



Bi-metal hole saws

General information

Hole saws are made from tough, shatter-proof, sturdy HSS bi-metal. The saw teeth are made from high-quality M42 material.

Advantages:

- Cost-effective sawing of round cut-outs.
- Chattering during sawing is prevented by the alternating tooth pitch.
- High concentricity.
- Good chip removal.
- The hole saw is conveniently centred and guided via the replaceable bi-metal pilot drill.
- Hole saw arbor is supplied with an ejection spring for improved ejection of the sawn cut material.

Workpiece materials:

- Steel
- Stainless steel (INOX)
- Aluminum
- Copper, bronze, brass
- Plastics
- Wood

Applications:

- Cutting out holes

Recommendations for use:

- Observe the recommended rotational speed.
 - Clamp the pilot drill in the hole saw arbor and make sure that it projects at least 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 service life.
- Exception:** When working on aluminum, use kerosene instead of cutting oil.
- Bi-metal hole saws are suitable for work on stainless steel (INOX). In order to avoid corrosion, remove any particles which develop during work from the workpiece. Clean the workpiece chemically or mechanically (etching/polishing, etc.).
 - Make sure that all the teeth are applied evenly. To prevent tooth breakage, avoid swinging movements during sawing.
 - Avoid overheating the saw.

Compatible with:

- Power drill
- Drill press



Safety notes:

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



= Wear eye protection!



= Follow the safety instructions!



Bi-metal hole saws

Hole saws made from tough, shatter-proof, sturdy HSS bi-metal for cutting out holes.


Thread:

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

Ordering notes:

- Please refer to the table below for the maximum cutting depth.
- Please order hole saw arbors separately. Detailed information and ordering data on hole saw arbors can be found on page 78.




d ₁ [Inches]	Max. cutting depth [Inches]	EDP number	Suitable arbors	Recommended rotational speed [RPM]				
				Steel	Stainless steel (INOX)	Non-ferrous metals	Plastics	
9/16	1-5/16	29100	EDP 29033, EDP 29034	620	310	800	1,000	1
5/8	1-5/16	29101	EDP 29033, EDP 29034	550	275	730	880	1
11/16	1-7/16	29102	EDP 29033, EDP 29034	520	260	680	820	1
3/4	1-7/16	29103	EDP 29033, EDP 29034	460	230	600	740	1
13/16	1-7/16	29104	EDP 29033, EDP 29034	410	205	540	670	1
7/8	1-7/16	29105	EDP 29033, EDP 29034	390	195	520	640	1
15/16	1-7/16	29106	EDP 29033, EDP 29034	360	180	470	580	1
1	1-7/16	29107	EDP 29033, EDP 29034	350	175	470	560	1
1-1/16	1-7/16	29108	EDP 29033, EDP 29034	325	160	435	520	1
1-1/8	1-7/16	29109	EDP 29033, EDP 29034	300	150	400	480	1
1-3/16	1-7/16	29110	EDP 29033, EDP 29034	285	145	380	470	1
1-1/4	1-7/16	29111	EDP 29036	275	140	360	440	1
1-5/16	1-7/16	29112	EDP 29036	260	135	345	420	1
1-3/8	1-7/16	29113	EDP 29036	250	125	330	400	1
1-7/16	1-7/16	29114	EDP 29036	235	115	310	370	1
1-1/2	1-7/16	29115	EDP 29036	230	115	300	370	1
1-9/16	1-7/16	29116	EDP 29036	215	110	280	350	1
1-5/8	1-7/16	29117	EDP 29036	210	105	280	340	1
1-11/16	1-1/4	29118	EDP 29036	200	100	260	330	1
1-3/4	1-1/4	29119	EDP 29036	195	95	260	320	1
1-13/16	1-1/4	29120	EDP 29036	185	90	250	300	1
1-7/8	1-1/4	29121	EDP 29036	180	90	240	290	1
2	1-1/4	29122	EDP 29036	170	85	230	270	1
2-1/16	1-1/4	29123	EDP 29036	165	80	220	270	1
2-1/8	1-1/4	29124	EDP 29036	160	80	210	260	1
2-1/4	1-1/4	29125	EDP 29036	150	75	200	250	1
2-5/16	1-1/4	29126	EDP 29036	145	70	190	240	1
2-3/8	1-1/4	29127	EDP 29036	140	70	190	230	1
2-1/2	1-1/4	29128	EDP 29036	135	65	180	220	1
2-9/16	1-1/4	29129	EDP 29036	135	60	180	220	1
2-5/8	1-1/4	29130	EDP 29036	130	65	170	210	1
2-3/4	1-1/4	29131	EDP 29036	125	60	160	200	1
2-7/8	1-1/4	29132	EDP 29036	120	60	160	190	1
3	1-1/4	29133	EDP 29036	115	55	150	180	1
3-1/8	1-1/4	29134	EDP 29036	110	55	140	180	1
3-1/4	1-1/4	29135	EDP 29036	105	50	140	170	1

