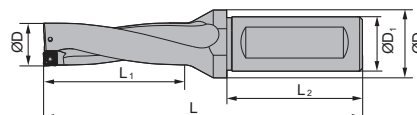


**Indexable drills series**

ZSD03



Article	*	Stock	Dimensions [mm]							kg	Inserts
			ØD	ØD1	ØD2	L1	L2	L			
ZSD03-120-XP20-SP04-02	*	●	12	20	25	39	50	105	0.165	SPMX040204**	
ZSD03-125-XP20-SP04-02	*	●	12.5	20	25	41	50	107	0.169	SPMX040204**	
ZSD03-130-XP20-SP04-02	*	●	13	20	25	42	50	108	0.171	SPMX040204**	
ZSD03-135-XP20-SP04-02	*	●	13.5	20	25	44	50	110	0.175	SPMX040204**	
ZSD03-140-XP20-SP04-02	*	●	14	20	25	45	50	111	0.178	SPMX040204**	
ZSD03-145-XP20-SP04-02	*	●	14.5	20	25	47	50	113	0.182	SPMX040204**	
ZSD03-150-XP20-SP05-02	*	●	15	20	25	48	50	114	0.189	SPMX050204**	
ZSD03-155-XP20-SP05-02	*	●	15.5	20	25	50	50	116	0.192	SPMX050204**	
ZSD03-160-XP20-SP05-02	*	●	16	20	25	51	50	117	0.201	SPMX050204**	
ZSD03-165-XP20-SP05-02	*	●	16.5	20	25	53	50	119	0.203	SPMX050204**	
ZSD03-170-XP20-SP05-02	*	●	17	20	25	54	50	120	0.205	SPMX050204**	
ZSD03-175-XP20-SP05-02	*	●	17.5	20	25	56	50	122	0.206	SPMX050204**	
ZSD03-180-XP25-SP06-02	*	●	18	25	32	57	56	131	0.319	SPMX060204**	
ZSD03-185-XP25-SP06-02	*	●	18.5	25	32	59	56	133	0.326	SPMX060204**	
ZSD03-190-XP25-SP06-02	*	●	19	25	32	60	56	134	0.332	SPMX060204**	
ZSD03-195-XP25-SP06-02	*	●	19.5	25	32	62	56	136	0.339	SPMX060204**	
ZSD03-200-XP25-SP06-02	*	●	20	25	32	63	56	137	0.344	SPMX060204**	
ZSD03-205-XP25-SP06-02	*	●	20.5	25	32	65	56	139	0.352	SPMX060204**	
ZSD03-210-XP25-SP06-02	*	●	21	25	32	66	56	140	0.368	SPMX060204**	
ZSD03-215-XP25-SP06-02	*	●	21.5	25	32	68	56	142	0.37	SPMX060204**	
ZSD03-220-XP25-SP06-02	*	●	22	25	32	69	56	143	0.375	SPMX060204**	
ZSD03-225-XP25-SP07-02	*	●	22.5	25	32	71	56	145	0.397	SPMX07T308**	
ZSD03-230-XP25-SP07-02	*	●	23	25	32	72	56	147	0.383	SPMX07T308**	
ZSD03-235-XP25-SP07-02	*	●	23.5	25	32	74	56	149	0.395	SPMX07T308**	
ZSD03-240-XP25-SP07-02	*	●	24	25	32	75	56	150	0.406	SPMX07T308**	
ZSD03-245-XP25-SP07-02	*	●	24.5	25	32	77	56	152	0.423	SPMX07T308**	
ZSD03-250-XP25-SP07-02	*	●	25	25	32	78	56	153	0.431	SPMX07T308**	
ZSD03-255-XP25-SP07-02	*	●	25.5	25	32	80	56	155	0.44	SPMX07T308**	
ZSD03-260-XP25-SP07-02	*	●	26	25	32	81	56	156	0.453	SPMX07T308**	
ZSD03-265-XP25-SP07-02	*	●	26.5	25	32	83	56	158	0.467	SPMX07T308**	
ZSD03-270-XP25-SP07-02	*	●	27	25	32	84	56	160	0.504	SPMX07T308**	
ZSD03-275-XP25-SP07-02	*	●	27.5	25	32	86	56	162	0.682	SPMX07T308**	
ZSD03-280-XP32-SP09-02	*	●	28	32	37	87	60	169	0.707	SPMX090408**	

