PRIME BORE

Expanded Range & Capabilities

Boring .188 to 8.189" (3 – 208mm)
PLUS…
Axial Grooving & Outside Turning

Cost-Effective

STARTER KITS

Offer a wide boring range…
.236 – 5.039" (6 – 128mm)

WOHLHAUPTER

THE FINEST IN PRECISION

PRIME BORE

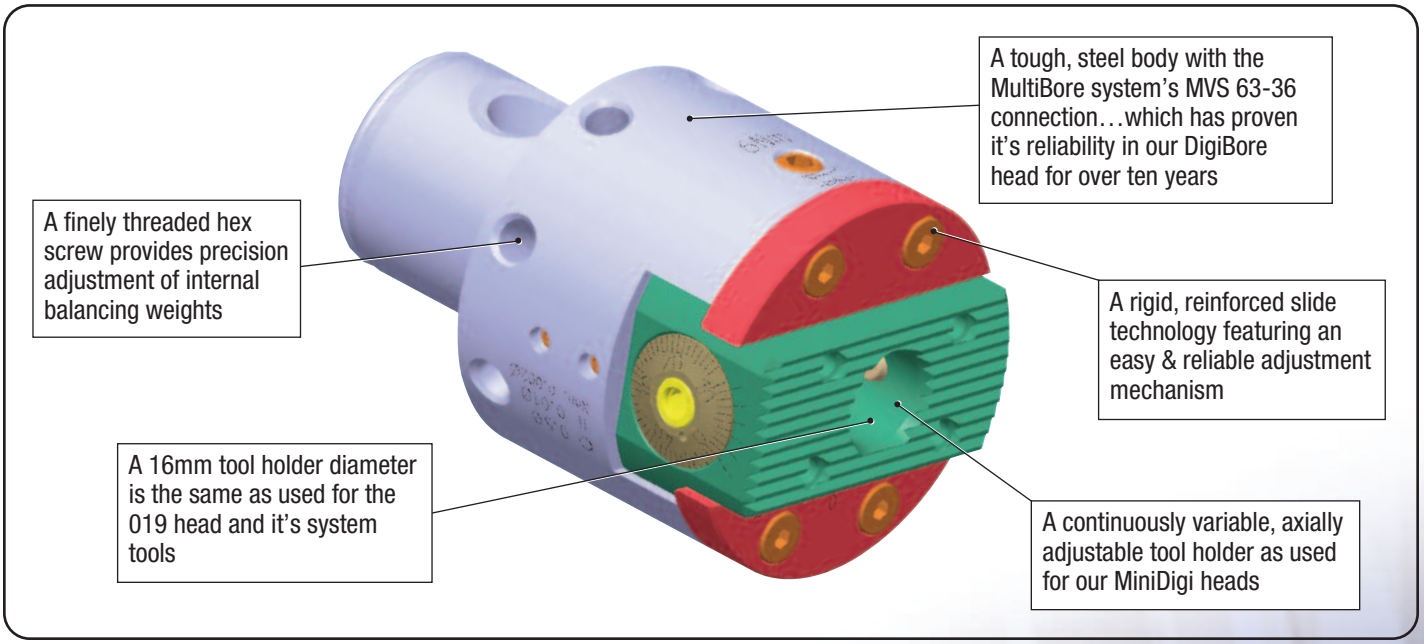
A cost effective addition to the Wohlhaupter family of precison boring heads

The PrimeBore precision boring head is the result of over 30 years of technological advances achiceved while developing the MultiBore precision tooling system.

Through the use of compatible tools and accessories, a single PrimeBore head is capable of producing precision bores from .188 to 8.189 inches (3 to 208mm)… as well as axial grooving & outside turning.

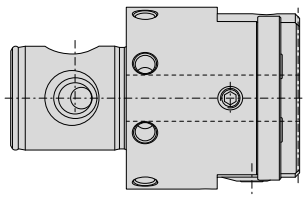
PrimeBore Features

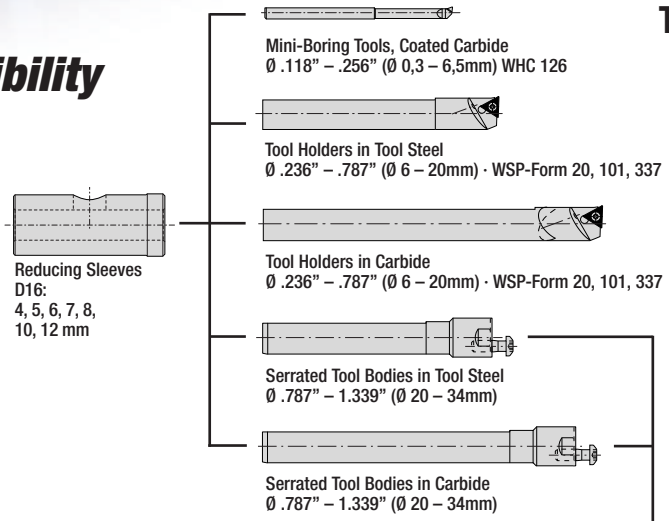
- Feed-in accuracy of .0001” (0,002mm) on diameter
- .177” (4,5mm) radial stroke adjustment
- Automatically defined cutting edge position
- Through-the-tool coolant supply for all integrated tools
- Capable of speeds up to 12,000 RPM
- Tools are continuously variable in axial adjustment



