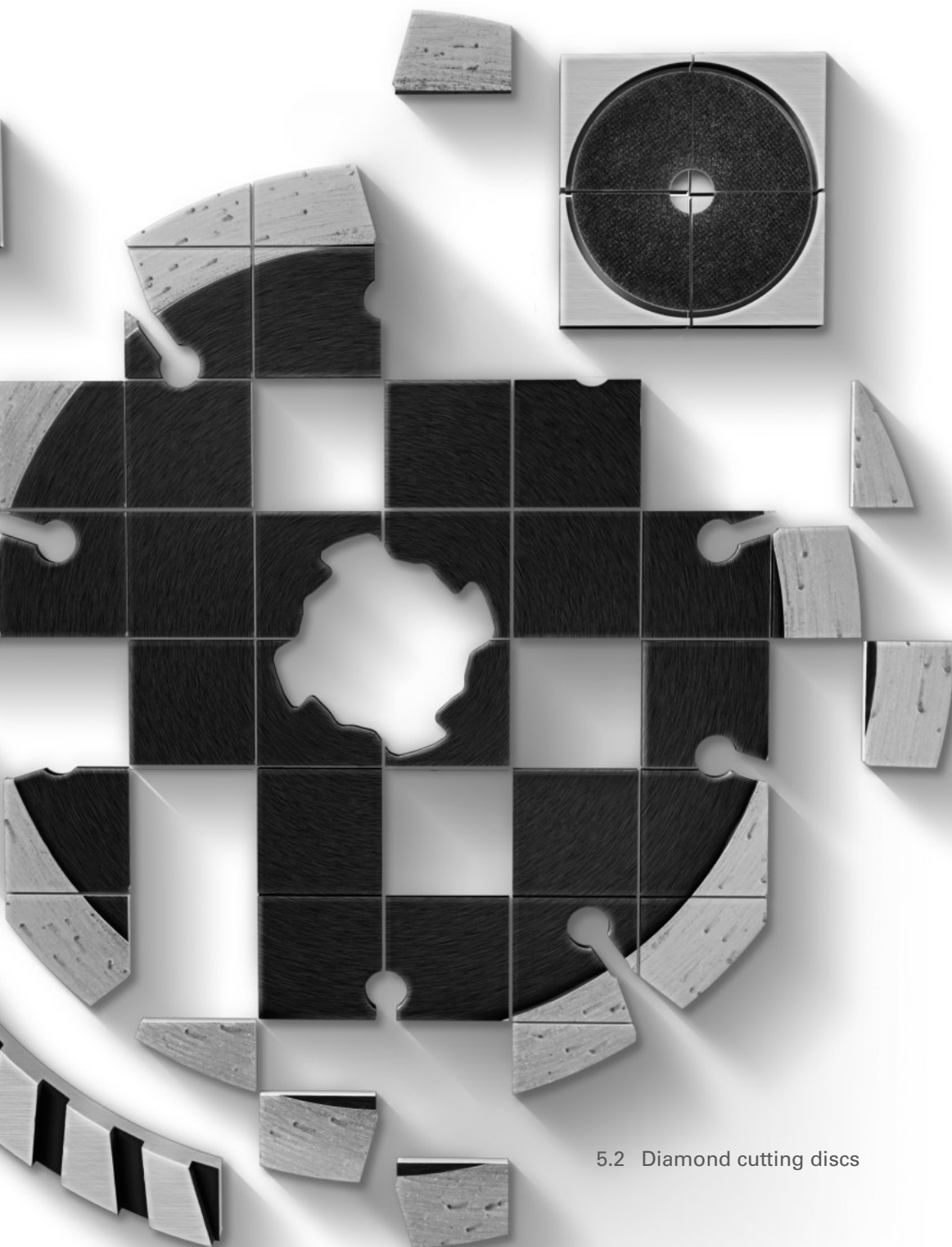


CUTTING

5.2 Diamond cutting discs

1–10



TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS diamond cutting discs

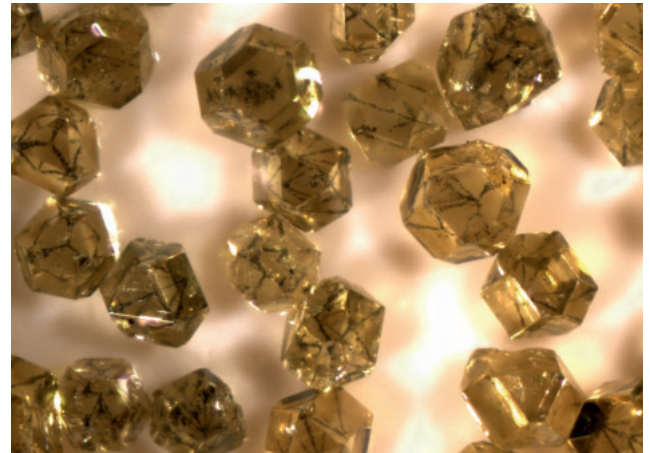
DIAMOND

Diamond is the hardest material in the world. The type of diamond chosen depends on what it is used for. Only synthetic diamonds are used for the diamond cutting discs. Unlike natural diamonds, their properties can be reproduced and controlled.

The following characteristics are significant when selecting diamonds:

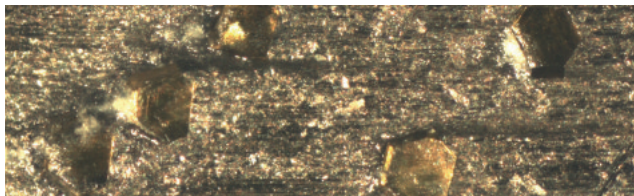
- degree of purity
- defined fracture strength
- sharp edges
- consistent geometry

Diamonds are classified by quality levels and grit sizes.



SEGMENT

The segments consist of a diamond-embedded metal powder. The metal bond must be suited to the material to be cut. The metal powder consists of bronze, cobalt, iron, carbide, or tungsten carbide, for example. The various characteristics of the metal powder give the segment sharpness and the all-important wear