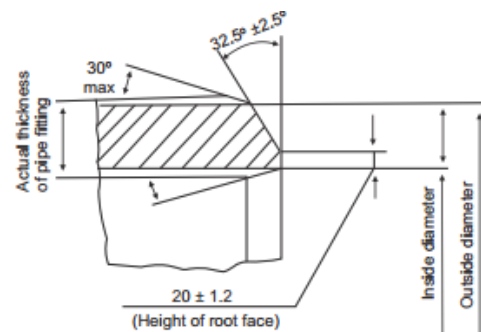
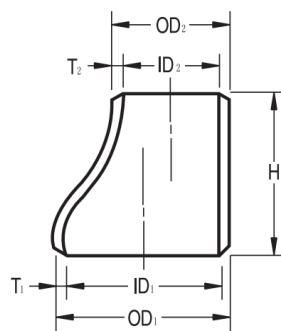


FIG 946 - REDUCING ECCENTRIC



SIZE RANGE / DIMENSIONS					
CODE	SIZE mm	OD	ID	T	L
946/0020x0015	20 x 15	27.2 x 21.7	21.6 x 16.1	2.8 x 2.8	38.1
946/0025x0015	25 x 15	24.0 x 21.7	27.6 x 16.1	3.2 x 2.8	50.8
946/0025x0020	25 x 20	34.0 x 27.2	27.6 x 21.6	3.2 x 2.8	50.8
946/0032x0015	32 x 15	42.7 x 21.7	35.7 x 16.1	3.5 x 2.8	20.8
946/0032x0020	32 x 20	42.7 x 27.2	35.7 x 21.6	3.5 x 2.8	50.8
946/0032x0025	32 x 25	42.7 x 34.0	35.7 x 27.6	3.5 x 3.2	50.8
946/0040x0015	40 x 15	48.6 x 21.7	41.6 x 16.1	3.5 x 2.8	63.5
946/0040x0020	40 x 20	48.6 x 27.2	41.6 x 21.6	3.5 x 2.8	63.5
946/0040x0025	40 x 25	48.6 x 34.0	41.6 x 27.6	3.5 x 3.2	63.5
946/0040x0032	40 x 32	48.6 x 42.7	41.6 x 35.7	3.5 x 3.5	63.5
946/0050x0020	50 x 20	60.5 x 27.2	52.9 x 21.6	3.8 x 2.8	76.2
946/0050x0025	50 x 25	60.5 x 34.0	52.9 x 27.6	3.8 x 3.2	76.2
946/0050x0032	50 x 32	60.5 x 42.7	52.9 x 35.7	3.8 x 3.5	76.2
946/0050x0040	50 x 40	60.5 x 48.6	52.9 x 41.6	3.8 x 3.5	76.2
946/0065x0025	65 x 25	76.3 x 34.0	67.9 x 27.6	4.2 x 3.2	88.9
946/0065x0032	65 x 32	76.3 x 42.7	67.9 x 35.7	4.2 x 3.5	88.9
946/0065x0040	65 x 40	76.3 x 48.6	67.9 x 41.6	4.2 x 3.5	88.9
946/0065x0050	65 x 50	76.3 x 60.5	67.9 x 52.9	4.2 x 3.8	88.9
946/0080x0032	80 x 32	89.1 x 42.7	80.7 x 35.7	4.2 x 3.5	88.9
946/0080x0040	80 x 40	89.1 x 48.6	80.7 x 41.6	4.2 x 3.5	88.9
946/0080x0050	80 x 50	89.1 x 60.5	80.7 x 52.9	4.2 x 3.8	88.9
946/0080x0065	80 x 65	89.1 x 76.3	80.7 x 67.9	4.2 x 4.2	88.9
946/0090x0032	90 x 32	101.6 x 42.7	93.2 x 35.7	4.2 x 3.5	101.6
946/0090x0040	90 x 40	101.6 x 48.6	93.2 x 41.6	4.2 x 3.5	101.6
946/0090x0050	90 x 50	101.6 x 60.5	93.2 x 52.9	4.2 x 3.8	101.6
946/0090x0065	90 x 65	101.6 x 76.3	93.2 x 67.9	4.2 x 4.2	101.6
946/0090x0080	90 x 80	101.6 x 89.1	93.2 x 80.7	4.2 x 4.2	101.6

