

BRANCHING ACCESSORIES



BRANCHING ACCESSORIES



Wire Routing & Fastening



Branching, Fastening & Closure Accessories



Polyamide



Standard: Black



Low: -40°C (-40°F)
High: 125°C (257°F)



Options: Compatible with Delfingen Convolved Tubing



Branching and routing of protected wire harnesses
Tee fittings, Elbows, Cross fittings, Y fittings and Clips
Easy & quick installation

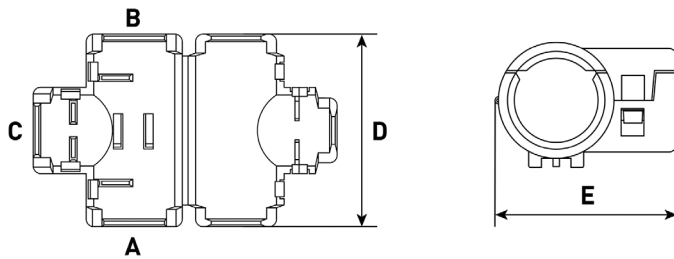
PHYSICAL PROPERTIES

Polyamide 6.6 **(A)**

Polypropylene **(B)**

Physical properties	Spec	Unit	A	B
Thermal properties				
Continuous temperature of use - min/max	-	°C (°F)	-40/125 (-40/257)	-30/100 (-22/212)
Peak temperature	-	°C (°F)	150 (302)	125 (257)
Mechanical properties				
Tensile strength at yield	ASTM D638	MPa	-	23
Elongation at yield	ASTM D638	%	-	33
Tensile strength at break	ISO 527	MPa	85	-
Elongation at break	ISO 527	%	>65	-
Other properties				
Density	ISO 1183	g/cm ³	1.14	0.90
Flammability	FMVSS 302	mm/min	<100	<100
Chemical resistance	Resists the majority of chemicals and automotive fluids			

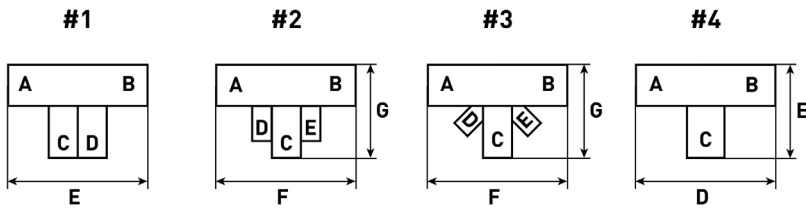
DIMENSIONS TEE FITTINGS



Designation	A	B	C	D	E	Fastening types
	(mm)					
TE 6/6/6	06	06	06	43	28.6	type 0
TE 9/6/6	09	09	06	41.7	26.4	type 0
TE 9/9/6	09	09	06	41.3	31.4	type 0
TE 9/9/9	09	09	09	45.6	24.25	type 0
TE 11/9/6	11	09	06	41.5	34	type 2
TE 11/9/9 PR	11	09	09	50.3	38	type 2
TE 11/9/11 PR	11	09	11	50.3	38	type 2
TE 11/11/6	11	11	06	41.3	34.1	type 1
TE 11/11/9	11	11	09	45.8	34.7	type 2
TE 11/11/11	11	11	11	50.3	38	type 2
TE 13/9/9	13	09	09	50.3	38	type 2
TE 13/9/11 PR	13	09	11	50.3	38	type 2
TE 13/11/9	13	11	09	51	35.6	type 2
TE 13/11/11 PR	13	11	11	50.3	38	type 2
TE 13/13/6	13	13	06	50.45	36.8	type 2
TE 13/13/9	13	13	09	45.6	36.2	type 1
TE 13/13/13	13	13	13	50.7	36.2	type 1

