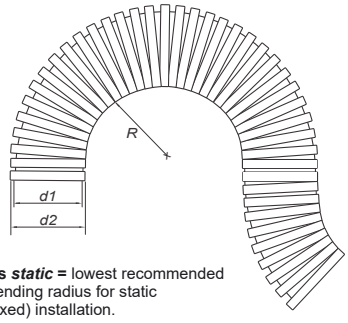
TMF Thermoplastic Covered Conduit

TMF conduit / tubing is designed for use in the food industry. This highly specialized material is suitable for applications on machines and productive structures built for the formulation of food and beverages. TMF has an enhanced resistance to acids, bases and watery compounds and has the added advantage of acting like a high quality thermal insulator. TMF's outer material has been designed to cover and protect installed fittings from all possible food contaminants.

RoHS 2002/95/EC CE

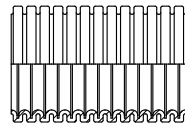
- Good weather and UV resistance
- Good mechanical strength and flexibility
- Temperature range: 0°C(32°F) to 100°C(212°F)
- Surface Hardness: 65 Shore A
- Enhanced resistance to ozone
- Flame retardant

Substances permitted for the conduit cleaning: water, water with chlorine, bleach, ammonia, basic substances.



Rs *static* = lowest recommended bending radius for static (fixed) installation.

PROFILE NW
TMF-F12.50
TYPE PU



Fine Profile **F**
Tight bend radius

Specifications are subject to change without notice

TMF

Order No.	Conduit Size	Trade Size		*d1*		*d2*		*Rs Static*		PU	
	NW	mm	in	mm	in	mm	in	mm	in	m	ft
TMF-F12.50	12	16	3/8	11.8	0.46	18.8	0.74	30.0	1.18	50	164.0
TMF-F17.50	17	20	1/2	16.0	0.63	24.2	0.95	40.0	1.57	50	164.0
TMF-F23.50	23	25	3/4	22.4	0.88	31.5	1.24	45.0	1.77	50	164.0
TMF-F29.50	29	32	1	28.8	1.13	37.5	1.48	55.0	2.17	50	164.0
TMF-F36.30	36	40	1-1/4	36.5	1.44	44.0	1.73	60.0	2.36	30	98.0
TMF-F48.30	48	50	1-1/2	48.5	1.91	57.5	2.26	70.0	2.76	30	98.0

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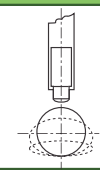
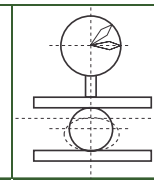
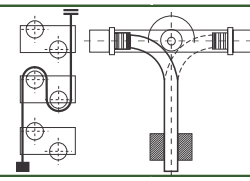
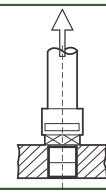
MECHANICAL CHARACTERISTICS	STANDARD REFERENCE	METHOD OF TESTING		VALUES	UNIT
Impact Strength	IEC EN 61386	The Conduit is impacted with a spherical object weighing 2 kg and having a 300 mm radius. The height of the drop is equal to 1.2 meters.		> 1 / [2] (-45°C)	J / Class
				> 2 / [3] (-15°C)	J / Class
				> 6 / [4] (23°C)	J / Class
Tensile Strenght at Break	ASTM D412-C			9.2	Mpa
Elongation at Break				720	%

Compression Strength	20% / 2 min.	The Conduit is compressed with a 100 mm steel plate for a period of time, reducing the conduit diameter by 25%.		Compression Force	Under Load Deformation	Deformation Residual	N / Class
Tested with conduit:							
TMF-F12.50	Internal Method			≥140 N	2.4 mm	4%	N 50x50 mm
TMF-F29.50				≥180 N	5.8 mm	2%	N 50x50 mm
TMF-F48.30				≥120 N	9.6 mm	2%	N 50x50 mm

Fatigue Strength	23°C / 50% r.h	The Conduit is continuosly subjected to horizontal and vertical movements. The full movements are counted.		≥250,000.00	Cycles at 23°C
	Internal Method				

Pull-Out Strength	23°C / 50% r.h.	The Conduit with the respective connector is subjected to increasing pull-out strength until test uncouples.		Pulling Force	Residual Elongation	N / Class
Tested with Grip Lock Fitting:						
K8-M-S-12P11	Internal Method			≥210 N	2%	
K8-M-S-29P29				≥530 N	2%	
K8-M-S-48P48				≥800 N	2%	

SHEATING PHYSICAL CHARACTERISTICS	STANDARD REFERENCE	VALUES	UNIT
Hardness	ASTM D2240	65	shore A
Density	ASTM D792	0.98	gr/cm³
M.F.I (190°C / 5Kg)	ASTM D1238	10	gr/10'

THERMAL CHARACTERISTICS	VALUES		UNIT
Operating Temperature	0°C to + 100°C		Celsius
Short Period of time	110°C	20,000 hours	
	150°C	168 hours	

FIRE CHARACTERISTICS	STANDARD REFERENCE	VALUES	UNIT
Oxygen Index	EN ISO 4589-1	≥25	%
Halogens Contents	DIN 53474	FREE	
Flame Class	UL94	HB	
Self-Extinguishing	IEC EN 61386	YES	
Glowing Flammability Index	EN 60695-2-10	850°C	Celsius

WEATHERING RESISTANCE	STANDARD REFERENCE	VALUES
Weathering UV / Rain Cycle		GOOD
UV Aging	ISO 4892 -2	≥2,000 hours

CHEMICAL PROPERTIES	VALUES
Resistance acids, bases and water compounds	ENHANCED

ENVIRONMENTAL PROPERTIES	STANDARD REFERENCE	VALUES
ROHS Compliant	EU Directive 2002 / 95 / EC	YES
Recyclable		YES
UV Resistant		YES

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