


How Do Parflex Plastics Stack Up Against Each Other for Laboratory Applications?



Attributes	 <ul style="list-style-type: none"> High lubricity Best coefficient of friction Unmatched chemical resistance Widest temperature range Best flexibility at low temperatures Thermal stability at high temperatures 										
	Material	PTFE	FEP	PFA	Nylon			Polyethylene (PE)		Polypropylene (PP)	Polyurethane (PU)
Series	101, 201,	103, 203	104, 204	N/NB	PAT	NR	E/EB	PEFR	PP/PPB	95U/95UM	95FR
Temperature Range	500°F (260°C) 100°F (-73°C)	400°F (204°C) 100°F (-73°C)	500°F (260°C) 100°F (-73°C)	200°F (93°C) -65°F (-54°C)	200°F (93°C) -70°F (-57°C)	200°F (93°C) -60°F (-51°C)	150°F (66°C) -80°F (-62°C)	150°F (66°C) -85°F (-65°C)	200°F (93°C) 0°F (-18°C)	180°F (82°C) -40°F (-40°C)	165°F (75°C) -40°F (-40°C)
Size Range O.D. inch metric	3/16" to 1.1" 3, 4, 5, 6, 7, 8, 9, 10, 12	3/16" to 1" 3, 4, 5, 6, 7, 8, 9, 10, 12	3/16" to 1" 4, 6, 8, 10, 12	1/8" to 1/2" 4, 6, 8, 10, 12, 14, 16, 18, 20	1/8" to 3/4" -	1/8" to 1/2" -	1/4" to 5/8" 6, 8, 10, 12	5/32" to 1/2" -	1/8" to 5/8" -	1/8" to 3/4" 4, 6, 8, 10, 12	1/4" to 1/2" 6, 8, 10, 12
Styles	Fractional Metric	Fractional Metric	Fractional Metric	Semi-Rigid Flexible / Metric	Ultra Pure, UV Resistant	Semi Rigid High Strength	Instrument UV Resistant	Flame Resistant	Laboratory Grade UV Resistant	Fractional Metric	Flame Resistant
Compliance	AMS 3653G (AWG) 21 CFR 177.1550 USP Class VI UL 94 V-0	ASTM D2116-07 21 CFR 177.1550 USP Class VI UL 94 V-0	ASTM D3307-10 21 CFR 177.1550 USP Class VI UL 94 V-0	-	-	-	ASTM D-1693 NSF – 51 NSF – 61 FDA, CFR21 Part 177 Compliant for Food Contact	ASTM D-1693 UL 94 V-2	NSF-51* FDA, CFR21 Part 177 Compliant for Food Contact	-	UL 94 V-0 compliant jacket material
Color Range	Milky White (colors on request)	Clear (colors on request)	Clear, w/blue tint (colors on request)	Multiple Colors	Black, Brown, Silver	White Black	Multiple Colors	Black	White Black	Multiple Colors	Multiple Colors
Flammability Rating UL-94	V-0	V-0	V-0	na	na	na	na	V-2	na	na	V-0
Typical Applications	Use for extreme high and low temperatures and chemical or corrosive applications			Use for general tubing applications							
	<ul style="list-style-type: none"> Fluid transfer Chemical processing Pneumatic actuator lines Process cooling water Gas sampling Laboratory Electronics 	<ul style="list-style-type: none"> Fluid transfer Instrumentation Food & Beverage UV applications Water and gas sampling Down hole pump Ozone sampling 	<ul style="list-style-type: none"> Semiconductor Wet bench Dionized (DI) water Air & gas sampling Flow monitoring High purity applications Laboratory 	<ul style="list-style-type: none"> Pneumatic and Petroleum based chemical transfer Robotics Machine tool General pneumatics Lubrication Pest control lines 	<ul style="list-style-type: none"> Pure air and gas distribution systems 	<ul style="list-style-type: none"> High-pressure pneumatics Low-pressure lubrication systems Marine control systems Process lines for chemicals and oils 	<ul style="list-style-type: none"> Chemical transfer Low-pressure pneumatics Potable water 	<ul style="list-style-type: none"> Pneumatic controls in HVAC 	<ul style="list-style-type: none"> Food contact* Chemical transfer Chlorinated water 	<ul style="list-style-type: none"> Low and high pressure pneumatics Robotics Machine tools Automation equipment Transportation (non-DOT) 	<ul style="list-style-type: none"> Low to medium pressure air and water supply lines where weld spatter protection is needed Robotic welding End-of-arm tooling

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