

## TBK-60 Directional Drilling Kit

Heat-Shrinkable corrosion and mechanical protection system for pipeline field joints during horizontal directional drilling.

For more than 35 years, Canusa-CPS has been a leading developer and manufacturer of specialty pipeline coatings for the sealing and corrosion protection of pipeline joints and other substrates. Canusa-CPS high performance products are manufactured to the highest quality standards and are available in a number of configurations to accommodate many specific project applications.

### Product Description

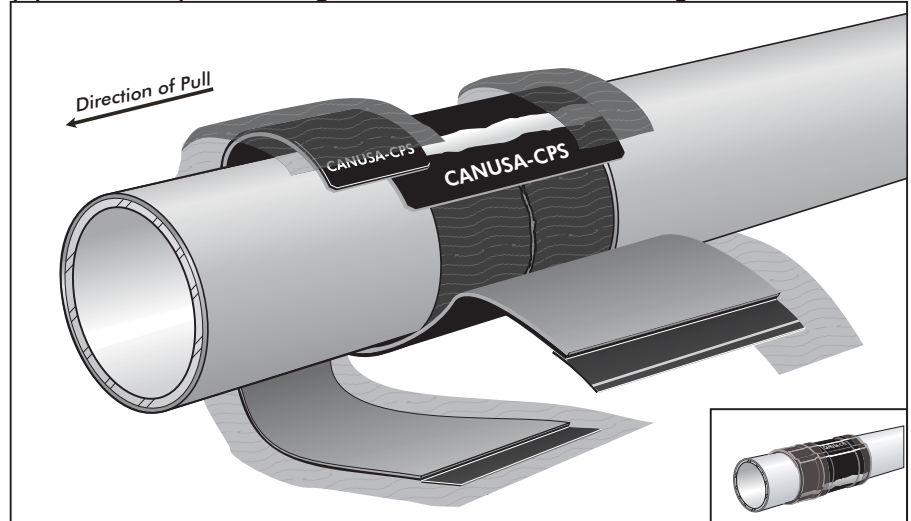
Canusa's TBK - Directional Drilling Kit is a high performance system designed to protect welded joints on PE, PP and FBE coated pipelines in directional drills. The system consists of three components: a primary heat-shrinkable sleeve which provides corrosion protection at the joint; a secondary heat-shrinkable sleeve which functions as a sacrificial wear cone; and a high-build epoxy top coat at the ends to provide additional protection to the system. The system provides effective protection against abrasion and wear forces that occur during the pull-through operation. The system is fully compatible with cathodic protection systems, resists cathodic disbondment and is designed for a wide range of operating temperatures.

The Canusa Wrapid Sleeve™ Type TBK-60 is a one-piece wraparound sleeve designed for corrosion protection of buried and exposed steel pipelines operating up to 60°C (140°F). Wrapid Sleeve™ Type TBK-60 consists of a cross-linked polyolefin backing, coated with a technologically advanced protective adhesive which effectively bonds to steel substrates and common pipeline coatings including polyethylene and fusion bonded epoxy.

### Features & Benefits

#### Long Term Corrosion Protection

Canusa's TBK - Directional Drilling Kit provides superior corrosion protection because of the protective combination. This primary sleeve provides excellent resistance to cathodic disbondment & excellent durability against abrasion and chemical attack. The result is effective, long term protection against corrosion.



#### Superior Abrasion Resistance

Canusa's TBK - Directional Drilling Kit utilizes multi-layer sleeves coated with a heat activated adhesive. The inherent performance properties associated with the sleeve adhesive reduces damage of the coating during pipeline installation and provides excellent resistance to soil stresses and pipe movements. The narrow, epoxy coated sacrificial sleeve is applied to the leading edge of the primary sleeve. The hardened epoxy topcoat provides the additional abrasion and wear resistance to withstand the forces during directional drilling.

#### Convenient Epoxy Kit

Epoxy is supplied in kits with all tools required to apply this system. The convenient ready-to-mix epoxy packaging minimizes installation time and labor costs while promoting high production rates.

