TECHNICAL SPECIFICATIONS

SNAP DRILL

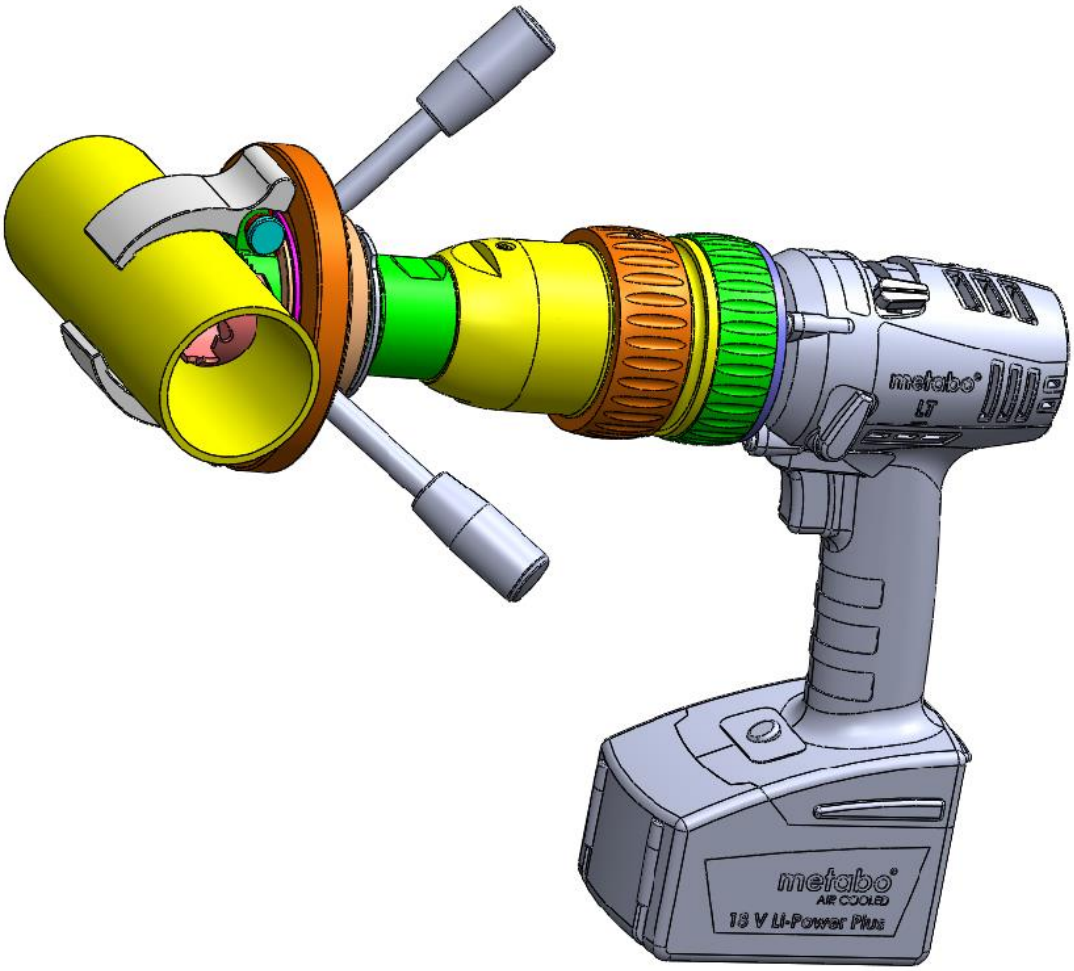


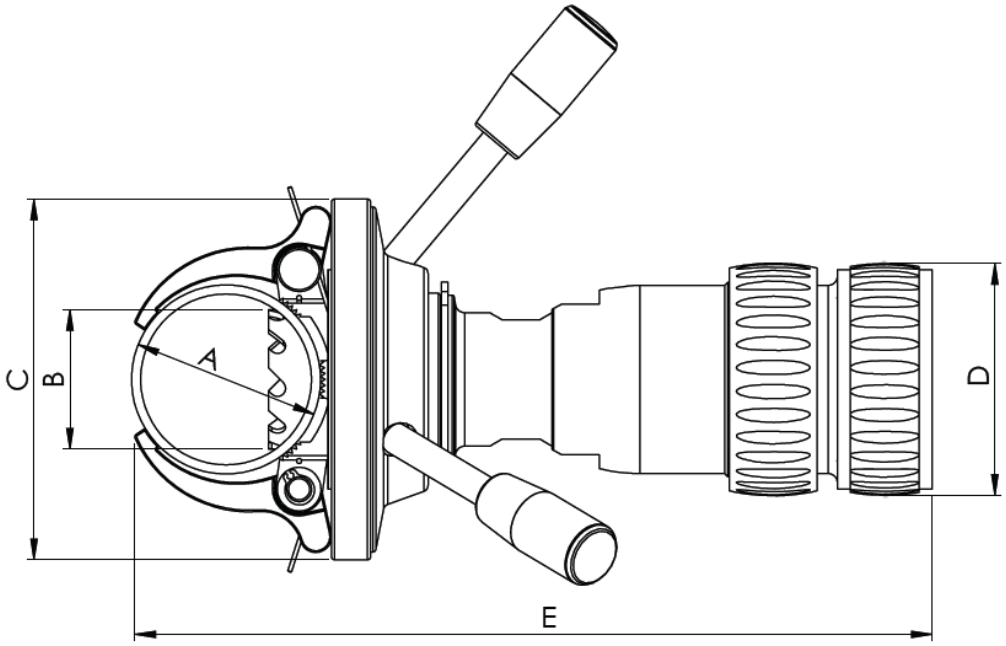
TABLE OF CONTENTS

CE

1 Description

The Snapdrill connects to a standard battery drill, and is a new patented tool for safe and efficient hole cutting in pipes. The tools cover pipes with an external diameter of Ø33,7 up to and included Ø219,1 mm, and drill holes from Ø17.2 up to and included Ø114.3 mm

2 Dimensions and weight



Snapdrill	SD33	SD42/SD48	SD60	SD76	SD88	SD114	SD168A	SD168B	SD168C	SD168H	SD219
Tube ØA (mm)	33,7	42,4 and 48,3	60,3	76,1	88,9	114,3	168,3	168,3	168,3	168,3	219,1
Diameter ØC (mm)	95	95	114	124	124	139	139	159,2	184,2	159,2	159,2
Diameter ØD (mm)	74	74	74	74	74	74	74	74	74	74	74
Length E (mm)	224	239,5	259	271	285	301	349,5	350	386	386	373
