

1534SH

SH series

Twist drills for hardened materials

- Specially designed chip geometry for very high stability.
- High performance coating for longer tool life.
- Diameter range 3.0–16.0 mm (3xD)



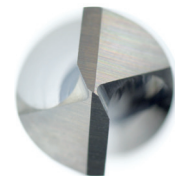
S cut

1105SC

SC series

Twist drills for aluminium alloys

- Equal nominal diameter and shank diameter.
- Diameter meter 2.0–16.0 mm (3xD, 5xD)



Straight cut

1165PA

PA series

Three-lips drills for aluminium alloys

- Three cutting edges provide high concentricity and therefore high feed rates.
- Equal nominal diameter and shank diameter.
- Diameter range 3.0–20.0 mm (3xD)



Straight cut

SH drill 3xD

Hard materials

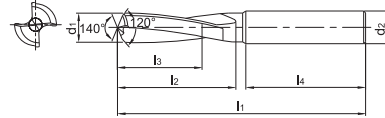
1534SH03



– Type of shank DIN 6535HA



External coolant



Article	*	Dimensions [mm]						Grade
		d ₁ (m7)	d ₂ (h6)	l ₁	l ₂	l ₃	l ₄	KDG303
1534SH03-0300		3	6	62	20	14	36	○
1534SH03-0330		3.3	6	62	20	14	36	●
1534SH03-0400		4	6	66	24	17	36	○
1534SH03-0420		4.2	6	66	24	17	36	●
1534SH03-0500		5	6	66	28	20	36	○
1534SH03-0600		6	6	66	28	20	36	○
1534SH03-0675		6.75	8	79	34	24	36	○
1534SH03-0700		7	8	79	34	24	36	○
1534SH03-0800		8	8	79	41	29	36	○
1534SH03-0850		8.5	10	89	47	35	40	○
1534SH03-0900		9	10	89	47	35	40	○
1534SH03-1000		10	10	89	47	35	40	○
1534SH03-1025		10.25	12	102	55	40	45	○
1534SH03-1050		10.5	12	102	55	40	45	○
1534SH03-1200		12	12	102	55	40	45	○
1534SH03-1250		12.5	14	107	60	43	45	○
1534SH03-1400		14	14	107	60	43	45	○
1534SH03-1450		14.5	16	115	65	45	48	○
1534SH03-1600		16	16	115	65	45	48	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
					✓

✓ Very suitable

✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178

SC drill 3xD

Non-ferrous metals

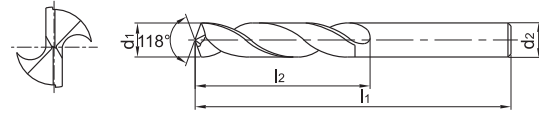
1105SC03



- Factory standard



External coolant



Article	*	Dimensions [mm]				Grade
		d ₁ (h8)	d ₂ (h7)	l ₁	l ₂	YK20F
1105SC03-0200		2	2	38	12	○
1105SC03-0250		2.5	2.5	43	14	○
1105SC03-0280		2.8	2.8	46	16	○
1105SC03-0300		3	3	46	16	○
1105SC03-0310		3.1	3.1	49	18	○
1105SC03-0320		3.2	3.2	49	18	○
1105SC03-0330		3.3	3.3	49	18	○
1105SC03-0340		3.4	3.4	52	20	○
1105SC03-0350		3.5	3.5	52	20	○
1105SC03-0360		3.6	3.6	52	20	○
1105SC03-0370		3.7	3.7	52	20	○
1105SC03-0380		3.8	3.8	55	22	○
1105SC03-0390		3.9	3.9	55	22	○
1105SC03-0400		4	4	55	22	○
1105SC03-0410		4.1	4.1	55	22	○
1105SC03-0420		4.2	4.2	55	22	○
1105SC03-0430		4.3	4.3	58	24	○
1105SC03-0440		4.4	4.4	58	24	○
1105SC03-0450		4.5	4.5	58	24	○
1105SC03-0460		4.6	4.6	58	24	○
1105SC03-0470		4.7	4.7	58	24	○
1105SC03-0480		4.8	4.8	62	26	○
1105SC03-0490		4.9	4.9	62	26	○
1105SC03-0500		5	5	62	26	○
1105SC03-0510		5.1	5.1	62	26	○
1105SC03-0520		5.2	5.2	62	26	○
1105SC03-0530		5.3	5.3	62	26	○
1105SC03-0540		5.4	5.4	66	28	○
1105SC03-0550		5.5	5.5	66	28	○
1105SC03-0560		5.6	5.6	66	28	○
1105SC03-0570		5.7	5.7	66	28	○
1105SC03-0580		5.8	5.8	66	28	○
1105SC03-0590		5.9	5.9	66	28	○
1105SC03-0600		6	6	66	28	○
1105SC03-0610		6.1	6.1	70	31	○
1105SC03-0620		6.2	6.2	70	31	○
1105SC03-0630		6.3	6.3	70	31	○
1105SC03-0640		6.4	6.4	70	31	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178



