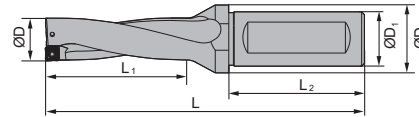


**Indexable drills series**

ZSD05



Article	*	Stock	Dimensions [mm]							kg	Inserts
			ØD	ØD1	ØD2	L1	L2	L			
ZSD05-120-XP20-SP04-02	*	●	12	20	25	63	50	129	0.173	SPMX040204**	
ZSD05-125-XP20-SP04-02	*	●	12.5	20	25	66	50	132	0.179	SPMX040204**	
ZSD05-130-XP20-SP04-02	*	●	13	20	25	68	50	134	0.183	SPMX040204**	
ZSD05-135-XP20-SP04-02	*	●	13.5	20	25	71	50	137	0.189	SPMX040204**	
ZSD05-140-XP20-SP04-02	*	●	14	20	25	73	50	139	0.194	SPMX040204**	
ZSD05-145-XP20-SP04-02	*	●	14.5	20	25	76	50	141	0.2	SPMX040204**	
ZSD05-150-XP20-SP05-02	*	●	15	20	25	78	50	144	0.206	SPMX050204**	
ZSD05-155-XP20-SP05-02	*	●	15.5	20	25	81	50	147	0.214	SPMX050204**	
ZSD05-160-XP20-SP05-02	*	●	16	20	25	83	50	149	0.219	SPMX050204**	
ZSD05-165-XP20-SP05-02	*	●	16.5	20	25	86	50	152	0.223	SPMX050204**	
ZSD05-170-XP20-SP05-02	*	●	17	20	25	88	50	154	0.23	SPMX050204**	
ZSD05-175-XP20-SP05-02	*	●	17.5	20	25	91	50	157	0.239	SPMX050204**	
ZSD05-180-XP25-SP06-02	*	●	18	25	32	93	56	167	0.355	SPMX060204**	
ZSD05-185-XP25-SP06-02	*	●	18.5	25	32	96	56	170	0.36	SPMX060204**	
ZSD05-190-XP25-SP06-02	*	●	19	25	32	98	56	172	0.369	SPMX060204**	
ZSD05-195-XP25-SP06-02	*	●	19.5	25	32	101	56	175	0.382	SPMX060204**	
ZSD05-200-XP25-SP06-02	*	●	20	25	32	103	56	177	0.39	SPMX060204**	
ZSD05-205-XP25-SP06-02	*	●	20.5	25	32	106	56	180	0.401	SPMX060204**	
ZSD05-210-XP25-SP06-02	*	●	21	25	32	108	56	182	0.413	SPMX060204**	
ZSD05-215-XP25-SP06-02	*	●	21.5	25	32	111	56	185	0.426	SPMX060204**	
ZSD05-220-XP25-SP06-02	*	●	22	25	32	113	56	187	0.441	SPMX060204**	
ZSD05-225-XP25-SP07-02	*	●	22.5	25	32	116	56	190	0.442	SPMX07T308**	
ZSD05-230-XP25-SP07-02	*	●	23	25	32	118	56	194	0.461	SPMX07T308**	
ZSD05-235-XP25-SP07-02	*	●	23.5	25	32	121	56	197	0.483	SPMX07T308**	
ZSD05-240-XP25-SP07-02	*	●	24	25	32	123	56	199	0.497	SPMX07T308**	
ZSD05-245-XP25-SP07-02	*	●	24.5	25	32	126	56	202	0.517	SPMX07T308**	
ZSD05-250-XP25-SP07-02	*	●	25	25	32	128	56	204	0.533	SPMX07T308**	
ZSD05-255-XP25-SP07-02	*	●	25.5	25	32	131	56	207	0.555	SPMX07T308**	
ZSD05-260-XP25-SP07-02	*	●	26	25	32	133	56	209	0.571	SPMX07T308**	
ZSD05-265-XP25-SP07-02	*	●	26.5	25	32	136	56	212	0.593	SPMX07T308**	
ZSD05-270-XP25-SP07-02	*	●	27	25	32	138	56	214	0.617	SPMX07T308**	
ZSD05-275-XP25-SP07-02	*	●	27.5	25	32	141	56	217	0.642	SPMX07T308**	
ZSD05-280-XP32-SP09-02	*	●	28	32	37	143	60	223	0.791	SPMX090408**	

● Ex stock ○ On demand

\* Internal cooling

System code > C9

Grade selection > C8


Technical info > C201

Cutting data > C36



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# Indexable drills Drilling bodies

