


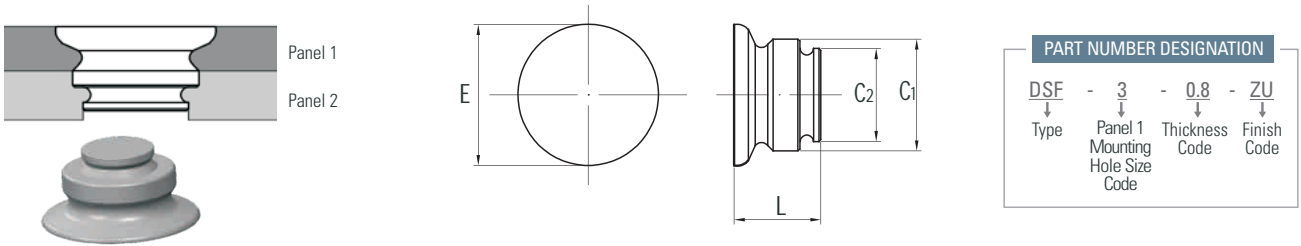


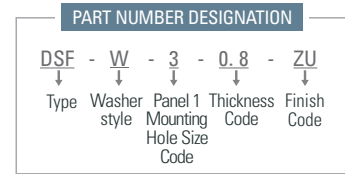
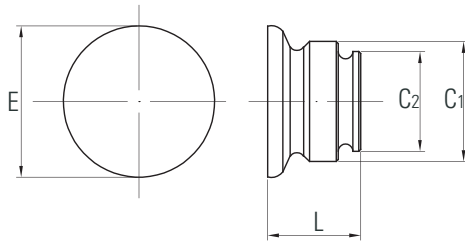
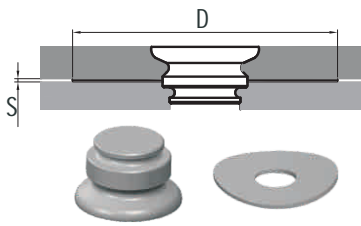
The Panel link fasteners create a permanent flush joint between two pieces of sheet metal. They are installed using a squeezing action, which causes the sheet metal materials to into two separate clinch profiles within the fastener. Type DSF, DSFK and DSFW fasteners can attach two sheets which are too thin to weld, fasten sheets of unequal thickness, join dissimilar metals unable to be welded and even attach ultra-thin metal sheets.

DSF	For permanent joining of two metal sheets	DSF self-clinching fasteners creates a permanent, flush joining of two sheets of metal. The fastener installs flush and smooth with the top sheet, while also flush (or sub-flush) with the bottom sheet.	
DSFW	With wave washer for single point hinging applications	DSFW is specifically designed to allow the pivoting of two sheets of sheet metal. A waved washer is supplied with the part and provides consistent torsion to allow a repeatable rotation.	
DSFK	For joining metal to PCB/ plastic panels	DSFK fasteners create a permanent flush joining of sheet metal to PCB or plastic panels. The fastener has two separate joining profiles. When squeezed, the sheet metal flows into the fastener, while the knurling broaches into the PC board or plastic panel.	



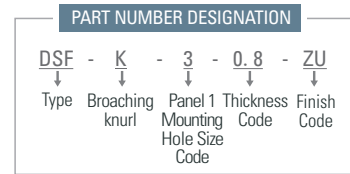
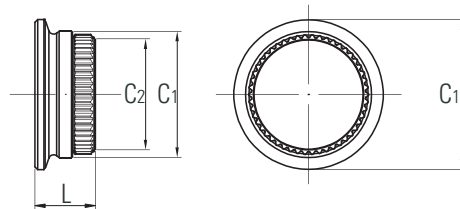
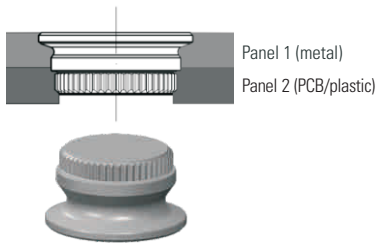
All dimensions are in millimeters.