A

Turning

B

Milling

C

Drilling

D

Technical Information

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SC drill 3xD

Non-ferrous metals

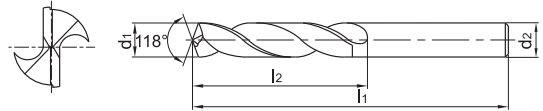
1105SC03



– Factory standard



External coolant



Article	*	Dimensions [mm]				Grade
		d ₁ (h8)	d ₂ (h7)	l ₁	l ₂	YK20F
1105SC03-0650		6.5	6.5	70	31	○
1105SC03-0660		6.6	6.6	70	31	○
1105SC03-0670		6.7	6.7	70	31	○
1105SC03-0680		6.8	6.8	74	34	○
1105SC03-0690		6.9	6.9	74	34	○
1105SC03-0700		7	7	74	34	○
1105SC03-0710		7.1	7.1	74	34	○
1105SC03-0720		7.2	7.2	74	34	○
1105SC03-0730		7.3	7.3	74	34	○
1105SC03-0740		7.4	7.4	74	34	○
1105SC03-0750		7.5	7.5	74	34	○
1105SC03-0760		7.6	7.6	79	37	○
1105SC03-0770		7.7	7.7	79	37	○
1105SC03-0780		7.8	7.8	79	37	○
1105SC03-0790		7.9	7.9	79	37	○
1105SC03-0800		8	8	79	37	○
1105SC03-0810		8.1	8.1	79	37	○
1105SC03-0820		8.2	8.2	79	37	○
1105SC03-0830		8.3	8.3	79	37	○
1105SC03-0840		8.4	8.4	79	37	○
1105SC03-0850		8.5	8.5	79	37	○
1105SC03-0860		8.6	8.6	84	40	○
1105SC03-0870		8.7	8.7	84	40	○
1105SC03-0880		8.8	8.8	84	40	○
1105SC03-0890		8.9	8.9	84	40	○
1105SC03-0900		9	9	84	40	○
1105SC03-0910		9.1	9.1	84	40	○
1105SC03-0920		9.2	9.2	84	40	○
1105SC03-0930		9.3	9.3	84	40	○
1105SC03-0940		9.4	9.4	84	40	○
1105SC03-0950		9.5	9.5	84	40	○
1105SC03-0960		9.6	9.6	89	43	○
1105SC03-0970		9.7	9.7	89	43	○
1105SC03-0980		9.8	9.8	89	43	○
1105SC03-0990		9.9	9.9	89	43	○
1105SC03-1000		10	10	89	43	○
1105SC03-1010		10.1	10.1	89	43	○
1105SC03-1020		10.2	10.2	89	43	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178

