



HSS hole saws made of shatter-proof and tough HSS bimetal are used on drilling machines and hand-held drills.

Advantages:

- Cost-effective sawing of round cut-outs
- Can be used on diverse materials such as alloyed and non-alloyed steels, stainless steel (INOX), aluminium, copper, bronze, brass, wood, plastics etc. (please observe the recommendations for use on stainless steel)
- Chattering during sawing is prevented by an alternating tooth pitch of the hole saw
- A selection of the most common HSS hole saws in sets for tradesmen, fitters, electricians and mechanics
- The hole saws are centred and guided via the HSS pilot drill (supplied with compression spring for improved ejection of the sawn material)

Recommendations for use:

- Clamp the pilot drill in the hole saw arbor and make sure that it projects at least 3 mm (1/8") over the teeth of the hole saw.
- When cutting metals, use a high-quality cutting oil, if possible. This facilitates smooth running and lengthens the hole saw life.
- **Exceptions:** When working on aluminium, use kerosene instead of cutting oil.
- HSS hole saws are suitable for work on stainless steel (INOX). Remove any particles which develop during use from the workpiece in order to avoid corrosion. Clean the workpiece chemically or mechanically (etching/polishing, etc.).
- Make sure that all the teeth are applied evenly. Avoid swinging movements during sawing to prevent tooth breakage.
- Avoid overheating.



Safety notes:

When using shank extensions, the recommended hole saw rotational speed must not be exceeded. Risk of accidents!



= Wear eye protection!



= Observe the recommended rotational speed!

Application examples for HSS hole saws and TC hole cutters

Dia. [mm]	Application examples	Dia. [mm]	Application examples
25.0	Plumbing and heating pipes	60.0	Built-in lights dia. 60 mm
30.0	Plumbing and heating pipes	68.0	Pattress boxes dia. 68 mm
32.0	Sink fittings dia. 32 mm	70.0	Hollow wall junction boxes dia. 70 mm
35.0	Plumbing and heating pipes, hollow wall junction boxes, halogen spots	74.0	Hollow wall junction boxes dia. 74 mm
40.0	Plumbing and waste pipes	80.0	Distribution boxes, built-in lights, cable opening covers dia. 80 mm
45.0	Water and heating pipes	90.0	Built-in lights dia. 90 mm
50.0	Water and heating pipes with insulation	105.0	Waste air pipes
55.0	Built-in lights dia. 55 mm		



Please refer to table below for maximum cutting depth.

Thread:

LS 14-LS 30 = 1/2-20
LS 32-LS 152 = 5/8-18

Suitable arbors:

LS 14-LS 30 = LSS 1, LSS 4
S 32-LS 152 = LSS 2

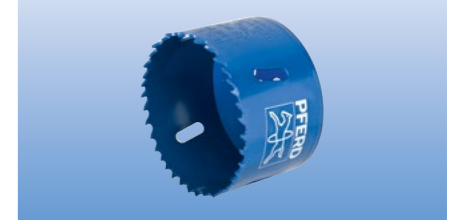
Ordering note:

Please order hole saw arbors separately. More detailed information and ordering data for hole saw arbors can be found on page 78.

Ordering example:

