

Operating Principle

Hydraulic Fastening Bolt

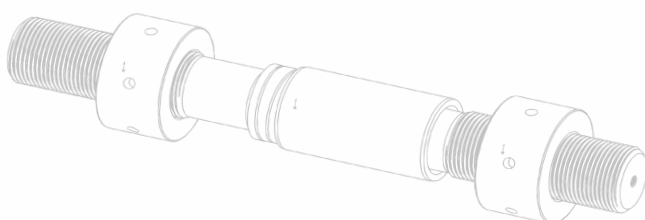
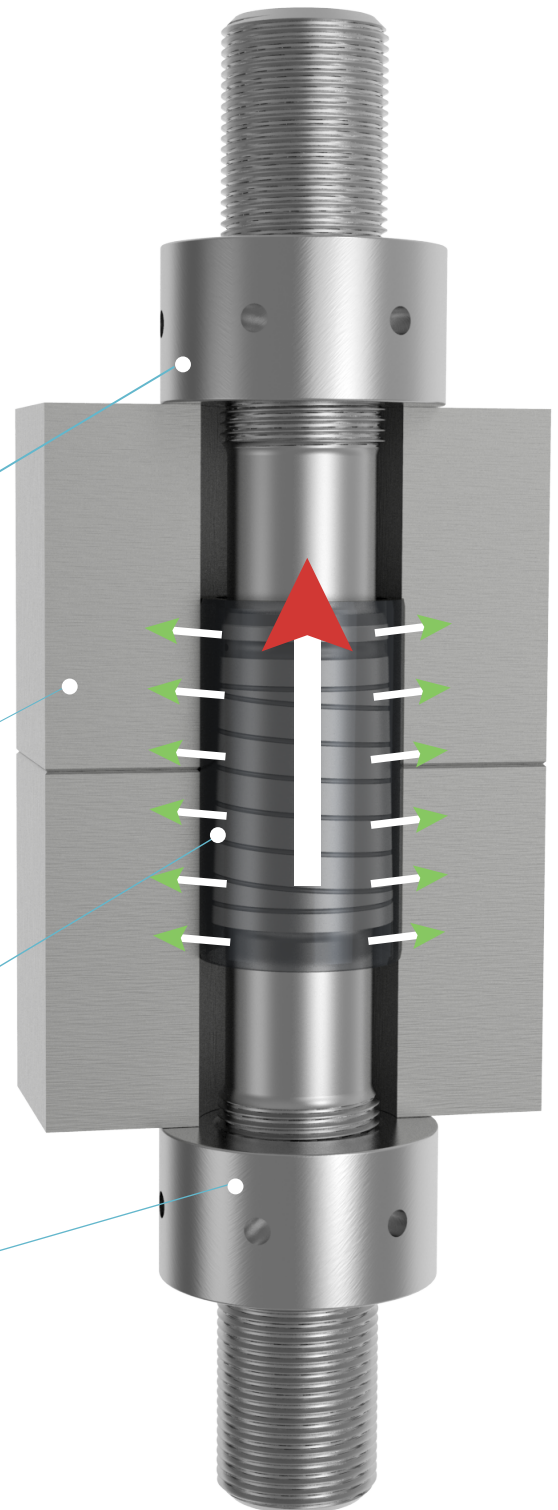
- Hydraulic fastening bolts are the perfect fastening solution for flange connections.
- Hydraulic fastening bolts are designed in accordance with ISO 898-1 standard and are suitable for bolt application scenarios across various industries. They are particularly applicable to highly dynamic application scenarios, such as flange connections of large electric motors.
- Hydraulic fastening bolts are easy to assemble and disassemble and can be reused.

Hydraulic nuts prevent bolts from rebounding during operation after the bolts have been tensioned by hydraulic pullers.

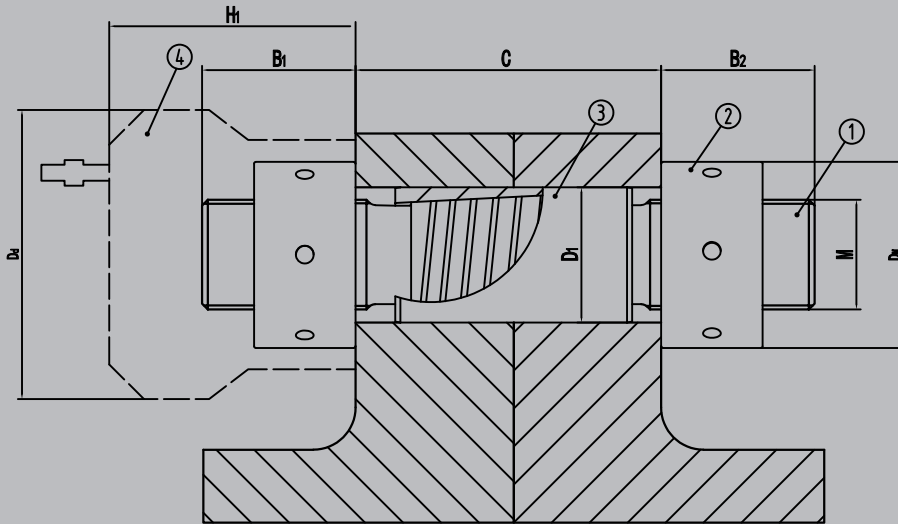
Hydraulic fastening bolts can reduce the machining requirements for mounting holes.

During the bolt tensioning process, the axial force is converted into radial force through the taper sleeve and causes the sleeve to expand, thereby forming a rigid connection in the fastening system.

It plays a limiting role during installation.



Hydraulic Fastening Bolt



- 1 Stud
- 2 Nut
- 3 Sleeve
- 4 Hydraulic tensioner

Mounting hole diameter	Thread specification	Mounting hole thickness	Protruding length	Protruding length	Nut diameter	Tensioner diameter	Mounting height
D_1 mm	M	C_{min} mm	B_1 mm	B_2 mm	D_m mm	D_d mm	H_1 mm
40-(44)	M33x3.5	126	64	51	58	88	142
44-(49)	M36x4	140	70	56	63	102	149
49-(51)	M39x4	143	78	62	67	102	157
51-(55)	M42x4,5	155	83	66	72	118	157
55-58	M45x4,5	160	87	69	76	118	161
58-(62)	M48x5	172	91	72	81	136	177
62-(68)	M52x5	185	99	78	89	136	185
68-(73)	M56x5.5	199	106	83	96	156	198
73-(78)	M60x5,5	209	114	90	102	156	206
78-(83)	M64x6	222	122	96	109	178	231
83-88)	M68x6	233	128	101	116	178	237
88-(93)	M72x6	243	134	105	122	198	245
93-(98)	M76x6	254	140	110	130	198	251
98-(104)	M80x6	267	146	114	137	236	282
104-(112)	M85x6	284	154	120	147	236	290
112-(118)	M90x6	297	162	126	155	268	310
118-(124)	M95x6	309	170	132	164	268	318
124-(130)	M100x6	321	178	138	172	296	334
130-(138)	M105x6	339	186	144	182	296	342

The maximum tensile force, F_{max} , exerts a long-term effective action on the bolted joint, including the operating load. Based on our design and manufacturing capabilities, we are also able to meet other application requirements, such as those for special materials, special surface treatments, or special thread clearance.