

# TYPE-B PEX TUBE

## 664 & 665 SERIES

PowerPEX®

### SPECIFICATION

Sioux Chief PowerPEX® Type-B tube shall be used in hot and cold potable water distribution or for approved non-potable system applications. Tube shall be SDR-9, and made in accordance with the ASTM F876 and ASTM F877 standards, for use with ASTM approved connection systems.

### MATERIALS

Cross-linked polyethylene - Silane Graft Process

### APPROVED APPLICATIONS

Plumbing, Radiant Heat, Fire Suppression, Geothermal, Water Reclamation, Turf Conditioning, Irrigation

### APPROVED FITTING SYSTEMS

ASTM F1807 / ASTM F2080 / ASTM F1960 / ASTM F2159 / ASSE 1061

### REQUIREMENTS PER ASTM F876

Tubing conforms to ID/OD and wall thickness tolerances, hydrostatic sustained pressure, burst pressure, density, % cross-linking, material, out-of-roundness, workmanship, pressure @ hydrostatic designed stress, stress-corrosion cracking resistance, bent strength, oxidative stability, excessive temperature and pressure capacity, pipe dimensional ratio, chlorine resistance and UV resistance.

### PRESSURE DROP @ 8 FPS

1/8"	data not available	3/4"	(0.174 factor @ 9 GPM × ft)
1/4"	(0.40 factor @ 1.25 GPM × ft)	1"	(0.148 factor @ 16 GPM × ft)
3/8"	(0.050 factor @ 2.47 GPM × ft)	1-1/4"	(0.199 factor @ 24 GPM × ft)
1/2"	(0.208 factor @ 4 GPM × ft)	1-1/2"	(0.08 factor @ 16 GPM × ft)
5/8"	(0.189 factor @ 5.5 GPM × ft)	2"	(0.37 factor @ 34 GPM × ft)

### DIMENSIONS

Size (Nom. CTS)	1/8"	1/4"	3/8"	1/2"	5/8"
Outer diameter <sup>1</sup>	0.25"	0.375"	0.50"	0.625"	0.75"
Wall thickness <sup>1</sup>	0.047"	0.062"	0.070"	0.070"	0.083"
Inner diameter <sup>2</sup>	0.156"	0.251"	0.36"	0.485"	0.584"
Coil inner diameter	22"	22"	22"	24"	24"
Size (Nom. CTS)	3/4"	1"	1-1/4"	1-1/2"	2"
Outer diameter <sup>1</sup>	0.875"	1.125"	1.375"	1.625"	2.125"
Wall thickness <sup>1</sup>	0.097"	0.125"	0.153"	0.181"	0.236"
Inner diameter <sup>2</sup>	0.681"	0.875"	1.069"	1.263"	1.653"
Coil inner diameter	24"	30"	30"	68"	n/a

1: Per ASTM F876 | 2: Calculated

### TUBE PRINT STREAM (EXAMPLE)

SIoux CHIEF POWERPEX SDR 9 PEX 1/2" CTS CNSFUS-PW-G U.P. CODE CSA B137.5 ASTM F876/F877 ANSI/AWWA C904 (FITTINGS: F1807/F2159/F1960/F2080/ASSE 1061) 5306 80PSI@200°F/100PSI@180°F/160PSI@73°F MADE IN THE USA (DATE)

ITEM # SUBMITTED	_____
JOB NAME	_____
LOCATION	_____
ENGINEER	_____
CONTRACTOR	_____
PO#	_____ TAG _____



### CHLORINE/UV RESISTANCE

5306 (non-barrier), 5006 (barrier)

### LISTINGS & CERTIFICATIONS

NSF-14, NSF-61, cNSFus-PW, CAN/UL 1821<sup>3</sup>  
ASTM F876 / F877, IAPMO/cUPC  
ASTM F1807 / F2080 / F2159 / F1960

Listed by Intertek to meet:

- Flame Spread - ASTM E-84 | CAN/ULC S102.2:  
<25/<50  
Rating applies when tubing is field insulated with fiberglass insulation conforming to the following:  
ASTM E84 Listed, Flame Spread Index of <25, Smoke Developed Index of <50, Wall thickness min 1/2"
- Fire Rating - ASTM E-119 | CAN/ULC S101:  
2hrs Design No: SCMC/DWP 120-01  
1hr Design No: SCMC/DWP 60-01  
1hr Design No: SCMC/DWP 60-02

3: 3/4" and 1" sizes only

### Create Item Number

#### ABCD

e.g. **665X2W100**: PowerPEX Type-B PEX tube, 1/2", White, 100-ft coil.

#### COIL OR STICKS A

**664X** = Sticks  
**665X** = Coil

#### NOM. TUBE SIZE B

**8** = 1/8" (1/4" OD)  
**0** = 1/4" (3/8" OD)  
**1** = 3/8" (1/2" OD)  
**2** = 1/2"  
**9** = 5/8" ID  
**3** = 3/4"  
**4** = 1"  
**5** = 1-1/4"  
**6** = 1-1/2"  
**7** = 2"

#### COLOR C

**R** = Red  
**W** = White  
**B** = Blue  
**H** = Orange<sup>4</sup>

#### LENGTH D

**10** = 10-ft sticks  
**20** = 20-ft sticks  
**100** = 100-ft coil  
**300** = 300-ft coil  
**500** = 500-ft coil  
**1000** = 1000-ft coil

4: The 'H' designation indicates oxygen-barrier tube. All oxygen-barrier tube is orange color.

Note: Not all option combinations are available - please check our website or current catalog for product availability