EAN 4007220319086
LS 14

HSS hole saws



Description	EAN 4007220	Dia. d [mm]	Dia. d [inch]	Max. cutting depth [mm]	Max. cutting depth [inch]	Rec. [RPM] Steel	Rec. [RPM] Stainless steel (INOX)	Rec. [RPM] Non-ferrous metals	Rec. [RPM] Plastic	
LS 14	319086	14	9/16	34	1 5/16	620	310	800	1,000	1
LS 16	062319	16	5/8	34	1 5/16	550	275	730	880	1
LS 17	319093	17	11/16	36	1 7/16	520	260	680	820	1
LS 19	062326	19	3/4	36	1 7/16	460	230	600	740	1
LS 20	062333	20	-	36	1 7/16	425	210	560	700	1
LS 21	319109	21	13/16	36	1 7/16	410	205	540	670	1
LS 22	062340	22	7/8	36	1 7/16	390	195	520	640	1
LS 24	319116	24	15/16	36	1 7/16	360	180	470	580	1
LS 25	062357	25	1	36	1 7/16	350	175	470	560	1
LS 27	062364	27	1 1/16	36	1 7/16	325	160	435	520	1
LS 29	062371	29	1 1/8	36	1 7/16	300	150	400	480	1
LS 30	062388	30	1 3/16	36	1 7/16	285	145	380	470	1
LS 32	062395	32	1 1/4	36	1 7/16	275	140	360	440	1
LS 33	062401	33	1 5/16	36	1 7/16	260	135	345	420	1
LS 35	062418	35	1 3/8	36	1 7/16	250	125	330	400	1
LS 37	319123	37	1 7/16	36	1 7/16	235	115	310	370	1
LS 38	062425	38	1 1/2	36	1 7/16	230	115	300	370	1
LS 40	319130	40	1 9/16	36	1 7/16	215	110	280	350	1
LS 41	062432	41	1 5/8	36	1 7/16	210	105	280	340	1
LS 43	319147	43	1 11/16	31	1 1/4	200	100	260	330	1
LS 44	062449	44	1 3/4	31	1 1/4	195	95	260	320	1
LS 46	319154	46	1 13/16	31	1 1/4	185	90	250	300	1
LS 48	062456	48	1 7/8	31	1 1/4	180	90	240	290	1
LS 51	062463	51	2	31	1 1/4	170	85	230	270	1
LS 52	319161	52	2 1/16	31	1 1/4	165	80	220	270	1
LS 54	062470	54	2 1/8	31	1 1/4	160	80	210	260	1
LS 57	062487	57	2 1/4	31	1 1/4	150	75	200	250	1
LS 59	319178	59	2 5/16	31	1 1/4	145	70	190	240	1
LS 60	062494	60	2 3/8	31	1 1/4	140	70	190	230	1
LS 64	062500	64	2 1/2	31	1 1/4	135	65	180	220	1
LS 65	319185	65	2 9/16	31	1 1/4	135	60	180	220	1
LS 67	062517	67	2 5/8	31	1 1/4	130	65	170	210	1
LS 68	500811	68	2 11/16	31	1 1/4	130	65	170	210	1
LS 70	062524	70	2 3/4	31	1 1/4	125	60	160	200	1
LS 73	062531	73	2 7/8	31	1 1/4	120	60	160	190	1
LS 76	062548	76	3	31	1 1/4	115	55	150	180	1
LS 79	062555	79	3 1/8	31	1 1/4	110	55	140	180	1
LS 83	062562	83	3 1/4	31	1 1/4	105	50	140	170	1
LS 86	319192	86	3 3/8	31	1 1/4	100	50	130	160	1
LS 89	062579	89	3 1/2	31	1 1/4	95	45	130	160	1
LS 92	062586	92	3 5/8	31	1 1/4	95	45	120	150	1
LS 95	062593	95	3 3/4	31	1 1/4	90	45	120	150	1
LS 98	319208	98	3 7/8	31	1 1/4	90	45	120	140	1
LS 102	062609	102	4	31	1 1/4	85	40	110	140	1

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HSS hole saws, sets and accessories

HSS hole saws



Description	EAN 4007220	Dia. d [mm]	Dia. d [inch]	Max. cutting depth [mm]	Max. cutting depth [inch]	Rec. [RPM] Steel	Rec. [RPM] Stainless steel (INOX)	Rec. [RPM] Non- ferrous metals	Rec. [RPM] Plastic	
LS 105	062616	105	4 1/8	31	1 1/4	80	40	110	130	1
LS 111	319222	111	4 3/8	31	1 1/4	75	35	100	130	1
LS 114	062623	114	4 1/2	31	1 1/4	75	35	100	120	1
LS 121	319239	121	4 3/4	31	1 1/4	70	35	90	120	1
LS 127	319246	127	5	31	1 1/4	65	30	80	110	1
LS 140	319253	140	5 1/2	31	1 1/4	60	30	75	100	1
LS 152	319260	152	6	31	1 1/4	55	25	70	90	1

HSS hole saw sets

Set for craftsmen



The set contains five HSS hole saws in the most common diameters, including accessories, for use in crafts. The set is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included. It is possible to use the LS 32 and LS 38 hole saws with the LSA adapter and washer.

