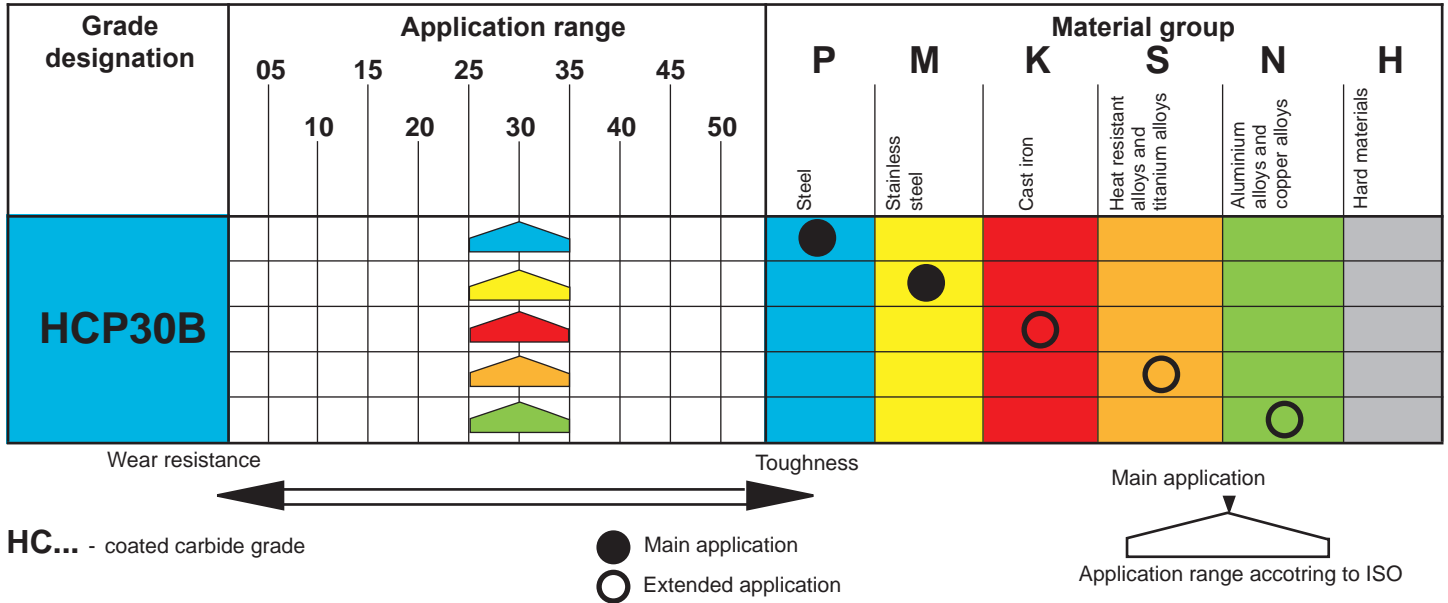


### Application fields carbide grade for drilling



### Type description coated carbide grade for drilling

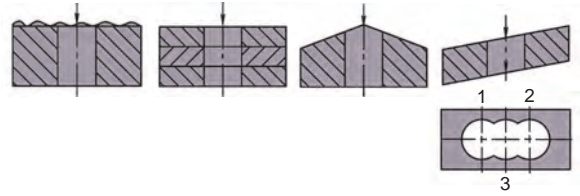
<b>HCP30B</b>	Universal high-production coated grade for all kinds of steel including stainless steel. Very tough and resistant against edge chipping. Good balance of toughness and wear resistance, combined with high edge strength, makes for cost-effective drilling on the high feed. Extended application for heat resisting alloys and nonferrous metals.
P25-P35	
M25-M35	
K25-K35	
S25-S35	
N25-N35	

	Carbide grade											Dimensions				
	P		M		K		N		S		H	ic	l	s	d1	r
	HCP30B		HCP30B		HCP30B		HCP30B		HCP30B			mm				
SOMT030205ER	●		●		○		○		○			4,6	4,2	2,1	2,25	0,5
SOMT040206ER	●		●		○		○		○			5,3	4,8	2,3	2,25	0,6
SOMT050206ER	●		●		○		○		○			5,9	5,5	2,5	2,50	0,6
SOMT06M307ER	●		●		○		○		○			6,5	6,1	2,9	2,50	0,7
SOMT070308ER	●		●		○		○		○			7,7	7,3	3,3	2,90	0,8
SOMT08T308ER	●		●		○		○		○			8,9	8,5	3,8	3,50	0,8
SOMT100408ER	●		●		○		○		○			10,1	9,6	4,4	4,10	0,8
SOMT120410ER	●		●		○		○		○			11,6	11,0	4,8	4,10	1,0
SOMT130512ER	●		●		○		○		○			13,0	12,2	5,0	5,30	1,2
SOMT150512ER	●		●		○		○		○			15,2	14,4	5,3	5,30	1,2
SOMT170512ER	●		●		○		○		○			17,5	16,7	5,6	5,30	1,2

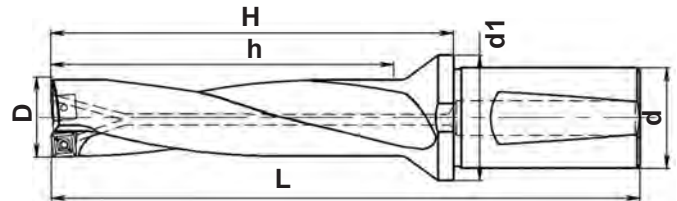
## DT190...-2D



### Drilling tools with internal coolant supply



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



#### DT190-WN...SO03-2D

#### Hole depth 2D

#### Straight shank with sloping clamping surface DIN 1835 E

Code key	Dimensions, mm						No.	T200455-06	7006-T 0,6 Nm
	D	h	H	L	d	d1			
DT190-014WN20R01SO03-2D-IK	14	28	46	96	20	30	SOMT030205ER	T200455-06	7006-T 0,6 Nm
DT190-014,5WN20R01SO03-2D-IK	14,5	29	47	97	20	30			
DT190-015WN20R01SO03-2D-IK	15	30	48	98	20	30			
DT190-015,5WN20R01SO03-2D-IK	15,5	31	49	99	20	30			

#### DT190-WN...SO04-2D

#### Hole depth 2D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-016WN20R01SO04-2D-IK	16	32	50	100	20	30	SOMT040205ER	T200455-06	7006-T 0,6 Nm
DT190-016,5WN20R01SO04-2D-IK	16,5	33	51	101	20	30			
DT190-017WN20R01SO04-2D-IK	17	34	52	102	20	30			
DT190-017,5WN20R01SO04-2D-IK	17,5	35	53	103	20	30			

#### DT190-WN...SO05-2D

#### Hole depth 2D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-018WN25R01SO05-2D-IK	18	36	55	111	25	32	SOMT050206ER	T220555-07	7007-T 1,0 Nm
DT190-018,5WN25R01SO05-2D-IK	18,5	37	56	112	25	32			
DT190-019WN25R01SO05-2D-IK	19	38	57	113	25	32			
DT190-019,5WN25R01SO05-2D-IK	19,5	39	58	114	25	32			
DT190-020WN25R01SO05-2D-IK	20	40	59	115	25	32			
DT190-020,5WN25R01SO05-2D-IK	20,5	41	60	116	25	32			