SC drill 3xD

Non-ferrous metals

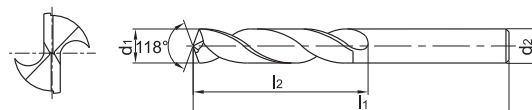
1105SC03



- Factory standard



External coolant



Article	*	Dimensions [mm]				Grade
		d ₁ (h8)	d ₂ (h7)	l ₁	l ₂	YK20F
1105SC03-1040		10.4	10.4	89	43	○
1105SC03-1050		10.5	10.5	89	43	○
1105SC03-1070		10.7	10.7	95	47	○
1105SC03-1080		10.8	10.8	95	47	○
1105SC03-1100		11	11	95	47	○
1105SC03-1150		11.5	11.5	95	47	○
1105SC03-1200		12	12	102	51	○
1105SC03-1250		12.5	12.5	102	51	○
1105SC03-1280		12.8	12.8	102	51	○
1105SC03-1300		13	13	102	51	○
1105SC03-1310		13.1	13.1	102	51	○
1105SC03-1350		13.5	13.5	107	54	○
1105SC03-1400		14	14	107	54	○
1105SC03-1430		14.3	14.3	111	56	○
1105SC03-1450		14.5	14.5	111	56	○
1105SC03-1500		15	15	111	56	○
1105SC03-1600		16	16	115	58	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

A

Turning

B

Milling

C

Drilling

D

Technical Information

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System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178



SC drill 5xD

Non-ferrous metals

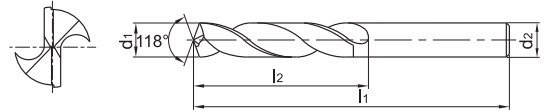
1101SC05



– Factory standard



External coolant



Article	*	Dimensions [mm]				Grade
		d ₁ (h8)	d ₂ (h7)	l ₁	l ₂	YK20F
1101SC05-0200		2	2	49	24	○
1101SC05-0250		2.5	2.5	57	30	○
1101SC05-0280		2.8	2.8	61	33	○
1101SC05-0300		3	3	61	33	○
1101SC05-0350		3.5	3.5	70	39	○
1101SC05-0380		3.8	3.8	75	43	○
1101SC05-0400		4	4	75	43	○
1101SC05-0420		4.2	4.2	75	43	○
1101SC05-0450		4.5	4.5	80	47	○
1101SC05-0480		4.8	4.8	86	52	○
1101SC05-0500		5	5	86	52	○
1101SC05-0550		5.5	5.5	93	57	○
1101SC05-0580		5.8	5.8	93	57	○
1101SC05-0600		6	6	93	57	○
1101SC05-0650		6.5	6.5	101	63	○
1101SC05-0680		6.8	6.8	109	69	○
1101SC05-0700		7	7	109	69	○
1101SC05-0750		7.5	7.5	109	69	○
1101SC05-0780		7.8	7.8	117	75	○
1101SC05-0800		8	8	117	75	○
1101SC05-0850		8.5	8.5	117	75	○
1101SC05-0880		8.8	8.8	125	81	○
1101SC05-0900		9	9	125	81	○
1101SC05-0950		9.5	9.5	125	81	○
1101SC05-0980		9.8	9.8	133	87	○
1101SC05-1000		10	10	133	87	○
1101SC05-1050		10.5	10.5	133	87	○
1101SC05-1080		10.8	10.8	142	94	○
1101SC05-1100		11	11	142	94	○
1101SC05-1150		11.5	11.5	142	94	○
1101SC05-1200		12	12	151	101	○
1101SC05-1250		12.5	12.5	151	101	○
1101SC05-1300		13	13	151	101	○
1101SC05-1350		13.5	13.5	160	108	○
1101SC05-1400		14	14	160	108	○
1101SC05-1450		14.5	14.5	169	114	○
1101SC05-1500		15	15	169	114	○
1101SC05-1550		15.5	15.5	178	120	○
1101SC05-1600		16	16	178	120	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178