Article	*	Stock	Dimensions [mm]							kg	Inserts 
			ØD	ØD1	ØD2	L1	L2	L			
ZSD05-290-XP32-SP09-02	*	•	29	32	37	148	60	228	0.837	SPMX090408**	
ZSD05-300-XP32-SP09-02	*	•	30	32	37	153	60	233	0.943	SPMX090408**	
ZSD05-310-XP32-SP09-02	*	•	31	32	37	158	60	238	0.943	SPMX090408**	
ZSD05-320-XP32-SP09-02	*	•	32	32	37	163	60	243	1.001	SPMX090408**	
ZSD05-330-XP32-SP09-02	*	•	33	32	37	168	60	249	1.067	SPMX090408**	
ZSD05-340-XP40-SP11-02	*	•	34	40	47	173	70	268	1.44	SPMX110408**	
ZSD05-350-XP40-SP11-02	*	•	35	40	47	178	70	273	1.505	SPMX110408**	
ZSD05-360-XP40-SP11-02	*	•	36	40	47	183	70	278	1.575	SPMX110408**	
ZSD05-370-XP40-SP11-02	*	•	37	40	47	188	70	283	1.723	SPMX110408**	
ZSD05-380-XP40-SP11-02	*	•	38	40	47	193	70	288	1.723	SPMX110408**	
ZSD05-390-XP40-SP11-02	*	•	39	40	47	198	70	293	1.808	SPMX110408**	
ZSD05-400-XP40-SP11-02	*	•	40	40	47	203	70	298	1.894	SPMX110408**	
ZSD05-410-XP40-SP11-02	*	•	41	40	47	208	70	303	1.991	SPMX110408**	
ZSD05-420-XP40-SP11-02	*	○	42	40	52	213	70	315	2.182	SPMX140512**	
ZSD05-430-XP40-SP14-02	*	•	43	40	52	218	70	320	2.11	SPMX140512**	
ZSD05-440-XP40-SP14-02	*	•	44	40	52	223	70	325	2.22	SPMX140512**	
ZSD05-450-XP40-SP14-02	*	•	45	40	52	228	70	330	2.331	SPMX140512**	
ZSD05-460-XP40-SP14-02	*	•	46	40	52	233	70	335	2.45	SPMX140512**	
ZSD05-470-XP40-SP14-02	*	○	47	40	52	238	70	340	2.582	SPMX140512**	
ZSD05-480-XP40-SP14-02	*	•	48	40	52	243	70	345	2.693	SPMX140512**	
ZSD05-490-XP40-SP14-02	*	•	19	40	52	248	70	350	2.823	SPMX140512**	
ZSD05-500-XP40-SP14-02	*	•	50	40	52	253	70	355	2.958	SPMX140512**	
ZSD05-510-XP50-SP14-02	*	○	51	50	57	258	80	370	3.7	SPMX140512**	
ZSD05-520-XP50-SP14-02	*	○	52	50	57	263	80	375	3.848	SPMX140512**	
ZSD05-530-XP50-SP14-02	*	○	53	50	57	268	80	380	3.998	SPMX140512**	
ZSD05-540-XP50-SP09-04	*	○	54	50	57	273	80	385	4.035	SPMX090408**	
ZSD05-550-XP50-SP09-04	*	○	55	50	57	278	80	390	4.203	SPMX090408**	
ZSD05-560-XP50-SP09-04	*	○	56	50	57	283	80	395	4.368	SPMX090408**	
ZSD05-570-XP50-SP09-04	*	○	57	50	57	288	80	400	4.671	SPMX090408**	
ZSD05-580-XP50-SP09-04	*	○	58	50	57	293	80	405	4.866	SPMX090408**	
ZSD05-590-XP50-SP09-04	*	○	59	50	57	298	80	410	5.047	SPMX090408**	
ZSD05-600-XP50-SP09-04	*	○	60	50	57	303	80	415	5.192	SPMX090408**	
ZSD05-610-XP50-SP09-04	*	○	61	50	57	308	80	420	5.4	SPMX090408**	
ZSD05-620-XP50-SP09-04	*	○	62	50	57	313	80	425	5.619	SPMX090408**	
ZSD05-630-XP50-SP09-04	*	○	63	50	57	318	80	430	5.834	SPMX090408**	

• Ex stock    ○ On demand

\* Internal cooling

### Spare parts

Insert	SPMX040204**	SPMX050204**	SPMX060204**	SPMX07T308**	SPMX090408**	SPMX110408**	SPMX140512**
 Screw	I60M1.8x4 (0.5Nm)	I60M2x4.3 (0.5Nm)	I60M2.2x5.5 (0.8Nm)	I60M2.5x6.5 (1.0Nm)	I60M3.5x8 (2.7Nm)	I60M4x10 (3.4Nm)	I60M5x13 (6.7Nm)
 Wrench	WT05IP	WT06IP	WT07IP	WT07IP	WT15IP	WT15IP	WT20IP

