NoNonSensors Technical Sheets

Burst Plugs/Rupture Disks

1. Introduction

Rupture Disk (means bust 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

2. Application

Fiber machine,Rubber-plastic machine,Polymer machine etc

3. 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

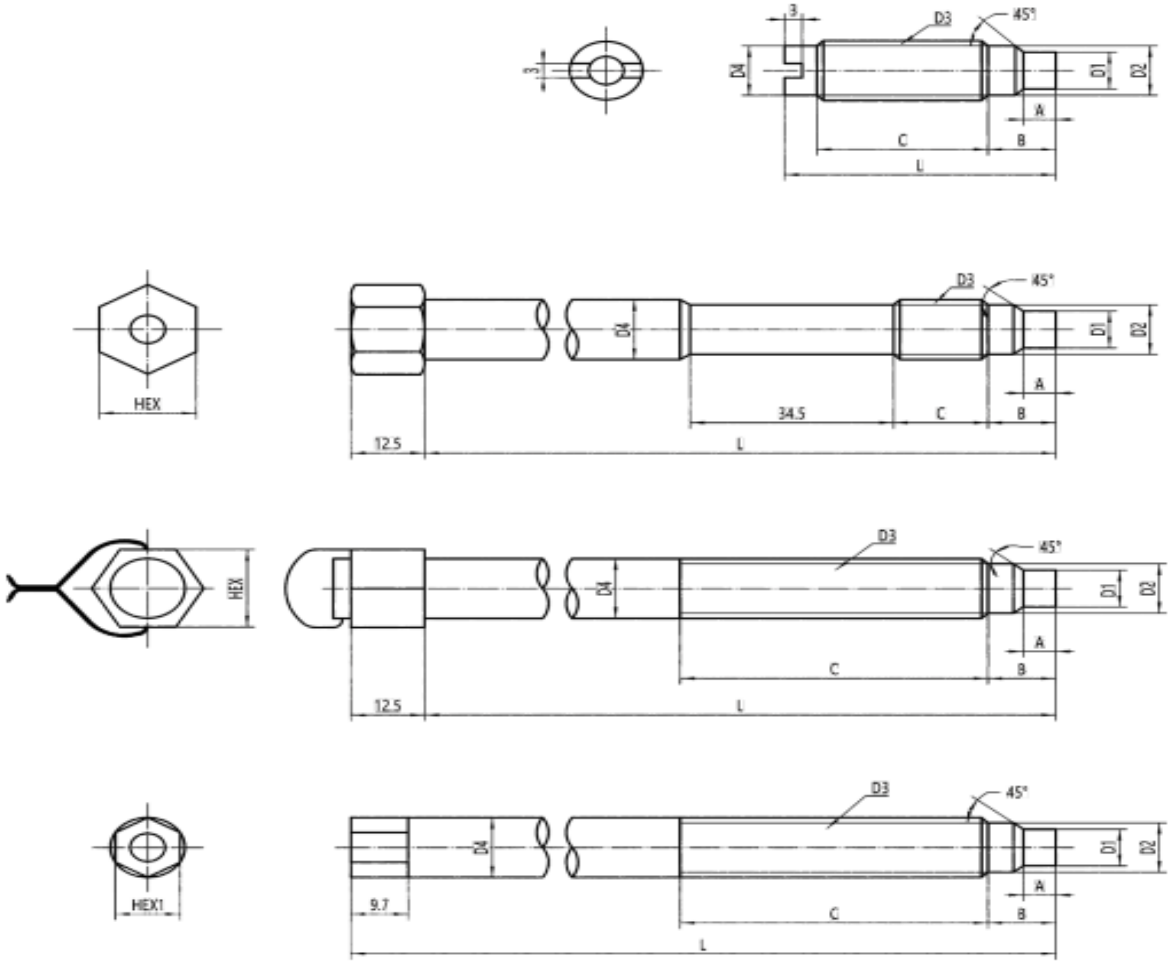
4. Technical data

Pressure range : 0···2500psi, 0···15000psi

Temperature range : 0···400C°

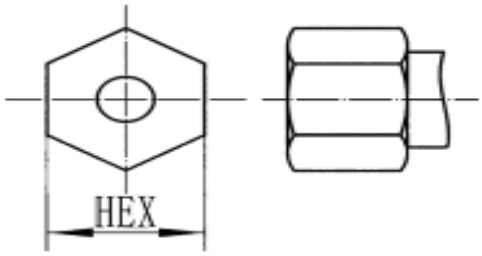
Material : 304 stainless steel

5. Dimensions

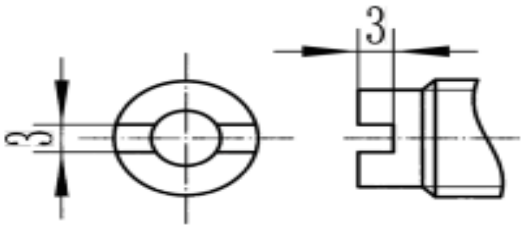


Product Type	D3	D1	D2	A	B	D4	HEX
Standard	1/2-20UNF	Φ7.8	Φ10.5	5.5	11.5	Φ12.7	16
	M14X1.5	Φ7.8	Φ11.5	5.5	11.5	Φ12.7	16
	M18X1.5	Φ9.8	Φ15.8	5.5	14	Φ12.7	16
	5/8-11UNC	Φ8.9	Φ12.4	6	14	Φ12.7	16
Product Type	D3	D1	D2	A	B	D4	HEX1
Y type	1/2-20UNF	Φ7.8	Φ10.5	5.5	11.5	Φ12.7	11