Weight (kg)	2,74	2,4	2,9	3,21	3	4,1	4,81	5,84	6,22	5,11	5

3 Hole cutters

SD42/SD48 Tube diameter Ø42,4 mm

Hole cutter part no	SD017S [1])	SD021S [1])	SD024S [1])	SD027S [1])	SD030S [1])	SD033S [1])
Hole cutter diameter ØB (mm)	17,2	21,3	24	27	30	33,7
Maximum wall thickness of tube (mm)	7,5	6,2	5,1	3,9	2,7	1,5

SD42/SD48 Tube diameter Ø48,3 mm

Hole cutter part no	SD017S [1])	SD021S [1])	SD024S [1])	SD027S [1])	SD030S [1])	SD033S [1])
Hole cutter diameter ØB (mm)	17,2	21,3	24	27	30	33,7
Maximum wall thickness of tube (mm)	6,4	5,1	4,4	3,4	2,4	1,4

SD60 Tube diameter Ø60,3 mm

Hole cutter part no	SD021L	SD024L	SD027L	SD030L	SD033L	SD038L	SD042L	SD044L	SD046L
Hole cutter diameter ØB (mm)	21,3	24	27	30	33,7	38,1	42,4	44,5	46
Maximum wall thickness of tube (mm)	12,5	11,5	10,5	9,5	8,2	6,4	4,7	4,2	3,4