Contents:
 5 HSS hole saws LS 22, LS 25, LS 29, LS 32 and LS 38
 1 hole saw arbor LSS 4
 1 LSA adapter for hole saw arbor LSS 4
 1 allen key, 4 mm
 1 ejection spring

Description	EAN 4007220	Dimensions [mm]	
LS-SO 7 H	319314	168 x 116 x 57	1

Set for plumbers



The set contains six HSS hole saws in the most common diameters, including accessories, for plumbers and sanitary engineers. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included. It is possible to use hole saw LS 38 with the LSA adapter and washer.

Contents:
 6 HSS hole saws LS 19, LS 22, LS 29, LS 38, LS 44 and LS 57
 2 hole saw arbors LSS 2 and LSS 4
 1 LSA adapter for hole saw arbor LSS 4
 1 allen key, 4 mm
 1 ejection spring

Description	EAN 4007220	Dimensions [mm]	
LS-SO 9 I	319338	219 x 156 x 60	1

Set for electricians (International standard sizes)



The set contains six HSS hole saws in the most common international diameters, including accessories, for electricians. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included. It is possible to use hole saw LS 35 with the LSA adapter and washer.

Contents:
 6 HSS hole saws LS 22, LS 29, LS 35, LS 44, LS 51 and LS 64
 2 hole saw arbors LSS 2 and LSS 4
 1 LSA adapter for hole saw arbor LSS 4
 1 allen key, 4 mm
 1 ejection spring

Description	EAN 4007220	Dimensions [mm]	
LS-SO 9 E-1	319321	219 x 156 x 60	1



HSS hole saws, sets and accessories

HSS hole saw sets

The set contains nine HSS hole saws in the most common diameters, including accessories for electricians in Germany. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included. It is possible to use hole saws LS 32 and LS 38 with the LSA adapter and washer.

Contents:
 9 HSS hole saws LS 19, LS 22, LS 25, LS 32, LS 38, LS 44, LS 51, LS 60 and LS 68
 2 hole saw arbors LSS 2 and LSS 4
 1 LSA adapter for hole saw arbor LSS 4
 1 pilot drill LSB 6/90
 1 allen key, 4 mm
 1 ejection spring

Set for electricians (German standard sizes)



Description	EAN 4007220	Dimensions [mm]	
LS-SO 13 E-2	319369	219 x 156 x 60	1

The set contains nine HSS hole saws in the most common diameters, including accessories, for engineers in the construction, container and pipeline industries. It is supplied in a clearly structured plastic box which protects against dirt and damage. The operating instructions are included. It is possible to use hole saws LS 35 and LS 38 with the LSA adapter and washer.

Contents:
 9 HSS hole saws LS 19, LS 22, LS 29, LS 35, LS 38, LS 44, LS 51, LS 57 and LS 64
 2 hole saw arbors LSS 2 and LSS 4
 1 pilot drill LSB 6/90
 1 LSA adapter for hole saw arbor LSS 4
 1 allen key, 4 mm
 1 ejection spring

Set for engineers



Description	EAN 4007220	Dimensions [mm]	
LS-SO 13 M	319352	219 x 180 x 66	1



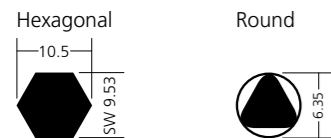


Description	EAN 4007220	Shank dia. [mm]	Shank dia. [inch]	Thread	Shank type	Suitable for hole saws	
LSS 1	062630	9.53	3/8	1/2 - 20 UNF	hexagonal	LS 14-30	1
LSS 2	062647	9.53	3/8	5/8 - 18 UNF	hexagonal	LS 32-152	1
LSS 4	062661	6.35	1/4	1/2 - 20 UNF	round	LS 14-30	1

Shank shapes

The adjacent tables show information on shank shapes and dimensions for the hole saw arbors LSS and pilot drills LSB. The matching hole saws and hole saw arbors are indicated.