● Ex stock ○ On demand

\* Internal cooling

System code > C9

Grade selection > C8

Technical info > C201

Cutting data > C36



A

Turning

B

Milling

C

Drilling

D

Technical Information

E

Index

# Indexable drills Drilling bodies

A

Turning

B

Milling

C


Drilling

D

Technical Information

E



Index

Article	*	Stock	Dimensions [mm]							kg	Inserts 
			ØD	ØD1	ØD2	L1	L2	L			
ZSD03-290-XP32-SP09-02	*	•	29	32	37	90	60	172	0.739	SPMX090408**	
ZSD03-300-XP32-SP09-02	*	•	30	32	37	93	60	175	0.754	SPMX090408**	
ZSD03-310-XP32-SP09-02	*	•	31	32	37	96	60	178	0.771	SPMX090408**	
ZSD03-320-XP32-SP09-02	*	•	32	32	37	99	60	181	0.806	SPMX090408**	
ZSD03-330-XP32-SP09-02	*	•	33	32	37	102	60	184	0.847	SPMX090408**	
ZSD03-340-XP40-SP11-02	*	•	34	40	47	105	70	200	1.208	SPMX110408**	
ZSD03-350-XP40-SP11-02	*	•	35	40	47	108	70	203	1.248	SPMX110408**	
ZSD03-360-XP40-SP11-02	*	•	36	40	47	111	70	206	1.302	SPMX110408**	
ZSD03-370-XP40-SP11-02	*	•	37	40	47	114	70	209	1.341	SPMX110408**	
ZSD03-380-XP40-SP11-02	*	•	38	40	47	117	70	212	1.395	SPMX110408**	
ZSD03-390-XP40-SP11-02	*	•	39	40	47	120	70	215	1.447	SPMX110408**	
ZSD03-400-XP40-SP11-02	*	•	40	40	47	123	70	218	1.505	SPMX110408**	
ZSD03-410-XP40-SP11-02	*	•	41	40	47	126	70	221	1.549	SPMX110408**	
ZSD03-420-XP40-SP11-02	*	○	42	40	52	129	70	231	1.716	SPMX140512**	
ZSD03-430-XP40-SP14-02	*	•	43	40	52	132	70	234	1.656	SPMX140512**	
ZSD03-440-XP40-SP14-02	*	○	44	40	52	135	70	237	1.708	SPMX140512**	
ZSD03-450-XP40-SP14-02	*	○	45	40	52	138	70	240	1.776	SPMX140512**	
ZSD03-460-XP40-SP14-02	*	○	46	40	52	141	70	243	1.851	SPMX140512**	
ZSD03-470-XP40-SP14-02	*	○	47	40	52	144	70	245	1.924	SPMX140512**	
ZSD03-480-XP40-SP14-02	*	○	48	40	52	147	70	249	2.003	SPMX140512**	
ZSD03-490-XP40-SP14-02	*	○	49	40	52	150	70	252	2.094	SPMX140512**	
ZSD03-500-XP40-SP14-02	*	○	50	40	52	153	70	255	2.184	SPMX140512**	
ZSD03-510-XP50-SP14-02	*	○	51	50	57	156	80	268	2.882	SPMX140512**	
ZSD03-520-XP50-SP14-02	*	○	52	50	57	159	80	271	2.974	SPMX140512**	
ZSD03-530-XP50-SP14-02	*	○	53	50	57	162	80	274	3.071	SPMX140512**	
ZSD03-540-XP50-SP09-04	*	○	54	50	57	165	80	277	3.116	SPMX090408**	
ZSD03-550-XP50-SP09-04	*	○	55	50	57	168	80	280	3.208	SPMX090408**	
ZSD03-560-XP50-SP09-04	*	○	56	50	57	171	80	283	3.315	SPMX090408**	
ZSD03-570-XP50-SP09-04	*	○	57	50	57	174	80	286	3.499	SPMX090408**	
ZSD03-580-XP50-SP09-04	*	○	58	50	57	177	80	289	3.53	SPMX090408**	
ZSD03-590-XP50-SP09-04	*	○	59	50	57	180	80	292	3.649	SPMX090408**	
ZSD03-600-XP50-SP09-04	*	○	60	50	57	183	80	295	3.838	SPMX090408**	
ZSD03-610-XP50-SP09-04	*	○	61	50	57	186	80	298	3.961	SPMX090408**	
ZSD03-620-XP50-SP09-04	*	○	62	50	57	189	80	301	4.103	SPMX090408**	
ZSD03-630-XP50-SP09-04	*	○	63	50	57	192	80	304	4.238	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

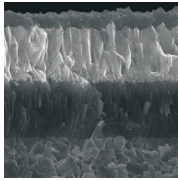

Technical info > C201

Cutting data > C36

**A**

Turning

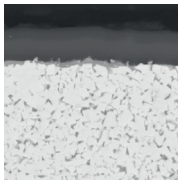
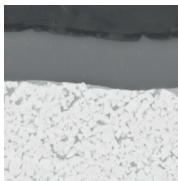
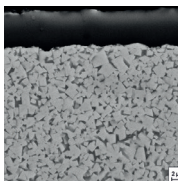
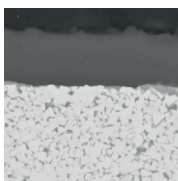
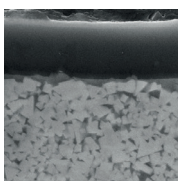
## Coated cemented carbide CVD

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**

Technical Information

**E**

Index

## Application fields of grades – indexable drills

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

B

Milling

C

Drilling

D

Technical Information

E

Index