



MULTI-STEP DRILLS – HSS DM 03



More precise hole diameter through cylindrical steps. Hole deburring through the next step.

Standard execution with 2 chip spaces, spiral grooved.

- More precise hole diameter through cylindrical steps.
- Immediate deburring through the next step
- Drilling of sheet metals as thin as 4 mm possible.
- Use coolant stick!
- The keyway allows the drill to make a chipping cut during drilling for better chip removal.
- Longer cutting edge compared to the usual straight groove and noticeably easier cutting.
- Laser-etched scale in the chip space to indicate the bore diameter achieved.

Description	Bore range	Shank Ø	Length	Prod.-No.
AM-12	4 - 12 mm x 1 mm	6.0	70 mm	08070
AM-20	6 - 20 mm x 2 mm	9.0	77 mm	08071
AM-30	6 - 30 mm x 2 mm	10.0	98 mm	08072

Set in plastic case 08073

Contents:
1 of each Type AM-12/AM-20/AM-30

High-performance coolant stick 09012



Prod.-No. 08072

Prod.-No. 09012

Standard values for the use of ALFRA Multi-step drills

This drill was developed to bore perfectly round and deburred holes in sheet metal from 4 - 6 mm thick. The transition forms a radius which serves to deburr or bevel the hole at the same time. While conical one-lip bits drill a slightly tapered hole, our ALFRA multi-step drill achieves a cylindrical hole. The tools have axial-radial relief grindings and can be lightly reground on the breast of the cutting tooth.

We recommend the use of pillar drilling machines, however, the small ALFRA Multi-step drills can be used on adjustable hand drilling machines. Sufficient cooling using ALFRA coolant stick or a bore emulsion is imperative.

Speed chart rpm

Type	sheet steel S235	stainless steel sheets	non-ferrous metals	plastics (soft)
AM	drill 800	360	1000	1000
	countersink 500 - 180	50 - 70	800 - 400	1000 - 400
AM-1	drill 800	360	1000	1000
	countersink 200 - 100	100 - 50	500 - 200	600 - 250
PVD+PVK+DKI	drill 800	360	1000	1000
PVD-VA + SVB	countersink 400 - 200	200 - 100	800 - 500	1000 - 600



Prod.-No. 08073