Shank dimensions [mm]



Ejection spring

All hole saw arbors are delivered with an ejection spring for better ejection of the sawn material.

Before application, this compression spring can be installed/removed without additional tools if required. Screw on the ejection spring from the side with the smaller diameter up to its limit. It is also possible to use the ejection spring with the adapter LSA and washer (see diagram).

Hole saw arbors are designed for mounting the hole saw and the pilot drill.

The PFERD range includes three different sizes. Select the appropriate arbor, taking into account the hole saw diameter and available drive system.

Purpose of the ejection spring

This prevents jamming of the sawn-out material between the inner walls of the hole saw and the drill. The spring force ejects the

material. Should this effect not be required for a particular application, e.g. already installed pipes, the spring can easily be removed manually without the help of tools.

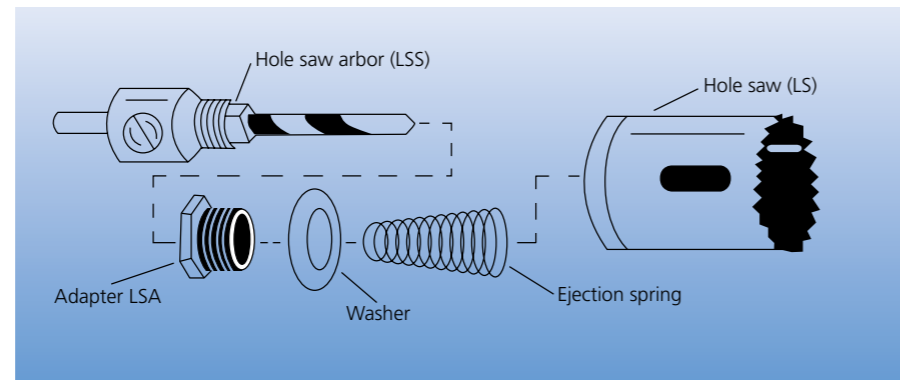
Ordering note:

Hole saw arbors LSS 1 and LSS 2 are supplied with the HSS pilot drill LSB 6/60 and an ejection spring.

Hole saw arbors LSS 4 are supplied with the HSS pilot drill LSB 6/90 and an ejection spring.

PFERD hole saw arbor	Shank dia. [mm]	Shank dia. [inch]	Shank shape	For PFERD hole saws
LSS 1	9.53	3/8		LS 14 to LS 30
LSS 2	9.53	3/8		LS 32 to LS 152
LSS 4	6.35	1/4		LS 14 to LS 30

PFERD pilot drill	Shank dia. [mm]	Shank dia. [inch]	Shank shape	For PFERD hole saw arbor
LSB 6/60	6.35	1/4		LSS 1, LSS 2
LSB 6/90	6.35	1/4		LSS 4



PFERD offers a mounting system for easy and rapid use of HSS hole saws. The quick-mounting system and the two three-part kits matching the diameter of the hole saws allow easy and comfortable use of PFERD HSS hole saws on all common drive systems.

Recommendations for use:

- Screw the adapters quickly and easily into the desired hole saw and clamp them in the quick-mounting system.
- After the application is completed, the hole saw and quick-mounting system can be separated without the use of additional tools by simply pressing a button.



Adapter sets

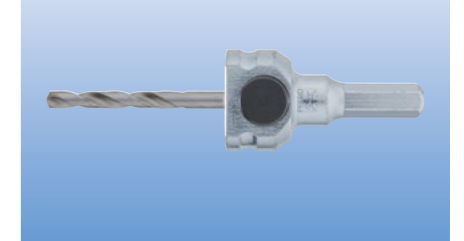


Ordering note:

Adapter set AS-PSL 14-30 is available for hole saw diameter 14-30 mm, and adapter set AS-PSL 32-152 for hole saw diameter 32-152 mm. Both adapter sets contain three adapters with the same dimensions.