#### DT190-WN...SO06-2D

#### Hole depth 2D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-021WN25R01SO06-2D-IK	21	42	61	117	25	32	SOMT06M307ER	T220555-07	7007-T 1,0 Nm
DT190-021,5WN25R01SO06-2D-IK	21,5	43	61	117	25	32			
DT190-022WN25R01SO06-2D-IK	22	44	62	118	25	32			
DT190-022,5WN25R01SO06-2D-IK	22,5	45	63	119	25	32			
DT190-023WN25R01SO06-2D-IK	23	46	64	120	25	32			
DT190-023,5WN25R01SO06-2D-IK	23,5	47	66	122	25	32			

#### DT190-WN...SO07-2D

#### Hole depth 2D

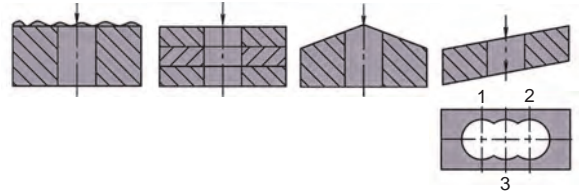
#### Straight shank with sloping clamping surface DIN 1835 E

DT190-024WN32R01SO07-2D-IK	24	48	71	131	32	40	SOMT070308ER	T250655-08AP	7008-T 1,2 Nm
DT190-024,5WN32R01SO07-2D-IK	24,5	49	72	132	32	40			
DT190-025WN32R01SO07-2D-IK	25	50	73	133	32	40			
DT190-025,5WN32R01SO07-2D-IK	25,5	51	73	133	32	40			
DT190-026WN32R01SO07-2D-IK	26	52	74	134	32	40			
DT190-026,5WN32R01SO07-2D-IK	26,5	53	75	135	32	40			
DT190-027WN32R01SO07-2D-IK	27	54	76	136	32	40			
DT190-027,5WN32R01SO07-2D-IK	27,5	55	76	136	32	40			

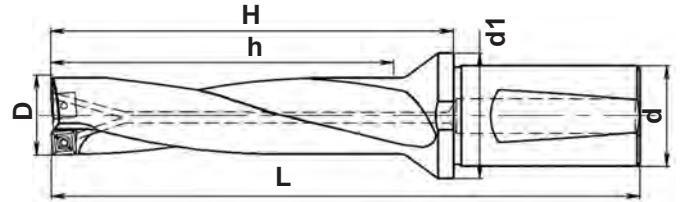







**DT190...-2D**   
**Drilling tools with internal coolant supply**






- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.






**DT190-WN...SO08-2D** **Hole depth 2D** **Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-028WN32R01SO08-2D-IK	28	56	77	137	32	40	SOMT08T308ER	2	T300755-09AP	7009-TP 2,2 Nm
DT190-028,5WN32R01SO08-2D-IK	28,5	57	78	138	32	40		2		
DT190-029WN32R01SO08-2D-IK	29	58	79	139	32	40		2		
DT190-029,5WN32R01SO08-2D-IK	29,5	59	79	139	32	40		2		
DT190-030WN32R01SO08-2D-IK	30	60	80	140	32	40		2		
DT190-030,5WN32R01SO08-2D-IK	30,5	61	81	141	32	40		2		
DT190-031WN32R01SO08-2D-IK	31	62	82	142	32	40		2		
DT190-031,5WN32R01SO08-2D-IK	31,5	63	82	142	32	40		2		
DT190-032WN32R01SO08-2D-IK	32	64	83	143	32	40		2		




**DT190-WN...SO10-2D** **Hole depth 2D** **Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-032,5WN40R01SO10-2D-IK	32,5	65	92	162	40	50	SOMT100408ER	2	T400955-15	7015-T 5,5 Nm
DT190-033WN40R01SO10-2D-IK	33	66	93	163	40	50		2		
DT190-033,5WN40R01SO10-2D-IK	33,5	67	94	164	40	50		2		
DT190-034WN40R01SO10-2D-IK	34	68	95	165	40	50		2		
DT190-034,5WN40R01SO10-2D-IK	34,5	69	96	166	40	50		2		
DT190-035WN40R01SO10-2D-IK	35	70	97	167	40	50		2		
DT190-035,5WN40R01SO10-2D-IK	35,5	71	98	168	40	50		2		
DT190-036WN40R01SO10-2D-IK	36	72	99	169	40	50		2		
DT190-036,5WN40R01SO10-2D-IK	36,5	73	100	170	40	50		2		

**DT190-WN...SO12-2D** **Hole depth 2D** **Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-037WN40R01SO12-2D-IK	37	74	104	174	40	56	SOMT120410ER	2	T400955-15	7015-T 5,5 Nm
DT190-038WN40R01SO12-2D-IK	38	76	106	176	40	56		2		
DT190-039WN40R01SO12-2D-IK	39	78	108	178	40	56		2		
DT190-040WN40R01SO12-2D-IK	40	80	110	180	40	56		2		
DT190-041WN40R01SO12-2D-IK	41	82	112	182	40	56		2		

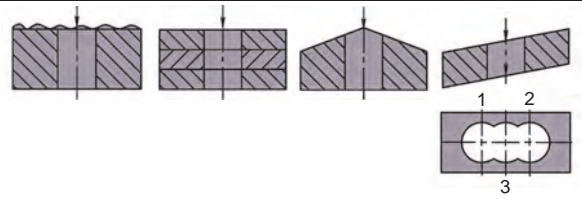
**DT190-WN...SO13-2D** **Hole depth 2D** **Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-042WN40R01SO13-2D-IK	42	84	117	187	40	60	SOMT130512ER	2	T451155-20	7020-T 7,0 Nm
DT190-043WN40R01SO13-2D-IK	43	86	119	189	40	60		2		
DT190-044WN40R01SO13-2D-IK	44	88	121	191	40	60		2		
DT190-045WN40R01SO13-2D-IK	45	90	123	193	40	60		2		
DT190-046WN40R01SO13-2D-IK	46	92	125	195	40	60		2		

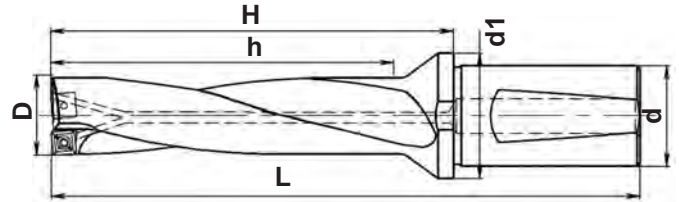
## DT190...-2D



### Drilling tools with internal coolant supply






- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



#### DT190-WN...SO15-2D

#### Hole depth 2D




#### Straight shank with sloping clamping surface DIN 1835 E

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-047WN40R01SO15-2D-IK	47	94	128	198	40	60	SOMT150512ER	2	T451155-20	7020-T 7,0 Nm
DT190-048WN40R01SO15-2D-IK	48	96	130	200	40	60				
DT190-049WN40R01SO15-2D-IK	49	98	132	202	40	60				
DT190-050WN40R01SO15-2D-IK	50	100	134	204	40	60				
DT190-051WN40R01SO15-2D-IK	51	102	136	206	40	60				
DT190-052WN40R01SO15-2D-IK	52	104	138	208	40	60				
DT190-053WN40R01SO15-2D-IK	53	106	140	210	40	60				
DT190-054WN40R01SO15-2D-IK	54	108	142	212	40	60				

