

RAINFORD PRECISION



 **OSAWA**

Typhoon Drills

sales@rainfordprecision.com

01744 889726



TYPHOON

Solid carbide for general and special purpose

🇬🇧 Top quality carbide substrate and latest coating technology combined with specific geometries. Here comes the Osawa Typhoon range of solid carbide drills.

🇮🇹 Un substrato di metallo duro di alta qualità e una tecnologia di rivestimento all'avanguardia combinati con geometrie specifiche. Queste le caratteristiche delle punte in metallo duro Osawa Typhoon.

🇩🇪 Hochwertige Hartmetallsubstrate, Beschichtungen und Schnittgeometrien stecken in dieser Produktpalette. Diese Produkte setzen die Osawa Typhoon VHM Bohrer Palette zusammen.

🇫🇷 Un substrat de carbure de haute qualité et une technologie de revêtement de pointe combinée avec des géométries spécifiques. Voilà les caractéristiques des forets carbure monobloc Osawa Typhoon.

🇪🇸 Sustrato de Metal Duro de altísima calidad, combinado con geometrías específicas y la última tecnología en recubrimiento. Aquí tenemos la gama Typhoon de Osawa en brocas de Metal Duro.

🇷🇺 Исходный материал наивысшего качества в комбинации с современным покрытием и специальной геометрией, представляет гамму твердосплавных сверл серии Osawa Typhoon.



PV200 COATING

GENERAL PURPOSE · USO GENERICO
ALLGEMEINE ANWENDUNGEN · APPLICATIONS GÉNÉRIQUES
UTILIZACIÓN GENERAL · ОБЩЕГО НАЗНАЧЕНИЯ



PV300 COATING

GENERAL PURPOSE · USO GENERICO
ALLGEMEINE ANWENDUNGEN · APPLICATIONS GÉNÉRIQUES
UTILIZACIÓN GENERAL · ОБЩЕГО НАЗНАЧЕНИЯ



PV300 COATING

LAPPED FLUTES · GOLE LAPPATE
GELÄPPTTE NUTEN · GOUJOURS RODÉES
RANURAS LAPEADAS · ПОЛИРОВАННЫЕ КАНАВКИ



STAINLESS STEEL · ACCIAIO INOSSIDABILE
ROSTFREIER STAHL · ACIER INOXYDABLE
ACERO INOXIDABLE · НЕРЖАВЕЮЩАЯ СТАЛЬ



UNCOATED

LAPPED FLUTES · GOLE LAPPATE
GELÄPPTTE NUTEN · GOUJOURS RODÉES
RANURAS LAPEADAS · ПОЛИРОВАННЫЕ КАНАВКИ

ALUMINIUM · ALLUMINIO
ALUMINIUM · ALUMINIUM
ALUMINIO · АЛЮМИНИЙ



PV1000 COATING

45-62HRC

TYPHOON

C-SD-TA

LFTA

SUTA

HSS-
HSS/CO
DRILLS

UH
RED

MEX
ORANGE

HF
EVO

MEF
ENDLESS

ALU

MDC

G2

MDTA

ULTRA
MILLS

HSS/CO

CARBIDE
BURRS

PARAMETERS

	OSAWA NORM	5XD 355SU 355SUH	8XD 358SUH	12XD 3512SUH
PAGE 246				

(m7)					
Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



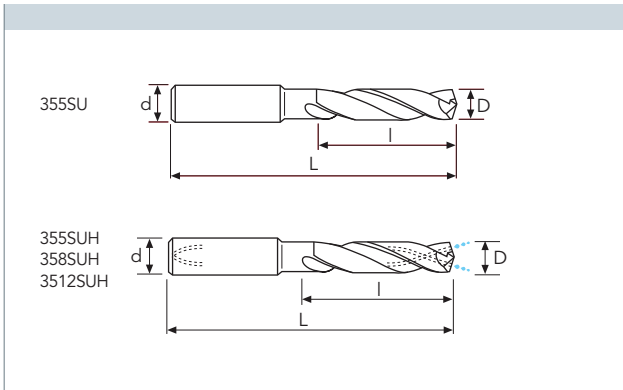
<p>355SU</p>				
<p>355SUH 358SUH 3512SUH</p>				

D(m7)	d(h6)	l	L	Stock	Stock	Stock	Stock
mm 1.00	3	6.5	50	○	○	●	●
1.00	3	9.5	50				
1.00	3	13.5	55				
1.05	3	6.5	50	○	○	○	
1.05	3	10	50				
1.10	3	7.2	50	○	○		
1.10	3	10.5	50			●	
1.10	3	14.9	55				○
1.15	3	7.5	50	○	○		
1.15	3	10.9	50			○	
1.20	3	7.8	50	○	○		
1.20	3	11.4	50			●	
1.20	3	16.2	55				●
1.25	3	8.1	50	○	○		
1.25	3	11.9	50			○	
1.28	3	12.4	50			●	
1.30	3	8.5	50	○	○		
1.30	3	12.4	50			●	
1.30	3	17.6	55				●
1.35	3	8.8	50	○	○		
1.35	3	12.8	50			○	
1.40	3	9.1	50	○	○		
1.40	3	13.3	50			●	
1.40	3	18.9	55				○
1.45	3	9.4	50	○	○		
1.45	3	13.8	50			●	
1.50	3	9.8	50	○	○		
1.50	3	14.3	50			●	
1.50	3	20.3	55				●
1.55	3	10.1	50	○	○		
1.55	3	14.7	50			○	
1.60	3	10.4	50	○	○		
1.60	3	15.2	50			●	
1.60	3	21.6	65				●
1.65	3	10.7	55	○	○		
1.65	3	15.7	60			○	

