

**Low Profile Shim Boots**

- Helashrink 313E Series, without adapter lip

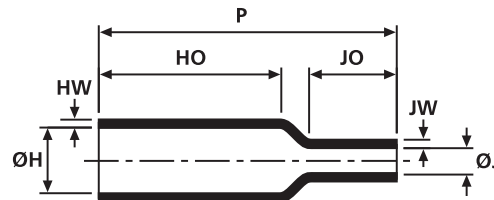
This part is normally used to build up or shim a cable diameter to facilitate a better fit for components in a cable harness.



313E445-457 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

Sizes and Type Table									
Type	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ±10%	HO ± 10%	HW ± 25%	JW ± 25%	JO ± 10%
313E445	12.7	12.7	11.1	3.3	63.5	41.1	1.5	1.5	15.7
313E455	22.1	22.1	11.2	3.3	53.3	27.9	2.3	1.5	15.7
313E447	20.8	14.7	20.6	9.9	63.5	41.1	1.5	1.5	16.5
313E457	22.1	22.1	20.6	9.9	53.3	27.9	2.3	1.5	14.0

All dimensions in mm. Subject to technical changes.

**For Material / Adhesive selection and other information please refer to page 10.**

Combinations "On request"			
Adhesive	Material		
	9	8	6
TSA-200	√	√	√
WM250	√	√	√
W8	√	√	√
W24	√	√	√
V9500	√	√	√
HMT200A	√	√	√
Without Adhesive	√	√	√

Standard combinations	
Article-No.	Type
422-10000	313E445-9
422-10200	313E455-9
422-10100	313E447-9
422-10300	313E457-9

**Low Profile Straight Boots**

- Helashrink 313F Series, with adapter lip

This boot provides strain relief in applications with partially loaded connectors, resulting in small cable diameters requiring a high shrink ratio.



313F322-396 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

Sizes and Type Table											
Type	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ±10%	R ± 15%	T ± 0.8	JO ± 10%	HW ± 1.5	JW ± 0.8	S ± 1.5
313F322	23.8	9.9	17.2	6.6	105.9	11.6	1.3	86.3	1.5	1.5	1.5
313F332	27.1	13.2	20.8	7.6	121.1	12.1	1.3	98.5	1.5	1.5	1.5
313F343	30.9	18.5	24.3	8.9	138.6	12.1	1.3	112.7	1.7	1.5	1.7
313F353	35.6	22.1	28.7	10.1	159.5	12.1	1.3	130.8	1.7	1.5	1.7
313F364	38.8	28.2	31.4	10.9	177.8	13.9	1.8	142.2	1.7	1.5	1.7
313F374	42.2	32.2	38.3	12.7	203.2	15.2	1.8	163.0	1.7	1.5	1.7
313F385	51.5	45.4	45.4	14.9	203.2	15.2	1.8	157.7	1.7	1.7	1.7
313F396	62.7	45.4	53.3	16.7	228.6	16.0	1.8	153.1	1.7	1.7	1.7

All dimensions in mm. Subject to technical changes.

Combinations "On request"			
Adhesive	Material		
	9	8	6
TSA-200	√	√	√
WM250	√	√	√
W8	√	√	√
W24	√	√	√
V9500	√	√	√
HMT200A	√	√	√
Without Adhesive	√	√	√

Standard combinations	
Article-No.	Type
422-20000	313F322-9
422-20100	313F332-9
422-20200	313F343-9
422-20300	313F353-9
422-20400	313F364-9
422-20500	313F374-9
422-20600	313F385-9
422-20700	313F396-9