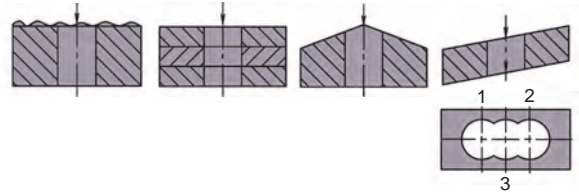
#### DT190-WN...SO17-2D

#### Hole depth 2D

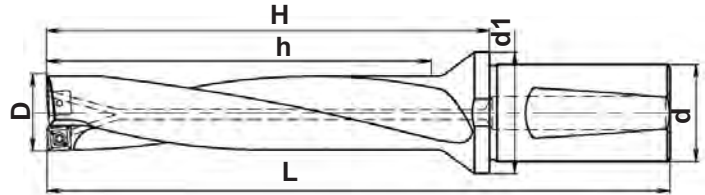
#### Straight shank with sloping clamping surface DIN 1835 E




Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-055WN40R01SO17-2D-IK	55	110	145	215	40	60	SOMT170512ER	2	T451155-20	7020-T 7,0 Nm
DT190-056WN40R01SO17-2D-IK	56	112	147	217	40	60				
DT190-057WN40R01SO17-2D-IK	57	114	149	219	40	60				
DT190-058WN40R01SO17-2D-IK	58	116	151	221	40	60				
DT190-059WN40R01SO17-2D-IK	59	118	153	223	40	60				
DT190-060WN40R01SO17-2D-IK	60	120	155	225	40	62				
DT190-061WN40R01SO17-2D-IK	61	122	157	227	40	62				
DT190-062WN40R01SO17-2D-IK	62	124	159	229	40	64				
DT190-063WN40R01SO17-2D-IK	63	126	161	231	40	64				

**DT190...-3D**   
**Drilling tools with internal coolant supply**



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.

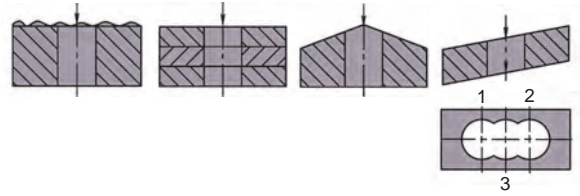


<b>DT190-WN...SO03-3D</b>		<b>Hole depth 3D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
Code key	Dimensions, mm							No.			
	D	h	H	L	d	d1					
DT190-014WN20R01SO03-3D-IK	14	42	59	109	20	30	SOMT030205ER	2	T200455-06	7006-T	0,6 Nm
DT190-014,5WN20R01SO03-3D-IK	14,5	44	61	111	20	30		2			
DT190-015WN20R01SO03-3D-IK	15	45	62	112	20	30		2			
DT190-015,5WN20R01SO03-3D-IK	15,5	47	64	114	20	30		2			
<b>DT190-WN...SO04-3D</b>		<b>Hole depth 3D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-016WN20R01SO04-3D-IK	16	48	65	115	20	30	SOMT040205ER	2	T200455-06	7006-T	0,6 Nm
DT190-016,5WN20R01SO04-3D-IK	16,5	50	67	117	20	30		2			
DT190-017WN20R01SO04-3D-IK	17	51	68	118	20	30		2			
DT190-017,5WN20R01SO04-3D-IK	17,5	53	70	120	20	30		2			
<b>DT190-WN...SO05-3D</b>		<b>Hole depth 3D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-018WN25R01SO05-3D-IK	18	54	72	128	25	32	SOMT050206ER	2	T220555-07	7007-T	1,0 Nm
DT190-018,5WN25R01SO05-3D-IK	18,5	56	74	130	25	32		2			
DT190-019WN25R01SO05-3D-IK	19	57	75	131	25	32		2			
DT190-019,5WN25R01SO05-3D-IK	19,5	59	77	133	25	32		2			
DT190-020WN25R01SO05-3D-IK	20	60	78	134	25	32		2			
DT190-020,5WN25R01SO05-3D-IK	20,5	62	80	136	25	32		2			
<b>DT190-WN...SO06-3D</b>		<b>Hole depth 3D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-021WN25R01SO06-3D-IK	21	63	82	138	25	32	SOMT06M307ER	2	T220555-07	7007-T	1,0 Nm
DT190-021,5WN25R01SO06-3D-IK	21,5	65	84	140	25	32		2			
DT190-022WN25R01SO06-3D-IK	22	66	85	140	25	32		2			
DT190-022,5WN25R01SO06-3D-IK	22,5	68	87	143	25	32		2			
DT190-023WN25R01SO06-3D-IK	23	69	88	144	25	32		2			
DT190-023,5WN25R01SO06-3D-IK	23,5	71	90	146	25	32		2			
<b>DT190-WN...SO07-3D</b>		<b>Hole depth 3D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-024WN32R01SO07-3D-IK	24	72	95	155	32	40	SOMT070308ER	2	T250655-08AP	7008-T	1,2 Nm
DT190-024,5WN32R01SO07-3D-IK	24,5	74	97	157	32	40		2			
DT190-025WN32R01SO07-3D-IK	25	75	98	158	32	40		2			
DT190-025,5WN32R01SO07-3D-IK	25,5	77	100	160	32	40		2			
DT190-026WN32R01SO07-3D-IK	26	78	101	161	32	40		2			
DT190-026,5WN32R01SO07-3D-IK	26,5	80	103	163	32	40		2			
DT190-027WN32R01SO07-3D-IK	27	81	104	164	32	40		2			
DT190-027,5WN32R01SO07-3D-IK	27,5	83	106	166	32	40		2			

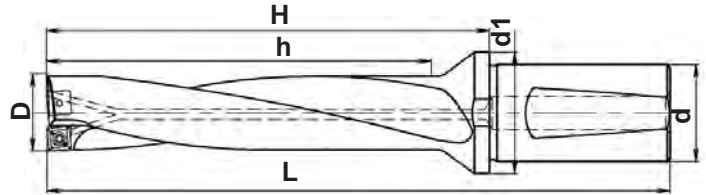
## DT190...-3D



### Drilling tools with internal coolant supply



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



#### DT190-WN...SO08-3D

#### Hole depth 3D

#### Straight shank with sloping clamping surface DIN 1835 E

Code key	Dimensions, mm						No.	T	Torque
	D	h	H	L	d	d1			
DT190-028WN32R01SO08-3D-IK	28	84	107	167	32	40	SOMT08T308ER	T300755-09AP	7009-TP 2,2 Nm
DT190-028,5WN32R01SO08-3D-IK	28,5	86	109	169	32	40			
DT190-029WN32R01SO08-3D-IK	29	87	110	170	32	40			
DT190-029,5WN32R01SO08-3D-IK	29,5	89	112	172	32	40			
DT190-030WN32R01SO08-3D-IK	30	90	113	173	32	40			
DT190-030,5WN32R01SO08-3D-IK	30,5	92	115	175	32	40			
DT190-031WN32R01SO08-3D-IK	31	93	116	176	32	40			
DT190-031,5WN32R01SO08-3D-IK	31,5	95	118	178	32	40			
DT190-032WN32R01SO08-3D-IK	32	96	119	179	32	40			