● stock standard ○ non-standard stock ■ stock exhaustion

	OSAWA NORM	5XD 355SU 355SUH	8XD 358SUH	12XD 3512SUH
PAGE 246				

(m7)					
Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



PV300	PV300	PV300	PV300

D(m7)	d(h6)	l	L	Stock	Stock	Stock	Stock
mm 1.70	3	11.1	55	○	○	●	○
1.70	3	16.2	60				
1.70	3	23	65				
1.75	3	11.4	55	○	○	○	○
1.75	3	16.6	60				
1.80	3	11.7	55	○	○	●	
1.80	3	17.1	60				●
1.80	3	24.3	65				
1.85	3	12	55	○	○		
1.85	3	17.6	60			●	
1.90	3	12.4	55	○	○		
1.90	3	18.1	60			●	
1.90	3	25.7	65			○	
1.95	3	12.7	55	○	○		
1.95	3	18.5	60				○
2.00	3	13	55	○	○	●	
2.00	3	19	60				●
2.00	3	27	65				●
2.05	3	13.3	55	○	○		
2.05	3	19.5	60			○	
2.10	3	13.7	55	○	○		
2.10	3	20	60			●	
2.10	3	28.4	65				●
2.15	3	14	55	○	○		
2.15	3	20.4	60			○	
2.20	3	14.3	55	○	○	●	
2.20	3	20.9	60				●
2.20	3	29.7	65				●
2.25	3	14.6	55	○	○		
2.25	3	21.4	60			○	
2.30	3	15	55	○	○		
2.30	3	21.9	60			●	
2.30	3	31.1	65				○
2.35	3	15.3	55	○	○		
2.35	3	22.3	60			○	
2.40	3	15.6	55	○	○		

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

C-SD-TA

LFTA

SUTA

HSS-HSS/CO DRILLS

UH RED

MEX ORANGE

HF EVO

MEF ENDLESS

ALU

MDC

G2

MDTA

ULTRA MILLS

HSS/CO

CARBIDE BURRS

PARAMETERS

	OSAWA NORM	5XD 355SU 355SUH	8XD 358SUH	12XD 3512SUH

(m7)					
Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



	PV300	PV300	PV300	PV300

D(m7)	d(h6)	l	L	Stock	Stock	Stock	Stock
mm 2.40	3	22.8	60			●	
2.40	3	32.4	75				○
2.45	3	15.9	55	○	○		
2.45	3	23.3	60			○	
2.50	3	16.3	55	○	○		
2.50	3	23.8	60			●	
2.50	3	33.8	75				●
2.55	3	16.6	55	○	○		
2.55	3	24.2	60			○	
2.60	3	16.9	55	○	○		
2.60	3	24.7	60			●	
2.60	3	35.1	75				●
2.65	3	17.2	55	○	○		
2.65	3	25.2	60			○	
2.70	3	17.4	55	○	○		
2.70	3	25.7	60			●	
2.70	3	36.5	75				○
2.75	3	17.9	55	○	○		
2.75	3	26.1	60			○	
2.80	3	18.2	55	○	○		
2.80	3	26.6	60			●	
2.80	3	37.8	75				●
2.85	3	18.5	55	○	○		
2.85	3	27.1	60			○	
2.90	3	18.9	55	○	○		
2.90	3	27.6	60			●	
2.90	3	39.2	75				○
2.95	3	19.2	55	○	○		
2.95	3	28	60			○	

● stock standard ○ non-standard stock ■ stock exhaustion

n **Vf**
PAGE 246-247

DIN 6539

3XD



343TA - 318N (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21

MG
PV200

MG
BR

140°

140°

30°

30°

D(h7)	d(h6)	l	L	Stock	Stock
mm 1.00	2	6	40	●	●
1.10	2	7	40	●	●
1.20	2	8	40	●	●
1.30	2	8	40	●	●
1.40	2	9	40	●	●
1.50	2	9	40	●	●
1.60	2	10	40	●	●
1.70	2	10	40	●	●
1.80	2	11	40	●	●
1.90	2	11	40	●	●
2.00	2	12	40	●	●
2.10	2.1	12	40	●	●
2.20	2.2	13	40	●	●
2.30	2.3	13	46	●	●
2.40	2.4	14	46	●	●
2.50	2.5	14	46	●	●
2.60	2.6	14	46	●	●
2.70	2.7	16	46	●	●
2.80	2.8	16	49	●	●
2.90	2.9	16	49	●	●
3.00	3	16	49	●	●
3.10	3.1	18	49	●	●
3.20	3.2	18	49	●	●
3.30	3.3	18	52	●	●
3.40	3.4	20	52	●	●
3.50	3.5	20	52	●	●
3.60	3.6	20	52	●	●
3.70	3.7	20	52	●	●
3.80	3.8	22	55	●	●
3.90	3.9	22	55	●	●
4.00	4	22	55	●	●
4.10	4.1	22	55	●	●
4.20	4.2	22	55	●	●
4.30	4.3	24	58	●	●
4.40	4.4	24	58	●	○
4.50	4.5	24	58	●	●