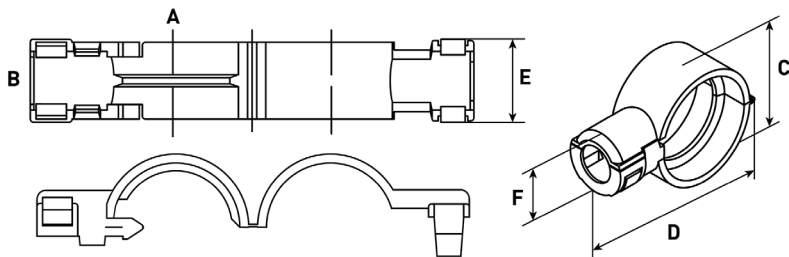
Designation	A	B	C	D	E	Fastening types
	(mm)					
TE 13/13/16	13	13	16	63	44	type 2
TE 16/13/9	16	13	09	45.6	39.4	type 2
TE 16/13/11 PR	16	13	11	58.5	43	type 2
TE 16/13/13 PR	16	13	13	58.5	43	type 2
TE 16/16/6	16	16	06	50.9	40	type 2
TE 16/16/9	16	16	09	50.5	38.4	type 2
TE 16/16/11 PR	16	16	11	58.2	42.5	type 2
TE 16/16/13	16	16	13	51.3	39.05	type 1
TE 16/16/16	16	16	16	53.4	39	type 1
TE 19/9/9	19	09	09	49.5	39.05	type 0
TE 19/11/16	19	11	16	53.4	44.6	type 2
TE 19/13/9 PR	19	13	09	58.5	42.75	type 2
TE 19/13/11 PR	19	13	11	58.25	43	type 2
TE 19/13/13 PR	19	13	13	58.5	43	type 2
TE 19/16/9 PR	19	16	09	58.5	42.75	type 2
TE 19/16/11 PR	19	16	11	58.5	42.7	type 2
TE 19/16/13 PR	19	16	13	58.5	42.7	type 2
TE 19/19/6	19	19	06	50.3	42.5	type 2
TE 19/19/9	19	19	09	50.7	42.3	type 2
TE 19/19/11	19	19	11	50.4	42.2	type 2
TE 19/19/13	19	19	13	48.3	41.4	type 1
TE 19/19/16	19	19	16	53	41.74	type 1
TE 19/19/19 PR	19	19	19	65.7	49.85	type 2
TE 19/19/23 PR	19	19	23	65.7	50	type 2
TE 19/23/19 PR	19	23	19	65.7	50	type 2
TE 19/23/23 PR	19	23	23	65.7	50	type 2
TE 23/16/9	23	16	09	45.6	46.8	type 2
TE 23/16/13	23	16	13	51	52.2	type 0
TE 23/19/23 PR	23	19	23	65.4	49.95	type 2
TE 23/23/6	23	23	06	53	47.5	type 2
TE 23/23/9	23	23	09	58	49	type 2
TE 23/23/11 PR	23	23	11	58	49.5	type 2
TE 23/23/13 PR	23	23	13	58	49	type 2
TE 23/23/13 3P	23	23	13	77.8	60.04	type 3
TE 23/23/16 PR	23	23	16	58	49.5	type 2
TE 23/23/23 PR	23	23	23	66	49.95	type 2
TE 26/26/9 PR	26	26	09	58.7	53.55	type 2
TE 26/26/11 PR	26	26	11	58.7	53.55	type 2
TE 26/26/13 PR	26	26	13	58.1	53.55	type 2
TE 26/26/13 3P	26	26	13	78.8	62.89	type 3
TE 26/26/16 PR	26	26	16	58.7	53.55	type 2
TE 29/19/13 PR	29	19	13	62.2	56	type 2
TE 29/19/16 PR	29	19	16	65.2	56	type 2
TE 29/19/19 PR	29	19	19	65.2	56	type 2
TE 29/19/23 PR	29	19	23	65.2	56	type 2
TE 29/19/26 PR	29	19	26	65.25	55.7	type 2
TE 29/26/19	29	26	19	60.5	55.7	type 2
TE 32/29/23 PR	32	29	23	68.8	59.4	type 2
TE 32/29/26 PR	32	29	26	68.8	59	type 2