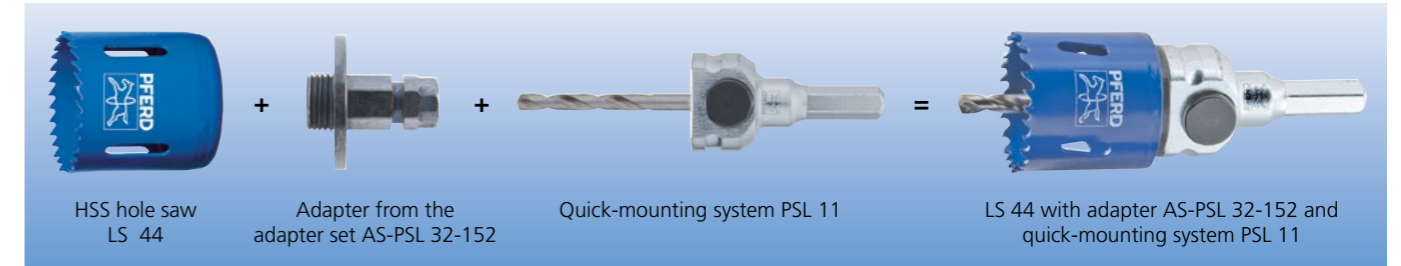
Ordering example:
EAN 4007220900185
PSL 11

Quick-mounting system for hole saws



Description	EAN 4007220	Suitable for hole saws	
PSL 11	900185	LS 14-152	1
AS-PSL 14-30	900215	LS 14-30	1
AS-PSL 32-152	900192	LS 32-152	1

Combination example



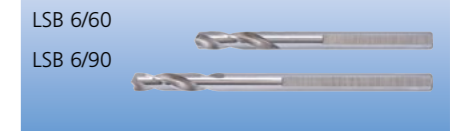
Hole saw arbors LSS 1 and LSS 2 are delivered with HSS pilot drill LSB 6/60.

Hole saw arbor LSS 4 is delivered with HSS pilot drill LSB 6/90.

The hole saw arbor LSB 6/90 can be used for the quick-mounting system PSL 11.

Ordering example:
EAN 4007220319284
LSB 6/60

HSS pilot drill LSB



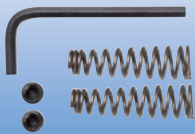
Description	EAN 4007220	Shank dia. [mm]	Shank dia. [inch]	Shank type	Suitable for hole saws	Suitable arbors	
LSB 6/60	319284	6.35	1/4	round	LS 14-152	LSS 1, LSS 2	1
LSB 6/90	062708	6.35	1/4	round	LS 14-152	LSS 4	1



HSS hole saws, sets and accessories

Accessories

Repair set for hole saw arbors



With the repair set for hole saw arbors, the most common parts can be replaced in case of loss or damage.

Contents:

- 2 ejection springs
- 2 hexagon socket head screws
- 1 hexagon socket wrench SW 4

Description	EAN 4007220	
RSL-5	758953	1

LSA adapter



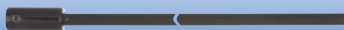
Hole saws LS 32 to LS 38 can be used with the LSA adapter, a washer and the hole saw arbors LSS 1 and LSS 4.

Recommendations for use:

We do not recommend using the adapter for hole saws with a diameter of more than 38 mm.

Description	EAN 4007220	Suitable for hole saws	Suitable arbors	
LSA	319291	LS 32–38	LSS 1, LSS 4	1

Arbor extension for hole saws




The HSS hole saw arbors LSS 1 and LSS 2 can be extended using the arbor extension SVL-300.

Advantages:

- Suitable for work on hard-to-reach components

- Particularly suitable for work on hollow walls
- Deep holes can be sawn easily
- Achieves the required distance between the drive system and the work area
- Avoids damage to workpiece and machine
- Dust is not drawn into the drive system during sawing

Description	EAN 4007220	Hexagon socket (SW) [mm]	Hexagon socket (SW) [inch]	Overall length [mm]	Overall length [inch]	Shank type	Width across flats [mm]	Suitable arbors	
SVL-300	798447	9.53	3/8	300	12	hexagonal	11	LSS 1, LSS 2	1