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

- C-SD-TA
- LFTA
- SUTA
- HSS-HSS/CO DRILLS
- UH RED
- MEX ORANGE
- HF EVO
- MEF ENDLESS
- ALU
- MDC
- G2
- MDTA
- ULTRA MILLS
- HSS/CO
- CARBIDE BURRS
- PARAMETERS

n **Vf**
PAGE
246-247

DIN
6539

3XD

343TA - 318N (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



TA

MG
PV200

140°

30°

TA

MG
BR

140°

30°

D(h7)	d(h6)	l	L	Stock	Stock
mm 4.60	4.6	24	58	●	●
4.70	4.7	24	58	●	●
4.80	4.8	26	62	●	●
4.90	4.9	26	62	●	●
5.00	5	26	62	●	●
5.10	5.1	26	62	●	●
5.20	5.2	26	62	●	●
5.30	5.3	26	66	●	●
5.40	5.4	28	66	●	●
5.50	5.5	28	66	●	●
5.60	5.6	28	66	●	●
5.70	5.7	28	66	●	●
5.80	5.8	28	70	●	●
5.90	5.9	28	70	●	●
6.00	6	28	70	●	●
6.10	6.1	31	70	●	●
6.20	6.2	31	70	●	●
6.30	6.3	31	70	●	●
6.40	6.4	31	70	●	●
6.50	6.5	31	70	●	●
6.60	6.6	31	70	●	○
6.70	6.7	31	70	●	●
6.80	6.8	34	74	●	●
6.90	6.9	34	74	●	●
7.00	7	34	74	●	●
7.10	7.1	34	74	●	○
7.20	7.2	34	74	●	○
7.30	7.3	34	79	●	○
7.40	7.4	34	79	●	○
7.50	7.5	34	79	●	●
7.60	7.6	37	79	●	○
7.70	7.7	37	79	●	○
7.80	7.8	37	79	●	○
7.90	7.9	37	79	●	○
8.00	8	37	79	●	●
8.10	8.1	37	79	●	●

● stock standard ○ non-standard stock ■ stock exhaustion

PAGE 246-247

DIN 6539

3XD

343TA - 318N (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



TA

MG

PV200

140°

30°

TA

MG

BR

140°

30°

D(h7)	d(h6)	l	L	Stock	Stock
mm 8.20	8.2	37	79	●	●
8.30	8.3	37	84	●	○
8.40	8.4	37	84	●	○
8.50	8.5	37	84	●	●
8.60	8.6	40	84	●	○
8.70	8.7	40	84	●	●
8.80	8.8	40	84	●	●
8.90	8.9	40	84	●	○
9.00	9	40	84	●	●
9.10	9.1	40	84	●	○
9.20	9.2	40	84	●	●
9.30	9.3	40	89	●	●
9.40	9.4	40	89	●	○
9.50	9.5	40	89	●	●
9.60	9.6	43	89	●	○
9.70	9.7	43	89	●	○
9.80	9.8	43	89	●	●
9.90	9.9	43	89	●	○
10.00	10	43	89	●	●
10.20	10.2	43	89	●	●
10.50	10.5	43	95	●	●
10.80	10.8	47	95	○	●
11.00	11	47	95	●	●
11.20	11.2	47	102	○	○
11.30	11.3	47	102	○	○
11.50	11.5	47	102	●	●
11.80	11.8	47	102	○	○
12.00	12	51	102	●	●
12.20	12.2	51	102	○	○
12.50	12.5	51	103	●	●
12.80	12.8	51	103	○	○
13.00	13	51	103	●	●
13.50	13.5	54	107	●	○
13.80	13.8	54	107	○	○
14.00	14	54	107	●	○
14.50	14.5	56	111	●	○

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

- C-SD-TA
- LFTA
- SUTA
- HSS-HSS/CO DRILLS
- UH RED
- MEX ORANGE
- HF EVO
- MEF ENDLESS
- ALU
- MDC
- G2
- MDTA
- ULTRA MILLS
- HSS/CO
- CARBIDE BURRS
- PARAMETERS



 PAGE 246-247

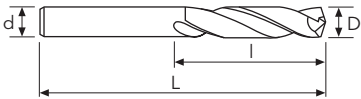










DIN
6539

3XD

343TA - 318N (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



	 TA	 TA				
	 MG	 MG				
	 PV200	 BR				
	 140°	 140°				
	 30°	 30°				
D(h7)	d(h6)	l	L	Stock	Stock	
mm 15.00	15	56	111	●		
15.30	15.3	58	115	○		
15.50	15.5	58	115	●		
15.80	15.8	58	115	○		
16.00	16	58	115	●		

● stock standard ○ non-standard stock ■ stock exhaustion

NEW

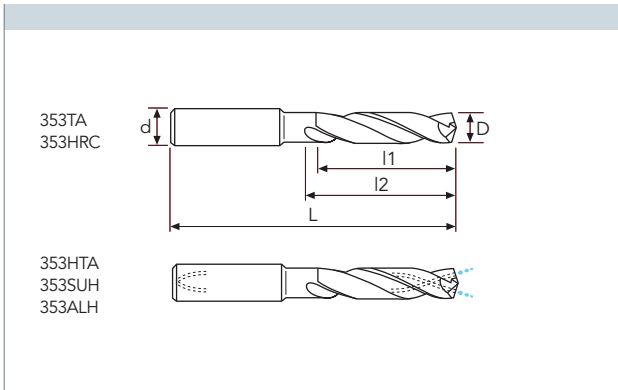
PAGE 246-247

DIN 6537K

3XD

353TA - 353HTA - 353SUH - 353ALH - 353HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