System code > C9

Grade selection > C8

Technical info > C201

Cutting data > C36

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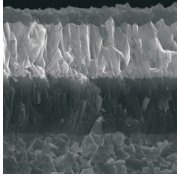

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**A**

Turning

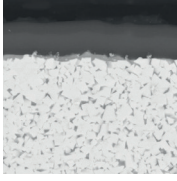
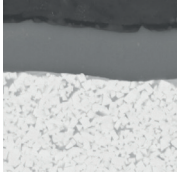
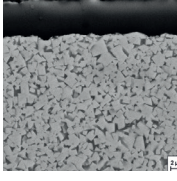
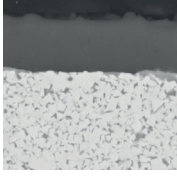
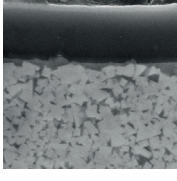
## Coated cemented carbide CVD

Grade	ISO	Micro structure	Grade description
<b>YB6338</b>	P20 - P40 K20 - K40		CVD coated P20–P40/K20–K40 carbide substrate for operation with higher cutting speed and feed rate in steel and cast iron.
<b>YBD252</b>	K20 - K35		CVD coated K20–K35 carbide substrate. Optimized for medium to roughing operation of cast iron and Steel. Good wear resistance and toughness at higher cutting speed.

**B**

Milling

## Coated cemented carbide PVD

Grade	ISO	Micro structure	Grade description
<b>YBG105</b>	S05 - S20		PVD multilayer coated S05–S20 carbide substrate for finishing to medium application of super alloy material but also stainless steel. Good wear resistance and thermal stability in a wide application field.
<b>YBG202</b>	P10 - P30 M10 - M25		PVD coated M10–M25/P10–P30 carbide substrate for finishing to medium application of stainless steel and steel (milling). Good wear resistance in a wide application field.
<b>YBS203</b>	S15 - S25		For processing heat-resistant materials. A special carbon substrate and the latest PVD coating technology enable a very good wear behaviour, high fracture toughness and high thermal stability.
<b>YBG205</b>	P10 - P30 M20 - M40 S15-S25		PVD multilayer coated P10–P30/M20–M40/S15–S25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (milling). Excellent wear resistance and thermal stability in a wide range of applications.
<b>YB9320</b>	P10 - P30 M10 - M25		PVD multilayer coated P10–P30/M10–M25 carbide substrate for finishing to medium machining of stainless steel, super alloys and steel (grooving/milling). Optimised coating stability for higher wear resistance and thermal stability in a wide range of applic

**C**

Drilling

**D**

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## Application fields of grades – indexable drills

	ISO	HC <sup>1</sup> (CVD)	HC <sup>1</sup> (PVD)	HT	HW	PCBN & PCD
<b>A</b> Turning	P01					
	P10					
	P20	YBD252	YBG202			
	P30	YB6338	YBG205			
	P40		YBG212			
<b>B</b> Milling	M01					
	M10		YBG202			
	M20		YB9320			
	M30		YBG205			
	M40		YBS203			
<b>C</b> Drilling	K01					
	K10	YBD252	YBG202			
	K20	YB6338	YBG205			
	K30					
	K40					YBG212
<b>D</b> Technical Information	N01					
	N10					
	N20				YD201	
	N30					
<b>E</b> Index	S01		YBG202			
	S10		YB9320			
	S20		YBG205			
	S30		YBS203			YBG212
<b>F</b> Index	H01					
	H10					
	H20					
	H30					

<b>P</b>	Steel
<b>M</b>	Stainless steel
<b>K</b>	Cast iron

<b>N</b>	Non-ferrous alloys
<b>S</b>	Heat-resistant alloys
<b>H</b>	Hardened materials

HC<sup>1</sup> Coated cemented carbide  
 HT Uncoated cermet  
 HW Uncoated cemented carbide

# ZSD – 03 300 – XP – 32 S P 09 – 02

1 2 3 4 5 6 7 8 9

Type	
Code	Description
ZSD	Indexable drill (SPMX*)
ZTD	Indexable drill (SPGT*)
ZD	Indexable drill (WCMX*)

1

L/D relation	
Code	Description
02	2xD
03	3xD
04	4xD
05	5xD

2

Diameter [mm]	
Code	Description
130	13
...	



3

Shank type	
Code	Description
XP	Weldon shank

4

Coupling size [mm]
--------------------

5

Insert shape
W 
S 

6

Clearance angle	
Code	Description
C	7°
P	11°

7

Cutting edge length [mm]		
Code	Insert shape	
	W	S
03	3,8	
04	4,3	
05	5,4	5
06	6,5	6
08	8,7	7,94
09		9,8
11		11,5
12		12,7
14		14,3

8

Number of teeth
-----------------

9

A

Turning

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Milling

C

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