resistance. The segment coating is produced by a sintering process. A hard bond is selected for abrasive construction materials, while a soft bond is needed for hard structural materials.



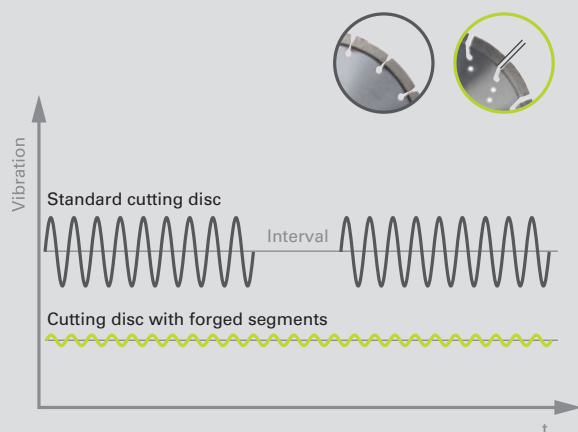
SEGMENT GEOMETRY

The patented forged segment geometry allows even tall segments to be arranged very close to each other. This significantly reduces vibration for the user. Another crucial advantage is safety. The dense, porelessly forged segments have welds that provide much more safety against fracturing compared to the usual sintered segments.

- universal and fast due to new types of alloys in the segments
- less vibration through trapezium segment geometry
- more safety due to segment feet that are poreless and provide the utmost safety against fracturing
- long tool life thanks to taller segments and slower rate of diamond shedding

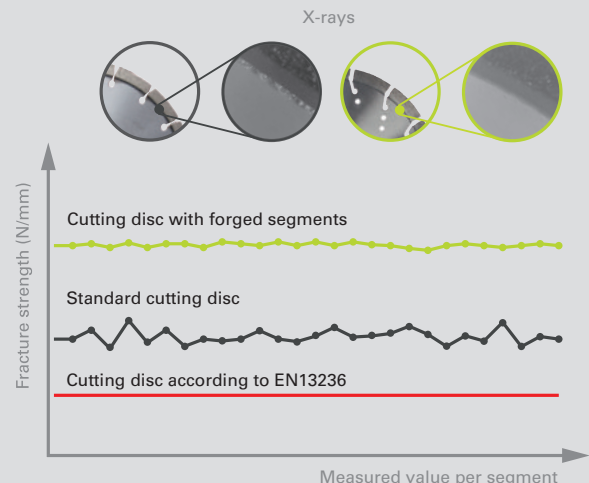
COMPARISON OF CUTTING PROPERTIES

Low-vibration, narrow-gap cutting discs compared to cutting discs with forged segment