SD76 Tube diameter Ø76,1 mm

Hole cutter part no	SD021L	SD024L	SD027L	SD030L	SD033L	SD038L	SD042L	SD044L	SD046L
Hole cutter diameter ØB (mm)	21,3	24	27	30	33,7	38,1	42,4	44,5	46
Maximum wall thickness of tube (mm)	14	13,5	13	12	10,8	9,3	7,8	7,1	6,6

SD76 Tube diameter Ø76,1 mm

Hole cutter part no	SD048L	SD050L	SD054L
Hole cutter diameter ØB (mm)	48,3	50,8	54
Maximum wall thickness of tube (mm)	5,7	4,8	3,5

SD88 Tube diameter Ø88,9 mm

Hole cutter part no	SD021L	SD024L	SD027L	SD030L	SD033L	SD038L	SD042L	SD044L	SD046L
Hole cutter diameter ØB (mm)	21,3	24	27	30	33,7	38,1	42,4	44,5	46
Maximum wall thickness of tube (mm)	16	15,5	15	14,2	13,2	12	10,7	9,9	9,5

SD88 Tube diameter Ø88,9 mm

Hole cutter part no	SD048L	SD050L	SD054L	SD060L	SD063L
Hole cutter diameter ØB (mm)	48,3	50,8	54	60,3	63,5
Maximum wall thickness of tube (mm)	8,7	7,7	6,7	4,4	3,2

SD114 Tube diameter Ø114,3 mm

Hole cutter part no	SD021L	SD024L	SD027L	SD030L	SD033L	SD038L	SD042L	SD044L	SD046L
Hole cutter diameter ØB (mm)	21,3	24	27	30	33,7	38,1	42,4	44,5	46
Maximum wall thickness of tube (mm)	15,4	15	14,5	14	13,4	12,5	11,5	11	10,7

SD114 Tube diameter Ø114,3 mm

Hole cutter part no	SD048L	SD050L	SD054L	SD060L	SD063L	SD070L
Hole cutter diameter ØB (mm)	48,3	50,8	54	60,3	63,5	70
Maximum wall thickness of tube (mm)	10,1	9,4	8,5	6,7	5,7	3,8

SD168A Tube diameter Ø168,3 mm

Hole cutter part no	SD021L	SD024L	SD027L	SD030L	SD033L	SD038L	SD042L	SD044L	SD046L
Hole cutter diameter ØB (mm)	21,3	24	27	30	33,7	38,1	42,4	44,5	46
Maximum wall thickness of tube (mm)	12,5	12,3	12	11,7	11,3	10,7	10,2	9,9	9,7

SD168A Tube diameter Ø168,3 mm

Hole cutter part no	SD048L	SD050L	SD054L	SD060L	SD063L	SD070L
Hole cutter diameter ØB (mm)	48,3	50,8	54	60,3	63,5	70
Maximum wall thickness of tube (mm)	9,3	8,9	8,3	7,1	6,5	5,5

1) Note that for cutter Ø21,3 / Ø24 / Ø27 / Ø30 / Ø33,7 there is a short (S) and a long (L) version.

4 Safety

1. Check HSE rules and regulations
2. Make inspection of tool before starting
3. Emphasize the clamping danger
4. Supply data sheets of the tube

It is recommended to wear protective footwear, goggles, hard hat, hearing protection and gloves to handle metal chips.