TA	HTA	SUH	ALH	HRC
MG	MG	MG	MG	MG
PV200	PV200	PV300	LAPPED	PV1000
140°	140°	140°	140°	150°
30°	30°	30°	30°	15°

D(m7)	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 2.60	6	14	20	62					●
3.00	6	14	20	62	●	●	●	●	●
3.10	6	14	20	62	●	●	●	○	●
3.20	6	14	20	62	●	●	●	○	●
3.30	6	14	20	62	●	●	●	●	●
3.40	6	14	20	62	●	●	●	●	●
3.50	6	14	20	62	●	●	●	●	●
3.60	6	14	20	62	●	●	●	○	●
3.70	6	14	20	62	●	●	●	○	●
3.80	6	17	24	66	●	●	●	●	●
3.90	6	17	24	66	●	●	●	○	●
4.00	6	17	24	66	●	●	●	●	●
4.10	6	17	24	66	●	●	●	○	●
4.20	6	17	24	66	●	●	●	●	●
4.30	6	17	24	66	●	●	●	●	●
4.40	6	17	24	66	●	●	●	○	●
4.50	6	17	24	66	●	●	●	●	●
4.60	6	17	24	66	●	●	●	○	●
4.70	6	17	24	66	●	●	●	○	●
4.80	6	20	28	66	●	●	●	●	●
4.90	6	20	28	66	●	●	●	○	●
5.00	6	20	28	66	●	●	●	●	●
5.10	6	20	28	66	●	●	●	●	●
5.20	6	20	28	66	●	●	●	●	●
5.30	6	20	28	66	●	●	●	○	●
5.40	6	20	28	66	●	●	●	○	●
5.50	6	20	28	66	●	●	●	●	●
5.60	6	20	28	66	●	●	●	○	●
5.70	6	20	28	66	●	●	●	○	●
5.80	6	20	28	66	●	●	●	●	●
5.90	6	20	28	66	●	●	●	○	●
6.00	6	20	28	66	●	●	●	●	●
6.10	8	24	34	79	●	●	●	○	●
6.20	8	24	34	79	●	●	●	●	●
6.30	8	24	34	79	●	●	●	○	●
6.40	8	24	34	79	●	●	●	○	●

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

C-SD-TA

LFTA

SUTA

HSS-HSS/CO DRILLS

UH RED

MEX ORANGE

HF EVO

MEF ENDLESS

ALU

MDC

G2

MDTA

ULTRA MILLS

HSS/CO

CARBIDE BURRS

PARAMETERS

NEW

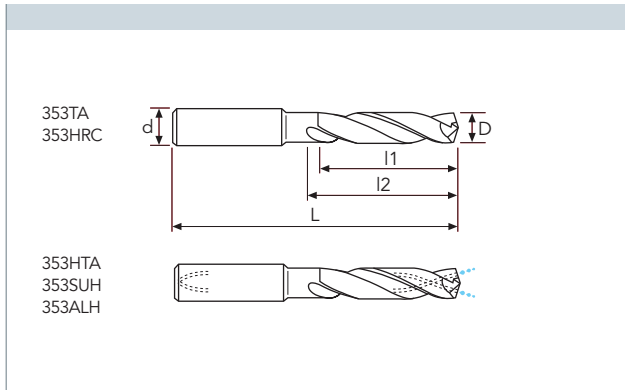
n **Vf**
PAGE
246-247

**DIN
6537K**

3XD

353TA - 353HTA - 353SUH - 353ALH - 353HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



TA	HTA	SUH	ALH	HRC
MG	MG	MG	MG	MG
PV200	PV200	PV300	LAPPED	PV1000
140°	140°	140°	140°	150°
30°	30°	30°	30°	15°

D(m7)	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 6.50	8	24	34	79	●	●	●	●	●
6.60	8	24	34	79	●	●	●	○	●
6.70	8	24	34	79	●	●	●	○	●
6.80	8	24	34	79	●	●	●	●	●
6.90	8	24	34	79	●	●	●	○	●
7.00	8	24	34	79	●	●	●	●	●
7.10	8	29	41	79	●	●	●	○	●
7.20	8	29	41	79	●	●	●	○	●
7.30	8	29	41	79	●	●	●	○	●
7.40	8	29	41	79	●	●	●	○	●
7.50	8	29	41	79	●	●	●	●	●
7.60	8	29	41	79	●	●	●	○	●
7.70	8	29	41	79	●	●	●	○	●
7.80	8	29	41	79	●	●	●	●	●
7.90	8	29	41	79	●	●	●	○	●
8.00	8	29	41	79	●	●	●	●	●
8.10	10	35	47	89	●	●	●	○	●
8.20	10	35	47	89	●	●	●	●	●
8.30	10	35	47	89	●	●	●	○	●
8.40	10	35	47	89	●	●	●	○	●
8.50	10	35	47	89	●	●	●	●	●
8.60	10	35	47	89	●	●	●	○	●
8.70	10	35	47	89	●	●	●	○	●
8.80	10	35	47	89	●	●	●	●	●
8.90	10	35	47	89	●	●	●	○	●
9.00	10	35	47	89	●	●	●	●	●
9.10	10	35	47	89	●	●	●	○	●
9.20	10	35	47	89	●	●	●	○	●
9.30	10	35	47	89	●	●	●	○	●
9.40	10	35	47	89	●	●	●	○	●
9.50	10	35	47	89	●	●	●	●	●
9.60	10	35	47	89	●	●	●	○	●
9.70	10	35	47	89	●	●	●	○	●
9.80	10	35	47	89	●	●	●	○	●
9.90	10	35	47	89	●	●	●	○	●
10.00	10	35	47	89	●	●	●	●	●