#### DT190-WN...SO10-3D

#### Hole depth 3D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-032,5WN40R01SO10-3D-IK	32,5	98	124	192	40	50	SOMT100408ER	T400955-15	7015-T 5,5 Nm
DT190-033WN40R01SO10-3D-IK	33	99	125	193	40	50			
DT190-033,5WN40R01SO10-3D-IK	33,5	101	127	195	40	50			
DT190-034WN40R01SO10-3D-IK	34	102	128	196	40	50			
DT190-034,5WN40R01SO10-3D-IK	34,5	104	130	198	40	50			
DT190-035WN40R01SO10-3D-IK	35	105	131	199	40	50			
DT190-035,5WN40R01SO10-3D-IK	35,5	107	133	201	40	50			
DT190-036WN40R01SO10-3D-IK	36	108	134	202	40	50			
DT190-036,5WN40R01SO10-3D-IK	36,5	110	136	204	40	50			

#### DT190-WN...SO12-3D

#### Hole depth 3D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-037WN40R01SO12-3D-IK	37	111	141	211	40	56	SOMT120410ER	T400955-15	7015-T 5,5 Nm
DT190-038WN40R01SO12-3D-IK	38	114	144	214	40	56			
DT190-039WN40R01SO12-3D-IK	39	117	147	217	40	56			
DT190-040WN40R01SO12-3D-IK	40	120	150	220	40	56			
DT190-041WN40R01SO12-3D-IK	41	123	153	223	40	56			

#### DT190-WN...SO13-3D

#### Hole depth 3D

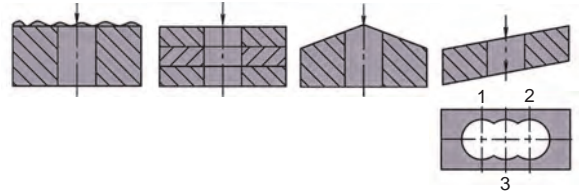
#### Straight shank with sloping clamping surface DIN 1835 E

DT190-042WN40R01SO13-3D-IK	42	126	159	229	40	60	SOMT130512ER	T451155-20	7020-T 7,0 Nm
DT190-043WN40R01SO13-3D-IK	43	129	162	232	40	60			
DT190-044WN40R01SO13-3D-IK	44	132	165	235	40	60			
DT190-045WN40R01SO13-3D-IK	45	135	168	238	40	60			
DT190-046WN40R01SO13-3D-IK	46	138	171	241	40	60			

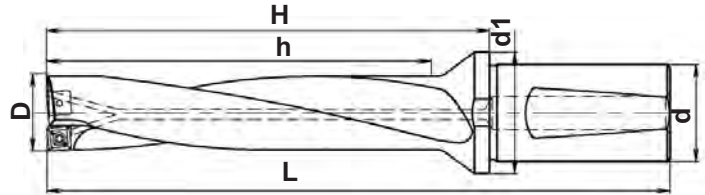







**DT190...-3D**   
**Drilling tools with internal coolant supply**






- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



**DT190-WN...SO15-3D** *Hole depth 3D* **Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-047WN40R01SO15-3D-IK	47	141	175	245	40	60	SOMT150512ER	2	T451155-20	7020-T 7,0 Nm
DT190-048WN40R01SO15-3D-IK	48	144	178	248	40	60				
DT190-049WN40R01SO15-3D-IK	49	147	181	251	40	60				
DT190-050WN40R01SO15-3D-IK	50	150	184	254	40	60				
DT190-051WN40R01SO15-3D-IK	51	153	187	257	40	60				
DT190-052WN40R01SO15-3D-IK	52	156	190	260	40	60				
DT190-053WN40R01SO15-3D-IK	53	159	193	263	40	60				
DT190-054WN40R01SO15-3D-IK	54	162	196	266	40	60				

**DT190-WN...SO17-3D** *Hole depth 3D* **Straight shank with sloping clamping surface DIN 1835 E**

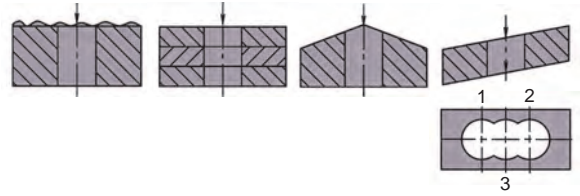
Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-055WN40R01SO17-3D-IK	55	165	200	270	40	60	SOMT170512ER	2	T451155-20	7020-T 7,0 Nm
DT190-056WN40R01SO17-3D-IK	56	168	203	273	40	60				
DT190-057WN40R01SO17-3D-IK	57	171	206	276	40	60				
DT190-058WN40R01SO17-3D-IK	58	174	209	279	40	60				
DT190-059WN40R01SO17-3D-IK	59	177	212	282	40	60				
DT190-060WN40R01SO17-3D-IK	60	180	215	285	40	62				
DT190-061WN40R01SO17-3D-IK	61	183	218	288	40	62				
DT190-062WN40R01SO17-3D-IK	62	186	221	291	40	64				
DT190-063WN40R01SO17-3D-IK	63	189	224	294	40	64				



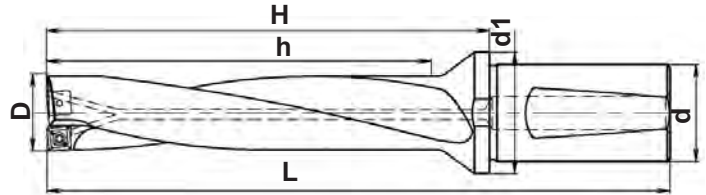
## DT190...-4D



### Drilling tools with internal coolant supply

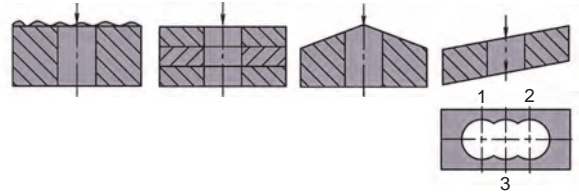


- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.

