

Instructions

Rupture Disk

BP224 Series



attestation

ISO 9001:2015

Please read this instruction manual carefully before installation



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Introduction

Rupture Disk (means burst plug) BP224 series are made by 17-4PH in use of pressure releasing for emergency circumstances. The diaphragm will burst while pressure overloaded to protect the machine and operator from explosion damage.

Application

Fiber machine,Rubber-plastic machine,Polymer machine etc

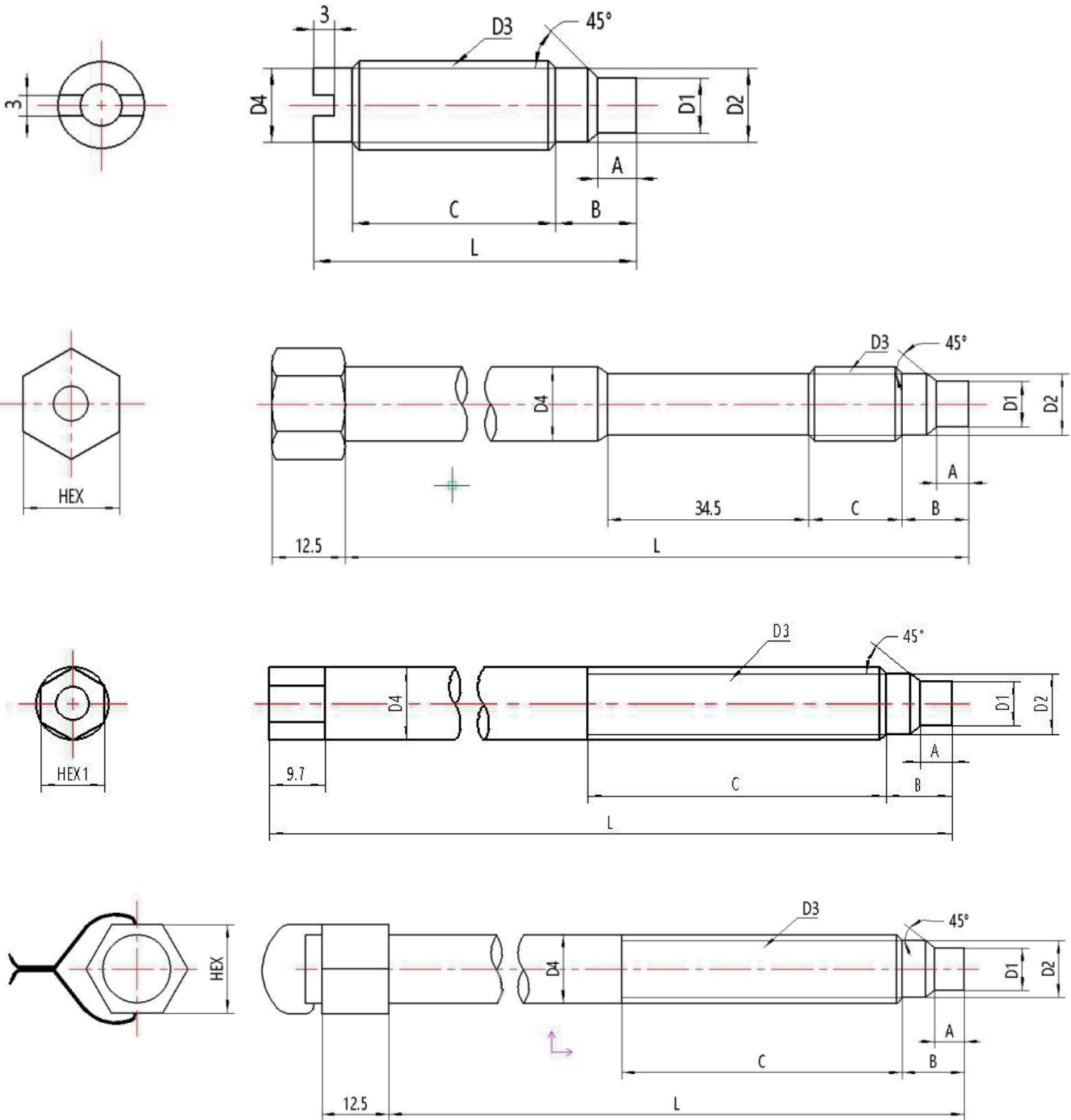
Product features

- Burst pressure range: 0...2500psi to 0...15000psi
- Low installation and maintenance costs
- Reliable protection of personnel and machinery
- Robust sensing element
- Designed for extrusion applications