● stock standard ○ non-standard stock ■ stock exhaustion

NEW

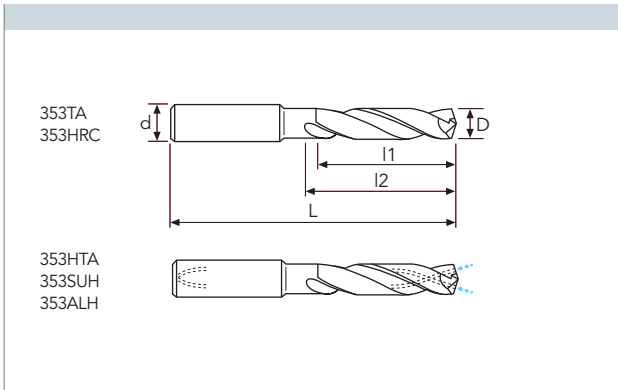
PAGE 246-247

DIN 6537K

3XD

353TA - 353HTA - 353SUH - 353ALH - 353HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



TA	HTA	SUH	ALH	HRC
MG	MG	MG	MG	MG
PV200	PV200	PV300	LAPPED	PV1000
140°	140°	140°	140°	150°
30°	30°	30°	30°	15°

D(m7)	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 10.10	12	40	55	102	●	●			
10.20	12	40	55	102	●	●	●	●	●
10.30	12	40	55	102	●	●	●	●	●
10.40	12	40	55	102	○	●			●
10.50	12	40	55	102	●	●	●	●	●
10.60	12	40	55	102	●	●	●		
10.70	12	40	55	102	○	○			
10.80	12	40	55	102	●	●	●	○	●
10.90	12	40	55	102	○	○			
11.00	12	40	55	102	●	●	●	●	●
11.10	12	40	55	102	○	●			
11.20	12	40	55	102	●	●	○	○	●
11.30	12	40	55	102	●	●	○	○	
11.40	12	40	55	102	○	○			
11.50	12	40	55	102	●	●	●	●	●
11.60	12	40	55	102	●	●			
11.70	12	40	55	102	●	●			
11.80	12	40	55	102	●	●	●	○	●
11.90	12	40	55	102	●	○			
12.00	12	40	55	102	●	●	●	●	●
12.20	14	43	60	107	●	●	●	○	●
12.50	14	43	60	107	●	●	●	○	
12.60	14	43	60	107		●			
12.80	14	43	60	107	○	●	●	○	
13.00	14	43	60	107	●	●	●	○	
13.30	14	43	60	107	○	●	●	○	
13.50	14	43	60	107	●	●	●	○	
13.80	14	43	60	107	○	●	●	○	
14.00	14	43	60	107	●	●	●	○	
14.20	16	45	65	115		●	●		●
14.50	16	45	65	115	●	●	●	○	
14.60	16	45	65	115					
15.00	16	65	65	115	●	●	●	○	
15.30	16	65	65	115	○	●	●	○	
15.50	16	65	65	115	●	●	●	○	
15.80	16	65	73	115	○	●	●	○	

● stock standard ○ non-standard stock ■ stock exhaustion

- TYPHOON
- C-SD-TA
- LFTA
- SUTA
- HSS-HSS/CO DRILLS
- UH RED
- MEX ORANGE
- HF EVO
- MEF ENDLESS
- ALU
- MDC
- G2
- MDTA
- ULTRA MILLS
- HSS/CO
- CARBIDE BURRS
- PARAMETERS

NEW



 PAGE 246-247

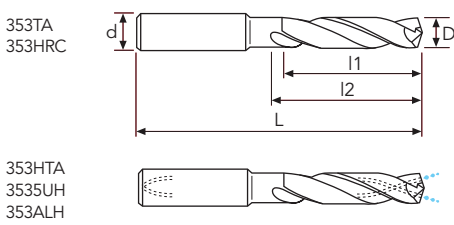
DIN 6537K

3XD

353TA - 353HTA - 353SUH - 353ALH - 353HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



 353TA 353HRC 353HTA 353SUH 353ALH					TA	HTA	SUH	ALH	HRC
					MG	MG	MG	MG	MG
					PV200	PV200	PV300	LAPPED	PV1000
					140°	140°	140°	140°	150°
					30°	30°	30°	30°	15°
D(m7)	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 16.00	16	65	73	115	●	●	●	○	
16.50	18	73	73	123	○	●	●	○	
17.00	18	73	73	123	○	●	●	○	
17.50	18	73	73	123	○	●	●	○	
18.00	18	73	73	123	○	●	●	○	
18.50	20	79	79	131	○	●	●	○	
19.00	20	79	79	131	○	●	●	○	
19.50	20	79	79	131	○	●	●	○	
20.00	20	79	79	131	○	●	●	○	

● stock standard ○ non-standard stock ■ stock exhaustion

NEW

PAGE 246-247

DIN 6537L

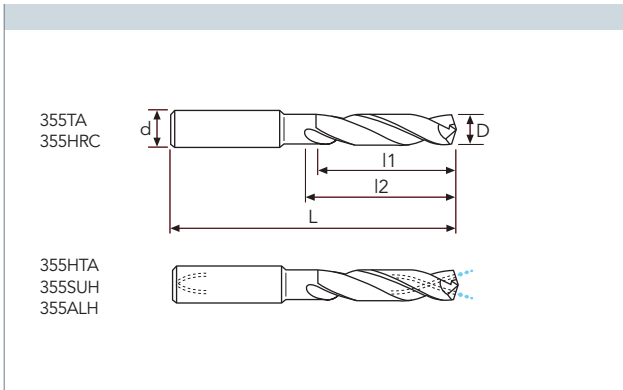
5XD

355TA - 355HTA - 355SUH - 355ALH - 355HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8