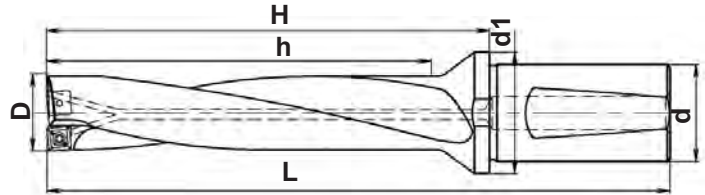





<b>DT190-WN...SO03-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>			
Code key	Dimensions, mm						No.	T	Torque	
	D	h	H	L	d	d1				
DT190-014WN20R01SO03-4D-IK	14	56	73	123	20	30	SOMT030205ER	T200455-06	7006-T 0,6 Nm	
DT190-014,5WN20R01SO03-4D-IK	14,5	58	75	125	20	30				
DT190-015WN20R01SO03-4D-IK	15	60	77	127	20	30				
DT190-015,5WN20R01SO03-4D-IK	15,5	62	79	129	20	30				
<b>DT190-WN...SO04-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>			
DT190-016WN20R01SO04-4D-IK	16	64	81	131	20	30	SOMT040205ER	T200455-06	7006-T 0,6 Nm	
DT190-016,5WN20R01SO04-4D-IK	16,5	66	83	133	20	30				
DT190-017WN20R01SO04-4D-IK	17	68	85	135	20	30				
DT190-017,5WN20R01SO04-4D-IK	17,5	70	87	137	20	30				
<b>DT190-WN...SO05-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>			
DT190-018WN25R01SO05-4D-IK	18	72	90	146	25	32	SOMT050206ER	T220555-07	7007-T 1,0 Nm	
DT190-018,5WN25R01SO05-4D-IK	18,5	74	92	148	25	32				
DT190-019WN25R01SO05-4D-IK	19	76	94	150	25	32				
DT190-019,5WN25R01SO05-4D-IK	19,5	78	96	152	25	32				
DT190-020WN25R01SO05-4D-IK	20	80	98	154	25	32				
DT190-020,5WN25R01SO05-4D-IK	20,5	82	100	156	25	32				
<b>DT190-WN...SO06-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>			
DT190-021WN25R01SO06-4D-IK	21	84	103	159	25	32	SOMT06M307ER	T220555-07	7007-T 1,0 Nm	
DT190-021,5WN25R01SO06-4D-IK	21,5	86	105	161	25	32				
DT190-022WN25R01SO06-4D-IK	22	88	107	163	25	32				
DT190-022,5WN25R01SO06-4D-IK	22,5	90	109	165	25	32				
DT190-023WN25R01SO06-4D-IK	23	92	111	167	25	32				
DT190-023,5WN25R01SO06-4D-IK	23,5	94	113	169	25	32				
<b>DT190-WN...SO07-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>			
DT190-024WN32R01SO07-4D-IK	24	96	119	179	32	40	SOMT070308ER	T250655-08AP	7008-T 1,2 Nm	
DT190-024,5WN32R01SO07-4D-IK	24,5	98	121	181	32	40				
DT190-025WN32R01SO07-4D-IK	25	100	123	183	32	40				
DT190-025,5WN32R01SO07-4D-IK	25,5	102	125	185	32	40				
DT190-026WN32R01SO07-4D-IK	26	104	127	187	32	40				
DT190-026,5WN32R01SO07-4D-IK	26,5	106	129	189	32	40				
DT190-027WN32R01SO07-4D-IK	27	108	131	191	32	40				
DT190-027,5WN32R01SO07-4D-IK	27,5	110	133	193	32	40				

**DT190...-4D**   
**Drilling tools with internal coolant supply**



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.

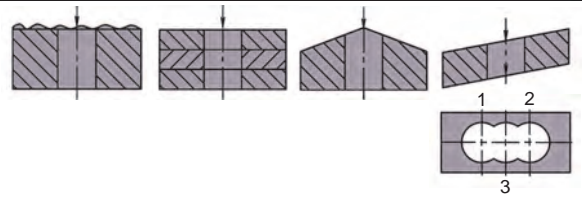


<b>DT190-WN...SO08-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
Code key	Dimensions, mm							No.			
	D	h	H	L	d	d1					
DT190-028WN32R01SO08-4D-IK	28	112	135	195	32	40	SOMT08T308ER	2	T300755-09AP	7009-TP	2,2 Nm
DT190-028,5WN32R01SO08-4D-IK	28,5	114	137	197	32	40		2			
DT190-029WN32R01SO08-4D-IK	29	116	139	199	32	40		2			
DT190-029,5WN32R01SO08-4D-IK	29,5	118	141	201	32	40		2			
DT190-030WN32R01SO08-4D-IK	30	120	143	203	32	40		2			
DT190-030,5WN32R01SO08-4D-IK	30,5	122	145	205	32	40		2			
DT190-031WN32R01SO08-4D-IK	31	124	147	207	32	40		2			
DT190-031,5WN32R01SO08-4D-IK	31,5	126	149	209	32	40		2			
DT190-032WN32R01SO08-4D-IK	32	128	151	211	32	40		2			
<b>DT190-WN...SO10-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-032,5WN40R01SO10-4D-IK	32,5	130	156	224	40	50	SOMT100408ER	2	T400955-15	7015-T	5,5 Nm
DT190-033WN40R01SO10-4D-IK	33	132	159	226	40	50		2			
DT190-033,5WN40R01SO10-4D-IK	33,5	134	160	228	40	50		2			
DT190-034WN40R01SO10-4D-IK	34	136	162	230	40	50		2			
DT190-034,5WN40R01SO10-4D-IK	34,5	138	164	232	40	50		2			
DT190-035WN40R01SO10-4D-IK	35	140	166	234	40	50		2			
DT190-035,5WN40R01SO10-4D-IK	35,5	142	168	238	40	50		2			
DT190-036WN40R01SO10-4D-IK	36	144	170	238	40	50		2			
DT190-036,5WN40R01SO10-4D-IK	36,5	146	172	240	40	50		2			
<b>DT190-WN...SO12-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-037WN40R01SO12-4D-IK	37	148	178	248	40	56	SOMT120410ER	2	T400955-15	7015-T	5,5 Nm
DT190-038WN40R01SO12-4D-IK	38	152	182	252	40	56		2			
DT190-039WN40R01SO12-4D-IK	39	156	186	256	40	56		2			
DT190-040WN40R01SO12-4D-IK	40	160	190	260	40	56		2			
DT190-041WN40R01SO12-4D-IK	41	164	194	264	40	56		2			
<b>DT190-WN...SO13-4D</b>		<b>Hole depth 4D</b>					<b>Straight shank with sloping clamping surface DIN 1835 E</b>				
DT190-042WN40R01SO13-4D-IK	42	168	201	271	40	60	SOMT130512ER	2	T451155-20	7020-T	7,0 Nm
DT190-043WN40R01SO13-4D-IK	43	172	205	275	40	60		2			
DT190-044WN40R01SO13-4D-IK	44	176	209	279	40	60		2			
DT190-045WN40R01SO13-4D-IK	45	180	213	283	40	60		2			
DT190-046WN40R01SO13-4D-IK	46	184	217	287	40	60		2			

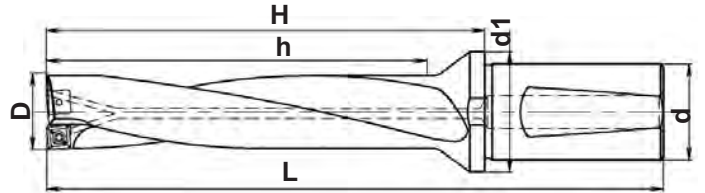
**DT190...-4D**



## Drilling tools with internal coolant supply



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



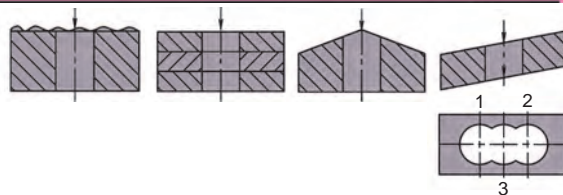
**DT190-WN...SO15-4D**

**Hole depth 4D**

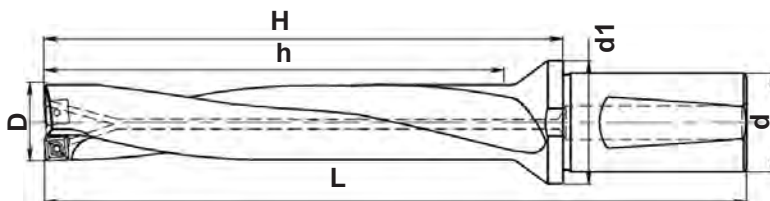
**Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-047WN40R01SO15-4D-IK	47	188	222	292	40	60	SOMT150512ER	2	T451155-20	7020-T 7,0 Nm
DT190-048WN40R01SO15-4D-IK	48	192	226	296	40	60				
DT190-049WN40R01SO15-4D-IK	49	196	230	300	40	60				
DT190-050WN40R01SO15-4D-IK	50	200	234	304	40	60				
DT190-051WN40R01SO15-4D-IK	51	204	238	308	40	60				
DT190-052WN40R01SO15-4D-IK	52	208	242	312	40	60				
DT190-053WN40R01SO15-4D-IK	53	212	246	316	40	60				
DT190-054WN40R01SO15-4D-IK	54	216	250	320	40	60				




