

# BLACTRACK

Advance/Pascal/Neo Pascal

High-performance fluoroelastomer tube

Black Truck Advance · Pascal · Neopascal

<Applications > Physical and chemical equipment, analytical equipment, chemical industry, general machinery industry, printing equipment,

Multi-layer tube with UV protection function in addition to flexibility and chemical resistance

- **Excellent chemical resistance.**

It is all-fluorine and resistant to many chemicals and solvents.

- **It is very flexible (advanced).**

It contributes to improved workability.

- **High heat resistance.**

It can be used in a continuous 120°C environment.

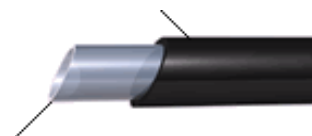
- **Less pollution due to elution.**

Since the inner layer contains no cross-linking agent, stabilizer, or plasticizer, there is almost no risk of elution.

- **Excellent pressure resistance and barrier performance (Pascal/Neopascal).**

Excellent pressure resistance due to the special two-layer structure.

Outer layer: black (fluorine elastomer layer)



Inner layer: transparent (fluorine resin layer)

■ General Properties

Item		Outer layer material
Specific gravity		1.89
Hardness	JIS A	67
Melting point	°C	220
Thermal decomposition start temperature	°C	380
Thermal conductivity	cal/cm · sec · °C	3.6×10 <sup>-4</sup>
specific heat	cal/g · °C	0.3
Low temperature torsion test	T <sub>50</sub> °C	-9
Growth	%	620
Tensile strength	MP a	15
Tear strength	kN/m	28
Compression set	50°C×24h %	57
Coefficient of friction		0.6
Impact resilience	%	10
Volume resistivity	Ω - c m	5×10 <sup>13</sup>
Breakdown voltage	kV/0.15mm	16
Permittivity	23°C 10 <sup>3</sup> Hz	5.9

Available size mm

Inner Diameter x Outer Diameter	Advanced	Pascal	Neo Pascal
1.0×3.0	○	○	
2.0×4.0	○	○	○
3.0×5.0	○	○	○
4.0×6.0	○	○	○
5.0×7.0	○	○	
6.0×8.0	○	○	○
7.0×9.0	○	○	
7.0×10.0	○		
8.0×11.0	○		
9.0×12.0	○	○	
1.6×4.8	○	○	
3.2×6.4	○	○	
4.8×7.9	○	○	
6.4×9.5	○	○	
7.9×11.1	○	○	

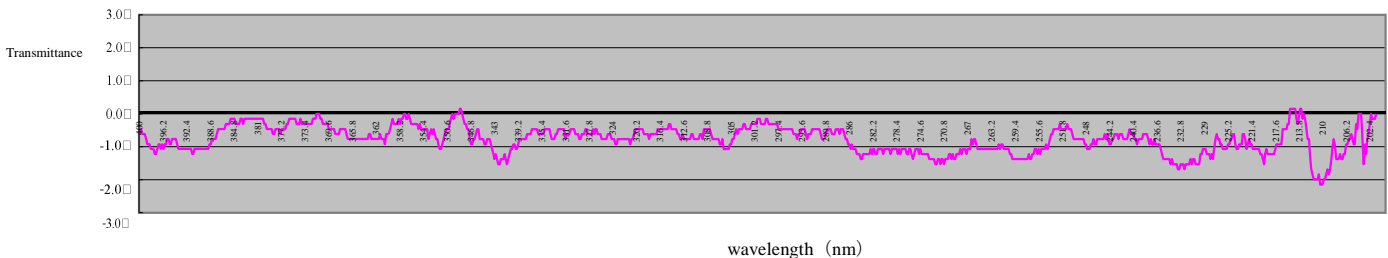
■ Chemical resistance

Classification	Drug name	Black track		
		Advanced	Pascal	Neo-pascal
Acid	Hydrochloric acid (35%)	○	○	○
	Sulfuric acid (98%)	○	○	○
	Nitric acid (68%)	○	○	○
	Phosphoric acid (85%)	○	○	○
Alkali	Sodium hydroxide (30%)	○	○	○
	Sodium hypochlorite	○	○	○
Hydrocarbon (Aliphatic)	n-hexane	○	○	○
	Cyclohexane	○	○	○
Aromatic	toluene	○	○	○
	Xylene	○	○	○
Alcohol	methanol	○	○	○
	ethanol	○	○	○
	Isopropyl alcohol	○	○	○
Ether	Diethyl ether	●	○	○
	Tetrahydrofuran	×	●	●
Ketone	Acetone	×	●	○
	Methyl ethyl ketone	×	●	○
	Acetic acid (99%)	●	○	○
Carboxylic acid ester	Ethyl acetate	×	●	○
	Propylene glycol monomethyl ether = acetate	△	○	○
	γ-butyrolactone	○	○	○
Chlorine solvent	Methylene chloride	●	○	○
	1,2-dichloroethane	○	○	○
	Trichlorethylene	○	○	○
	Tetrachlorethylene	○	○	○
Amide	N,N-dimethylformamide	×	●	○
	1-methyl-2-pyrrolidone	×	○	○
Other	Dimethyl sulfoxide	○	○	○
	ASTM #2 oil	○	○	○
	gasoline	-	○	○

◆ Test method: Measure the weight change after soaking in each chemical for 7 days at room temperature. This is an evaluation of the inner surface where all fluids come into contact. However, it varies depending on the usage conditions.

\*Evaluation (weight increase rate)

- Less than 5%
- △ Above 10% and less than 20%
- Above 5% and less than 10%
- × More than 20%



(Note) The products described in this material are not manufactured for use as medical devices that come into contact with living tissue. Please note that the finished tube has a curl, and if it is bent in the opposite direction to the curl, buckling will occur.

The data in this pamphlet are typical values, not guaranteed values. When selecting a tube, be sure to perform a confirmation test on the customer side. Specifications are subject to change without notice.