WELDING PROPERTIES OF FORGED SEGMENTS

Highest level of safety against fracturing



USAGE INSTRUCTIONS

The right disc for your application

LUKAS has diamond cutting discs for a variety of materials. Whether you are working with concrete, tile or asphalt, you'll

find the perfect tool for every application. Select the material that you want to cut from the table below.

<div><div></div>best suitable<div></div>suitable</div>			Tile			Granite, hard materials			Concrete			Building material				Asphalt, abrasive materials				
Page	Product	Product line	Tile	Fine stoneware	Granite tile	Granite	Porphyry	Clinker brick	Reinforced concrete	Exposed aggregate concrete	Concrete products	Brick, masonry	Roof tiles	Gas concrete, pumice	Sand-lime brick	Refractory bricks	Screed	Fresh concrete	Asphalt	Grey iron
Segmented diamond cutting discs																				
4	VDC	★★★★																		
5	ASPHALT																			
5	REINFORCED																			
6	3 STAR SEGMENTED																			
7	2 STAR SEGMENTED	★★★☆☆																		
7	1 STAR SEGMENTED	★☆☆☆☆																		
Turbo cutting discs																				
8	3 STARTURBO	★★★★																		
8	2 STARTURBO	★★★☆☆																		
Continuous cutting discs																				
9	3 STAR CONTINUOUS	★★★★																		
10	2 STAR CONTINUOUS	★★★☆☆																		
10	1 STAR CONTINUOUS	★☆☆☆☆																		

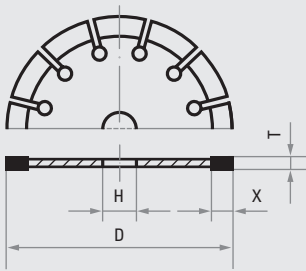
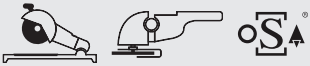
VDC – AGGRESSIVE APPLICATION
WITH EXTREME TOOL LIFE

STAYS COOL. NO DUST OR ODOURS. NO EXPIRY DATE.



CUTTING

VDC diamond cutting disc



★★★

- the diamond cutting disc that revolutionised cutting cast iron
- ideal for cutting cast iron (GG, GGG), fibreglass reinforced plastics (GFRP) and mineralisation
- not suitable for high-alloy materials containing nickel!

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DD115202203024	VDC 115.2.22 DIA	115	7.0	2.2	22.23	13,200	1
7DD230302203024	VDC 230.3.22 DIA	230	7.0	3.0	22.23	6,600	1
7DD350362503024	VDC 350.36.25 DIA	350	7.0	3.6	32.00	4,400	1

Recommended for: ● Stone/Construction material ● Cast material ● Plastic

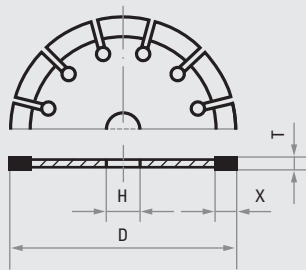
HARD DIAMOND BOND FOR ASPHALT CUTTING

HIGHER SEGMENTS FOR EXTENDED TOOL LIFE

Asphalt diamond cutting disc



- perfect for cutting concrete, green concrete and asphalt
- specially formed segments for high running smoothness and core protection
- laser-welded joints
- wet application



★★★

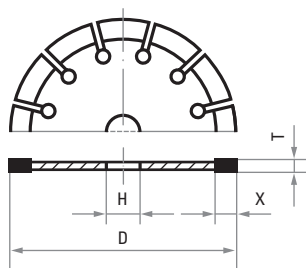
Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB350302502003	ASPHALT 350.3.25 DIA	350	10	3.2	25.4	4,300	1

