

# MEGA-Drill-Reamers –

## Boring and reaming in one pass

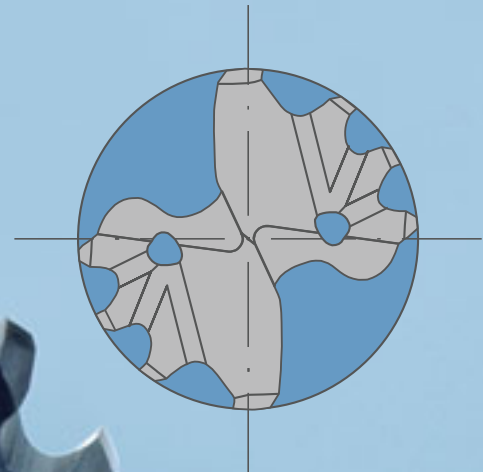
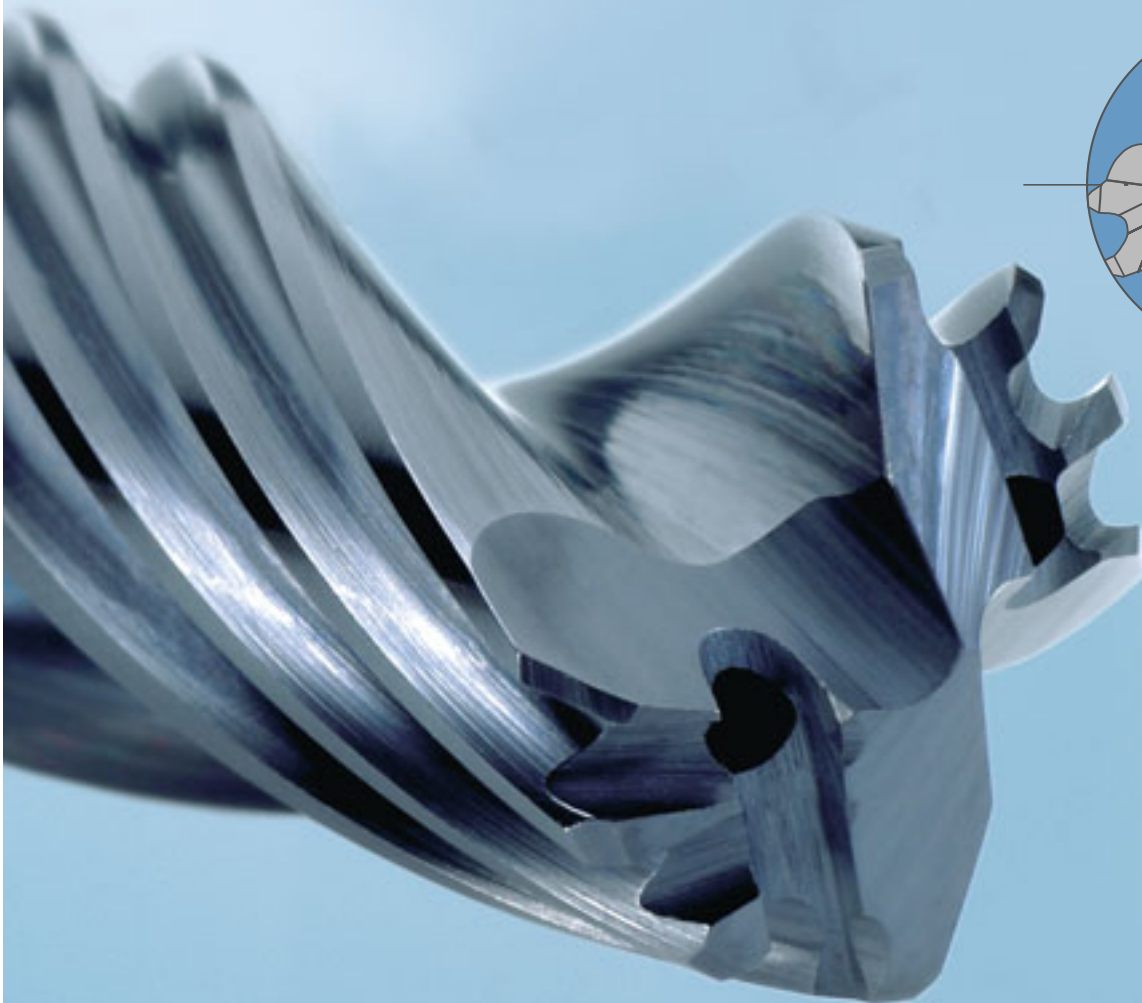
The combination of two tools, and as a result two operations opens up considerable saving potential. With the MAPAL MEGA-Drill-Reamers this idea has been successfully realized and the production of bores in reaming quality becomes more efficient and faster.