DIMENSIONS SPECIFIC TEE FITTING



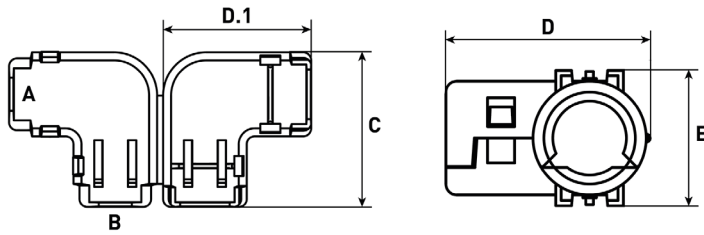
Fitting type #	Designation	A	B	C	D	E	F	G	Fastening types	Branches	
		(mm)								at 90°	at 45°
#1	TE 13/9/2x9	13	09	09	09	61	/	/	type 2	2	/
	TE 13/13/2x9	13	13	09	09	61	/	/	type 1	2	/
#2	TE 19/19/3x6 S	19	19	06	06	06	63.2	44.75	type 2	3	/
#3	TE 19/19/19/2x6	19	19	19	06	06	77.4	53.25	type 1	1	2
#4	TE 23/23/19 PR	23	23	19	66	49.2	/	/	type 3	1	/
	TE 23/23/19 3P	23	23	19	78	59	/	/	type 2	1	/
	TE 26/26/19 PR	26	26	19	58.7	53.55	/	/	type 3	1	/
	TE 26/26/19 3P	26	26	19	79	62	/	/	type 2	1	/
	TE 26/26/26	26	26	26	86.2	60.6	/	/	type 3	1	/
	TE 29/32/26 PR 3P	29	32	26	81.4	68.75	/	/	type 3	1	/
	TE 29/29/26 PR 3P	29	29	26	81.4	68.75	/	/	type 3	1	/

DIMENSIONS NON-AGRESSIVE TEE FITTINGS



Designation	A	B	C	D	E	F
	(mm)					
TE NAG 16/6	16	06	24.8	36.25	13.9	13.6
TE NAG 16/11	16	11	27.2	35.3	21.7	19.5
TE NAG 19/11	19	11	29	38.5	21.8	19.5
TE NAG 23/4.5	23	04.5	33.4	45.5	14	14
TE NAG 23/6 PR	23	06	33.4	45.5	14	14

DIMENSIONS ELBOW



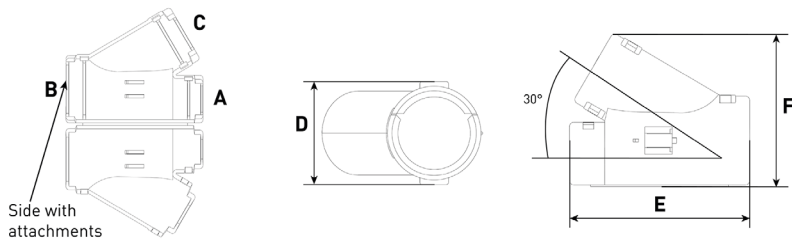
Designation	A	B	C	D	D.1	E	Fastening types
	(mm)						
ELBOW 6/9	06	09	22.4	-	31.6	16.4	type 0
ELBOW 9/9	09	09	38.3	37.65	-	25.4	type 2
ELBOW 9/11	11	09	38.3	37.65	-	25.4	type 2
ELBOW 11/9	09	11	38.3	37.65	-	25.4	type 2
ELBOW 11/11	11	11	38.3	37.65	-	25.4	type 2
ELBOW 13/13	13	13	42	-	42	29.8	type 2
ELBOW 13/16	16	13	42	-	42	29.8	type 2
ELBOW 16/13	13	16	42	-	42	29.8	type 2
ELBOW 16/16	16	16	42	42.75	-	29.8	type 2
ELBOW 19/19	19	19	57.8	59.15	-	37.6	type 2
ELBOW 19/23	23	19	57.8	-	57.8	37.6	type 2
ELBOW 23/19	19	23	57.8	-	57.8	37.6	type 2
ELBOW 23/23	23	23	57.8	-	57.8	37.6	type 2