PA drill 3xD

Non-ferrous metals

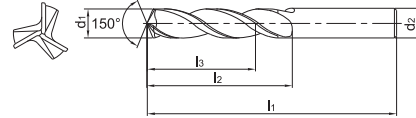
1165PA03



- Factory standard



External coolant



Article	*	Dimensions [mm]					Grade	
		d ₁ (h7)	d ₂ (h7)	l ₁	l ₂	l ₃	KDG303	YK30F
1165PA03-0300		3	3	46	16	12	●	●
1165PA03-0310		3.1	3.1	49	18	14	○	○
1165PA03-0320		3.2	3.2	49	18	14	○	●
1165PA03-0330		3.3	3.3	49	18	14	○	○
1165PA03-0340		3.4	3.4	52	20	15	○	●
1165PA03-0350		3.5	3.5	52	20	15	○	○
1165PA03-0360		3.6	3.6	52	20	15	○	○
1165PA03-0370		3.7	3.7	52	20	15	○	○
1165PA03-0380		3.8	3.8	55	22	17	○	○
1165PA03-0390		3.9	3.9	55	22	17	○	○
1165PA03-0400		4	4	55	22	17	○	○
1165PA03-0410		4.1	4.1	55	22	17	○	○
1165PA03-0420		4.2	4.2	55	22	17	○	○
1165PA03-0430		4.3	4.3	58	24	18	○	○
1165PA03-0440		4.4	4.4	58	24	18	○	○
1165PA03-0450		4.5	4.5	58	24	18	○	○
1165PA03-0460		4.6	4.6	58	24	18	○	○
1165PA03-0470		4.7	4.7	58	24	18	○	○
1165PA03-0480		4.8	4.8	62	26	20	○	○
1165PA03-0490		4.9	4.9	62	26	20	○	○
1165PA03-0500		5	5	62	26	20	○	○
1165PA03-0510		5.1	5.1	62	26	20	○	○
1165PA03-0520		5.2	5.2	62	26	20	○	○
1165PA03-0530		5.3	5.3	62	26	20	○	○
1165PA03-0540		5.4	5.4	66	28	21	○	○
1165PA03-0550		5.5	5.5	66	28	21	○	○
1165PA03-0560		5.6	5.6	66	28	21	○	○
1165PA03-0570		5.7	5.7	66	28	21	○	○
1165PA03-0580		5.8	5.8	66	28	21	○	○
1165PA03-0590		5.9	5.9	66	28	21	○	○
1165PA03-0600		6	6	66	28	21	○	○
1165PA03-0610		6.1	6.1	70	31	23	○	○
1165PA03-0620		6.2	6.2	70	31	23	○	○
1165PA03-0630		6.3	6.3	70	31	23	○	○
1165PA03-0640		6.4	6.4	70	31	23	○	○
1165PA03-0650		6.5	6.5	70	31	23	○	○
1165PA03-0660		6.6	6.6	70	31	23	○	●
1165PA03-0670		6.7	6.7	70	31	23	○	●