5 Instructions for use

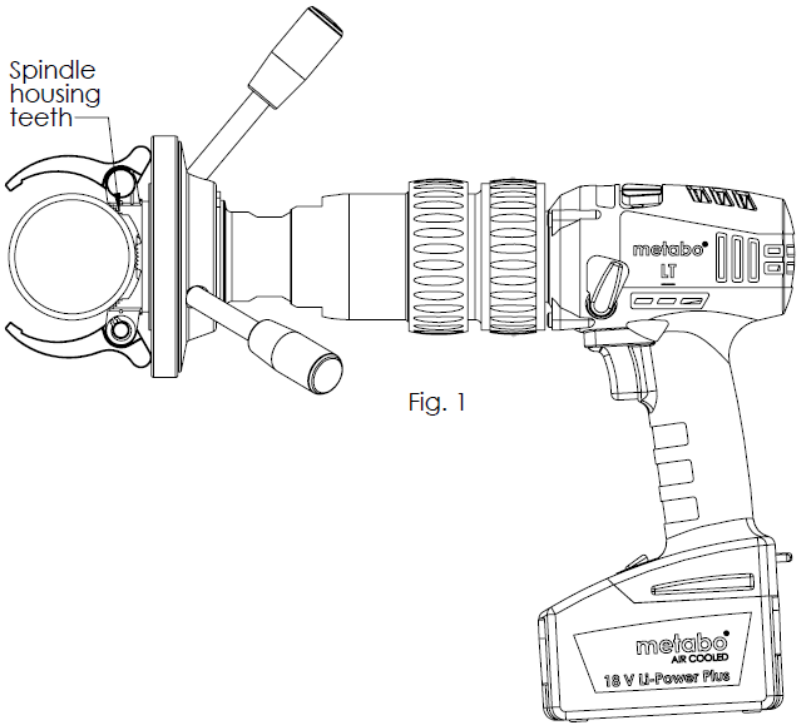


Fig. 1

1. Referring to fig. 1, place the teeth in the spindle housing against the tube where to drill the hole.

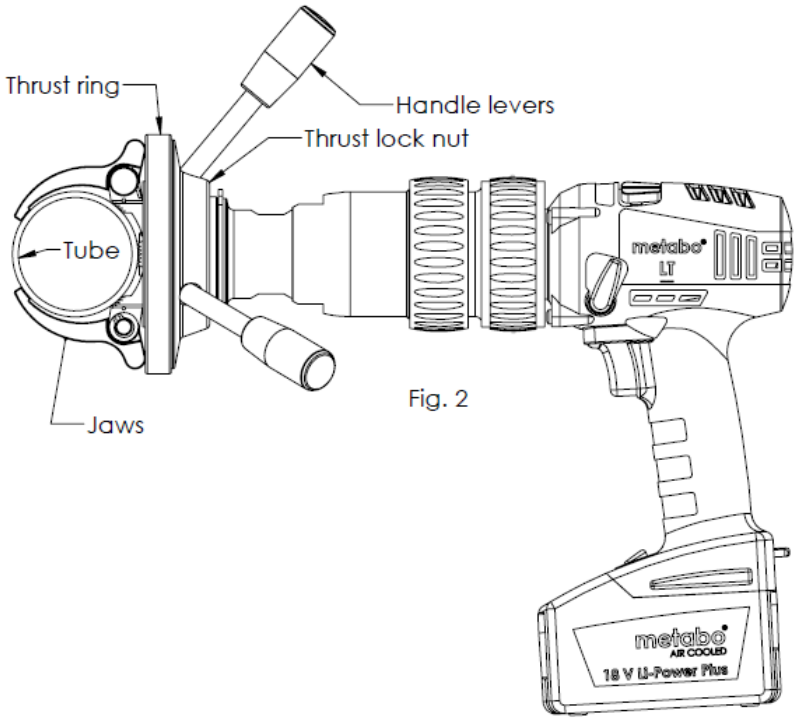


Fig. 2

2. Referring to fig. 2, fasten the snap drill to the tube by tightening the jaws against the tube by rotating the thrust lock nut clockwise against the thrust ring by the help of the handle levers. Use both hands for final tightening.