PrimeBore head's incredible compatibility

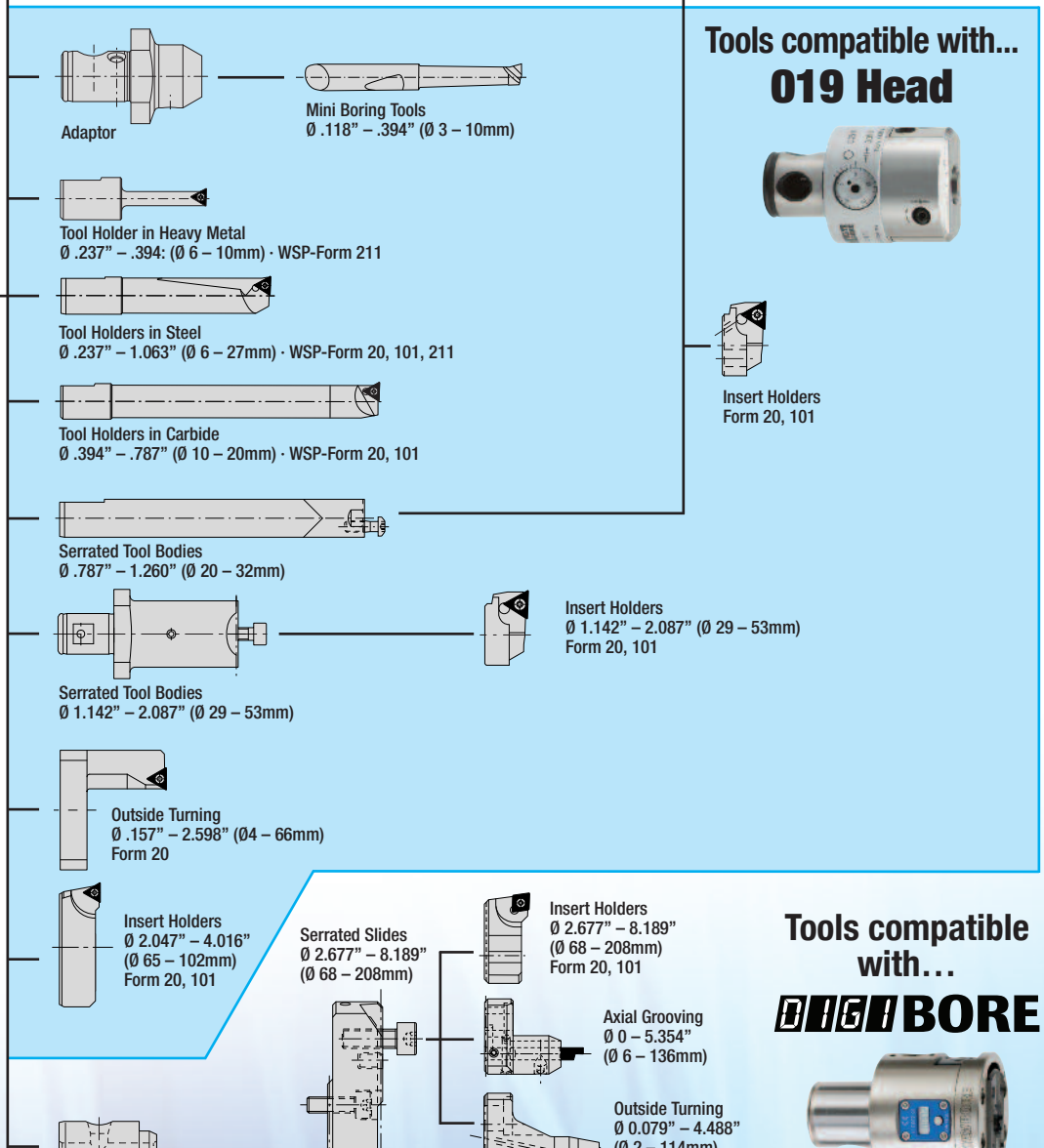
As shown in this schematic, the PrimeBore head is able to handle smaller diameter MiniDigi tools, mid range 019 tools… and larger and special purpose DigiBore tooling





Tools compatible with…

MINI DIGI



Tools compatible with...

019 Head

Tools compatible with…

DIGIBORE

PRIMEBORE
STARTER KIT

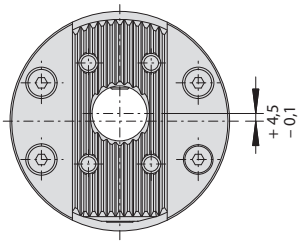
Qty.	Description	Insert KIT #1 Insert Forms F101 & F211	KIT #2 Insert Forms F20 & F211
1	PrimeBore Head		
3	Tool Holders	F101/F211	F20/F211
2	Insert Holders	F101	F20
1	Serrated Tool Body		
1	Serrated Tool Slide		
1	Coolant Delivery Section		
2	Torx Drivers		
1	Hex Wrench		
Inserts		2 x F211 RO, 2WHT 12	2 x F211 RO, 2WHT 12
		3 x F101 RO, 2 WHT 99	2 x F20 RO, 2 WHT 12
Inch Kits - Order Numbers		104 088	104 089
Metric Kits- Order Numbers		103 088	103 089

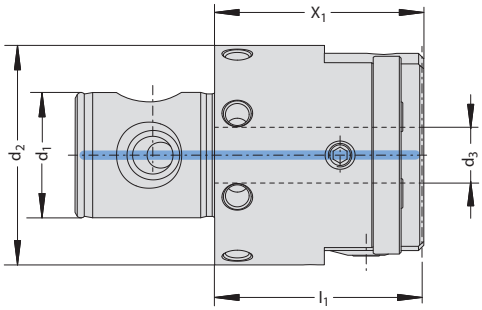
The PrimeBore head offers incredible versatility and tool compatibility

Each kit provides a boring range of .236 to 5.04 inches (6 to 128mm)

PrimeBore kits offer a cost-effective way to begin to reap the many advantages offered by the PrimeBore precision boring head.

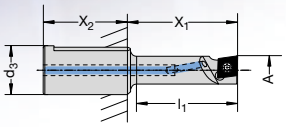
Besides being one of the most accurate boring heads available on the market today, it is also one of the most versatile. It is able to accommodate a number of other Wohlhaupter tools that are used in their MiniDigi, 019 and Digibore heads.





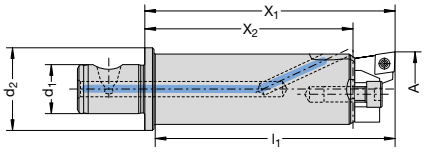
MVS Connection			Dimensions						Boring range		Weight		Order No.	
			d_3		X_1		l_1		A					
d_2		d_1	in	mm	in	mm	in	mm	in	mm	lbs	kg	in	mm
63	**-**	**36**	.63	16	2.36	60	2.34	59,5	.236 – 5.04	6 – 128	2.866	1,3	451 001	450 001

Tool Holders



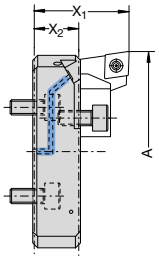
Boring Range A		Dimensions X_1		X_2		d_2		l_1		weight		Insert Form	Order No.
in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg		
.236-.394	6-10	.866-1.260	22-32	1.122	28,5	.630	16	.787	20	.088	0,04	211	450 026
.394-.630	10-16	1.378-1.772	35-45	1.122	28,5	.630	16	1.299	33	.132	0,06	101	450 027
.394-.630	10-16	1.378-1.772	35-45	1.122	28,5	.630	16	1.299	33	.132	0,06	20	450 038
.630-.945	16-24	2.362-2.756	60-70	1.122	28,5	.630	16	2.283	58	.220	0,10	101	450 028
.630-.945	16-24	2.362-2.756	60-70	1.122	28,5	.630	16	2.283	58	.220	0,10	20	450 039

Serrated Tool Body



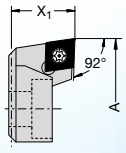
Boring Range A		Dimensions X_1		X_2		d_1		d_2		l_1		weight		Order No.
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	
.945-2.560	24-65	3.228	82	2.677	68	.630	16	1.063	27	3.110	79	.441	0,20	450 021