Technical data

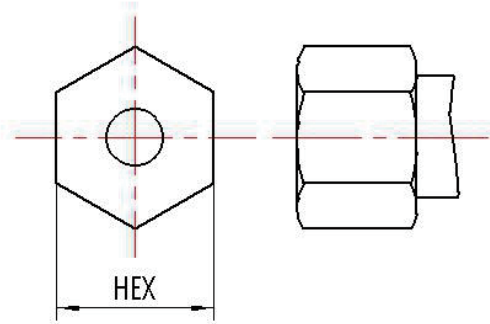
Pressure range: 0...2500psi, 0...15000psi
Temperature range: 0...400°C
Material: 304 stainless steel

Dimensions

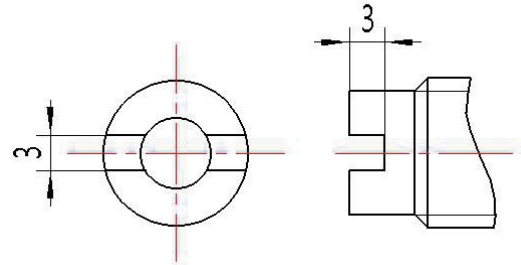


Product Type	D3	D1	D2	A	B	D4	HEX
Standard	1/2-20UNF	φ7.8	φ10.5	5.5	11.5	φ12.7	16
	M14×1.5	φ7.8	φ11.5	5.5	11.5	φ12.7	16
	M18×1.5	φ9.8	φ15.8	5.5	14	φ12.7	16
	5/8-11UNC	φ8.9	φ12.4	6	14	φ12.7	16
Product Type	D3	D1	D2	A	B	D4	HEX1
Y Type	1/2-20UNF	φ7.8	φ10.5	5.5	11.5	φ12.7	11