Drill-Reamers are highly effective both on machining centers where main and non-productive times can be significantly reduced and also on transfer lines, where a complete machining unit can be dispensed with. With drill reamers, two drilling margins take over the rough machining operation.

Directly behind the drilling margins, four or six reaming margins are responsible for finish machining the bore. They guarantee as good a surface finish, dimensional stability and concentricity as with reaming.

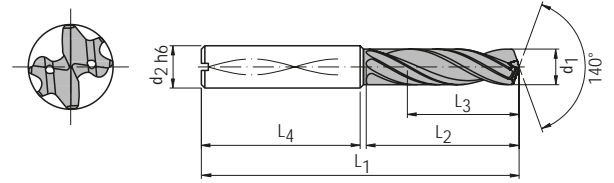
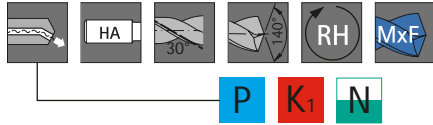
The MAPAL MEGA-Drill-Reamers are also coated with MxF and achieve high cutting values and tool life with maximum quality of the finished bore.

Despite the larger number of margins and guide chamfers, MAPAL MEGA-Drill-Reamers can be reground easily and to high precision.



# MEGA-Drill-Reamer M2263 / M2265

## Drill Reamer with four reaming margins

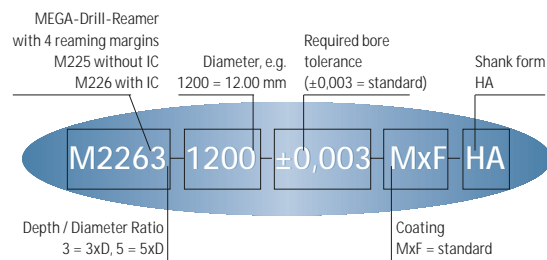


### Design:

Drill diameter: 5.97 – 12.72 mm  
0.2350 – 0.5008 Inch  
Bore tolerance: ± 0.003 standard  
No. of margins: 2+4

### Product is built-to-order!

To order, use the following order code:



3xD

Drill diameter $d_1$ ( $\pm 0.003$ )		Recommended for bore diameter* min. – max.		Shank diameter $d_2$ h6 mm	Total length $L_1$ mm	Margin length $L_2$ mm	Maximum drilling depth $L_3$ mm	Shank length $L_4$ mm	Order code Form/Diameter	
mm	Inch	mm	Inch							
5,97	0,2350	5,965 - 5,985	0,2348 - 0,2356	6	79	34	24	36	M2263-0597	○
5,98	0,2354	5,975 - 5,995	0,2352 - 0,2360	6	79	34	24	36	M2263-0598	○
5,99	0,2358	5,985 - 6,005	0,2356 - 0,2364	6	79	34	24	36	M2263-0599	○
6,00	0,2362	5,995 - 6,015	0,2360 - 0,2368	6	79	34	24	36	M2263-0600	○
6,01	0,2366	6,005 - 6,025	0,2364 - 0,2372	6	79	34	24	36	M2263-0601	○
6,02	0,2370	6,015 - 6,035	0,2368 - 0,2376	6	79	34	24	36	M2263-0602	○
6,32	0,2488	6,315 - 6,335	0,2486 - 0,2494	8	79	34	24	36	M2263-0632	○
6,33	0,2492	6,325 - 6,345	0,2490 - 0,2498	8	79	34	24	36	M2263-0633	○
6,34	0,2496	6,335 - 6,355	0,2494 - 0,2502	8	79	34	24	36	M2263-0634	○
6,35	0,2500	6,345 - 6,365	0,2498 - 0,2506	8	79	34	24	36	M2263-0635	○
6,36	0,2504	6,355 - 6,375	0,2502 - 0,2510	8	79	34	24	36	M2263-0636	○
6,37	0,2508	6,365 - 6,385	0,2506 - 0,2514	8	79	34	24	36	M2263-0637	○
7,97	0,3138	7,964 - 7,986	0,3135 - 0,3144	8	79	34	24	36	M2263-0797	○
7,98	0,3142	7,974 - 7,996	0,3139 - 0,3148	8	79	34	24	36	M2263-0798	○
7,99	0,3146	7,984 - 8,006	0,3143 - 0,3152	8	79	34	24	36	M2263-0799	○
8,00	0,3150	7,994 - 8,016	0,3147 - 0,3156	8	79	34	24	36	M2263-0800	○
8,01	0,3154	8,004 - 8,026	0,3151 - 0,3160	8	79	34	24	36	M2263-0801	○
8,02	0,3157	8,014 - 8,036	0,3155 - 0,3164	8	79	34	24	36	M2263-0802	○

\*The given bore diameters can only be guaranteed under perfect machining conditions and a run-out < 10 µm. Workpiece material and lubricant may also have an impact on the bore size. Other diameters and lengths can be offered on request at a minimum order quantity of three pieces per size.

For machining values see Page 84.

# MEGA-Drill-Reamer

## M2263 / M2265

### Drill Reamer with four reaming margins

Drill diameter $d_1 (\pm 0.003)$		Recommended for bore diameter* min. – max.		Shank diameter $d_2 h_6$ mm	Total length $L_1$ mm	Margin length $L_2$ mm	Maximum drilling depth $L_3$ mm	Shank length $L_4$ mm	Order code Form/Diameter	M2263
mm	Inch	mm	Inch							
9,48	0,3732	9,473 - 9,497	0,3730 - 0,3739	10	89	47	35	40	M2263-0948	○
9,49	0,3736	9,483 - 9,507	0,3733 - 0,3743	10	89	47	35	40	M2263-0949	○
9,50	0,3740	9,493 - 9,517	0,3737 - 0,3747	10	89	47	35	40	M2263-0950	○
9,52	0,3748	9,513 - 9,537	0,3745 - 0,3755	10	89	47	35	40	M2263-0952	○
9,53	0,3752	9,523 - 9,547	0,3749 - 0,3759	10	89	47	35	40	M2263-0953	○
9,54	0,3756	9,533 - 9,557	0,3753 - 0,3763	10	89	47	35	40	M2263-0954	○
9,97	0,3925	9,963 - 9,987	0,3922 - 0,3932	10	89	47	35	40	M2263-0997	○
9,98	0,3929	9,973 - 9,997	0,3926 - 0,3936	10	89	47	35	40	M2263-0998	○
9,99	0,3933	9,983 - 10,007	0,3930 - 0,3940	10	89	47	35	40	M2263-0999	○
10,00	0,3937	9,993 - 10,017	0,3934 - 0,3944	10	89	47	35	40	M2263-1000	○
10,01	0,3941	10,003 - 10,027	0,3938 - 0,3948	10	89	47	35	40	M2263-1001	○
10,02	0,3945	10,013 - 10,037	0,3942 - 0,3952	10	89	47	35	40	M2263-1002	○
11,97	0,4713	11,962 - 11,988	0,4709 - 0,4720	12	102	55	40	45	M2263-1197	○
11,98	0,4717	11,972 - 11,998	0,4713 - 0,4724	12	102	55	40	45	M2263-1198	○
11,99	0,4720	11,982 - 12,008	0,4717 - 0,4728	12	102	55	40	45	M2263-1199	○
12,00	0,4724	11,992 - 12,018	0,4721 - 0,4731	12	102	55	40	45	M2263-1200	○
12,01	0,4728	12,002 - 12,028	0,4725 - 0,4735	12	102	55	40	45	M2263-1201	○
12,02	0,4732	12,012 - 12,038	0,4729 - 0,4739	12	102	55	40	45	M2263-1202	○
12,67	0,4988	12,662 - 12,688	0,4985 - 0,4995	14	107	60	43	45	M2263-1267	○
12,68	0,4992	12,672 - 12,698	0,4989 - 0,4999	14	107	60	43	45	M2263-1268	○
12,69	0,4996	12,682 - 12,708	0,4993 - 0,5003	14	107	60	43	45	M2263-1269	○
12,70	0,5000	12,692 - 12,718	0,4997 - 0,5007	14	107	60	43	45	M2263-1270	○
12,71	0,5004	12,702 - 12,728	0,5001 - 0,5011	14	107	60	43	45	M2263-1271	○
12,72	0,5008	12,712 - 12,738	0,5005 - 0,5015	14	107	60	43	45	M2263-1272	○

