

Nanoport Assemblies 소개 자료



♠ 나노포트

: 마이크로칩에 편리하게 유체를 연결할 수 있도록 한 최초의 상용화 된 제품

♠ 특징

- 실리콘, 석영, 글라스 또는 폴리머 칩의 표면에 접착제 링을 이용하여 부착
- 접착된 나노포트는 1,500 psi (103 bar)까지 견딜 수 있음

♠ 재질

- PEEK 재질 : Nuts and Ports
- Perlast perfluoroelastomer : Ferrules and Gaskets

♠ 사용 가능한 Tubing Size

- 360um, 1/32", 1/16" 외경 튜빙은 direct로 연결 가능
- MicroTight™ Tubing Sleeve를 이용하여 70 ~ 520um 외경 튜빙 연결 가능

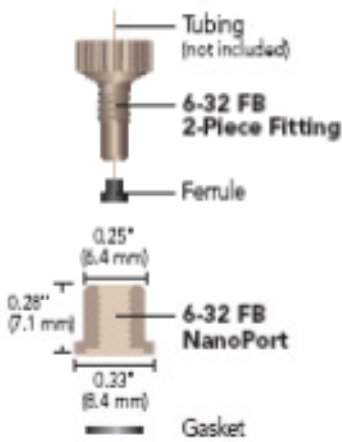
♠ 나노포트 선택시 고려해야 할 사항

- 연결하고 자 하는 튜빙 사이즈
- Chip hole 의 치수
- Fitting 형태 (One-piece 또는 Two-piece 피팅)
- Nut Head 형태 (Standard 또는 Headless 너트)

