

# Sumitube® B55

Single Wall Polyolefin, 2:1

Operating Temperature: -70 up to 135°C

Surface: Matt

Marking: None



ASTM  
FMVSS 302

## Dimensions

BEFORE SHRINKAGE		AFTER SHRINKAGE		DELIVERY UNITS	
Inner diameter (EID) min.		Inner diameter (RID) max.	Wall thickness (RWT) min-max	Unit quantity	Box quantity
[type]	[mm]	[mm]	[mm]	[m]	[m]
1,2	1,20	0,60	nom. 0,31	500	2500
1,6	1,60	0,80	nom. 0,33	500	2000
2,4	2,40	1,20	nom. 0,36	500	2000
3,2	3,20	1,60	nom. 0,39	300	1500
4,8	4,80	2,40	nom. 0,42	150	750
6,4	6,40	3,20	nom. 0,45	100	500
9,5	9,50	4,80	nom. 0,48	100	500
12,7	12,7	6,40	nom. 0,52	100	600
19,1	19,1	9,50	nom. 0,58	100	500
25,4	25,4	12,7	nom. 0,67	100	500
31,8	31,8	15,9	nom. 0,76	100	200
38,1	38,1	19,1	nom. 0,76	100	300
50,8	50,8	25,4	nom. 0,85	100	200
76,2	76,2	38,1	nom. 0,95	80	80
101,6	101,6	50,8	nom. 1,05	80	80
127,0	127,0	63,5	nom. 1,40	30	30

## Colours & Technical drawing

### STANDARD COLOURS

black

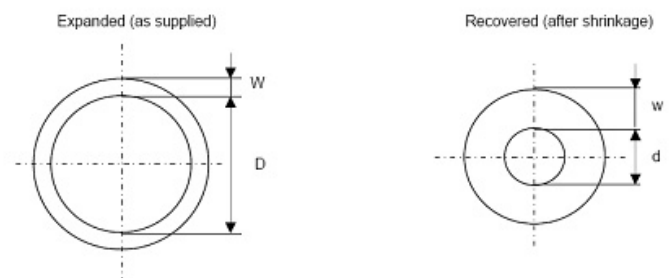


### SPECIAL COLOURS

upon request

### TECHNICAL DRAWING

Tube Front



D= Inside diameter expanded  
d= Inside diameter recovered  
W= Wall thickness expanded  
w= Wall thickness recovered

# Sumitube® B55

Single Wall Polyolefin, 2:1

## Technical properties

### PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	REQUIREMENT	TYPICAL VALUE
Longitudinal Change	SAE-AS23053	-5% ± 10%	-5%
Specific Gravity	ASTM D 792	nom. 1,1	Pass
Tensile Strength	ASTM D 638	Min. 10,4 MPa	Pass
Elongation at Break	ASTM D 638	Min. 200%	≥ 400%
Secant Modulus	ASTM D 882	Max. 173 MPa	≤ 100 MPa

### THERMAL PROPERTIES

PROPERTY	TEST METHOD	REQUIREMENT	TYPICAL VALUE
Operating Temperature	Life-Curve	-70 up to 135°C	-70 up to 135°C
Min. Shrink Temperature	Shrink curve	full recovery	90°C
Shrinking starts at	Shrink curve		60°C
Heat Shock (225°C x 4h)	UL 224	no crack, flowing or dripping	Pass
Elongation after heat ageing (136°C x 168h)	SAE-AS23053	Min. 100%	≥ 170%
Tensile Strength after heat ageing (136°C x 168h)	SAE-AS23053	Min. 7,3 MPa	Pass
Cold bend (-70°C x 4h)	UL 224	no cracking	Pass
Copper Corrosion (175°C x 16h)	UL 224	no corrosion	Pass

### CHEMICAL PROPERTIES

PROPERTY	TEST METHOD	REQUIREMENT	TYPICAL VALUE
Flammability	FMVSS 302	Pass	Pass
Fluid Resistance (after immersion 24°C x 24h)	SAE-AS23053	Min. 10,4 MPa (Tensile Strength)	Pass
Fluid Resistance (after immersion 24°C x 24h)	SAE-AS3053	Min. 200% (Elongation)	Pass

### ELECTRICAL PROPERTIES

PROPERTY	TEST METHOD	REQUIREMENT	TYPICAL VALUE
Voltage Rating			600V
Dielectric Voltage Withstand (2.5kV x 60s)	UL 224	no breakdown	Pass
Volume Resistivity	ASTM D 257	Min. 10 <sup>14</sup> Ω·cm	Pass
Dielectric Strength	ASTM D 876	Min. 19,7 kV/mm	≥ 23 kV/mm

Tested fluids: (24 hrs at 23°C)

Gasoline. Simulated Windshield cleaner. Brake fluid. Anti-freezing fluid. battery fluid. Engine oil. Torque conversion oil.