Continued on next page

Bi-metal hole saws

Bi-metal hole saws

d ₁ [Inches]	Max. cutting depth [Inches]	EDP number	Suitable arbors	Recommended rotational speed [RPM]				
				Steel	Stainless steel (INOX)	Non-ferrous metals	Plastics	
3-3/8	1-1/4	29136	EDP 29036	100	50	130	160	1
3-1/2	1-1/4	29137	EDP 29036	95	45	130	160	1
3-5/8	1-1/4	29138	EDP 29036	95	45	120	150	1
3-3/4	1-1/4	29139	EDP 29036	90	45	120	150	1
3-7/8	1-1/4	29140	EDP 29036	90	45	120	140	1
4	1-1/4	29141	EDP 29036	85	40	110	140	1
4-1/8	1-1/4	29142	EDP 29036	80	40	110	130	1
4-3/8	1-1/4	29144	EDP 29036	75	35	100	130	1
4-1/2	1-1/4	29145	EDP 29036	75	35	100	120	1
4-3/4	1-1/4	29146	EDP 29036	70	35	90	120	1
5	1-1/4	29147	EDP 29036	65	30	80	110	1
5-1/2	1-1/4	29148	EDP 29036	60	30	75	100	1
6	1-1/4	29149	EDP 29036	55	25	70	90	1

Bi-metal hole saw sets




13-piece hole saw set

The set contains nine bi-metal 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 the 1-3/8" and 1-1/2" diameter hole saws with the adapter and washer.

Industry/ target group:

Process equipment construction, tank and pressure vessel construction, pipeline construction

Number of pieces	Dimension [Inches]	Contents			EDP number		
		Description	Diameter [Inches]	Shank dia. [Inches]	EDP number	Individual EDP's in set	
13	8-1/2 x 7 x 2-1/2	Bi-metal hole saw	3/4	-	29180	29103	1
		Bi-metal hole saw	7/8	-		29105	1
		Bi-metal hole saw	1-1/8	-		29109	1
		Bi-metal hole saw	1-3/8	-		29113	1
		Bi-metal hole saw	1-1/2	-		29115	1
		Bi-metal hole saw	1-3/4	-		29119	1
		Bi-metal hole saw	2	-		29122	1
		Bi-metal hole saw	2-1/4	-		29125	1
		Bi-metal hole saw	2-1/2	-		29128	1
		Hole saw arbor	-	1/4		29036	1
		Hole saw arbor	-	3/8		29034	1
		Bi-metal pilot drill	-	1/4		29039	1
		Thread adapter	-	-		29070	1

Quick-mounting system for hole saws, adapter sets

PFERD offers a clamping system for easily and quickly using bi-metal hole saws. The quick-mounting system and the two three-part adapter sets, which have been tailored to the hole saw diameter, enable PFERD bi-metal hole saws to be used easily and conveniently on all conventional power drills.

Advantages:

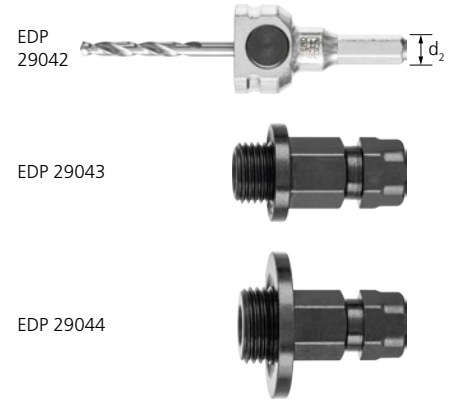
- Easily and quickly swap different hole saws.
- After the application is completed, the hole saw and quick-mounting system can be separated without the use of additional tools by simply pressing a button.
- Interchangeable bi-metal pilot drill.

Ordering notes:

- Adapter set EDP 29043 is available for hole saw diameter 9/16" - 1-3/16", and adapter set EDP 29044 for hole saw diameter 1-1/4" - 6". Both adapter sets contain three adapters with the same dimensions.

Recommendations for use:

- Screw the adapters quickly and easily into the desired hole saw and clamp them in the quick-mounting system.



For hole saw threads	Suitable for hole saw diameters [Inches]	d ₂ [Inches]	Shank type	Description	EDP number	
-	9/16 - 6	7-1/16	hexagonal	Quick-mounting system for hole saws	29042	1
1/2-20	9/16 - 1-3/16	-	-	3-piece quick-mounting adapter set	29043	1
5/8-18	1-1/4 - 6	-	-	3-piece quick-mounting adapter set	29044	1

Example combination



Bi-metal pilot drill

Bi-metal pilot drills for bi-metal hole saw arbors and quick-mounting systems for hole saws.

Ordering notes:

- Hole saw arbors EDP 29033 and EDP 29034 are supplied with the bi-metal pilot drill EDP 29040.
- The bi-metal pilot drill EDP 29039 can be used for the quick-mounting system EDP 29042.