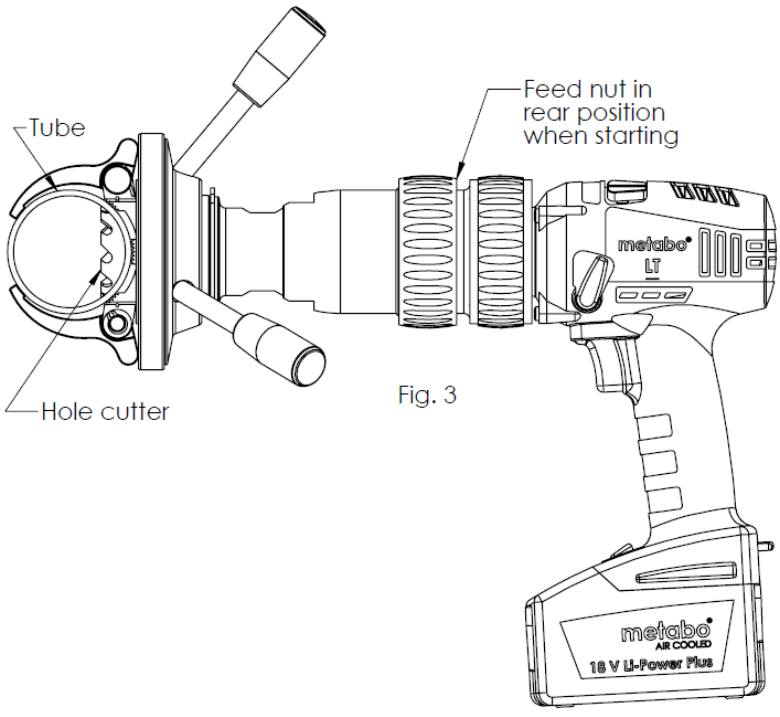


Fig. 3

3. Referring to fig. 3, check that the feed nut is in the rear position before start. Lubrication directly in the hole saw ahead of drilling is recommended. Use the battery drills “drilling mode” (drill symbol) on the torque switch. Use battery drill gear stage 1. Start the battery drill clockwise pushing the button fully down to achieve full torque. Gently rotate the feed nut outwards to engage the clutch. The hole cutter will now move outwards and cut the hole in the tube. Drill continuously, until the hole saw is fully through the pipe.

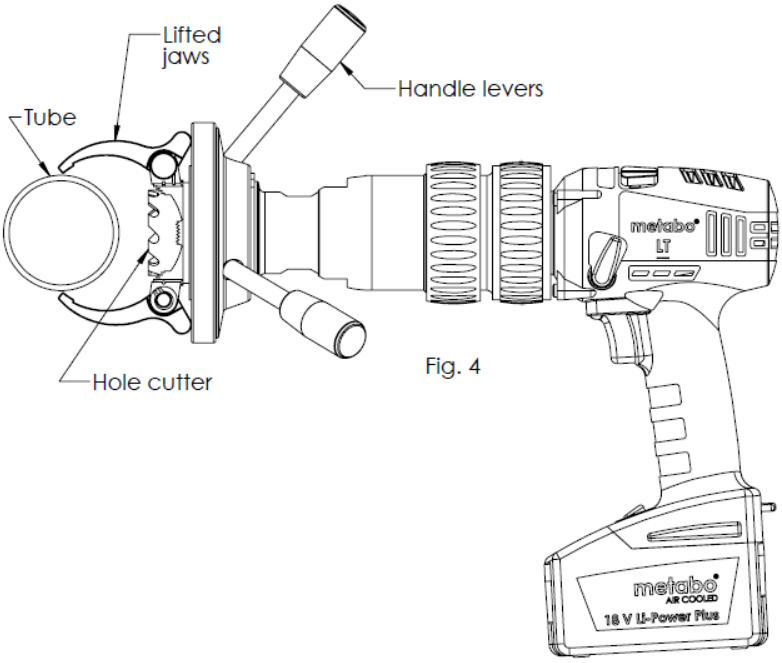


Fig. 4

4. Referring to fig. 4, loosen the jaws by rotating the thrust lock nut anticlockwise. The torsion springs will lift up the jaws thus enable the snap drill to be pulled free.