DIMENSIONAL TOLERANCES AND PERMISSIBLE VALUES

ITEM	TYPES OF PIPE FITTINGS	NOMINAL DIAMETER mm					
		15-65	80-100	125-200	250-450	500-600	650-750
		TOLERANCE					
Outside diameter at end	All types of pipe fittings	± 2.0	± 2.5	± 3.5	+5.0 - 4.5	+6.4 - 4.8	
Inside diameter at end face		± 2.0	± 2.5	± 3.5	± 4.5	± 4.8	
Thickness		*not specified -15%					
Bevel angle		See Fig					
Height of root face		See Fig					
Dimensions from centerline to end face (H F)	45 ° Elbow 90 ° Elbow	± 2.0		± 3.2			
Overall length (H)	Reducers	± 2.0		± 3.2		± 4.8	
Dimension from centerline to end face (C M)	Tees	± 2.0		± 3.2		± 4.8	
Dimensions from back to end face (E)	Caps	± 3.2		± 6.4		-	

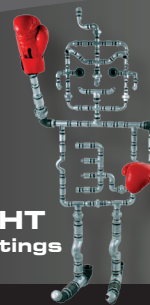
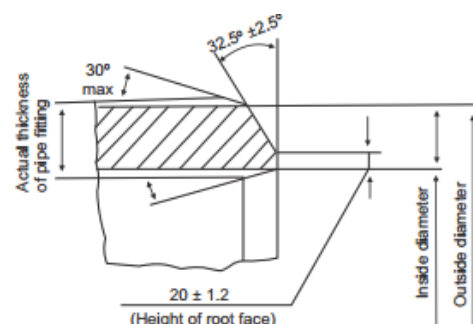
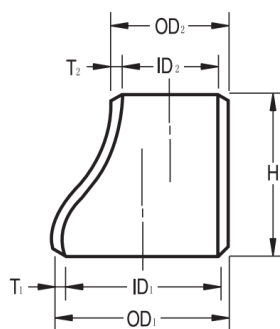


FIG 946 - REDUCING ECCENTRIC



SIZE RANGE / DIMENSIONS					
CODE	SIZE mm	OD	ID	T	L
946/0100x0040	100 x 40	114.3 x 48.6	105 x 41.6	4.5 x 3.5	101.6
946/0100x0050	100 x 50	114.3 x 60.5	105 x 52.9	4.5 x 3.8	101.6
946/0100x0065	100 x 65	114.3 x 76.3	105 x 67.9	4.5 x 4.2	101.6
946/0100x0080	100 x 80	114.3 x 89.1	105 x 80.7	4.5 x 4.2	101.6
946/0100x0090	100 x 90	114.3 x 101.6	105 x 93.2	4.5 x 4.2	101.6
946/0125x0050	125 x 50	139.8 x 60.5	131 x 52.9	4.5 x 3.8	127
946/0125x0065	125 x 65	139.8 x 76.3	131 x 67.9	4.5 x 4.2	127
946/0125x0080	125 x 80	139.8 x 89.1	131 x 80.7	4.5 x 4.2	127
946/0125x0090	125 x 90	139.8 x 101.6	131 x 93.2	4.5 x 4.2	127
946/0125x0100	125 x 100	139.8 x 114.3	131 x 105	4.5 x 4.5	127
946/0150x0065	150 x 65	165.2 x 76.3	155 x 67.9	5 x 4.2	139.7
946/0150x0080	150 x 80	165.2 x 89.1	155 x 80.7	5 x 4.2	139.7
946/0150x0090	150 x 90	165.2 x 101.6	155 x 93.2	5 x 4.2	139.7
946/0150x0100	150 x 100	165.2 x 114.3	155 x 105	5 x 4.5	139.7
946/0150x0125	150 x 125	165.2 x 139.8	155 x 131	5 x 4.5	139.7
946/0200x0080	200 x 80	219.1 x 89.1	205 x 80.7	5.8 x 4.2	152.4
946/0200x0090	*200 x 90	219.1 x 101.6	205 x 93.2	5.8 x 4.2	152.4
946/0200x0100	*200 x 100	219.1 x 114.3	205 x 105	5.8 x 4.5	152.4
946/0200x0125	*200 x 125	219.1 x 139.8	205 x 131	5.8 x 4.5	152.4
946/0200x0150	*200 x 150	219.1 x 165.2	205 x 155	5.8 x 5.0	152.4
946/0250x0100	*250 x 100	273.0 x 114.3	254 x 105	6.6 x 4.5	177.8
946/0250x0125	*250 x 125	273.0 x 139.8	254 x 131	6.6 x 4.5	177.8
946/0250x0150	*250 x 150	273.0 x 165.2	254 x 155	6.6 x 5.0	177.8
946/0250x0200	*250 x 200	273.0 x 219.1	254 x 205	6.6 x 5.8	177.8
946/0300x0125	*300 x 125	323.8 x 139.8	305 x 131	6.9 x 4.5	203.2
946/0300x0150	*300 x 150	323.8 x 165.2	305 x 155	6.9 x 5.0	203.2
946/0300x0200	*300 x 200	323.8 x 219.1	305 x 205	6.9 x 5.8	203.2
946/0300x0250	*300 x 250	323.8 x 273.0	305 x 254	6.9 x 6.6	203.2