Recommended for: ● Stone/Construction material

Reinforced concrete diamond cutting disc



- perfect for cutting concret
- specially formed segments for high running smoothness and core protection
- laser-welded joints
- wet application



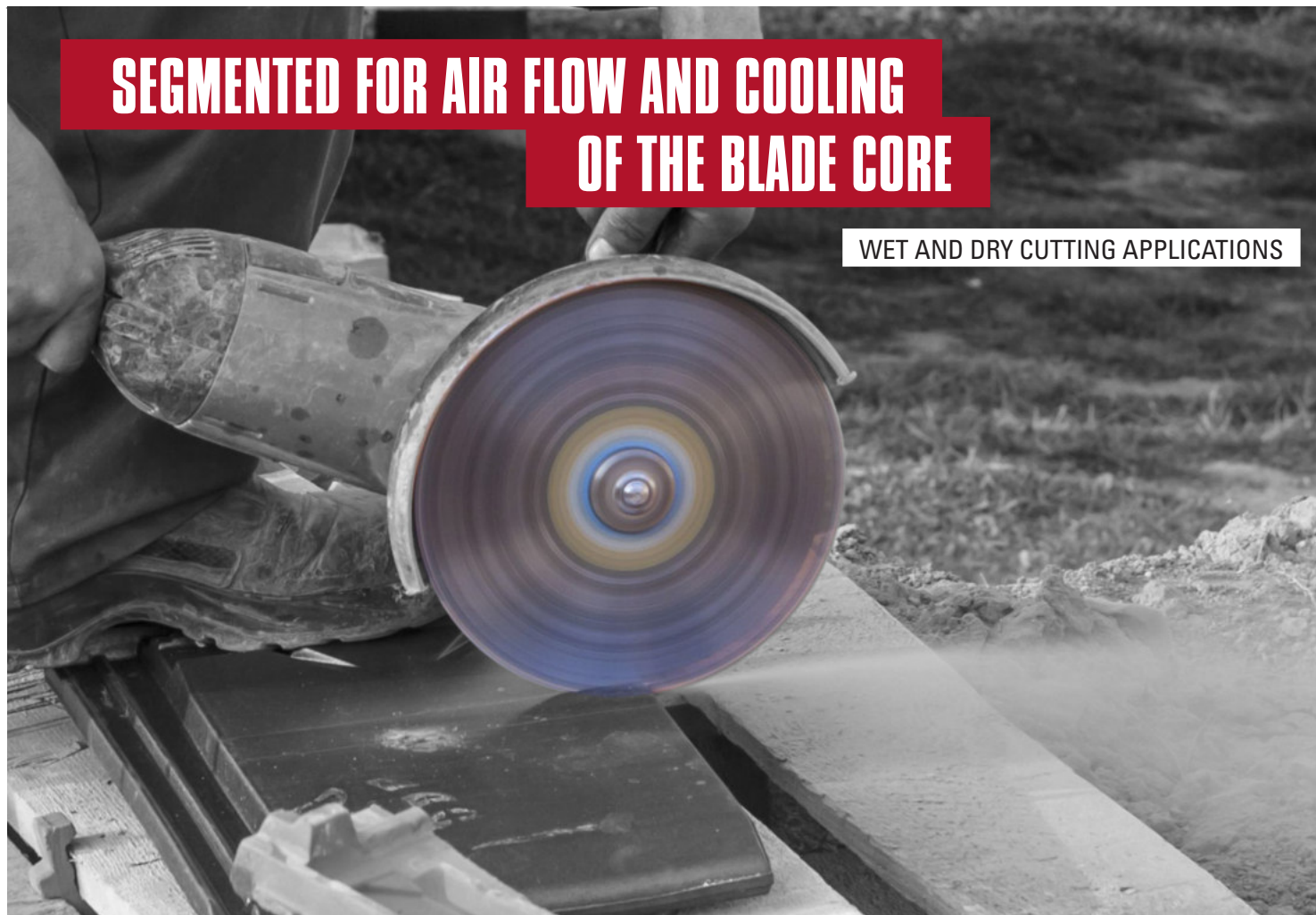
★★★

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB350302500003	REINFORC CON 350.3.25 DIA	350	10	3.2	25.4	4,300	1
7DB450302501003	REINFORC CON 450.36.60 DIA	450	12	3.6	60.0	3,400	1