**DT190...-5D**   
**Drilling tools with internal coolant supply**



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



**DT190-WN...SO03-5D** *Hole depth 5D* **Straight shank with sloping clamping surface DIN 1835 E**

Code key	Dimensions, mm							No.		
	D	h	H	L	d	d1				
DT190-014WN20R01SO03-5D-IK	14	70	87	137	20	30	SOMT030205ER	2	T200455-06	7006-T 0,6 Nm
DT190-014,5WN20R01SO03-5D-IK	14,5	73	90	140	20	30		2		
DT190-015WN20R01SO03-5D-IK	15	75	92	142	20	30		2		
DT190-015,5WN20R01SO03-5D-IK	15,5	78	95	145	20	30		2		

**DT190-WN...SO04-5D** *Hole depth 5D* **Straight shank with sloping clamping surface DIN 1835 E**

DT190-016WN20R01SO04-5D-IK	16	80	97	147	20	30	SOMT040205ER	2	T200455-06	7006-T 0,6 Nm
DT190-016,5WN20R01SO04-5D-IK	16,5	83	100	150	20	30		2		
DT190-017WN20R01SO04-5D-IK	17	85	102	152	20	30		2		
DT190-017,5WN20R01SO04-5D-IK	17,5	88	105	155	20	30		2		

**DT190-WN...SO05-5D** *Hole depth 5D* **Straight shank with sloping clamping surface DIN 1835 E**

DT190-018WN25R01SO05-5D-IK	18	90	108	164	25	32	SOMT050206ER	2	T220555-07	7007-T 1,0 Nm
DT190-018,5WN25R01SO05-5D-IK	18,5	93	111	167	25	32		2		
DT190-019WN25R01SO05-5D-IK	19	95	113	169	25	32		2		
DT190-019,5WN25R01SO05-5D-IK	19,5	98	116	172	25	32		2		
DT190-020WN25R01SO05-5D-IK	20	100	118	174	25	32		2		
DT190-020,5WN25R01SO05-5D-IK	20,5	103	121	177	25	32		2		

**DT190-WN...SO06-5D** *Hole depth 5D* **Straight shank with sloping clamping surface DIN 1835 E**

DT190-021WN25R01SO06-5D-IK	21	105	124	180	25	32	SOMT06M307ER	2	T220555-07	7007-T 1,0 Nm
DT190-021,5WN25R01SO06-5D-IK	21,5	108	127	183	25	32		2		
DT190-022WN25R01SO06-5D-IK	22	110	128	184	25	32		2		
DT190-022,5WN25R01SO06-5D-IK	22,5	113	131	187	25	32		2		
DT190-023WN25R01SO06-5D-IK	23	115	133	189	25	32		2		
DT190-023,5WN25R01SO06-5D-IK	23,5	118	136	192	25	32		2		

**DT190-WN...SO07-5D** *Hole depth 5D* **Straight shank with sloping clamping surface DIN 1835 E**

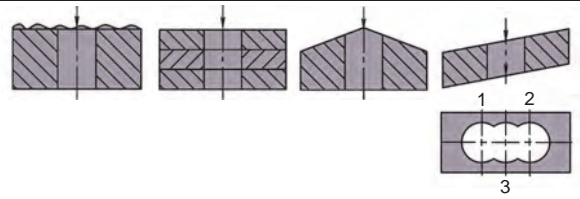
DT190-024WN32R01SO07-5D-IK	24	120	143	203	32	40	SOMT070308ER	2	T250655-08AP	7008-T 1,2 Nm
DT190-024,5WN32R01SO07-5D-IK	24,5	123	146	206	32	40		2		
DT190-025WN32R01SO07-5D-IK	25	125	148	208	32	40		2		
DT190-025,5WN32R01SO07-5D-IK	25,5	128	141	211	32	40		2		
DT190-026WN32R01SO07-5D-IK	26	130	152	212	32	40		2		
DT190-026,5WN32R01SO07-5D-IK	26,5	133	155	215	32	40		2		
DT190-027WN32R01SO07-5D-IK	27	135	157	217	32	40		2		
DT190-027,5WN32R01SO07-5D-IK	27,5	138	160	220	32	40		2		



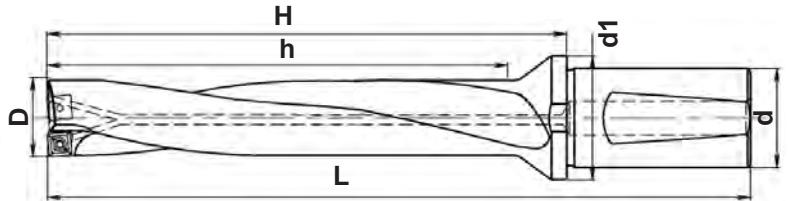
## DT190...-5D



### Drilling tools with internal coolant supply



- \*Optimized for high feed rates.
- \*Long tool life thanks to cutter body coating.
- \*4 cutting edges per insert.
- \*For general drilling of steels, stainless steel, cast irons and non ferrous metals.



#### DT190-WN...SO08-5D

#### Hole depth 5D

#### Straight shank with sloping clamping surface DIN 1835 E

Code key	Dimensions, mm						No.	T300755-09AP	7009-TP 2,2 Nm
	D	h	H	L	d	d1			
DT190-028WN32R01SO08-5D-IK	28	140	161	221	32	40	SOMT08T308ER	T300755-09AP	7009-TP 2,2 Nm
DT190-028,5WN32R01SO08-5D-IK	28,5	143	164	224	32	40			
DT190-029WN32R01SO08-5D-IK	29	145	166	226	32	40			
DT190-029,5WN32R01SO08-5D-IK	29,5	148	169	229	32	40			
DT190-030WN32R01SO08-5D-IK	30	150	170	230	32	40			
DT190-030,5WN32R01SO08-5D-IK	30,5	153	173	233	32	40			
DT190-031WN32R01SO08-5D-IK	31	155	175	235	32	40			
DT190-031,5WN32R01SO08-5D-IK	31,5	158	178	238	32	40			
DT190-032WN32R01SO08-5D-IK	32	160	179	239	32	40			

#### DT190-WN...SO10-5D

#### Hole depth 5D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-032,5WN40R01SO10-5D-IK	32,5	163	172	242	40	50	SOMT100408ER	T400955-15	7015-T 5,5 Nm
DT190-033WN40R01SO10-5D-IK	33	165	191	259	40	50			
DT190-033,5WN40R01SO10-5D-IK	33,5	168	194	262	40	50			
DT190-034WN40R01SO10-5D-IK	34	170	196	264	40	50			
DT190-034,5WN40R01SO10-5D-IK	34,5	173	199	267	40	50			
DT190-035WN40R01SO10-5D-IK	35	175	201	269	40	50			
DT190-035,5WN40R01SO10-5D-IK	35,5	178	204	272	40	50			
DT190-036WN40R01SO10-5D-IK	36	180	206	274	40	50			
DT190-036,5WN40R01SO10-5D-IK	36,5	183	209	277	40	50			