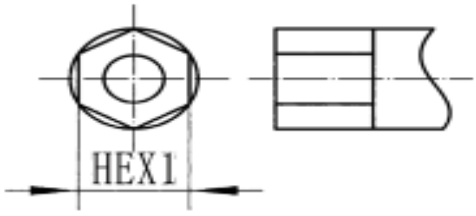
6. Lock Type



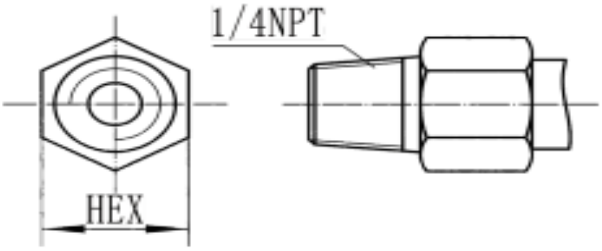
HEX Nut



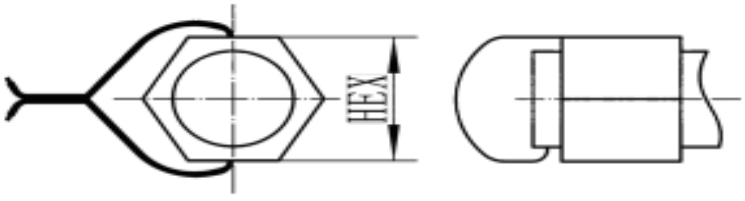
Slotted Nut



Milling HEX



HEX 1/4 NPT Fitting



HEX with alarm

7. Ordering Guide

Product Type	Stanadard	--					
	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	1/2-20UNF			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	Stanadard					--	
	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

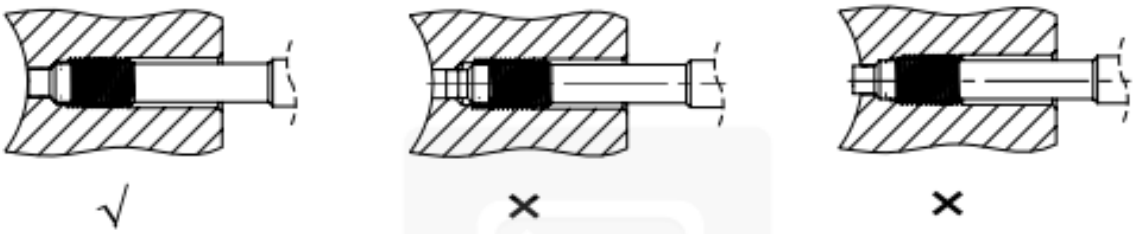
8. Installation & Removal

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

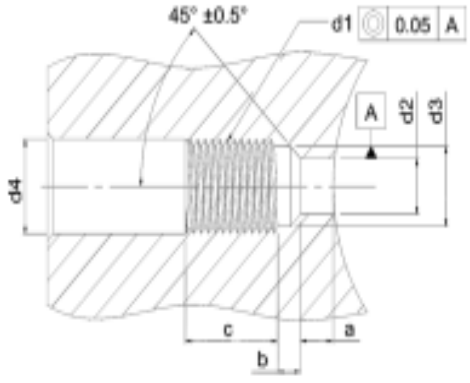
M18 x 1.5 = Maximum starting torque: 50 Nm



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	M18X1.5	M14X1.5	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

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