### Applications



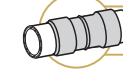
Oil & Gas



Water Pipelines



Directional Drilling



Girth-Weld Joints

### Configurations



2-Layer



Multi Kit



Wrapid Sleeve™

### Pipe Sizes



55-1520 (2"-60")

### Temperature Range





Up to 60°C (176°F)

The product selection chart shown here is intended as a guide for standard products. Consult your Canusa representative for specific projects or unique applications.

# TBK-60 - Directional Drilling Kit

## Product Selection Guide

Choose the appropriate TBK system based on selection steps 1-2-3.

Sleeve Operating Characteristics	Celsius	Fahrenheit	2-Layer Systems	
	130°	266°	<b>TBK-60</b>	
	110°	230°		
	90°	194°		
	70°	158°		
	50°	122°		
	30°	86°		
Pipeline Operating Temp.	 °C (°F)		60 (140)	
Minimum Installation Temp.	 °C (°F)		75 (167)	
Resistance to Circumferential Forces			good	
Resistance to Soil Stress			good	
Resistance to Axial Pipe Movement			good	
Main Line Coating Compatibility			FBE, PE, PP, PU	

## Epoxy Kit Usage

Pipe Diameter		Kits Required
(Inches)	(mm)	
4½	115	1
6.6	170	1
8.6	230	1
10¾	280	1
12¾	315	1
14	355	1
16	400	2
18	450	2
20	500	2
24	610	2
28	710	2
30	760	2
36	915	3
42	1060	3
48	1220	4
60	1520	4

### Application Guidelines

Refer to specific product Installation Guide.

### Canusa Properties

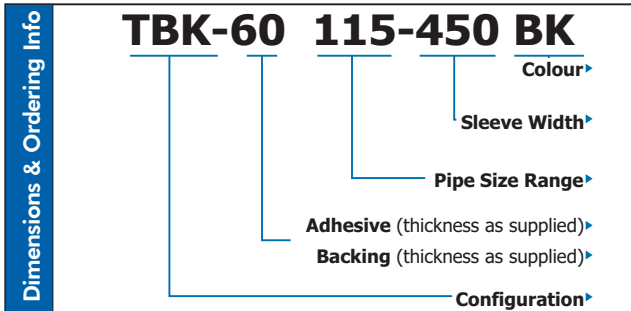
Pot life @ 23°C (73°F) 20 minutes

Shelf life @ 23°C, out of sunlight 3 years

## Typical Product Properties

	Test Standard	Unit	TBK-60
Adhesive	Softening point	ASTM E28 °C (°F)	102 (216)
	Lap shear	DIN 30 672 N/cm <sup>2</sup>	15
	Lap shear	ASTM D1002 psi	5.5
Backing	Specific gravity	ASTM D792	0.95
	Tensile strength	ASTM D638 MPa (psi)	24 (3480)
	Elongation	ASTM D638 %	700
	Hardness	ASTM D2240 Shore D	52
	Abrasion resistance	ASTM D1044 mg	30
	Volume Resistivity	ASTM D257 ohm-cm	10 <sup>18</sup>
	Dielectric Voltage Brkdown	ASTM D149 kV/mm	20
Sleeve	Impact	DIN 30 672 class C	pass
	Indentation	DIN 30 672 class C	pass
	Peel	ASTM D1000 N/cm (pli)	80 (46)
	Cathodic Disbondment	ASTM G8 mm rad	8
	Water Absorption	ASTM D570 %	0.05
Low Temp. Flexibility	ASTM D2671-C °C (°F)	-14 (7)	

## How To Order:



Ordering Options
<b>TBK-60</b>
<b>BK-Black</b>
Primary Sleeve - 300, 450, 600mm (12, 18, 24") Sacrificial Sleeve - 150mm (6")
<b>55-610 mm (2-24")</b>
<b>1.1 mm (0.045")</b> <b>0.6 mm (0.025")</b>
<b>TBK-60</b>

The above represent standard ordering options. Consult your Canusa representative for any unique project requirements.