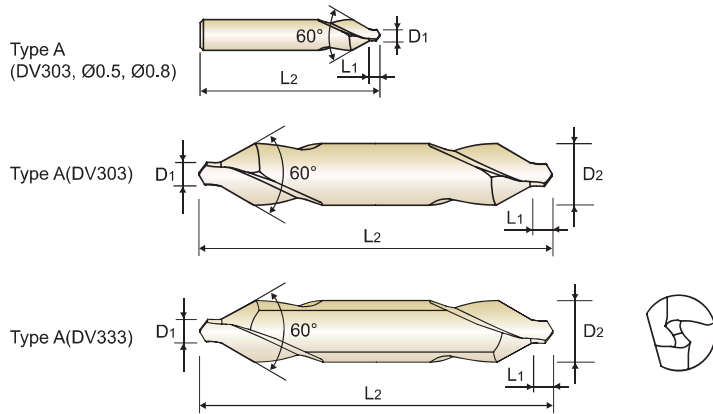


HSS-E, CENTER DRILLS / FORM A

- HSS-EX, ZENTRIERBOHRER / FORM A
- Forets HSS-EX à centrer / Forme A
- PUNTE A CENTRARE PER TORNII IN HSS-EX / FORMA A



FORM A (60°)

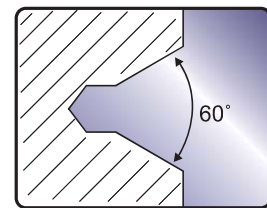
EDP No.	Drill Diameter		Shank Diameter		Pilot Length		Overall Length	
	D1	D2	L1	L2	L1	L2	L1	L2
DV303005	0.5	3.15	0.8	25				
DV303008	0.8	3.15	1.1	25				
DV303010	1.0	3.15	1.3	31.5				
DV303912	1.25	3.15	1.6	31.5				
DV303016	1.6	4	2	35.5				
DV303020	2.0	5	2.5	40				
DV303025	2.5	6.3	3.1	45				
DV303931	3.15	8	3.9	50				
DV303040	4.0	10	5	56				
DV303050	5.0	12.5	6.3	63				
DV303063	6.3	16	8	71				

► Under 1.0mm : Single End

FORM A (60°), FLAT

Unit : mm

EDP No.	Drill Diameter		Shank Diameter		Pilot Length		Overall Length	
	D1	D2	L1	L2	L1	L2	L1	L2
DV333016	1.6	4	2	35.5				
DV333020	2.0	5	2.5	40				
DV333025	2.5	6.3	3.1	45				
DV333931	3.15	8	3.9	50				
DV333040	4.0	10	5	56				
DV333050	5.0	12.5	6.3	63				
DV333063	6.3	16	8	71				



ISO Material Description	P										M				K								
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel				Stainless steel				Grey cast iron		Nodular cast iron		Malleable cast iron
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230			
Recommended	◎	◎	○			◎	○					○			◎	○	○	○	○	○			

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)			Non Metallic Materials		Heat Resistant Super Alloys						Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended																					

◎ : Excellent ○ : Good



RECOMMENDED CUTTING CONDITIONS
EMPFOHLENE SCHNEIDKONDITIONEN

DV303, DV333, DV334, D1303, D1343, D1313, D1353, D1363, D1373, DV383 SERIES

HSS & HSS-E, CENTER DRILLS

RPM = rev./min.
FEED = mm/rev.

ISO	VDI 3323	Material Description	Vc (m/min)	Parameter	Drill Diameter (mm)							
					1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0
P	1	Non-alloy steel	40	RPM FEED	12730 0.02-0.04	6370 0.03-0.06	4240 0.04-0.08	3180 0.05-0.09	2550 0.06-0.10	2120 0.07-0.12	1590 0.09-0.15	1270 0.12-0.18
	2		30	RPM FEED	9550 0.02-0.04	4770 0.03-0.06	3180 0.04-0.08	2390 0.05-0.09	1910 0.06-0.10	1590 0.07-0.12	1190 0.09-0.15	950 0.12-0.18
	3		25	RPM FEED	7960 0.01-0.03	3980 0.01-0.035	2650 0.015-0.05	1990 0.02-0.06	1590 0.03-0.07	1330 0.04-0.08	990 0.06-0.12	800 0.08-0.14
	4											
	5											
	6	Low alloy steel	30	RPM FEED	9550 0.02-0.04	4770 0.03-0.06	3180 0.04-0.08	2390 0.05-0.09	1910 0.06-0.10	1590 0.07-0.12	1190 0.09-0.15	950 0.12-0.18
	7		20	RPM FEED	6370 0.01-0.03	3180 0.01-0.035	2120 0.015-0.05	1590 0.02-0.06	1270 0.03-0.07	1060 0.04-0.08	800 0.06-0.12	640 0.08-0.14
	8											
	9											
	10		High alloyed steel, and tool steel									
	11											
M	12	Stainless steel	10	RPM FEED	3180 0.01-0.03	1590 0.01-0.035	1060 0.015-0.05	800 0.02-0.06	640 0.03-0.07	530 0.04-0.08	400 0.06-0.12	320 0.08-0.14
	13											
	14											
K	15	Grey cast iron	40	RPM FEED	12730 0.02-0.04	6370 0.03-0.06	4240 0.04-0.08	3180 0.05-0.09	2550 0.06-0.10	2120 0.07-0.12	1590 0.09-0.15	1270 0.12-0.18
	16		30	RPM FEED	9550 0.01-0.03	4770 0.01-0.035	3180 0.015-0.05	2390 0.02-0.06	1910 0.03-0.07	1590 0.04-0.08	1190 0.06-0.12	950 0.08-0.14
	17	Nodular cast iron	40	RPM FEED	12730 0.02-0.04	6370 0.03-0.06	4240 0.04-0.08	3180 0.05-0.09	2550 0.06-0.10	2120 0.07-0.12	1590 0.09-0.15	1270 0.12-0.18
	18											
	19	Malleable cast iron	25	RPM FEED	7960 0.02-0.04	3980 0.03-0.06	2650 0.04-0.08	1990 0.05-0.09	1590 0.06-0.10	1330 0.07-0.12	990 0.06-0.12	800 0.12-0.18
20												
N	21	Aluminum-wrought alloy										
	22											
	23	Aluminum-cast, alloyed										
	24											
	25											
	26	Copper and Copper Alloys (Bronze / Brass)										
	27											
	28											
	29	Non Metallic Materials										
30												
S	31	Heat Resistant Super Alloys										
	32											
	33											
	34											
	35											
H	36	Titanium Alloys										
	37											
H	38	Hardened steel										
	39											
H	40	Hardened Cast Iron										
	41											