Recommended for: ● Stone/Construction material

SEGMENTED FOR AIR FLOW AND COOLING OF THE BLADE CORE

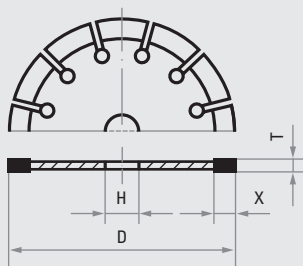
WET AND DRY CUTTING APPLICATIONS



Segmented diamond cutting disc



★★★



- professional disc for dry cutting of concrete and construction materials
- extremely versatile with optimum cutting speed
- long tool life
- Trapezium-shaped segments ensure low vibration.
- segment produced using forge technology

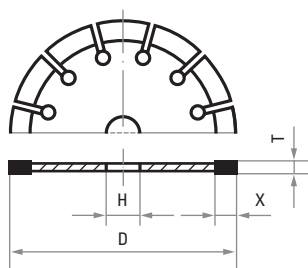
Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302201003	3STR 115.30.22 SEG DIA	115	7	1.8	22.23	13,200	1
7DB125302201003	3STR 125.30.22 SEG DIA	125	7	1.9	22.23	12,200	1
7DB180302201003	3STR 180.30.22 SEG DIA	180	7	2.2	22.23	8,400	1
7DB180302501003	3STR 180.30.25 SEG DIA	180	7	2.2	25.00	8,400	1
7DB230302201003	3STR 230.30.22 SEG DIA	230	7	2.4	22.23	6,600	1
7DB350302501003	3STR 350.30.25 SEG DIA	350	10	3.2	25.00	5,500	1
7DB400302501003	3STR 400.30.25 SEG DIA	400	10	3.6	25.00	4,800	1

Recommended for: ● Stone/Construction material



Segmented diamond cutting disc

- For universal applications but highly versatile with a high cutting rate in reinforced concrete and construction material
- dry cutting of masonry and concrete applications
- excellent price-performance ratio
- laser-welded joints



★★☆

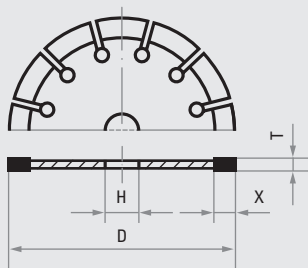
Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302201103	2STR 115.30.22 SEG DIA	115	8	2.4	22.23	13,200	1
7DB230302201103	2STR 230.30.22 SEG DIA	230	8	2.4	22.23	6,600	1

Recommended for: ● Stone/Construction material



Segmented diamond cutting disc

- especially popular on construction sites
- excellent price-performance ratio



★☆☆

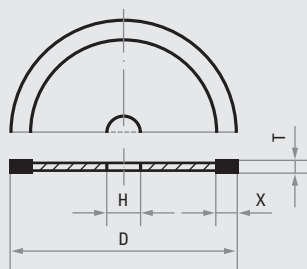
Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302201503	1STR 115.30.22 SEG DIA	115	8	2.0	22.23	13,200	1
7DB230302201503	1STR 230.30.22 SEG DIA	230	8	2.0	22.23	6,600	1

Recommended for: ● Stone/Construction material

HIGH CUTTING RATE

INTEGRATED INTERWEAVING DIAMOND MATRIX

TURBO diamond cutting disc



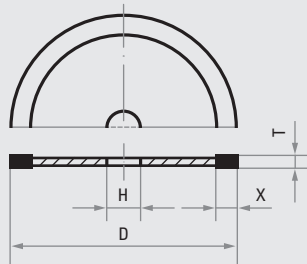
- ideal for cleanly cutting construction materials or concrete
- suitable for various applications
- wet or dry cutting of masonry, concrete and marble
- cut granite with "chip-free" cut