385UH (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



MG PV200	MG PV200	MG PV300	MG LAPPED	MG PV1000

D	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 2.60	6	23	28	66					○
3.00	6	23	28	66	●	●	●	●	○
3.10	6	23	28	66	●	●	●	○	
3.20	6	23	28	66	●	●	●	●	
3.25 NEW	6	23	28	66		●			
3.30	6	23	28	66	●	●	●	●	○
3.40	6	23	28	66	●	●	●	●	○
3.50	6	23	28	66	●	●	●	●	○
3.60	6	23	28	66	●	●	●	○	
3.70	6	23	28	66	●	●	●	●	○
3.80	6	29	36	74	●	●	●	●	○
3.90	6	29	36	74	●	●	●	●	
4.00	6	29	36	74	●	●	●	●	○
4.10	6	29	36	74	●	●	●	○	○
4.20	6	29	36	74	●	●	●	●	○
4.30	6	29	36	74	●	●	●	●	○
4.40	6	29	36	74	●	●	●	○	
4.50	6	29	36	74	●	●	●	●	○
4.60	6	29	36	74	●	●	●	○	○
4.65 NEW	6	29	36	74		●			
4.70	6	29	36	74	●	●	●	○	
4.80	6	35	44	82	●	●	●	●	○
4.90	6	35	44	82	●	●	●	○	
5.00	6	35	44	82	●	●	●	●	○
5.10	6	35	44	82	●	●	●	●	○
5.20	6	35	44	82	●	●	●	●	○
5.30	6	35	44	82	●	●	●	○	○
5.40	6	35	44	82	●	●	●	○	
5.50	6	35	44	82	●	●	●	●	○
5.55 NEW	6	35	44	82		●			
5.60	6	35	44	82	●	●	●	○	○
5.70	6	35	44	82	●	●	●	○	
5.80	6	35	44	82	●	●	●	●	○
5.90	6	35	44	82	●	●	●	○	
6.00	6	35	44	82	●	●	●	●	○
6.10	8	43	53	91	●	●	●	○	○

● stock standard ○ non-standard stock ■ stock exhaustion

- TYPHOON
- C-SD-TA
- LFTA
- SUTA
- HSS-HSS/CO DRILLS
- UH RED
- MEX ORANGE
- HF EVO
- MEF ENDLESS
- ALU
- MDC
- G2
- MDTA
- ULTRA MILLS
- HSS/CO
- CARBIDE BURRS
- PARAMETERS



**DIN
6537L**

5XD

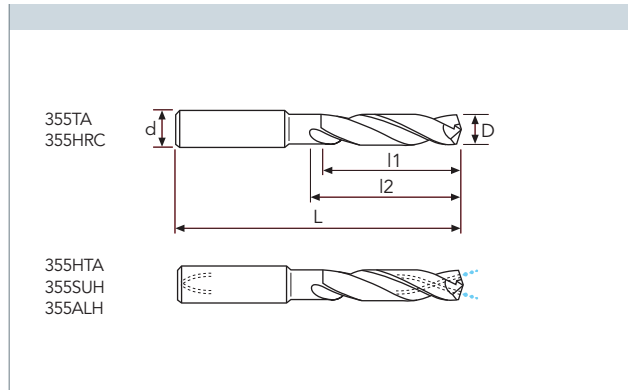
NEW

355TA - 355HTA - 355SUH - 355ALH - 355HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8

385UH (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



TA	HTA	SUH	ALH	HRC
MG	MG	MG	MG	MG
PV200	PV200	PV300	LAPPED	PV1000
140°	140°	140°	140°	150°
30°	30°	30°	30°	15°

D	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 6.20	8	43	53	91	●	●	●	●	○
6.30	8	43	53	91	●	●	●	○	
6.40	8	43	53	91	●	●	●	○	
6.50	8	43	53	91	●	●	●	●	○
6.60	8	43	53	91	●	●	●	○	
6.70	8	43	53	91	●	●	●	○	
6.80	8	43	53	91	●	●	●	●	○
6.90	8	43	53	91	●	●	●	○	○
7.00	8	43	53	91	●	●	●	●	○
7.10	8	43	53	91	●	●	●	○	
7.20	8	43	53	91	●	●	●	○	
7.30	8	43	53	91	●	●	●	○	
7.40	8	43	53	91	●	●	●	○	○
7.45 NEW	8	43	53	91	●	●	●	○	○
7.50	8	43	53	91	●	●	●	●	○
7.60	8	43	53	91	●	●	●	○	
7.70	8	43	53	91	●	●	●	○	
7.80	8	43	53	91	●	●	●	●	○
7.90	8	43	53	91	●	●	●	○	
8.00	8	43	53	91	●	●	●	●	○
8.10	10	49	61	103	●	●	●	○	○
8.20	10	49	61	103	●	●	●	●	○
8.30	10	49	61	103	●	●	●	○	
8.40	10	49	61	103	●	●	●	○	
8.50	10	49	61	103	●	●	●	●	○
8.60	10	49	61	103	●	●	●	○	○
8.70	10	49	61	103	●	●	●	○	○
8.80	10	49	61	103	●	●	●	●	○
8.90	10	49	61	103	●	●	●	○	
9.00	10	49	61	103	●	●	●	●	○
9.10	10	49	61	103	●	●	●	○	
9.20	10	49	61	103	●	●	●	○	
9.25 NEW	10	49	61	103	●	●	●	○	
9.30	10	49	61	103	●	○	●	○	○
9.35 NEW	10	49	61	103	●	○	●	○	
9.40	10	49	61	103	●	●	●	○	