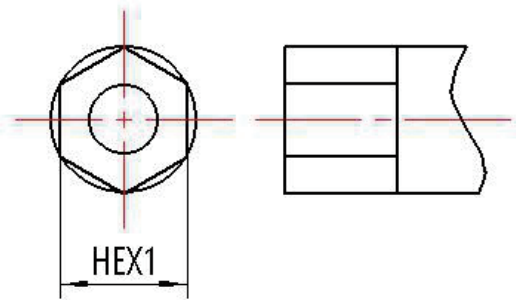
Lock type



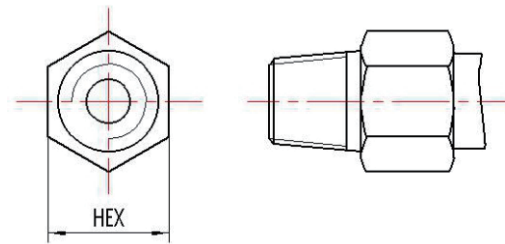
HEX Nut



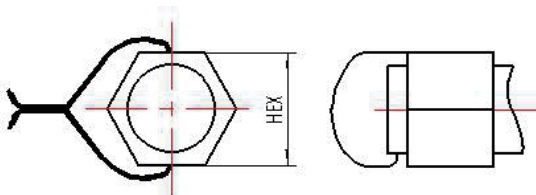
HEX Nut



Milling HEX



HEX 1/4 NPT Fitting



HEX with alarm

Ordering guide

Serie No	BP224	-	X	-	X	-	X	-	X	-	X	-	X
Product type	Standard		--										
	Y Type		Y										
Pressure range	17MPa 170bar 2500psi			2.5M									
	20MPa 200bar 3000psi			3M									
	25MPa 250bar 3500psi			3.5M									
	35MPa 350bar 5000psi			5M									
	50MPa 500bar 7500psi			7.5M									
	60MPa 600bar 8500psi			8.5M									
	65MPa 650bar 9500psi			9.5M									
	70MPa 700bar 10000psi			10M									
	85MPa 850bar 12500psi			12.5M									
	100MPa 1000bar 15000psi			15M									
Process connection	1/2-20UMF			1/2									
	M14×1.5			M14									
	5/8-11UNC			5/8									
	M18×1.5			M18									
Rigid stem length	46mm			1.8									
	64mm			2.5									
	76mm			3									
	102mm			4									
	152mm			6									
	178mm			7									
	203mm			8									
	228mm			9									
	317.5mm			12									
	xmm			xmm									
Thread length	Standard			--									
	25.4mm			L25.4									
	29mm			L29									
	41mm			L41									
	53mm			L53									
	58mm			L58									
	xmm			LX									
Locking type and polymer discharge options	Hex Nut									N			
	Slotted Nut									S			
	Milling Hex									M			
	Hex with Alarm									K			
	Hex 1/4NPT Fitting									1/4NPT			

Installation & Removal

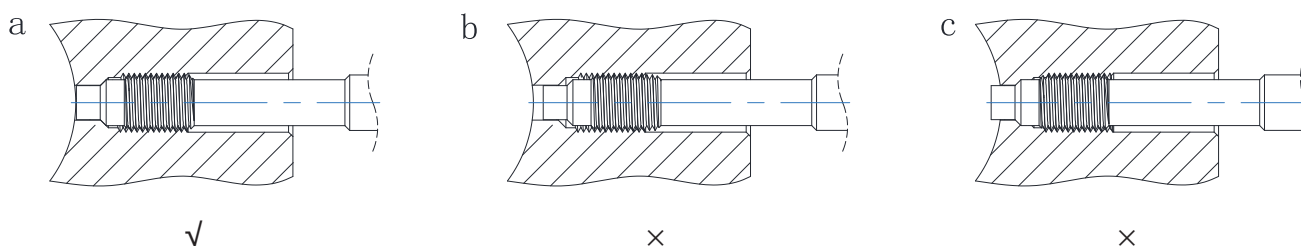
Installation

When installing the rupture disk, the rupture disk hole should be within the size requirement marked in following drawing and the assembly accuracy can be checked by testing bolts. Before installing the rupture disk, first clean the impurities in the hole and between the threads, then the thread of the sensor is coated with heat-resistant slurry, the screw teeth can be avoided.

The installation force is very important, the installation torque of the rupture disk can only act on the shaft (hexagon), do not apply any force to its head. The housing should be kept away from high temperature areas.

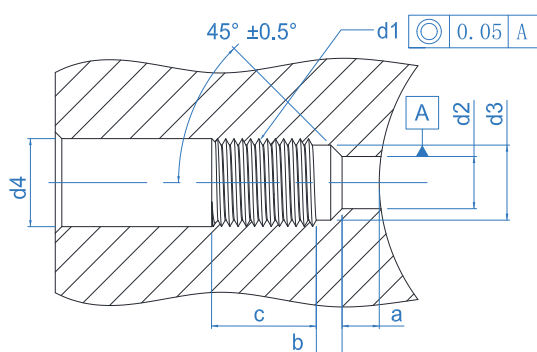
1/2-20 UNF /M14×1.5= Maximum starting torque: 40Nm

M18 x 1.5 = Maximum starting torque: 50 Nm



Removal

Rupture disk removal must be completed under heating conditions (plastic melting point). When removing the rupture disk, note that the diaphragm does not contact the pressure. The force to unload the rupture disk must be applied on the shaft (HEX).



d1	M18×1.5	M14×1.5	1/2-20UNF-2A
d2	∅ 9.9 ^{+0.1}	∅ 7.9 ^{+0.1}	∅ 7.9 ^{+0.1}
d3	∅ 16.1 ^{+0.1}	∅ 11.7 ^{+0.1}	∅ 10.7 ^{+0.1}
d4	∅ 20	∅ 15	∅ 14
a	6.1 ^{-0.1}	5.7 ^{-0.1}	5.7 ^{-0.1}
b	4 ^{-0.2}	3.2 ^{-0.2}	3.2 ^{-0.2}
c	25	19	19

Transport and storage

Bp224 Rupture disk's induction diaphragm is protected by a protective cap, which should be tightened at any time of storage and opened only when installed.