Serrated Slide



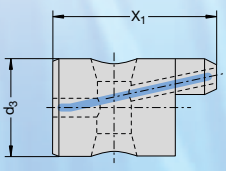
Boring Range A		Dimensions X_1		X_2		weight		Order No.
in	mm	in	mm	in	mm	lbs	kg	
2.560-5.039	65-128	1.161	29,5	.571	14,5	.176	0,08	450 024

Insert Holders – 92° Approach Angle



Boring Range with Serrated Tool Body A		Serrated Slide A		Dimensions X_1		weight		Insert Form	Order No.
in	mm	in	mm	in	mm	lbs	kg		
.945-1.575	24-40			.551	14	.441	0,02	101	450 022
.945-1.575	24-40			.551	14	.441	0,02	20	450 040
1.575-2.559	40-65	2.559-5.039	65-128	.551	14	.661	0,03	101	450 023
1.575-2.559	40-65	2.559-5.039	65-128	.551	14	.661	0,03	20	450 041

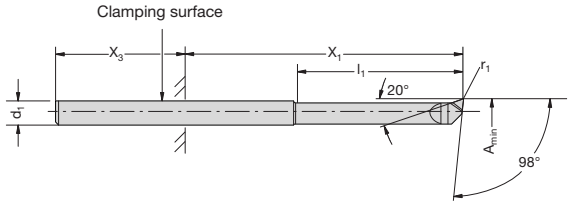
Coolant Delivery Section



Dimensions X_1		d_3		weight		Order No.
in	mm	in	mm	lbs	kg	
1.053	26,75	.630	16	.022	0,01	450 125

Smaller Diameter Tools for PRIME BORE
Compatible with MINI DIGI

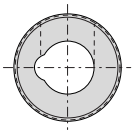
Mini-Boring Tools, Coated Carbide
WHC 126, Ø .16" – .256" (Ø 0,4 – 6,5mm)

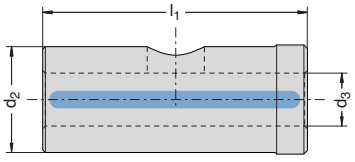


Boring Range				511 001, 510 004, 510 005				511 021, 510 024								Order No.
A_{min}		d_1		X_1		X_3		X_1		$X_{3\,min}$		l_1		r_1		
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
.110	2,8	.157	4*	.591-1.496	15,0-38,0	.63	16	.591-1.142	15,0-29,0	.98	25	.551	14,0	.003	0,07	081 408
.138	3,5	.157	4*	.748-1.654	19,0-42,0	.63	16	.748-1.299	19,0-33,0	.98	25	.689	17,5	.004	0,10	081 409
.157	4,0	.157	4*	.827-1.732	21,0-44,0	.63	16	.827-1.378	21,0-35,0	.98	25	.787	20,0	.004	0,10	081 410
.197	5,0	.197	5*	1.043-1.969	26,5-50,0	.63	16	1.043-1.614	26,5-41,0	.98	25	.984	25,0	.005	0,12	081 411

* Fixture through reducing sleeves
Other versions on request

Reducing Sleeves

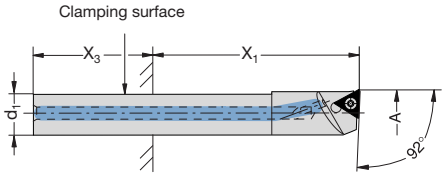




Dimensions						Order No.
d_2		d_3		l_1		
in	mm	in	mm	in	mm	
.630	16	.157	4	1.260	32	450 129
.630	16	.197	5	1.260	32	450 130
.630	16	.276	7	1.260	32	450 132
.630	16	.315	8	1.260	32	450 133
.630	16	.397	10	1.260	32	450 134
.630	16	.472	12	1.260	32	450 135
.630	16	.556	14	1.260	32	450 136

Smaller Diameter Tools for PRIME BORE
Compatible with MINI DIGI

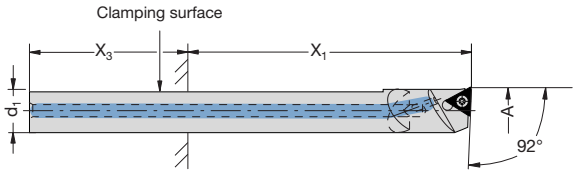
Tool Holders in Tool Steel with 92° Approach Angle
Ø .236" – .787" (Ø 6 – 20mm)



Boring Range		Dimensions								Insert Form		Insert Form	
A		d_1		X_1		$X_{3\ min}$		weight			Order No.		Order No.
in	mm	in	mm	in	mm	in	mm	lbs	kg				
.236-.315	6-8	.197*	5*	.492-1.772	12,5-45,0	.630	16	.022	0,01	337	514 001	–	–
.315-.394	8-10	.276*	7*	.689-2.205	17,5-56,0	.630	16	.044	0,02	337	514 002	–	–
.394-.472	10-12	.315*	8	.787-2.362	20,0-60,0	.748	19	.066	0,03	101	514 003	20	514 004
.236-.315	6-8	.197*	5*	.492-1.772	12,5-45,0	.984	25	.022	0,01	337	514 001	–	–
.315-.394	8-10	.276*	7*	.689-2.205	17,5-56,0	.984	25	.044	0,02	337	514 002	–	–
.394-.472	10-12	.315*	8*	.787-2.362	20,0-60,0	.984	25	.066	0,03	101	514 003	20	514 004
.472-.551	12-14	.394*	10*	.984-2.953	25,0-75,0	.984	25	.110	0,05	101	514 005	20	514 006
.551-.630	14-16	.472*	12*	1.181-3.307	30,0-84,0	1.181	30	.198	0,09	101	514 007	20	514 008
.630-.709	16-18	.551	14	2.205-3.583	56,0-91,0	1.181	30	.287	0,13	101	514 009	20	514 010
.709-.787	18-20	.551	14	2.205-3.583	56,0-91,0	1.181	30	.287	0,13	101	514 011	20	514 012

* Fixture through reducing sleeves

Tool Holders in Carbide with 92° Approach Angle
Ø .236" – .787" (Ø 6 – 20mm)