Type and Size	Fastener Material	Thickness Code	Panel 1 (metal)		Panel 2 (PCB/plastic)		C1 Max.	C2 Max.	E Max.	L Max.	Min. Dist Hole To Edge
			Thickness ± 0.08mm	Mounting Hole +0.08/-0.0	Thickness Min.	Mounting Hole +0.08/-0.0					
DSF-3	Carbon Steel	0.8	0.8	3.0	0.8	2.5	2.98	2.48	3.53	1.50	2.54
DSF-3	Carbon Steel	1.0	1.0	3.0	1.0	2.5	2.98	2.48	3.76	1.90	2.54
DSF-3	Carbon Steel	1.2	1.2	3.0	1.2	2.5	2.98	2.48	3.76	2.31	2.54
DSF-3	Carbon Steel	1.6	1.6	3.0	1.6	2.5	2.98	2.48	3.76	3.12	2.54
DSF-5	Carbon Steel	0.8	0.8	5.0	0.8	4.0	4.98	3.97	5.56	1.50	3.60
DSF-5	Carbon Steel	1.0	1.0	5.0	1.0	4.0	4.98	3.97	5.56	1.90	3.60
DSF-5	Carbon Steel	1.2	1.2	5.0	1.2	4.0	4.98	3.97	5.56	2.31	3.60
DSF-5	Carbon Steel	1.6	1.6	5.0	1.6	4.0	4.98	3.97	5.56	3.12	3.60



All dimensions are in millimeters.

Type and Size	Fastener Material	Thickness Code	Panel 1		Panel 2		C1	C2	E	L	D	S	Min. Dist Hole To Edge
			Thickness ± 0.08	Mounting Hole +0.08/-0.0	Thickness Min.	Mounting Hole +0.08/-0.0	Max.	Max.	Max.	Max.	Nom	Nom	
DSFW-3	Carbon Steel	0.8	0.8	3.0	0.8	2.5	2.98	2.48	3.53	2.09	9.7	0.5	2.54
DSFW-3	Carbon Steel	1.0	1.0	3.0	1.0	2.5	2.98	2.48	3.76	2.49			2.54
DSFW-3	Carbon Steel	1.2	1.2	3.0	1.2	2.5	2.98	2.48	3.76	2.90			2.54
DSFW-3	Carbon Steel	1.6	1.6	3.0	1.6	2.5	2.98	2.48	3.76	3.71			2.54
DSFW-5	Carbon Steel	0.8	0.8	5.0	0.8	4.0	4.98	3.97	5.56	1.98	10.6	0.5	3.60
DSFW-5	Carbon Steel	1.0	1.0	5.0	1.0	4.0	4.98	3.97	5.56	2.39			3.60
DSFW-5	Carbon Steel	1.2	1.2	5.0	1.2	4.0	4.98	3.97	5.56	2.79			3.60
DSFW-5	Carbon Steel	1.6	1.6	5.0	1.6	4.0	4.98	3.97	5.56	3.61			3.60



All dimensions are in millimeters.

Type and Size	Fastener Material	Thickness Code	Panel 1 (metal)		Panel 2 (PCB/plastic)		C1	C2	E	L	Min. Dist Hole To Edge
			Thickness ± 0.08	Mounting Hole +0.08/-0.0	Thickness Min.	Mounting Hole +0.08/-0.0	Max.	+/-0.08 ± 0.03	Max.	Max.	
DSFK-3	Carbon Steel	0.8	0.8	3.0	1.6	2.5	2.98	2.9	3.53	2.31	3.0
DSFK-3	Carbon Steel	1.0	1.0	3.0	1.6	2.5	2.98	2.9	3.76	2.51	3.0
DSFK-3	Carbon Steel	1.2	1.2	3.0	1.6	2.5	2.98	2.9	3.76	2.72	3.0
DSFK-3	Carbon Steel	1.6	1.6	3.0	1.6	2.5	2.98	2.9	3.76	3.12	3.0
DSFK-5	Carbon Steel	0.8	0.8	5.0	1.6	4.5	4.98	4.9	5.56	2.31	5.1
DSFK-5	Carbon Steel	1.0	1.0	5.0	1.6	4.5	4.98	4.9	5.56	2.51	5.1
DSFK-5	Carbon Steel	1.2	1.2	5.0	1.6	4.5	4.98	4.9	5.56	2.72	5.1
DSFK-5	Carbon Steel	1.6	1.6	5.0	1.6	4.5	4.98	4.9	5.56	3.12	5.1