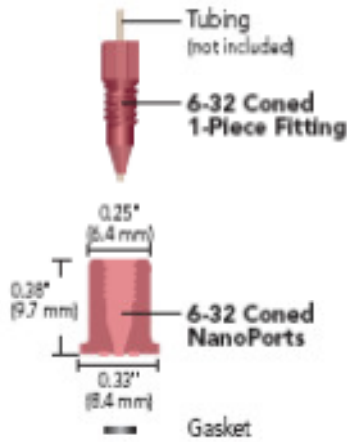
♠ 접착제 링을 이용한 부착

: 166 - 177°C (330- 350°F) 에서 1시간 열처리 해야 함

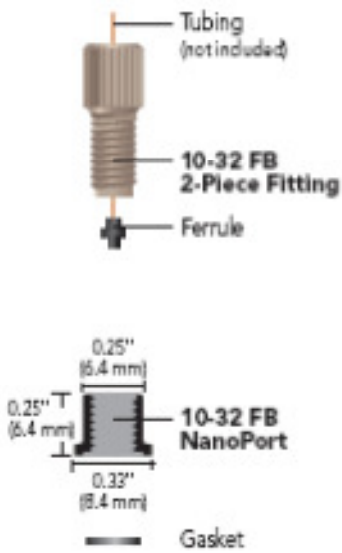
6-32 Flat-Bottom Assemblies



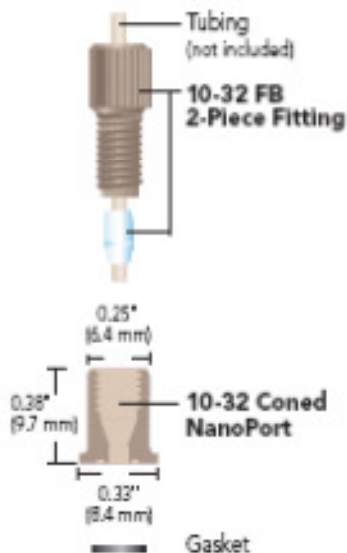
6-32 Coned Assemblies



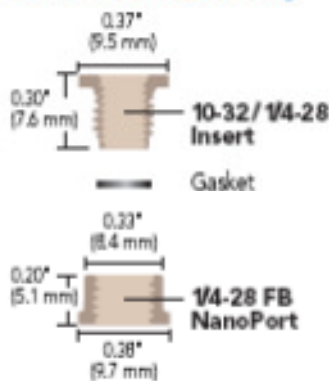
10-32 Flat-Bottom Assemblies



10-32 Coned Assembly



Reservoir Assembly



♠ Ordering Information

Part No.	Nut	Ferrule	For Chip Hole (dia. x depth)	For Tubing OD	Qty.
NANOPORT ASSEMBLIES					
6-32 Flat-Bottom NanoPort Assemblies					
N-121H	F-123H	N-123-04	0.04" x 0.04" (1.0 mm x 1.0 mm)	360 µm	ea.
N-121S	F-123S	N-123-04	0.04" x 0.04" (1.0 mm x 1.0 mm)	360 µm	ea.
N-122H	F-123H	N-123-05	0.04" x 0.06" (1.0 mm x 1.5 mm)	360 µm	ea.
N-122S	F-123S	N-123-05	0.04" x 0.06" (1.0 mm x 1.5 mm)	360 µm	ea.
N-123H	F-123H	N-123-03	0.04" (1.0 mm) dia. or less	360 µm	ea.
N-123S	F-123S	N-123-03	0.04" (1.0 mm) dia. or less	360 µm	ea.
6-32 Coned NanoPort Assemblies					
N-124H	F-124H	None	Up to 0.063" (1.6 mm)	360 µm	ea.
N-124S	F-124S	None	Up to 0.063" (1.6 mm)	360 µm	ea.
N-125H	F-125H	None	Up to 0.063" (1.6 mm)	70 – 520 µm ¹	ea.
N-125S	F-125	None	Up to 0.063" (1.6 mm)	70 – 520 µm ¹	ea.
N-126H	F-126H	None	Up to 0.063" (1.6 mm)	1/32"	ea.
N-126S	F-126S	None	Up to 0.063" (1.6 mm)	1/32"	ea.
10-32 Flat-Bottom NanoPort Assemblies					
N-129H	F-122H	N-123-04	0.04" x 0.04" (1.0 mm x 1.0 mm)	360 µm	ea.
10-32 Coned NanoPort Assembly					
★ N-333	F-333N	F-142N	Up to 0.063" (1.6 mm)	1/16"	ea.
NanoPort Reservoir Assembly					
N-131	80 µL Reservoir with Insert				ea.
NANOPORT REPLACEMENT PARTS					
Part No.	Description	Threads	For Chip Hole	Tubing OD	Qty.
Fittings					
F-121Hx	Headless Nuts	10-32 FB	N/A	360 µm	10-pk
F-122Hx	Headless Nuts	10-32 FB	N/A	360 µm	10-pk
F-123Hx	Headless Nuts	6-32 FB	N/A	360 µm	10-pk
F-123Sx	Standard Head Nuts	6-32 FB	N/A	360 µm	10-pk
F-124Hx	Headless Fittings	6-32 C	N/A	360 µm	10-pk
F-124Sx	Standard Head Fittings	6-32 C	N/A	360 µm	10-pk
★ F-125Hx	Headless Fittings	6-32 C	N/A	70 – 520 µm ¹	10-pk
★ F-125x	Standard Head Fittings	6-32 C	N/A	70 – 520 µm ¹	10-pk
F-126Hx	Headless Fittings	6-32 C	N/A	1/32"	10-pk
F-126Sx	Standard Head Fittings	6-32 C	N/A	1/32"	10-pk
F-333Nx	Headless Fittings	10-32 C	Up to 0.063" (1.6 mm)	1/16"	10-pk
F-142Nx	Ferrules	10-32 C	Up to 0.063" (1.6 mm)	1/16"	10-pk
★ N-123-03x	Ferrules	6-32 FB	0.04" (1.0 mm) dia. or less	360 µm	10-pk
★ N-123-04x	Ferrules	6-32, 10-32 FB	0.04" x 0.04" (1.0 mm x 1.0 mm)	360 µm	10-pk
N-123-05x	Ferrules	6-32 FB	0.04" x 0.06" (1.0 mm x 1.5 mm)	360 µm	10-pk
Gaskets					
N-123-02	Gasket, For all assemblies except 6-32 Coned Assemblies		N/A	N/A	ea.
N-124-02	Gasket, For 6-32 Coned Assemblies		N/A	N/A	ea.
Adhesives and Clamp					
N-006	Clamp		N/A	N/A	ea.
★ N-100-01	Preformed Adhesive Rings		N/A	N/A	2-pk

¹ Designed to use our MicroTight® Tubing Sleeves (page 19) to connect tubing OD sizes from 70–520 µm
 Abbreviation Definitions: FB = Flat Bottom; C = Coned; N/A = Not Applicable