● stock standard ○ non-standard stock ■ stock exhaustion

NEW

PAGE 246-247

DIN 6537L

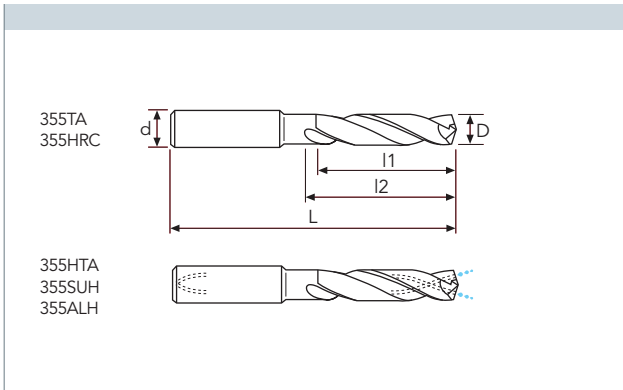
5XD

355TA - 355HTA - 355SUH - 355ALH - 355HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8

385UH (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



MG PV200	MG PV200	MG PV300	MG LAPPED	MG PV1000

D	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock	
mm	9.45 NEW	10	49	61	103		●			
	9.50	10	61	61	103	●	●	●	●	○
	9.60	10	61	61	103	●	●	●	○	
	9.70	10	61	61	103	●	●	●	○	
	9.80	10	61	61	103	●	●	●	○	○
	9.90	10	61	61	103	●	●	●	○	
	10.00	10	61	61	103	●	●	●	●	○
	10.10	12	71	71	118	●	●			
	10.20	12	71	71	118	●	●	●	●	○
	10.30	12	71	71	118	●	●	●		○
	10.40	12	71	71	118	○	●			○
	10.50	12	71	71	118	●	●	●	●	○
	10.60	12	71	71	118	●	●	●		
	10.70	12	71	71	118	●	●			
	10.80	12	71	71	118	●	●	●	○	○
	10.90	12	71	71	118	○	○			
	11.00	12	71	71	118	●	●	●	●	○
	11.10	12	71	71	118	○	●			
	11.20	12	71	71	118	●	●	●	○	○
	11.25 NEW	12	71	71	118	●	●	●	○	
	11.30	12	71	71	118		●			
	11.40	12	71	71	118	○	●			
	11.50	12	71	71	118	●	●	●	●	○
	11.60	12	71	71	118	○	●			
	11.70	12	71	71	118	○	●			
	11.80	12	71	71	118	●	●	●	○	○
	11.90	12	71	71	118	○	○			
	12.00	12	71	71	118	●	●	●	●	○
	12.20	14	77	77	124	○	●	●	○	○
	12.50	14	77	77	124	●	●	●	○	
	12.60	14	77	77	124		●	●		
	12.80	14	77	77	124	○	●	●	○	
	13.00	14	77	77	124	●	●	●	○	
	13.30	14	77	77	124	○	●	●	○	
	13.50	14	77	77	124	●	●	●	○	
	13.80	14	77	77	124	○	●	●	○	

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

C-SD-TA

LFTA

SUTA

HSS-HSS/CO DRILLS

UH RED

MEX ORANGE

HF EVO

MEF ENDLESS

ALU

MDC

G2

MDTA

ULTRA MILLS

HSS/CO

CARBIDE BURRS

PARAMETERS

NEW

PAGE 246-247

DIN 6537L

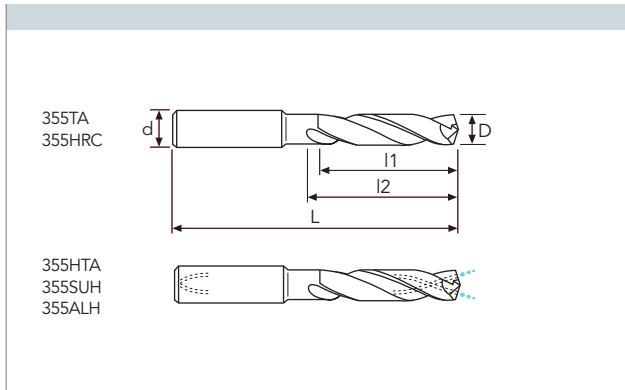
5XD

355TA - 355HTA - 355SUH - 355ALH - 355HRC (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8

385UH (h7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	0 / -10	0 / -12	0 / -15	0 / -18	0 / -21



TA	HTA	SUH	ALH	HRC
MG	MG	MG	MG	MG
PV200	PV200	PV300	LAPPED	PV1000
140°	140°	140°	140°	150°
30°	30°	30°	30°	15°

D	d(h6)	l1	l2	L	Stock	Stock	Stock	Stock	Stock
mm 14.00	14	77	77	124	●	●	●	○	
14.20	16	83	83	133		●	●		○
14.50	16	83	83	133	●	●	●	○	
14.60	16	83	83	133		●			
15.00	16	83	83	133	●	●	●	○	
15.30	16	83	83	133	○	●	●	○	
15.50	16	83	83	133	●	●	●	○	
15.80	16	83	83	133	○	●	●	○	
16.00	16	83	83	133	●	●	●	○	
16.50	18	93	93	143	○	●	●	○	
17.00	18	93	93	143	○	●	●	○	
17.50	18	93	93	143	○	●	●	○	
18.00	18	93	93	143	○	●	●	○	
18.50	20	101	101	153	○	●	●	○	
19.00	20	101	101	153	○	●	●	○	
19.50	20	101	101	153	○	○	●	○	
20.00	20	101	101	153	○	●	●	○	