#### DT190-WN...SO12-5D

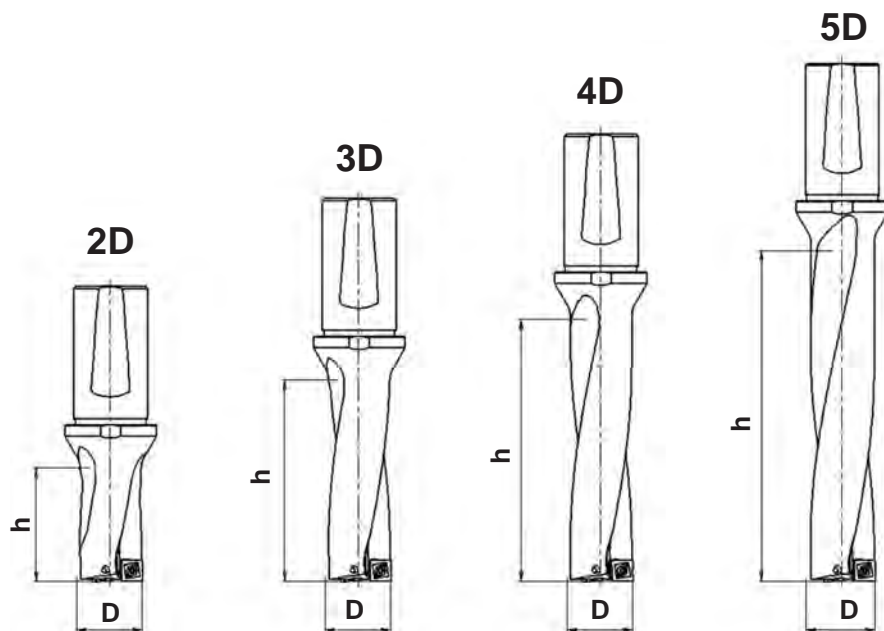
#### Hole depth 5D

#### Straight shank with sloping clamping surface DIN 1835 E

DT190-037WN40R01SO12-5D-IK	37	185	215	285	40	56	SOMT120410ER	T400955-15	7015-T 5,5 Nm
DT190-038WN40R01SO12-5D-IK	38	190	220	290	40	56			
DT190-039WN40R01SO12-5D-IK	39	195	225	295	40	56			
DT190-040WN40R01SO12-5D-IK	40	200	230	300	40	56			
DT190-041WN40R01SO12-5D-IK	41	205	235	305	40	56			



## Permissible value for the length of the drilling tool



Code key insert	D, mm	h, mm			
		2D	3D	4D	5D
SOMT030205ER	14-15,5	2D	3D	4D	5D
SOMT040206ER	16-17,5	2D	3D	4D	5D
SOMT050206ER	18-20,5	2D	3D	4D	5D
SOMT06M307ER	21-23,5	2D	3D	4D	5D
SOMT070308ER	24-27,5	2D	3D	4D	5D
SOMT08T308ER	28-32	2D	3D	4D	5D
SOMT100408ER	32,5-36,5	2D	3D	4D	5D
SOMT120410ER	37-41	2D	3D	4D	5D
SOMT130512ER	42-46	2D	3D	4D	---
SOMT150512ER	47-54	2D	3D	4D	---
SOMT170512ER	55-63	2D	3D	--	---

**Choice cutting speed and definition of feed rates for drilling**

ISO	Workpiece material	Cutting speed $v_c$ (m/min)	L/D	Diameter (mm)					
				14-15,5 SOMT03..	16-17,5 SOMT04..	18-20,5 SOMT05..	21-23,5 SOMT06..	24-27,5 SOMT07..	28-32 SOMT08..
		HCP30B		Feed/tooth (mm/tooth)					
<b>P</b>	Non-alloy steel	160-300	2D-3D 4D 5D	0,015-0,10 0,015-0,10 0,015-0,08	0,03-0,16 0,03-0,14 0,03-0,11	0,05-0,18 0,05-0,16 0,04-0,13	0,07-0,20 0,05-0,18 0,04-0,15	0,08-0,22 0,06-0,20 0,06-0,17	0,08-0,23 0,06-0,22 0,06-0,18
	Low-alloy steel	100-280	2D-3D 4D 5D	0,015-0,10 0,015-0,10 0,015-0,10	0,03-0,17 0,03-0,16 0,03-0,15	0,05-0,20 0,05-0,18 0,05-0,16	0,08-0,22 0,06-0,20 0,05-0,17	0,09-0,23 0,07-0,21 0,07-0,18	0,09-0,24 0,07-0,23 0,07-0,19
	High-alloy steel and cast steel	100-200	2D-3D 4D 5D	0,015-0,10 0,015-0,10 0,015-0,09	0,03-0,15 0,03-0,12 0,03-0,12	0,05-0,18 0,05-0,15 0,05-0,14	0,08-0,20 0,06-0,18 0,05-0,15	0,09-0,21 0,07-0,20 0,07-0,17	0,09-0,23 0,07-0,22 0,07-0,18
	Stainless steel and cast steel	80-150	2D-3D 4D 5D	0,015-0,10 0,015-0,10 0,015-0,08	0,03-0,13 0,03-0,11 0,03-0,08	0,05-0,18 0,05-0,12 0,04-0,09	0,08-0,15 0,06-0,12 0,04-0,10	0,08-0,17 0,06-0,15 0,06-0,12	0,08-0,18 0,06-0,17 0,07-0,14
<b>M</b>	Stainless steel	80-120	2D-3D 4D 5D	0,015-0,10 0,015-0,10 0,015-0,08	0,03-0,14 0,03-0,13 0,03-0,12	0,05-0,15 0,05-0,13 0,05-0,12	0,05-0,16 0,05-0,15 0,05-0,13	0,05-0,18 0,05-0,16 0,05-0,14	0,06-0,18 0,06-0,16 0,06-0,15
<b>K</b>	Grey cast iron	100-200	2D-3D 4D 5D	0,04-0,16 0,04-0,16 0,04-0,14	0,05-0,20 0,05-0,20 0,04-0,20	0,08-0,24 0,08-0,22 0,08-0,22	0,10-0,25 0,10-0,24 0,10-0,23	0,10-0,28 0,10-0,25 0,10-0,25	0,10-0,28 0,10-0,25 0,10-0,25
	Nodular cast iron	100-200	2D-3D 4D 5D	0,04-0,16 0,04-0,14 0,04-0,12	0,05-0,20 0,05-0,18 0,05-0,18	0,08-0,22 0,08-0,20 0,08-0,18	0,10-0,25 0,10-0,24 0,10-0,23	0,10-0,28 0,10-0,26 0,10-0,25	0,10-0,28 0,10-0,26 0,10-0,25
	Malleable cast iron	70-160	2D-3D 4D 5D	0,04-0,14 0,04-0,13 0,04-0,11	0,05-0,17 0,05-0,16 0,05-0,14	0,08-0,21 0,08-0,18 0,08-0,16	0,10-0,25 0,10-0,22 0,10-0,20	0,10-0,28 0,10-0,25 0,10-0,22	0,10-0,28 0,10-0,25 0,10-0,22
<b>N</b>	Aluminium wrought alloys	150-500	2D-3D 4D 5D	0,06-0,14 0,06-0,14 0,06-0,14	0,06-0,14 0,06-0,14 0,06-0,14	0,08-0,15 0,08-0,15 0,08-0,14	0,10-0,15 0,10-0,15 0,10-0,15	0,10-0,15 0,10-0,15 0,10-0,15	0,10-0,17 0,10-0,17 0,10-0,17
	Aluminium cast alloys	150-350	2D-3D 4D 5D	0,06-0,15 0,06-0,15 0,06-0,15	0,06-0,15 0,06-0,15 0,06-0,15	0,08-0,15 0,08-0,15 0,08-0,15	0,10-0,20 0,10-0,20 0,10-0,20	0,10-0,20 0,10-0,20 0,10-0,20	0,10-0,22 0,10-0,22 0,10-0,22
	Copper and copper alloys	150-400	2D-3D 4D 5D	0,08-0,16 0,08-0,16 0,08-0,16	0,08-0,16 0,08-0,16 0,08-0,16	0,08-0,18 0,08-0,18 0,08-0,16	0,10-0,18 0,10-0,18 0,10-0,18	0,10-0,18 0,10-0,18 0,10-0,18	0,10-0,20 0,10-0,20 0,10-0,20
<b>S</b>	Heat resistant alloys	20-80	2D-3D 4D 5D	0,03-0,05 0,03-0,05 0,03-0,05	0,04-0,06 0,04-0,06 0,04-0,06	0,04-0,08 0,04-0,07 0,04-0,06	0,05-0,08 0,04-0,07 0,04-0,06	0,05-0,10 0,05-0,08 0,04-0,07	0,05-0,10 0,05-0,08 0,05-0,08
	Titanium alloys	25-100	2D-3D 4D 5D	0,03-0,06 0,03-0,06 0,03-0,04	0,04-0,08 0,04-0,08 0,04-0,05	0,07-0,10 0,05-0,10 0,04-0,08	0,05-0,12 0,05-0,12 0,05-0,11	0,06-0,12 0,05-0,12 0,05-0,11	0,07-0,15 0,06-0,15 0,06-0,12