Boring Range		Dimensions								Insert Form		Insert Form	
A		d_1		X_1		$X_{3\ min}$		weight			Order No.		Order No.
in	mm	in	mm	in	mm	in	mm	lbs	kg				
.236-.315	6-8	.197*	5*	.492-2.559	12,5-65,0	.630	16	.044	0,02	337	514 013	–	–
.315-.394	8-10	.276*	7*	.827-3.307	21,0-84,0	.630	16	.110	0,05	337	514 014	–	–
.394-.472	10-12	.315*	8*	2.047-3.622	52,0-92,0	.748	19	.154	0,07	101	514 015	20	514 016
.236-.315	6-8	.197*	5*	.492-2.559	12,5-65,0	.984	25	.044	0,02	337	514 013	–	–
.315-.394	8-10	.276*	7*	.827-3.307	21,0-84,0	.984	25	.110	0,05	337	514 014	–	–
.394-.472	10-12	.315*	8*	.866-3.622	22,0-92,0	.984	25	.154	0,07	101	514 015	20	514 016
.472-.551	12-14	.394*	10*	2.008-4.528	51,0-115,0	.984	25	.287	0,13	101	514 017	20	514 018
.551-.630	14-16	.472*	12*	2.677-5.197	68,0-132,0	1.181	30	.485	0,22	101	514 019	20	514 020
.630-.709	16-18	.551	14	3.031-4.409	77,0-112,0	1.181	30	.573	0,26	101	514 021	20	514 022
.630-.709	16-18	.551	14	4.409-5.787	112,0-147,0	1.181	30	.827	0,33	101	514 023	20	514 024
.709-.787	18-20	.551	14	3.031-4.409	77,0-112,0	1.181	30	.573	0,26	101	514 025	20	514 026
.709-.787	18-20	.551	14	4.409-5.787	112,0-147,0	1.181	30	.827	0,33	101	514 027	20	514 028

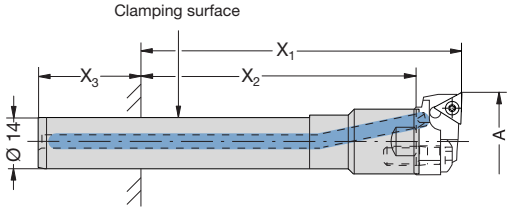
* Fixture through reducing sleeves

Smaller Diameter Tools for PRIME BORE
Compatible with MINI DIGI

Serrated Tool Bodies Ø .787" – 1.339" (Ø 20 – 34mm)

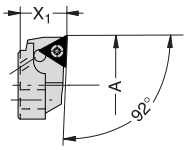
In Carbide

In Tool Steel



Serrated Tool Bodies	Boring Range		Dimensions								Order No.
	A		X_1		X_2		$X_{3\ min}$		weight		
	in	mm	in	mm	in	mm	in	mm	lbs	kg	
In Tool Steel	.787-1.339	20-34	1.929-3.307	49-84	1.457-2.835	37-72	1.181	30	.287	0,13	514 029
In Carbide	.787-1.339	20-34	3.031-4.409	77-112	2.559-3.937	65-100	1.181	30	.551	0,25	514 030
	.787-1.339	20-34	4.409-5.787	112-147	3.937-5.315	100-135	1.181	30	.728	0,33	514 031

Insert Holders with 92° Approach Angle
Ø .787" – 1.339" (Ø 20 – 34mm)

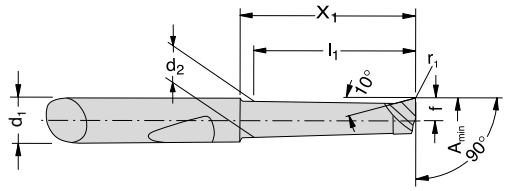


Boring Range				Dimensions						Insert Form		Insert Form	
A_{opt}		A_{max}		X_1		f		weight			Order No.		Order No.
in	mm	in	mm	in	mm	in	mm	lbs	kg				
.787-.866	20-22	(.787-.945)	(20-24)	.472	12	.386	9,8	.022	0,01	101	502 052	20	502 046
.866-.945	22-24	(.866-1.024)	(22-26)	.472	12	.425	10,8	.022	0,01	101	502 053	20	502 047
.945-1.024	24-26	(.945-.1.102)	(24-28)	.472	12	.465	11,8	.022	0,01	101	502 054	20	502 048
1.024-1.102	26-28	(1.024-1.181)	(26-30)	.472	12	.504	12,8	.022	0,01	101	502 055	20	502 049
1.102-1.181	28-30	(1.102-1.260)	(28-32)	.472	12	.543	13,8	.022	0,01	101	502 056	20	502 050
1.181-1.260	30-32	(1.181-1.339)	(30-34)	.472	12	.583	14,8	.022	0,01	101	502 057	20	502 051

A_{opt} = Optimized balanced for highest revolutions
A_{max} = Maximum approved range of application

Small/Mid-Range Boring Tools for PRIME BORE
Compatible with ***019 Head***

Mini-Boring Tool



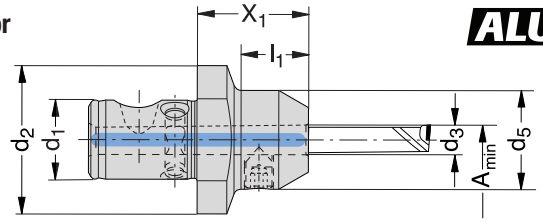
Boring Range		Dimensions												Coated Carbide		Uncoated Carbide	CBN
A_{min}		d_1		X_1		l_1		f		r_1		d_2		Order No.		Order No.	Order No.
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	WHC 18	WHC 05	WHW 04	WBN 150
.118	3,0	.236	6	.453	11,5	.394	10	.055	1,4	.004	0,1	.102	2,6	081 306 ○	081 306 ●	081 306 ○	081 322 ●
.118	3,0	.236	6	.650	16,5	.591	15	.055	1,4	.004	0,1	.102	2,6	081 307 ○	081 307 ●	081 307 ○	081 340 ●
.157	4,0	.236	6	.472	12,0	.394	10	.075	1,9	.008	0,2	.142	3,6	081 308 ○	081 308 ●	081 308 ○	081 317 ●
.157	4,0	.236	6	.669	17,0	.591	15	.075	1,9	.008	0,2	.142	3,6	081 309 ○	081 309 ●	081 309 ○	081 341 ●
.157	4,0	.236	6	.866	22,0	.787	20	.075	1,9	.008	0,2	.142	3,6	081 310 ○	081 310 ●	081 310 ○	–
.197	5,0	.236	6	.472	12,0	.394	10	.094	2,4	.008	0,2	.181	4,6	081 311 ○	081 311 ●	081 311 ○	081 318 ●
.197	5,0	.236	6	.866	22,0	.787	20	.094	2,4	.008	0,2	.181	4,6	081 312 ○	081 312 ●	081 312 ○	081 319 ●
.197	5,0	.236	6	1.260	32,0	1.181	30	.094	2,4	.008	0,2	.181	4,6	081 313 ○	081 313 ●	081 313 ○	–
.236	6,0	.236	6	.866	22,0	.787	20	.114	2,9	.008	0,2	.220	5,6	081 314 ○	081 314 ●	081 314 ○	081 320 ●
.236	6,0	.236	6	1.260	32,0	1.181	30	.114	2,9	.008	0,2	.220	5,6	081 315 ○	081 315 ●	081 315 ○	081 321 ●
.236	6,0	.236	6	1.654	42,0	1.575	40	.114	2,9	.008	0,2	.220	5,6	081 316 ○	081 316 ●	081 316 ○	–
.315	8,0	.315	8	.984	25,0	.906	23	.154	3,9	.008	0,2	.299	7,6	081 323 ○	081 323 ●	081 323 ○	081 325 ●
.315	8,0	.315	8	1.968	50,0	1.890	48	.154	3,9	.008	0,2	.299	7,6	081 324 ○	081 324 ●	081 324 ○	–