5xD

Drill diameter $d_1 (\pm 0.003)$		Recommended for bore diameter* min. – max.		Shank diameter $d_2 h_6$ mm	Total length $L_1$ mm	Margin length $L_2$ mm	Maximum drilling depth $L_3$ mm	Shank length $L_4$ mm	Order code Form/Diameter	M2265
mm	Inch	mm	Inch							
5,97	0,2350	5,965 - 5,985	0,2348 - 0,2356	6	91	53	43	36	M2265-0597	○
5,98	0,2354	5,975 - 5,995	0,2352 - 0,2360	6	91	53	43	36	M2265-0598	○
5,99	0,2358	5,985 - 6,005	0,2356 - 0,2364	6	91	53	43	36	M2265-0599	○
6,00	0,2362	5,995 - 6,015	0,2360 - 0,2368	6	91	53	43	36	M2265-0600	○
6,01	0,2366	6,005 - 6,025	0,2364 - 0,2372	6	91	53	43	36	M2265-0601	○
6,02	0,2370	6,015 - 6,035	0,2368 - 0,2376	6	91	53	43	36	M2265-0602	○


\*The given bore diameters can only be guaranteed under perfect machining conditions and a run-out < 10 µm. Workpiece material and lubricant may also have an impact on the bore size. Other diameters and lengths can be offered on request at a minimum order quantity of three pieces per size.

For machining values see Page 84.