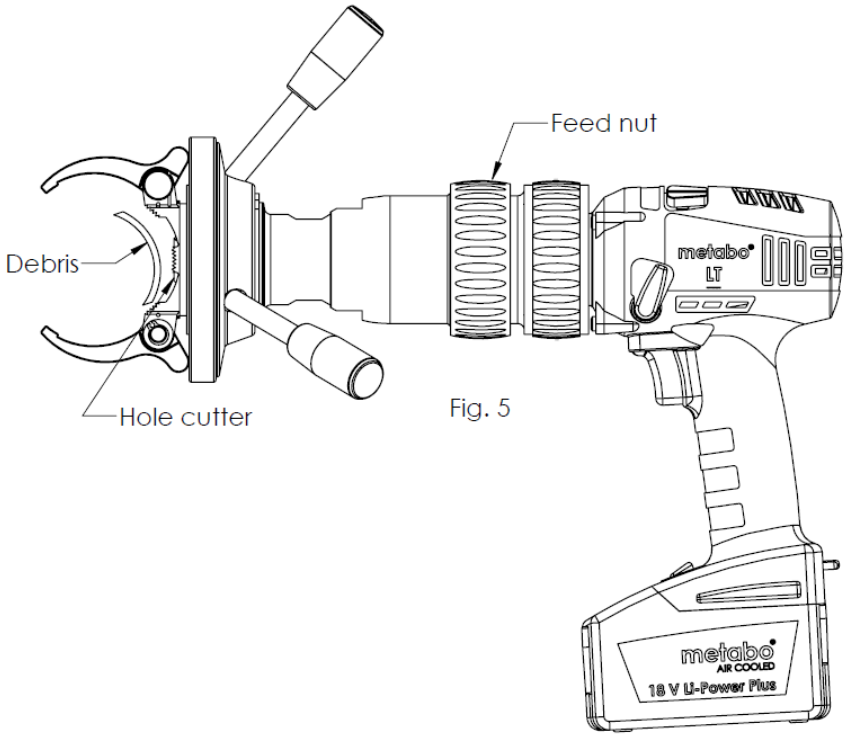


Fig. 5

5. Referring to fig. 5, get rid of the debris by rotating the drill anticlockwise and gently rotate the feed nut outwards to engage the clutch. The hole cutter will now move backwards pushing the debris against the hexagon drive shaft thus throwing it free from the hole cutter.

6 Changing of hole cutter

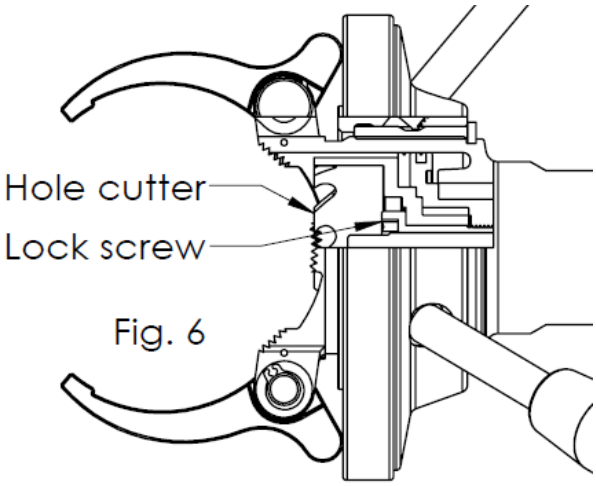


Fig. 6

1. Referring to fig. 6, screw out lock screw and remove the hole cutter.

2. Thoroughly clean all visible parts. Using air pressure to clean is not recommended. Insert the new hole cutter.

3. It is important that the battery drill is set to gear stage 1. Fasten the hole cutter with the custom socket and flex handle.
4. The table below gives the hole cutter part number and its size that fit for each SnapDrill. Note that for cutters Ø21,3 / Ø24 / Ø27 / Ø30 / Ø33,7 there is a short (S) and a long (L) version.