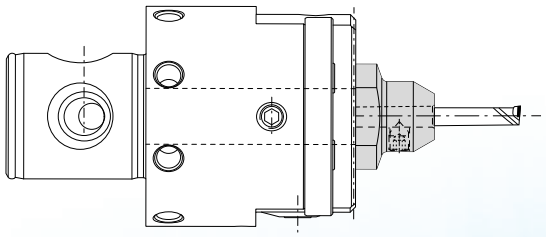
For clamping in the adaptor
Ordering Example: 081 306 WHC 05

● Available in Stock
○ On request

Adaptor

ALU LINE

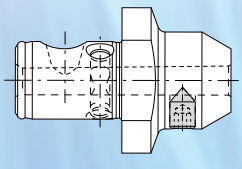




Boring Range		Dimensions																Order No.
A_{min}		d_1		d_2		X_1		l_1		d_3		d_5		weight				
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg			
.118	3	.630	16	1.181	30	.886	22,5	.551	14	.236	6	.787	20	.110	0,05	319 010		
.318	8	.630	16	1.181	30	.886	22,5	.551	14	.318	8	.866	22	.110	0,05	236 071		

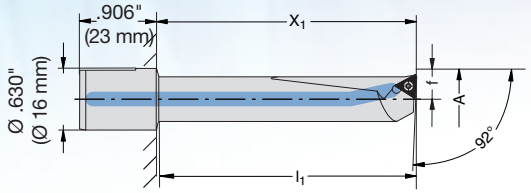
Set Screw

Hex Size/Type	Order No.
s 3,0 mm/A	415 244



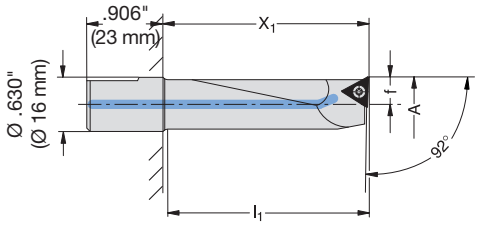
Small/Mid-Range Boring Tools for PRIME BORE
Compatible with ***019 Head***

Tool Holders in Heavy Metal, with
92° Lead Angle for Greater Boring Depths
Ø .236" – .394" (Ø 6 – 10mm)



Boring Range		Dimensions								Insert Form	
A		X_1		l_1		f		weight			
in	mm	in	mm	in	mm	in	mm	lbs	kg		
.236-.315	6-8	1.260	32	1.142	29	.110	2,8	.176	0,08	211	081 055
.315-.394	8-10	1.772	45	1.654	42	.150	3,8	.198	0,09	211	218 072

Tool Holders in Tool Steel with 92° Lead Angle
Ø .236" – 1.26" (Ø 6 – 27mm)

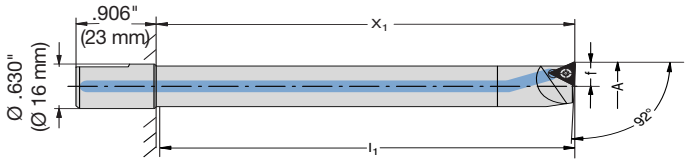


Boring Range				Dimensions								Insert Form		Insert Form	
A_{opt}		A_{max}		X_1		l_1		f		weight			Order No.		Order No.
in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg				
.236-.315	6-8	(.236-.512)	(6-13)	.866	22	.748	19	.110	2,8	.07	0,03	–	–	211	081 053
.315-.394	8-10	(.315-.591)	(8-15)	1.181	30	1.063	27	.150	3,8	.09	0,04	210	081 054	211	218 071
.394-.472	10-12	(.394-.669)	(10-17)	1.772	45	1.654	42	.189	4,8	.11	0,05	–	–	20	081 044
.394-.472	10-12	(.394-.669)	(10-17)	.984	25	.866	22	.189	4,8	.09	0,04	101	218 047	20	218 058
.394-.472	10-12	(.394-.669)	(10-17)	1.378	35	1.260	32	.189	4,8	.11	0,05	101	218 048	20	218 059
.472-.551	12-14	(.472-.748)	(12-19)	1.181	30	1.063	27	.228	5,8	.11	0,05	101	218 012	20	218 014
.472-.551	12-14	(.472-.748)	(12-19)	1.772	45	1.654	42	.228	5,8	.13	0,06	101	218 049	20	218 060
.551-.630	14-16	(.551-.827)	(14-21)	1.378	35	1.260	32	.268	6,8	.13	0,06	101	218 050	20	218 061
.551-.630	14-16	(.551-.827)	(14-21)	1.969	50	1.850	47	.268	6,8	.18	0,08	101	218 051	20	218 062
.591-.669	15-17	(.591-.866)	(15-22)	1.457	37	1.339	34	.291	7,4	.13	0,06	–	–	20	081 048
.591-.669	15-17	(.591-.866)	(15-22)	2.362	60	2.244	57	.291	7,4	.18	0,08	101	081 041	20	081 045
.630-.709	16-18	(.630-.906)	(16-23)	1.575	40	1.457	37	.307	7,8	.18	0,08	101	218 052	20	218 063
.630-.709	16-18	(.630-.906)	(16-23)	2.362	60	2.244	57	.307	7,8	.20	0,09	101	218 053	20	218 064
.787-.866	20-22	(.787-1.063)	(20-27)	1.457	37	1.299	33	.386	9,8	.15	0,07	–	–	20	081 049
.787-.866	20-22	(.787-1.063)	(20-27)	2.756	70	2.480	63	.386	9,8	.24	0,11	101	081 042	20	081 046
.984-1.063	25-27	(.984-1.260)	(25-32)	1.457	37	1.299	33	.484	12,3	.15	0,07	–	–	20	081 050
.984-1.063	25-27	(.984-1.260)	(25-32)	2.756	70	2.638	67	.484	12,3	.24	0,11	101	081 043	20	081 047