# MEGA-Drill-Reamer

## M2263 / M2265

### Drill Reamer with four reaming margins

Drill diameter d <sub>1</sub> (± 0.003)		Dimensions							 M2265 Order code Form/Diameter	
		Recommended for bore diameter* min. – max.		Shank diameter d <sub>2</sub> h <sub>6</sub> mm	Total length L <sub>1</sub> mm	Margin length L <sub>2</sub> mm	Maximum drilling depth L <sub>3</sub> mm	Shank length L <sub>4</sub> mm		
mm	Inch	mm	Inch							
6,32	0,2488	6,315 - 6,335	0,2486 - 0,2494	8	91	53	43	36	M2265-0632	○
6,33	0,2492	6,325 - 6,345	0,2490 - 0,2498	8	91	53	43	36	M2265-0633	○
6,34	0,2496	6,335 - 6,355	0,2494 - 0,2502	8	91	53	43	36	M2265-0634	○
6,35	0,2500	6,345 - 6,365	0,2498 - 0,2506	8	91	53	43	36	M2265-0635	○
6,36	0,2504	6,355 - 6,375	0,2502 - 0,2510	8	91	53	43	36	M2265-0636	○
6,37	0,2508	6,365 - 6,385	0,2506 - 0,2514	8	91	53	43	36	M2265-0637	○
7,97	0,3138	7,964 - 7,986	0,3135 - 0,3144	8	91	53	43	36	M2265-0797	○
7,98	0,3142	7,974 - 7,996	0,3139 - 0,3148	8	91	53	43	36	M2265-0798	○
7,99	0,3146	7,984 - 8,006	0,3143 - 0,3152	8	91	53	43	36	M2265-0799	○
8,00	0,3150	7,994 - 8,016	0,3147 - 0,3156	8	91	53	43	36	M2265-0800	○
8,01	0,3154	8,004 - 8,026	0,3151 - 0,3160	8	91	53	43	36	M2265-0801	○
8,02	0,3157	8,014 - 8,036	0,3155 - 0,3164	8	91	53	43	36	M2265-0802	○
9,48	0,3732	9,473 - 9,497	0,3730 - 0,3739	10	103	61	49	40	M2265-0948	○
9,49	0,3736	9,483 - 9,507	0,3733 - 0,3743	10	103	61	49	40	M2265-0949	○
9,50	0,3740	9,493 - 9,517	0,3737 - 0,3747	10	103	61	49	40	M2265-0950	○
9,52	0,3748	9,513 - 9,537	0,3745 - 0,3755	10	103	61	49	40	M2265-0952	○
9,53	0,3752	9,523 - 9,547	0,3749 - 0,3759	10	103	61	49	40	M2265-0953	○
9,54	0,3756	9,533 - 9,557	0,3753 - 0,3763	10	103	61	49	40	M2265-0954	○
9,97	0,3925	9,963 - 9,987	0,3922 - 0,3932	10	103	61	49	40	M2265-0997	○
9,98	0,3929	9,973 - 9,997	0,3926 - 0,3936	10	103	61	49	40	M2265-0998	○
9,99	0,3933	9,983 - 10,007	0,3930 - 0,3940	10	103	61	49	40	M2265-0999	○
10,00	0,3937	9,993 - 10,017	0,3934 - 0,3944	10	103	61	49	40	M2265-1000	○
10,01	0,3941	10,003 - 10,027	0,3938 - 0,3948	10	103	61	49	40	M2265-1001	○
10,02	0,3945	10,013 - 10,037	0,3942 - 0,3952	10	103	61	49	40	M2265-1002	○
11,97	0,4713	11,962 - 11,988	0,4709 - 0,4720	12	118	71	56	45	M2265-1197	○
11,98	0,4717	11,972 - 11,998	0,4713 - 0,4724	12	118	71	56	45	M2265-1198	○
11,99	0,4720	11,982 - 12,008	0,4717 - 0,4728	12	118	71	56	45	M2265-1199	○
12,00	0,4724	11,992 - 12,018	0,4721 - 0,4731	12	118	71	56	45	M2265-1200	○
12,01	0,4728	12,002 - 12,028	0,4725 - 0,4735	12	118	71	56	45	M2265-1201	○
12,02	0,4732	12,012 - 12,038	0,4729 - 0,4739	12	118	71	56	45	M2265-1202	○
12,67	0,4988	12,662 - 12,688	0,4985 - 0,4995	14	124	77	60	45	M2265-1267	○
12,68	0,4992	12,672 - 12,698	0,4989 - 0,4999	14	124	77	60	45	M2265-1268	○
12,69	0,4996	12,682 - 12,708	0,4993 - 0,5003	14	124	77	60	45	M2265-1269	○
12,70	0,5000	12,692 - 12,718	0,4997 - 0,5007	14	124	77	60	45	M2265-1270	○
12,71	0,5004	12,702 - 12,728	0,5001 - 0,5011	14	124	77	60	45	M2265-1271	○
12,72	0,5008	12,712 - 12,738	0,5005 - 0,5015	14	124	77	60	45	M2265-1272	○

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For machining values see Page 84.