## Choice cutting speed and definition of feed rates for drilling

ISO	Workpiece material	Cutting speed $v_c$ (m/min)	L/D	Diameter (mm)				
				32,5-36,5 SOMT10..	37-41 SOMT12..	42-46 SOMT13..	47-54 SOMT15..	55-63 SOMT17..
		HCP30B		Feed/tooth (mm/tooth)				
P	Non-alloy steel	160-300	2D-3D 4D 5D	0,09-0,24 0,08-0,22 0,06-0,22	0,09-0,25 0,08-0,24 0,07-0,23	0,09-0,26 0,08-0,25 0,07-0,24	0,09-0,27 0,08-0,26 0,08-0,26	0,09-0,28 0,08-0,28 0,08-0,28
	Low-alloy steel	100-280	2D-3D 4D 5D	0,10-0,25 0,08-0,23 0,07-0,23	0,10-0,26 0,10-0,26 0,08-0,25	0,10-0,27 0,10-0,27 0,08-0,26	0,10-0,28 0,10-0,29 0,09-0,28	0,10-0,30 0,10-0,30 0,10-0,29
	High-alloy steel and cast steel	100-200	2D-3D 4D 5D	0,10-0,23 0,08-0,23 0,07-0,22	0,10-0,25 0,08-0,24 0,07-0,24	0,10-0,26 0,08-0,26 0,07-0,25	0,10-0,27 0,08-0,26 0,07-0,26	0,10-0,29 0,08-0,28 0,07-0,28
	Stainless steel and cast steel	80-150	2D-3D 4D 5D	0,09-0,19 0,09-0,18 0,06-0,17	0,10-0,20 0,06-0,18 0,06-0,18	0,10-0,21 0,06-0,18 0,06-0,18	0,10-0,23 0,06-0,19 0,06-0,19	0,10-0,24 0,06-0,20 0,06-0,19
M	Stainless steel	80-120	2D-3D 4D 5D	0,07-0,21 0,07-0,20 0,07-0,18	0,07-0,21 0,07-0,21 0,07-0,20	0,07-0,21 0,07-0,21 0,07-0,21	0,08-0,22 0,08-0,22 0,07-0,21	0,08-0,22 0,08-0,22 0,08-0,22
K	Grey cast iron	100-200	2D-3D 4D 5D	0,10-0,30 0,10-0,28 0,10-0,25	0,10-0,30 0,10-0,29 0,10-0,24	0,10-0,31 0,10-0,29 0,10-0,24	0,10-0,31 0,10-0,29 0,10-0,26	0,10-0,31 0,10-0,30 0,10-0,28
	Nodular cast iron	100-200	2D-3D 4D 5D	0,10-0,28 0,10-0,26 0,10-0,25	0,10-0,29 0,10-0,27 0,10-0,27	0,10-0,30 0,10-0,27 0,10-0,27	0,10-0,30 0,10-0,29 0,10-0,28	0,10-0,31 0,10-0,30 0,10-0,29
	Malleable cast iron	70-160	2D-3D 4D 5D	0,10-0,30 0,10-0,28 0,10-0,22	0,10-0,30 0,10-0,29 0,10-0,24	0,10-0,30 0,10-0,29 0,10-0,26	0,10-0,31 0,10-0,29 0,10-0,26	0,10-0,31 0,10-0,30 0,10-0,29
N	Aluminium wrought alloys	150-500	2D-3D 4D 5D	0,10-0,17 0,10-0,17 0,10-0,17	0,10-0,18 0,10-0,18 0,10-0,18	0,10-0,18 0,10-0,18 0,10-0,18	0,10-0,18 0,10-0,18 0,10-0,18	0,10-0,19 0,10-0,19 0,10-0,19
	Aluminium cast alloys	150-350	2D-3D 4D 5D	0,10-0,22 0,10-0,22 0,10-0,22	0,10-0,24 0,10-0,24 0,10-0,24	0,10-0,24 0,10-0,24 0,10-0,24	0,10-0,24 0,10-0,24 0,10-0,24	0,10-0,24 0,10-0,24 0,10-0,24
	Copper and copper alloys	150-400	2D-3D 4D 5D	0,10-0,20 0,10-0,20 0,10-0,20	0,10-0,22 0,10-0,22 0,10-0,22	0,10-0,22 0,10-0,22 0,10-0,22	0,10-0,22 0,10-0,22 0,10-0,22	0,10-0,22 0,10-0,22 0,10-0,22
S	Heat resistant alloys	20-80	2D-3D 4D 5D	0,05-0,12 0,05-0,10 0,05-0,08	0,05-0,12 0,05-0,11 0,05-0,10	0,05-0,12 0,05-0,11 0,05-0,10	0,05-0,14 0,05-0,12 0,05-0,10	0,05-0,14 0,05-0,12 0,05-0,11
	Titanium alloys	25-100	2D-3D 4D 5D	0,07-0,15 0,07-0,15 0,07-0,12	0,07-0,16 0,07-0,16 0,07-0,12	0,07-0,16 0,07-0,16 0,07-0,13	0,07-0,16 0,07-0,16 0,07-0,13	0,07-0,18 0,07-0,18 0,07-0,13