Other tool holders on request
A_{opt} = Optimized balanced for highest revolutions
A_{max} = Maximum approved range of application

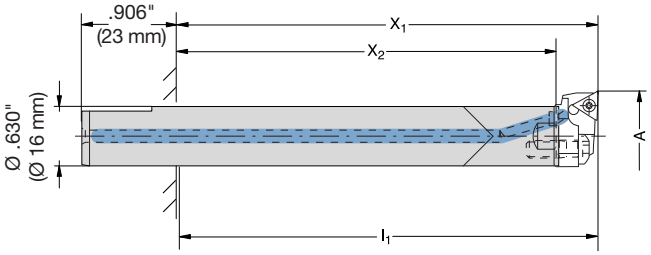
Small/Mid-Range Boring Tools for PRIME BORE
Compatible with ***019 Head***

Tool Holders in Carbide, with
92° Lead Angle for Greater Boring Depths
Ø .394” – .787” (Ø 10 – 20mm)



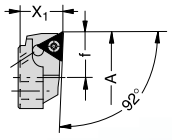
Boring Range		Dimensions								Insert Form		Insert Form	
A		X_1		l_1		f		weight			Order No.		Order No.
in	mm	in	mm	in	mm	in	mm	lbs	kg				
.394-.472	10-12	2.165	55	2.047	52	.189	4,8	.154	0,07	101	218 042	20	218 037
.394-.472	10-12	2.953	75	2.835	72	.189	4,8	.198	0,09	101	218 032	20	218 029
.472-.551	12-14	2.756	70	2.638	67	.228	5,8	.220	0,10	101	218 043	20	218 038
.472-.551	12-14	3.543	90	3.425	87	.228	5,8	.331	0,15	101	218 033	20	218 030
.551-.630	14-16	2.953	75	2.835	72	.268	6,8	.353	0,16	101	218 044	20	218 039
.551-.630	14-16	3.937	100	3.819	97	.268	6,8	.441	0,20	101	218 045	20	218 040
.630-.787	16-20	3.543	90	3.425	87	.307	7,8	.573	0,26	101	218 046	20	218 041
.630-.787	16-20	4.724	120	4.606	117	.307	7,8	.728	0,33	101	218 034	20	218 031

Serrated Tool Body, Carbide
Ø .787” – 1.260” (Ø 20 – 32mm)



Boring Range		Dimensions								Order No.
A		X_1		X_2		l_1		weight		
in	mm	in	mm	in	mm	in	mm	lbs	kg	
.787-1.260	20-32	4.724	120	4.252	108	4.606	117	.882	0,4	236 091

Insert Holder with 92° Lead Angle

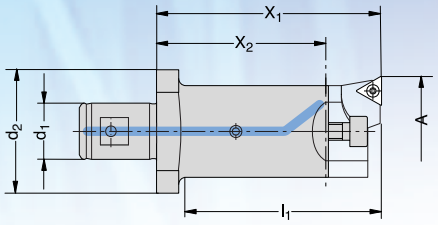


Boring Range				Dimensions						Insert Form		Insert Form	
A_{opt}		A_{max}		X_1		f		weight			Order No.		Order No.
in	mm	in	mm	in	mm	in	mm	lbs	kg				
.787-.866	20-22	(.787-.945)	(20-24)	.472	12	.386	9,8	.022	0,01	101	502 052	20	502 046
.866-.945	22-24	(.866-1.024)	(22-26)	.472	12	.425	10,8	.022	0,01	101	502 053	20	502 047
.945-1.024	24-26	(.945-.1.102)	(24-28)	.472	12	.465	11,8	.022	0,01	101	502 054	20	502 048
1.024-1.102	26-28	(1.024-1.181)	(26-30)	.472	12	.504	12,8	.022	0,01	101	502 055	20	502 049
1.102-1.181	28-30	(1.102-1.260)	(28-32)	.472	12	.543	13,8	.022	0,01	101	502 056	20	502 050
1.181-1.260	30-32	(1.181-1.339)	(30-34)	.472	12	.583	14,8	.022	0,01	101	502 057	20	502 051

A_{opt} = Optimized balanced for highest revolutions
A_{max} = Maximum approved range of application

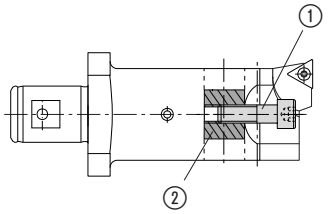
Small/Mid-Range Boring Tools for PRIMEBORE
Compatible with **019 Head**

Serrated Tool Bodies
Ø 1.142" – 2.087" (Ø 29 – 53mm)



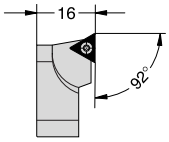
Connection				Boring Range		Dimensions								Order No.
d_1		d_2		A		X_1		X_2		l_1		weight		
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	
.630	16	1.379	35	1.142-2.087	29-53	2.520	64	1.890	48	2.205	56	.441	0,2	236 021
.630	16	1.379	35	1.142-2.087	29-53	3.937	100	3.307	84	3.622	92	.661	0,3	236 031

Cap Screw ①	Hex Size	Clamping Piece ②
Order No.	mm	Order No.
027 154	s4	145 184

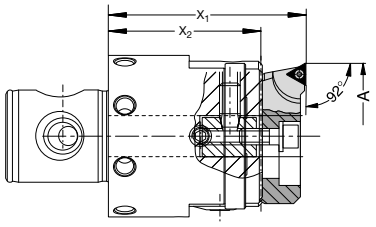


Insert Holders with 92° Lead Angle

Turning Range		Weight		Insert Form	Order No.
A					
in	mm	lbs	kg		
1.142-1.614	29-41	.088	0,04	20	236 022
1.142-1.614	29-41	.088	0,04	101	236 023
1.575-2.087	40-53	.132	0,06	20	236 024
1.575-2.087	40-53	.132	0,06	101	236 025



Insert Holders with 92° Lead Angle
Ø 2.559" – 4.016" (Ø 65 – 102mm)

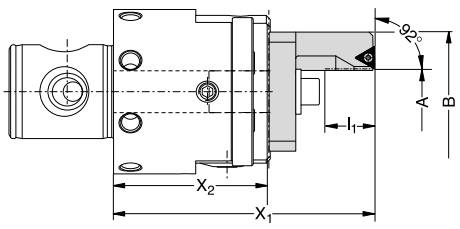


Boring Range		Dimensions						Insert Form	Order No.
A		X_1		X_2		weight			
in	mm	in	mm	in	mm	lbs	kg		
2.559-3.031	65-77	2.598	66	1.949	49,5	.132	0,06	20	236 026
2.559-3.031	65-77	2.598	66	1.949	49,5	.132	0.06	101	236 027
2.992-4.016	76-102	2.598	66	1.949	49,5	.220	0,10	20	236 028
2.992-4.016	76-102	2.598	66	1.949	49,5	.220	0,10	101	236 029