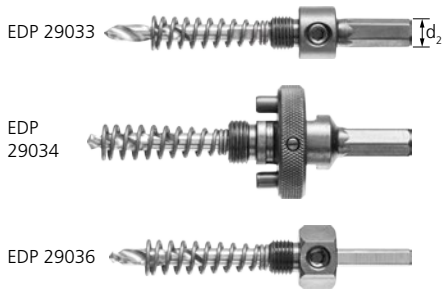


Shank dia. [Inches]	Shank dia. [mm]	Shank type	d ₂ [Inches]	Suitable for hole saw diameters [Inches]	Suitable for arbors	EDP number	
1/4	6.35	Round	1/4	9/16 to 6	EDP 29033, EDP 29034	29040	1
	6.35	Round	1/4	9/16 to 6	EDP 29036	29039	1



Bi-metal hole saws

Accessories



Hole saw arbors


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

Purpose of the ejection spring

It prevents the sawn-out material from becoming jammed 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. pipes that are already installed, the spring can easily be removed manually without the help of tools.

Ordering notes:

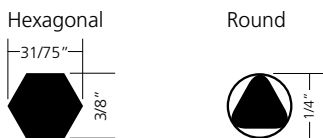
- Available in three sizes.
- Select the appropriate arbor, taking into account the hole saw diameter and available power tool.
- Hole saw arbors EDP 29033 and EDP 29034 are supplied with the bi-metal pilot drill EDP 29040 and an ejection spring.
- Hole saw arbors EDP 29036 are supplied with the bi-metal pilot drill EDP 29039 and an ejection spring.




d_2 [Inches]	d_2 [mm]	Thread	Shank type	Suitable for hole saw diameters [Inches]	EDP number	
3/8	9.53	1/2"-20	hexagonal	9/16 to 1-3/16	29033	1
	9.53	5/8"-18	hexagonal	1-1/4 to 6	29034	1
1/4	6.35	1/2"-20	round	9/16 to 1-3/16	29036	1



Shank shapes

The adjacent tables provide information on the arbor shapes and dimensions for the hole saw arbors and pilot drills. The matching hole saws and hole saw arbors are indicated.

Shank dimensions [mm]



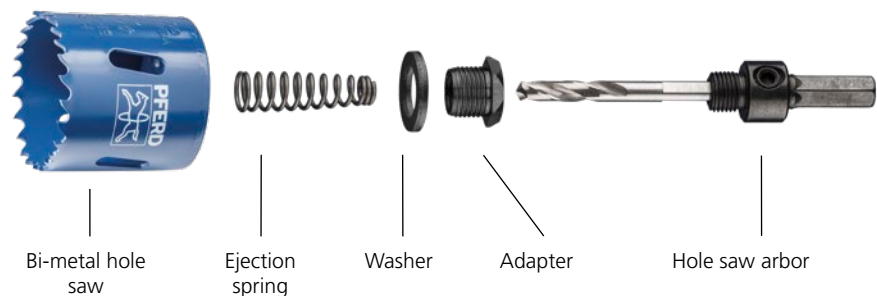
PFERD hole saw arbor EDP	Shank dia. [Inches]	Shank dia. [mm]	Shank shape	for PFERD hole saw dia. [Inches]
29033	3/8	9.53		9/16 to 1-3/16
29034	3/8	9.53		1-1/4 to 6
29036	1/4	6.35		9/16 to 1-3/16

PFERD pilot drill EDP	Shank dia. [Inches]	Shank dia. [mm]	Shank shape	For PFERD hole saw arbors
29040	1/4	6.35		EDP 29033, EDP 29034
29039	1/4	6.35		EDP 29036

Ejection spring

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

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

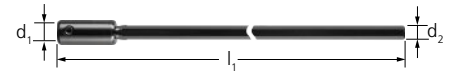



Arbor extension for hole saws

The bi-metal hole saw arbors EDP 29033 and EDP 29034 can be extended using this arbor extension.

Advantages:

- Suitable for work on hard-to-reach components.
- Particularly suitable for work on hollow walls.
- Deep holes can be accessed easily.
- Achieves the required distance between the power tool and the work area.
- Avoids damage to the workpiece and machine.
- Dust is not drawn into the power tool during sawing.



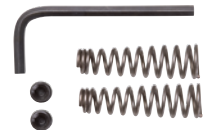
Hexagon socket d_1 [Inches]	Hexagon socket d_1 [mm]	l_1 [Inches]	l_1 [mm]	Shank type	Width across flats (AF) d_2 [Inches]	Width across flats (AF) d_2 [mm]	Suitable for arbors	EDP number	
3/8	9.53	12	300	hexagonal	7/16	11	EDP 29033, 29034	29071	1


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




EDP number	
29072	1

LSA adapter

1-1/4" to 1-1/2" diameter hole saws can be used with the adapter, a washer and the hole saw arbors EDP 29033 and EDP 29036.



Suitable for hole saw diameters [Inches]	Suitable for arbors	EDP number	
1-1/4 – 1-1/2	EDP 29033, EDP 29036	29070	1