DIMENSIONS BRANCHING CROSS FITTINGS



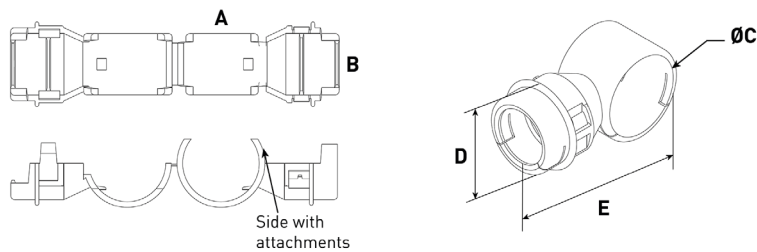
Designation	A	B	C	D	E	F	G	H	Fastening types
	(mm)								
CROSS 19/19/9/9/6	19	19	09	09	06	33.8	56	75.8	type 2
CROSS 19/19/9/9/6 RE	19	19	09	09	06	38.4	63.4	89	type 2
CROSS 19/19/9/9/9 PR	19	19	09	09	09	37.9	62.75	89	type 2
CROSS 19/19/11/11/9 PR	19	19	11	11	09	37.7	63	89.3	type 2
CROSS 19/23/9/9/6 PR	19	23	09	09	06	38.2	62.75	89.3	type 2
CROSS 19/23/9/9/9 PR	19	23	09	09	09	38.2	62.75	89	type 2
CROSS 23/19/9/9/9 PR	23	19	09	09	09	37.9	62.75	88.8	type 2
CROSS 23/23/9/9/6 PR	23	23	09	09	06	37.7	63	89.3	type 2
CROSS 23/23/9/9/9 PR	23	23	09	09	09	37.3	63	89.3	type 2
CROSS 23/23/11/11/9 PR	23	23	11	11	09	37.7	63	89.3	type 2
CROSS 26/26/9/9/6 RE	26	26	09	09	06	41.6	66.2	89.3	type 2
CROSS 26/26/9/9/9 RE	26	26	09	09	09	41.6	66.2	89.3	type 2

DIMENSIONS Y FITTINGS



Designation	A	B	C	D	E	F	Fastening types
	(mm)						
Y 6/6/4.5	06	06	04.5	14	49.6	30.4	type 0
Y 29/19/19 PR	19	29	19	45.4	82.5	65.6	type 2
Y 29/19/26 PR	19	29	26	45.4	82.5	68.95	type 2

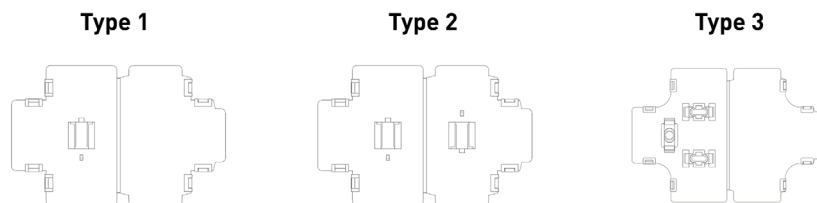
DIMENSIONS BRANCHING CLIPS



Designation	A	B	C	D	E	F
	(mm)					
CLIP 17/7.5	17	7.5	23.2	16.5	43.1	16
CLIP 17/10	17	10	23	19.3	43.1	16
CLIP 17/12	17	12	23	22	43.1	16
CLIP 22/7.5	22	7.5	28.5	17.25	47.85	18
CLIP 22/10	22	10	28.5	19.3	47.85	18
CLIP 22/12	22	12	27.6	22.3	47.85	18

FASTENING TYPES

Type	Description
TYPE 0	No slide bar
TYPE 1	Slide bar
TYPE 2	Double slide bar
TYPE 3	3 spigots



APPROVALS

Specific to applications

PACKAGING

Cardboard boxes of
 A12 format (400x300x290 mm)
 A16 format (300x200x190 mm)
 Other packaging upon request