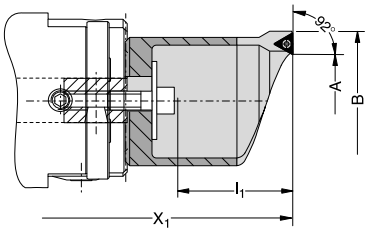
Small/Mid-Range Boring Tools for PRIMEBORE
*Compatible with **019 Head***

Insert Holders for Outside Turning with 92° Lead Angle
Ø .157" – 2.598" (Ø 4 – 66mm)

Type A



Type B



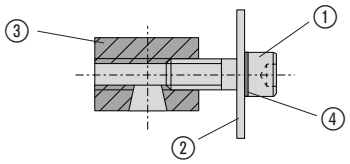
With through-the-tool coolant

Turning Range A in	Turning Range A mm	Dimensions X_1 in	X_1 mm	X_2 in	X_2 mm	l_1 in	l_1 mm	B in	B mm	weight lbs	weight kg	Type	Insert Form*	Order No.
.157-.689	4-17,5	3.543	90	1.949	49,5	.787	20	1.772	45,0	.220	0,1	A	20	236 081
.650-1.181	16,5-30	3.937	100	1.949	49,5	1.181	30	2.067	52,5	.220	0,1	A	20	236 082
1.142-1.732	29-44	4.921	125	1.949	49,5	2.126	54	2.482	63,5	.661	0,3	B	20	236 083
1.693-2.598	43-66	5.905	150	1.949	49,5	3.110	79	3.366	85,5	.882	0,4	B	20	236 084

* Clockwise and neutral execution

Clamping Elements for Insert Holders

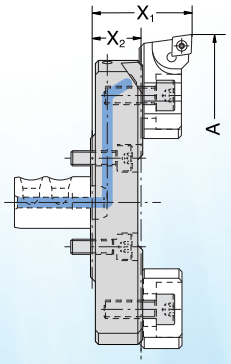
Boring Range A in	Boring Range A mm	Cap Screw ① Order No.	Hex Size mm	Washer ② Order No.	Clamping Piece ③ Order No.	Locking Washer ④ Order No.	Order No Compl.
.157-1.181	4-30	070 153	s5	315 155	236 120	215 254	236 088
1.142-2.598	29-66	070 153	s5	315 156	236 120	215 254	236 089
2.047-4.016	52-102	115 147	s5	115 725	236 120	–	236 020



Larger Diameter Boring Tools for PRIMEBORE
Compatible with DIGIBORE

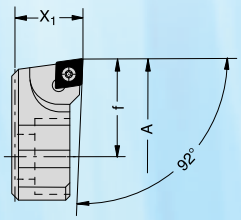
Serrated Slides
Ø 2.677" – 8.189" (Ø 68 – 208mm)

Boring Range A in	Boring Range A mm	Dimensions ALULINE X_2 in	X_2 mm	X_1 in	X_1 mm	weight lbs	weight kg	Order No.
2.677-3.780	68-96	.630	16	1.280	32,5	.220	0,10	501 054
3.780-4.881	96-124	.630	16	1.280	32,5	.220	0.10	501 055
4.881-5.984	124-152	.630	16	1.280	32,5	.441	0,20	501 056
5.984-7.087	152-180	.866	22	1.516	38,5	.551	0,25	501 058
7.087-8.189	180-208	.866	22	1.516	38,5	.661	0,30	501 059



Insert Holder with 92° Lead Angle

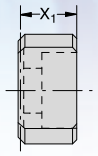
Boring Range A in	Boring Range A mm	Dimensions X_1 in	X_1 mm	f in	f mm	weight lbs	weight kg	Insert Form	Order No.
2.677-8.189	68-208	.650	16,5	.776	19,7	.110	0,05	101	502 064
2.677-8.189	68-208	.650	16,5	.776	19,7	.110	0.05	20	502 069



Larger Diameter Boring Tools for PRIMEBORE
Compatible with the DIGIBORE Head

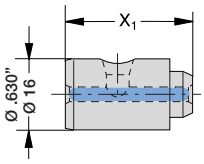
Counter Weight

Dimensions				Order No.
X_1		weight		
in	mm	lbs	kg	
.528	13,4	.110	0,05	502 165



Coolant Delivery Section

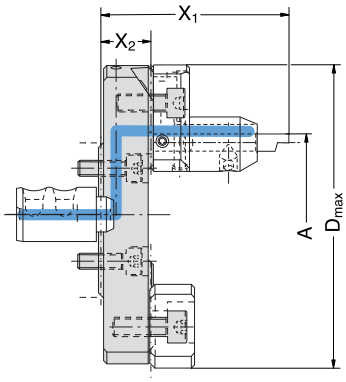
Dimensions ALULINE				Order No.
X_1		weight		
in	mm	lbs	kg	
1.004	25,5	.022	0,01	450 137



Axial Grooving Tools for PRIMEBORE
Compatible with the DIGIBORE Head

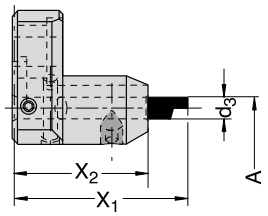
Axial Grooving Ø .236"/.315" – 8.189" (Ø 6/8 – 136mm): Serrated Slides

Outside Ø Recess		Dimensions ALULINE								Interfering Ø		Order No.
				502 084*		502 085*						
A		X_2		X_1		X_1		weight		D_{max}		
in	mm	in	mm	in	mm	in	mm	lbs	kg	in	mm	
.236/.315-.945	6/8-24	.630	16	2.520	64	2.874	73	.220	0,10	2.913	74	501 054
.945-2.047	24-52	.630	16	2.520	64	2.874	73	.220	0,10	4.016	102	501 055
2.047-3.150	52-80	.630	16	2.520	64	2.874	73	.441	0,20	5.079	129	501 056
3.150-4.252	80-108	.866	22	2.756	70	3.110	79	.551	0,25	6.181	157	501 058
4.252-5.354	108-136	.866	22	2.756	70	3.110	79	.661	0,30	7.283	185	501 059



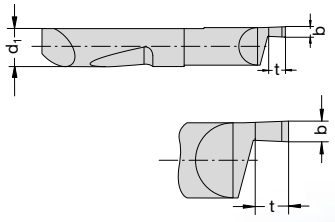
Adaptors

Outside Ø Recess		Dimensions										Order
A		X_2		X_1		f		d_3		weight		
in	mm	in	mm	in	mm	in	mm	in	mm	lbs	kg	
.236-5.354	6-136	1.457	37,0	1.890	48,0	.455	11,55	.236	6	.331	0,15	502 084
.315-5.354	8-136	1.457	37,0	2.244	57,0	.494	12,55	.315	8	.331	0,15	502 085