● stock standard ○ non-standard stock ■ stock exhaustion



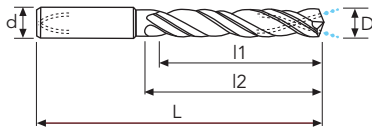
4 guide chamfers
4 fasi
4 Führungsfasen
4 listels
4 márgenes
4 фазы

3584HTA



3584HTA (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



D(m7)	d(h6)	I1	I2	L	Stock
mm 3.00	6	32	40	85	●
3.10	6	32	40	85	○
3.20	6	32	40	85	●
3.30	6	32	40	85	●
3.40	6	32	40	85	○
3.50	6	32	40	85	●
3.60	6	36	40	85	○
3.70	6	36	40	85	●
3.80	6	36	40	85	●
3.90	6	36	40	85	○
4.00	6	38	46	85	●
4.10	6	38	46	85	●
4.20	6	38	46	85	●
4.30	6	40	46	97	●
4.40	6	40	46	97	○
4.50	6	44	46	97	●
4.60	6	44	46	97	●
4.70	6	44	46	97	○
4.80	6	44	46	97	●
4.90	6	44	46	97	○
5.00	6	48	57	97	●
5.10	6	48	57	97	●
5.20	6	48	57	97	●
5.30	6	48	57	97	○
5.40	6	48	57	97	○
5.50	6	48	57	97	●
5.60	6	48	57	97	●
5.70	6	48	57	97	○
5.80	6	48	57	97	●
5.90	6	48	57	97	●
6.00	6	48	57	97	●
6.10	8	64	76	116	●
6.20	8	64	76	116	●
6.30	8	64	76	116	●
6.40	8	64	76	116	○
6.50	8	64	76	116	●

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

C-SD-TA

LFTA

SUTA

HSS-HSS/CO DRILLS

UH RED

MEX ORANGE

HF EVO

MEF ENDLESS

ALU

MDC

G2

MDTA

ULTRA MILLS

HSS/CO

CARBIDE BURRS

PARAMETERS



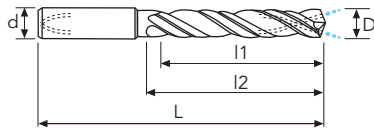
4 guide chamfers
4 fasi
4 Führungsfasen
4 listels
4 márgenes
4 фазы

3584HTA



3584HTA (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



D(m7)	d(h6)	l1	l2	L	Stock
mm 6.60	8	64	76	116	○
6.70	8	64	76	116	○
6.80	8	64	76	116	●
6.90	8	64	76	116	○
7.00	8	64	76	116	●
7.10	8	64	76	116	●
7.20	8	64	76	116	●
7.30	8	64	76	116	○
7.40	8	64	76	116	○
7.50	8	64	76	116	●
7.60	8	64	76	116	○
7.70	8	64	76	116	○
7.80	8	64	76	116	●
7.90	8	64	76	116	○
8.00	8	64	76	116	●
8.10	10	80	95	142	●
8.20	10	80	95	142	●
8.30	10	80	95	142	●
8.40	10	80	95	142	○
8.50	10	80	95	142	●
8.60	10	80	95	142	●
8.70	10	80	95	142	○
8.80	10	80	95	142	●
8.90	10	80	95	142	○
9.00	10	80	95	142	●
9.10	10	80	95	142	●
9.20	10	80	95	142	●
9.30	10	80	95	142	○
9.40	10	80	95	142	○
9.50	10	80	95	142	●
9.60	10	80	95	142	○
9.70	10	80	95	142	○
9.80	10	80	95	142	●
9.90	10	80	95	142	○
10.00	10	80	95	142	●
10.20	12	96	114	163	●

● stock standard ○ non-standard stock ■ stock exhaustion



OSAWA
NORM

8XD



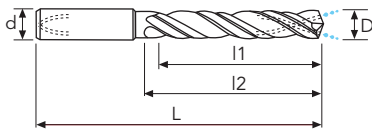
4 guide chamfers
4 fasi
4 Führungsfasen
4 listels
4 márgenes
4 фазы

3584HTA



3584HTA (m7)

Ø mm	1~3	3.1~6	6.1~10	10.1~18	18.1~20
tol. D µ	+12 / +2	+16 / +4	+21 / +6	+25 / +7	+29 / +8



D(m7)	d(h6)	I1	I2	L	Stock
mm 10.50	12	96	114	163	●
10.80	12	96	114	163	●
11.00	12	96	114	163	●
11.20	12	96	114	163	●
11.30	12	96	114	163	○
11.50	12	96	114	163	●
11.80	12	96	114	163	●
12.00	12	96	114	163	●
12.20	14	112	133	182	●
12.50	14	112	133	182	●
12.80	14	112	133	182	●
13.00	14	112	133	182	●
13.50	14	112	133	182	●
14.00	14	112	133	182	●
14.50	16	128	152	204	●
15.00	16	128	152	204	●
15.50	16	128	152	204	●
16.00	16	128	152	204	●

● stock standard ○ non-standard stock ■ stock exhaustion

TYPHOON

C-SD-TA

LFTA

SUTA

HSS-HSS/CO DRILLS

UH RED

MEX ORANGE

HF EVO

MEF ENDLESS

ALU

MDC

G2

MDTA

ULTRA MILLS

HSS/CO

CARBIDE BURRS

PARAMETERS