN3SYS	0,15 - 0,25	0,20 - 0,30	0,25 - 0,30	0,20 - 0,25	0,23 - 0,28	0,25 - 0,30
Cast Aluminum	30-180	183 - 244	T-A or GEN3SYS	0,25 - 0,36	0,30 - 0,40	0,30 - 0,40	0,15 - 0,23	0,20 - 0,28	0,20 - 0,30
Wrought Aluminum	30-180	183 - 244	T-A or GEN3SYS	0,20 - 0,30	0,25 - 0,36	0,25 - 0,36	0,15 - 0,23	0,20 - 0,28	0,20 - 0,30
Aluminum Bronze	100-250	123 - 213	T-A or GEN3SYS	0,13 - 0,20	0,18 - 0,25	0,23 - 0,28	0,15 - 0,23	0,18 - 0,25	0,20 - 0,30
Brass	30-100	244	T-A or GEN3SYS	0,18 - 0,23	0,20 - 0,25	0,23 - 0,30	0,15 - 0,20	0,18 - 0,23	0,20 - 0,25
Copper	60	213	T-A or GEN3SYS	0,08 - 0,15	0,15 - 0,20	0,20 - 0,25	0,08 - 0,15	0,15 - 0,20	0,15 - 0,20

$m/min = RPM \cdot 0.003 \cdot Dia.$ $RPM = m/min \cdot 318.47/Dia.$ $mm/min = RPM \cdot mm/rev$

⚠ WARNING

Tool failure can cause serious injury. To prevent:

- For APX Bodies 8xD or longer, do not rotate tool more than 50 RPM unless it is engaged with workpiece or fixture.
- Refer to page 49 for Deep Hole Drilling Guidelines in this section of the catalog. Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is also available for your specific applications.



APX™

Coolant Recommendations

IMPORTANT: The coolant pressure and flow rate recommendations below represent a good approximation to obtain optimum tool life and chip evacuation at Allied recommended speeds and feeds. If lower coolant capabilities exist in a drilling application, the APX Drilling System will still function at reduced penetration rates. Contact our Application Engineering Department for a more specific recommendation of coolant requirements and/or speeds and feeds.

Series	Pressure		Flow Rate	
	PSI	BAR	GPM	LPM
38	300	21	10	38
44	275	19	12	45
51	250	17	18	68
57	225	16	20	76
63	200	14	22	83
70	150	10	25	95
76	100	7	28	106
83	100	7	30	114
89	100	7	33	125
95	100	7	33	125

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

ASC 320

Special Tooling

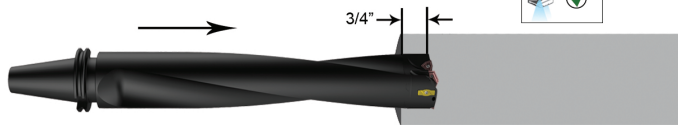
Deep Hole Drilling Guidelines

- 1) Approach**
50RPM Max
12 IPM (300 mm/min)



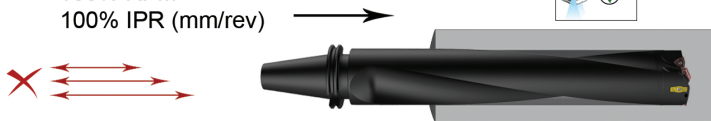
- Feed the longer drill within 1/16" (1,5 mm) short of the workpiece at a **maximum of 50 RPM** and 12 IPM (300 mm/min) feed rate

- 2) Feed In**
Speed at 75% of recommended start
Feed at 50% of recommended start



- Drill 3/4" deep at 75% recommended speed and 50% recommended feed to establish hole

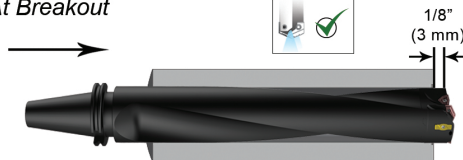
- 3) Deep Hole Drilling - Blind**
100% RPM
100% IPR (mm/rev)



- Drill to full depth at recommended speed and feed for longer drills, according to Allied speed and feed charts

No peck cycle recommended

- 4) Deep Hole Drilling - At Breakout**
50% RPM
100% IPR (mm/rev)



****For Through Holes Only****

- Reduce speed by 50% prior to break out
- Do not break out more than 1/8" (3 mm) past the full diameter of drill

- 5) Drill Retract**
50 RPM Max



Reduce speed to a **maximum of 50 RPM** before retracting from hole

WARNING

Tool failure can cause serious injury. To prevent:

NEVER rotate these tool holders more than 50 RPM without proper engagement with a workpiece or fixture. Failure to do so could result in tool failure and/or personal injury.

Visit www.alliedmachine.com/deepholeguidelines.aspx for the most up-to-date information and procedures. Factory technical assistance is also available for your specific applications.



APX™

Geometry Guidelines

Revolution & Opening

APX

GEN3SYS & GEN3SYS XT

Original T-A & GEN2 T-A

AccuPort 432

ASC 320

Special Tooling

T-A®:

Standard T-A: Allied's Standard T-A Geometry is an excellent choice for general purpose use. The design provides fast penetration rates that produce good hole size and finish. Standard Geometry combines highly efficient, stable cutting action to minimize power consumption. Recommended for use in most steels, cast irons, high temperature alloys and aluminum alloys.

High Impact (HI): Allied Machines's High Impact geometry is specifically designed to enhance chip formation in materials with high elasticity/ductility, and poor chip forming characteristics. Includes Allied Machine's SK2 corner preparation for increased tool life. Effective at improving chip formation in structural, cast, and forged steels, plus, cast stainless steel and high temperature alloys, particularly in materials above 200 BHN.

GEN2 T-A®: For more stable applications with good rigidity to take advantage of the centering Notch Point® geometry and increased efficiency. Offers improved tool life verses Standard T-A. Recommended for most steels and cast iron.

GEN2 T-A High Efficiency (HE): AlliedMachine's GEN2 T-A -HE Geometry is designed for improved chip formation in elastic materials like low carbon steels. -HE Geometry combined with the other advanced features of the GEN2 T-A, allows for maximum performance and increased value.

Tiny Chip (TC): Allied Machine's Tiny Chip geometry is an excellent choice for applications that are running at lighter feed rates, or require a more manageable chip. Recommended for use in low carbon steels, soft alloy steels, and other long chipping materials.

GEN3SYS® XT:

GEN3SYS XT offers superior chip forming capabilities and material specific geometries such as (-AS), which is designed for austenitic stainless steels.