Recessing Tools

Dimensions						Order No.
d_1		b		t		
in	mm	in	mm	in	mm	WHC 05
.236	6	.039	1,0	.059	1,5	081 326 ●
.236	6	.059	1,5	.098	2,5	081 327 ●
.236	6	.079	2,0	.118	3,0	081 328 ●
.236	6	.098	2,5	.138	3,5	081 329 ●
.315	8	.039	1,0	.059	1,5	081 330 ●
.315	8	.059	1,5	.098	2,5	081 331 ●
.315	8	.079	2,0	.118	3,0	081 332 ●
.315	8	.098	2,5	.138	3,5	081 333 ●
.315	8	.118	3,0	.138	3,5	081 334 ●

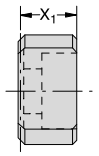


Ordering Example: 081 306 WHC 05

● Available in Stock

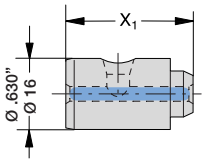
Counter Weights

For Adapter	Dimensions				Order No.
	X_1		weight		
	in	mm	lbs	kg	
502 084 (d_1: Ø 6mm)	.768	19,5	.331	0,15	502 186
502 085 (d_1: Ø 8mm)	.874	22,2	.441	0,20	502 187

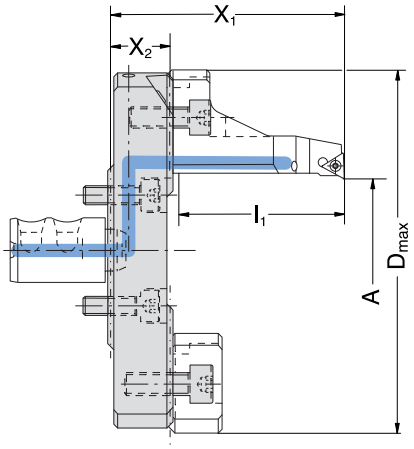


Coolant Delivery Section

Dimensions ALU LINE				Order No.
X_1		weight		
in	mm	lbs	kg	
1.004	25,5	.022	0,01	450 137



Outside Turning Tools for PRIME BORE
Compatible with the DIGI BORE Head



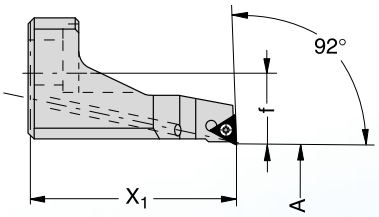
Outside Turning Ø .079" – 4.488" (Ø 2 – 114mm): Serrated Slides

Outside Turning Range		Dimensions ALU LINE								Interfering Ø		Order No.
A		X_2		X_1		l_1		weight		D_{max}		
in	mm	in	mm	in	mm	in	mm	lbs	kg	in	mm	
.079-1.181	2-30	.630	16	2.874	73	2.165	55	.220	0,10	3.976	101	501 055
1.181-2.283	30-58	.630	16	2.874	73	2.165	55	.441	0,20	5.079	129	501 056
2.283-3.386	58-86	.866	22	3.110	79	2.165	55	.551	0,25	6.181	157	501 058
3.386-4.488	86-114	.866	22	3.110	79	2.165	55	.661	0,30	7.283	185	501 059

Insert Holder Outside Turning

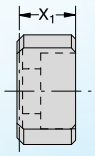
Outside Turning Range		Dimensions						Insert Form*	Order No.
A		X_1		f		weight			
in	mm	in	mm	in	mm	lbs	kg		
.079-4.488	2-114	2.244	57,0	.776	19,7	.331	0,15	20	502 082

* Clockwise and neutral execution



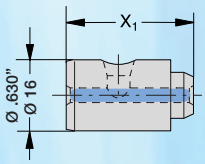
Counter Weight

Dimensions				Order No.
X_1		weight		
in	mm	lbs	kg	
.945	24,0	.331	0,15	502 183



Coolant Delivery Section

Dimensions ALU LINE				Order No.
X_1		weight		
in	mm	lbs	kg	
1.004	25,5	.022	0,01	450 137



...a history of

Continuous Innovation since 1929...

when Wohlhaupter began as a small tool making shop near Stuttgart, Germany

1937 - Facing & Boring Heads

UPA Heads were the first of their type of tool to be manufactured. They continue to be manufactured to this day for use in shops around the world.

In **1989** the APD Head was developed for use on CNC machining centers. It is also capable of back facing and grooving.

1973 - Modular Boring System

MultiBore was the first precision, boring system. It includes adaptors to fit every machine tool, intermediate modules, and many types of boring tools. All feature the precise MVS system connection.

1985 - Vernier Style Boring Heads

The 019 Head was introduced offering a finish boring range of 0.118" to 4.016" with a setting accuracy of .0001" on diameter.

In **2014** the PrimeBore Head was released at IMTS. It offers a range of .118" to 8.189", a setting accuracy of .0001", and a .177" radial stroke adjustment.

1993 - Balance Tools

The first boring tools featuring an automatic, internal balancing mechanism that compensates for imbalance resulting from diameter adjustments.

In **2010** digital readouts were incorporated in these tools & the boring range expanded to 1.968" - 8.071".

1998 - AluLine Tool Bodies

Since their introduction, these bodies have been incorporated in many MultiBore tools. They reduce the stress on spindles by reducing weight by up to 50%.

2001 - CombiLine Tools

These tools have two insert holders, one axially fixed and one radially adjustable. This offset offers what amounts to two cutting passes in one.

In **2004** the boring range of these tools was expanded to include bores from .965" to 128.15".

2003 - Digital Heads with DRO Scales

The world's first digital boring head incorporating DRO technology. They combine direct traverse measurement with digital technology... bringing a new level of precision to boring. They offer a boring range of .118" to 8.189" with .0001" adjustments on diameter.

In **2012** MiniDigi heads were released. Thay are smaller versions of the DigiBore Head and are able to produce smaller bores ranging from .015" to 1.339" at speeds up to 40,000 rpm.

In **2004** AluLine bodies and serrated slides were introduced for large diameter boring tools up to 128.15".

2009 - Digital Casettes

They were the first of their kind. The cassettes were designed for use on larger diameter boring tools up to 128.15" that incorporate serrated bodies and slides.

2014 - Dual System Connections

This unique, dual connection is compatible with both MVS and CK type tool systems. Digital & Vernier style heads plus reducers and extensions are offered with this connection.

WOHLHAUPTER

FOR BORING PAIN RELIEF

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