★★★★

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302202003	3STR 115.30.22 TRB DIA	115	7.0	1.9	22.23	13,200	1
7DB125302202003	3STR 125.30.22 TRB DIA	125	7.0	2.0	22.23	12,200	1
7DB180302202003	3STR 180.30.22 TRB DIA	180	7.0	2.2	22.23	8,400	1
7DB180302502003	3STR 180.30.25 TRB DIA	180	7.0	2.2	22.23	8,400	1
7DB230302202003	3STR 230.30.22 TRB DIA	230	7.5	2.6	22.23	6,600	1

Recommended for: ● Stone/Construction material

TURBO diamond cutting disc



- the turbo disc for precise cutting
- great price-performance ratio
- wet or dry cutting of masonry, concrete and marble
- cut granite with "chip-free" cut

★★★☆☆

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302202103	2STR 115.30.22 TRB DIA	115	7.0	1.9	22.23	13,200	1
7DB230302202103	2STR 230.30.22 TRB DIA	230	7.5	2.6	22.23	6,600	1

Recommended for: ● Stone/Construction material

LUKAS CONTINUOUS CUT DIAMOND CUTTING BLADE

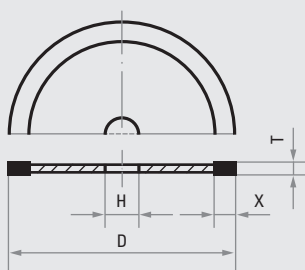
CONTINUOUS CUT FOR AN INCREASED QUALITY OF CUT

CUTTING



Continuous diamond cutting disc

- extra-thin diamond cutting disc for ceramic and fine stone applications
- cuts through the hardest tiles quickly and cleanly
- wet cutting of ceramics, masonry and marble

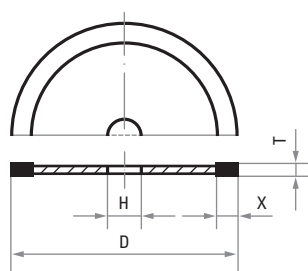


★★★

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302203003	3STR 115.30.22 CON DIA	115	6.5	1.8	22.23	13,200	1
7DB125302203003	3STR 125.30.22 CON DIA	125	6.5	1.9	22.23	12,200	1
7DB180302203003	3STR 180.30.22 CON DIA	180	6.5	2.0	22.23	8,400	1
7DB200302503003	3STR 200.30.25 CON DIA	200	7.0	2.2	25.4	7,600	1
7DB230302203003	3STR 230.30.22 CON DIA	230	5.0	2.4	22.23	6,600	1
7DB250302503003	3STR 250.30.25 CON DIA	250	7.0	2.4	25.4	6,100	1
7DB300302503003	3STR 300.30.25 CON DIA	300	7.0	3.0	25.4	6,100	1

Recommended for: ● Stone/Construction material

Continuous diamond cutting disc



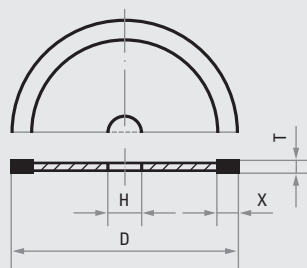
★★☆

- the popular choice cutting discs for tile and ceramic
- also cuts exactly through glazed ceramic

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302203103	2STR 115.30.22 CON DIA	115	7.5	1.8	22.23	13,200	1
7DB230302203103	2STR 230.30.22 CON DIA	230	7.5	2.4	22.23	6,600	1

Recommended for: ● Stone/Construction material

Continuous diamond cutting disc



★★☆

- cuts through tiles with ease
- excellent price-performance ratio

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n _{max} rpm	Pack contains
7DB115302203503	1STR 115.30.22 CON DIA	115	7.5	1.8	22.23	13,200	1
7DB230302203503	1STR 115.30.22 CON DIA	125	7.5	2.4	22.23	6,600	1

Recommended for: ● Stone/Construction material