

# ALTAFLUOR® 350 THV FLEX

THV FLEX (tetrafluoroethylene-hexafluoropropylene-vinylidene fluoride) has a unique combination of properties making it the preferred choice for many applications. THV is ideal for use in applications requiring excellent UV light transmission combined with the safety and flexibility of plastic. THV FLEX grade has the flexibility of traditional PVC flex tubing combined with chemical resistance much closer to that of FEP. THV is available in a variety of compositions each designed for specific performance values. ALTAFLUOR® 350 Series uses THV FLEX grade, which allows for greatest flexibility, permeation resistance and good chemical resistance, but with slightly reduced upper service temperature over other grades. ALTAFLUOR® 350 also has excellent bondability with other materials, which allows for multi-layer extrusions. For more product specific information please contact your ALTAFLUOR representative.

## ALTAFLUOR® 350 FEATURES

- 100% Virgin THV 221 FLEX Grade
- Highest UV and visible light transmission of any fluoropolymer
- Most flexible fluoropolymer
- Good chemical resistance
- Superior weatherability
- Excellent bondability
- Excellent ozone resistance
- Extremely low permeation

## APPLICATIONS

- Laboratory
- Solar energy
- UV purification systems
- Fiber optic
- Chemical process

## SPECIFICATIONS

**Temperature:** -40 °F to 212 °F

**Flammability:** THV Flex grade resin is UL 94 V0 rated. THV FLEX grade resists combustion and does not promote flame spread

## ALTAFLUOR® 350 THV FLEX - TUBING

PART NUMBER	ID	OD	+/-	WALL	+/-
350-0250-030-0C	0.188	0.250	0.006	0.030	0.004
350-0250-040-0C	0.170	0.250	0.006	0.040	0.004
350-0250-047-0C	0.156	0.250	0.006	0.047	0.004
350-0250-062-0C	0.125	0.250	0.006	0.062	0.004
350-0375-062-0C	0.250	0.375	0.006	0.062	0.004
350-0500-062-0C	0.375	0.500	0.006	0.062	0.004

Revision 2

Additional sizes are available as custom items - minimum order requirements may apply. Please consult factory for additional sizes and availability.

## ALTAFLUOR® 350 THV FLEX - BEND RADIUS AND WORKING PRESSURE CHART

PART NUMBER	OD	WALL	ID	BEND RADIUS (INCHES)	SUGGESTED MAX WORKING PRESSURE @ 73°F
350-0250-030-0C	0.250	0.030	0.188	1"	50
350-0250-040-0C	0.250	0.040	0.170	1"	68
350-0250-047-0C	0.250	0.047	0.156	1"	80
350-0250-062-0C	0.250	0.062	0.125	1"	106
350-0375-062-0C	0.375	0.062	0.250	1"	67
350-0500-062-0C	0.500	0.062	0.375	1.5"	39

Revision 2

The above information is based on tests performed at 73° F and can vary in individual applications based on parameters such as temperature, chemical concentration, pressure, etc. Please consult factory for details. For an estimate on burst pressure at ambient temperature we consider a 5:1 ratio when exposure temperature is 73° F. However Altaflo does not recommend exceeding the suggested Working Pressure listed.

## ALTAFLUOR® 350 SERIES THV FLEX - PHYSICAL PROPERTIES

PHYSICAL PROPERTY	ASTM TEST METHOD	UNITS	VALUES
Upper Service Temp. Long Term			180° F
Specific Gravity	D 792		1.95
Tensile Strength	D 638	PSI	2900
Elongation	D		600
Flex Modulus	D 790	PSI	12,000
MIT Flex Life			N/A
Hardness	D 2240	Shore D	44

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**NOTE:** 3M, the sole producer of THV resins, is exiting the fluorochemical market in 2025. THV resin availability is limited. We currently have resin supply available for new orders on a "first come, first served" basis. We strongly recommend placing orders now to get you through the upcoming year while we search for a replacement material.



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