SnapDrill part number and pipe size (mm)	**SD33** Ø33,7	**SD42/SD48** Ø42,4 and Ø48,3	**SD60** Ø60,3	**SD76** Ø76,1	**SD88** Ø88,9	**SD114** Ø114,3
Hole cutter part number and cutter size (mm)	SD027S -Ø27 SD024S -Ø24 SD021S -Ø21,3 SD017S -Ø17,2	SD033S -Ø33,7 SD030S -Ø30 SD027S -Ø27 SD024S -Ø24 SD021S -Ø21,3 SD017S -Ø17,2	SD046L -Ø46 SD044L -Ø44,5 SD042L -Ø42,4 SD038L -Ø38,1 SD033L -Ø33,7 SD030L -Ø30 SD027L -Ø27 SD024L -Ø24 SD021L -Ø21,3	SD054L -Ø54 SD050L -Ø50,8 SD048L -Ø48,3 SD046L -Ø46 SD044L -Ø44,5 SD042L -Ø42,4 SD038L -Ø38,1 SD033L -Ø33,7 SD030L -Ø30 SD027L -Ø27 SD024L -Ø24 SD021L -Ø21,3	SD063L -Ø63,5 SD060L -Ø60,3 SD054L -Ø54 SD050L -Ø50,8 SD048L -Ø48,3 SD046L -Ø46 SD044L -Ø44,5 SD042L -Ø42,4 SD038L -Ø38,1 SD033L -Ø33,7 SD030L -Ø30 SD027L -Ø27 SD024L -Ø24 SD021L -Ø21,3	SD070L -Ø70 SD063L -Ø63,5 SD060L -Ø60,3 SD054L -Ø54 SD050L -Ø50,8 SD048L -Ø48,3 SD046L -Ø46 SD044L -Ø44,5 SD042L -Ø42,4 SD038L -Ø38,1 SD033L -Ø33,7 SD030L -Ø30 SD027L -Ø27 SD024L -Ø24 SD021L -Ø21,3

SnapDrill part number and pipe size (mm)	SD168A Ø168,3	SD168B Ø168,3	SD168C Ø168,3	SD168H Ø168,3	SD219 Ø219,1
Hole cutter part number and cutter size (mm)	SD070L -Ø70 SD063L -Ø63,5 SD060L -Ø60,3 SD054L -Ø54 SD050L -Ø50,8 SD048L -Ø48,3 SD046L -Ø46 SD044L -Ø44,5 SD042L -Ø42,4 SD038L -Ø38,1 SD033L -Ø33,7 SD030L -Ø30 SD027L -Ø27 SD024L -Ø24 SD021L -Ø21,3	SD090L -Ø90 SD088L -Ø88,9 SD076L -Ø76,1	SD114C -Ø114,3	SD090H -Ø90 SD063H -Ø63,5	SD100L -Ø100 SD090L -Ø90 SD070L -Ø70 SD063L -Ø63,5 SD050L -Ø50,8 SD044L -Ø44,5 SD038L -Ø38,1 SD030L -Ø30 SD024L -Ø24

7 List of spare parts

Name	Description
42,4/48,3-JAW	Replacement jaw (2) for SD42,4/48,3 with brass bolt and spring (2) and circlip (2)
60,3-JAW	Replacement jaw (2) for SD60,3 with brass bolt and spring (2) and circlip (2)
76,1-JAW	Replacement jaw (2) for SD76,1 with brass bolt and spring (2) and circlip (2)
88,9-JAW	Replacement jaw (2) for SD88,9 with brass bolt and spring (2) and circlip (2)
114,3-JAW	Replacement jaw (2) for SD114,3 with brass bolt and spring (2) and circlip (2)
168,3-JAW	Replacement jaw (2) for SD168,3 with brass bolt and spring (2) and circlip (2)
219,1-JAW	Replacement jaw (2) for SD219,1 with brass bolt and spring (2) and circlip (2)
M8-Handles	Replacement handles (3) for SD42,4/48,3 up to SD76,1 with locking-washers (6)
M10-Handles	Replacement handles (3) for SD88,9 up to SD219,1 with locking-washers (6)
Level Bubble	Replacement level bubble
Level Bracket	Replacement 3-position level bracket (with level bubble)
SD-Bolt	Hex bolt for hole saw fastening
SD-Flex handle	Flex handle for hex nut
SD-Socket	Hex socket for fastening of SD-Bolt