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178



PA drill 3xD

Non-ferrous metals

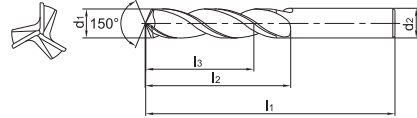
1165PA03



– Factory standard



External coolant



Article	*	Dimensions [mm]					Grade	
		d ₁ (h7)	d ₂ (h7)	l ₁	l ₂	l ₃	KDG303	YK30F
1165PA03-0680		6.8	6.8	74	34	25	○	○
1165PA03-0690		6.9	6.9	74	34	25	○	○
1165PA03-0700		7	7	74	34	25	○	○
1165PA03-0710		7.1	7.1	74	34	25	○	○
1165PA03-0720		7.2	7.2	74	34	25	○	○
1165PA03-0730		7.3	7.3	74	34	25	○	○
1165PA03-0740		7.4	7.4	74	34	25	○	○
1165PA03-0750		7.5	7.5	74	34	25	○	○
1165PA03-0760		7.6	7.6	79	37	27	○	○
1165PA03-0770		7.7	7.7	79	37	27	○	○
1165PA03-0780		7.8	7.8	79	37	27	○	○
1165PA03-0790		7.9	7.9	79	37	27	○	○
1165PA03-0800		8	8	79	37	27	○	○
1165PA03-0810		8.1	8.1	79	37	27	○	○
1165PA03-0820		8.2	8.2	79	37	27	○	○
1165PA03-0830		8.3	8.3	79	37	27	○	○
1165PA03-0840		8.4	8.4	79	37	27	○	○
1165PA03-0850		8.5	8.5	79	37	27	○	○
1165PA03-0860		8.6	8.6	84	40	29	○	●
1165PA03-0870		8.7	8.7	84	40	29	○	○
1165PA03-0880		8.8	8.8	84	40	29	○	○
1165PA03-0890		8.9	8.9	84	40	29	○	○
1165PA03-0900		9	9	84	40	29	○	○
1165PA03-0910		9.1	9.1	84	40	29	○	○
1165PA03-0920		9.2	9.2	84	40	29	○	○
1165PA03-0930		9.3	9.3	84	40	29	○	○
1165PA03-0940		9.4	9.4	84	40	29	○	○
1165PA03-0950		9.5	9.5	84	40	29	○	○
1165PA03-0960		9.6	9.6	89	43	31	○	○
1165PA03-0970		9.7	9.7	89	43	31	○	○
1165PA03-0980		9.8	9.8	89	43	31	○	○
1165PA03-0990		9.9	9.9	89	43	31	○	○
1165PA03-1000		10	10	89	43	31	○	○
1165PA03-1010		10.1	10.1	89	43	31	○	○
1165PA03-1020		10.2	10.2	89	43	31	○	○
1165PA03-1030		10.3	10.3	89	43	31	○	○
1165PA03-1050		10.5	10.5	89	43	31	○	○
1165PA03-1100		11	11	95	47	33	○	○

● Ex stock ○ On demand

* With internal cooling

Application field

P	M	K	N	S	H
			✓		

✓ Very suitable

✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178

PA drill 3xD

Non-ferrous metals

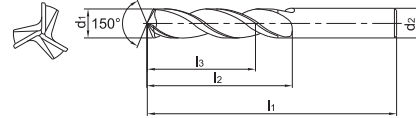
1165PA03



- Factory standard



External coolant



Article	*	Dimensions [mm]					Grade	
		d ₁ (h7)	d ₂ (h7)	l ₁	l ₂	l ₃	KDG303	YK30F
1165PA03-1120		11.2	11.2	95	47	33	○	○
1165PA03-1150		11.5	11.5	95	47	33	○	○
1165PA03-1180		11.8	11.8	95	47	33	○	○
1165PA03-1200		12	12	102	51	35	○	○
1165PA03-1210		12.1	12.1	102	51	35	○	○
1165PA03-1250		12.5	12.5	102	51	35	○	○
1165PA03-1300		13	13	102	51	35	○	○
1165PA03-1350		13.5	13.5	107	54	37	○	○
1165PA03-1400		14	14	107	54	37	○	○
1165PA03-1450		14.5	14.5	111	56	38	○	○
1165PA03-1500		15	15	111	56	38	○	○
1165PA03-1550		15.5	15.5	115	58	38	○	○
1165PA03-1600		16	16	115	58	38	○	○
1165PA03-1650		16.5	16.5	119	60	39	○	○
1165PA03-1700		17	17	119	60	39	○	○
1165PA03-1750		17.5	17.5	123	62	40	○	○
1165PA03-1800		18	18	123	62	40	○	○
1165PA03-1850		18.5	18.5	127	64	41	○	○
1165PA03-1900		19	19	127	64	41	○	○
1165PA03-1950		19.5	19.5	131	66	42	○	○
1165PA03-2000		20	20	131	66	42	○	○

● Ex stock ○ On demand

* With internal cooling

Application field					
P	M	K	N	S	H
			✓		

✓ Very suitable
✓ Suitable

System code > C28

Machining instructions > C165

Cutting data > C122

Nonstandard order > C178



A

Turning

B

Milling

C

Drilling

D

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