DIMENSIONAL TOLERANCES AND PERMISSIBLE VALUES

ITEM	TYPES OF PIPE FITTINGS	NOMINAL DIAMETER mm					
		15-65	80-100	125-200	250-450	500-600	650-750
TOLERANCE							
Outside diameter at end	All types of pipe fittings	± 2.0	± 2.5	± 3.5	+5.0 - 4.5	+6.4 - 4.8	
Inside diameter at end face		± 2.0	± 2.5	± 3.5	± 4.5	± 4.8	
Thickness		*not specified -15%					
Bevel angle		See Fig					
Height of root face		See Fig					
Dimensions from centerline to end face (H F)	45 ° Elbow 90 ° Elbow	± 2.0		± 3.2			
Overall length (H)	Reducers	± 2.0		± 3.2			± 4.8
Dimension from centerline to end face (C M)	Tees	± 2.0		± 3.2			± 4.8
Dimensions from back to end face (E)	Caps	± 3.2		± 6.4			-

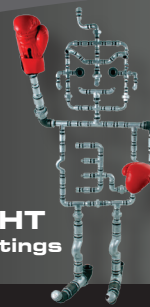
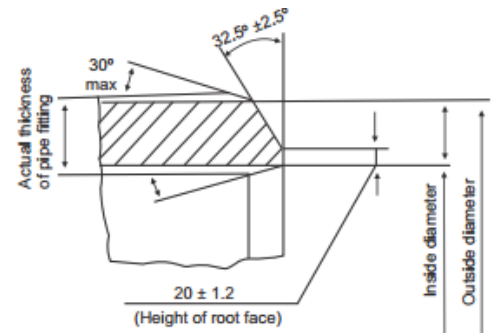
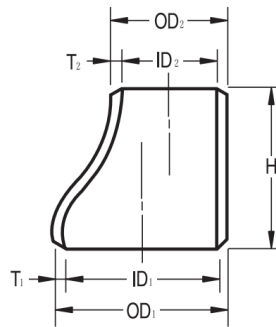


FIG 946 - REDUCING ECCENTRIC



SIZE RANGE / DIMENSIONS					
CODE	SIZE mm	OD	ID	T	L
946/0350x0150	350 x 150	355.6 x 165.2	340 x 155	7.9 x 5	330.2
946/0350x0200	350 x 200	355.6 x 219.1	340 x 205	7.9 x 5.8	330.2
946/0350x0250	*350 x 250	355.6 x 273.0	340 x 254	7.9 x 6.6	330.2
946/0350x0300	*350 x 300	355.6 x 323.8	340 x 305	7.9 x 6.9	330.2
946/0400x0150	400 x 150	406.4 x 165.2	391 x 155	7.9 x 5	355.6
946/0400x0200	*400 x 200	406.4 x 219.1	391 x 205	7.9 x 5.8	355.6
946/0400x0250	*400 x 250	406.4 x 273.0	391 x 254	7.9 x 6.6	355.6
946/0400x0300	400 x 300	406.4 x 318.5	391 x 305	7.9 x 6.9	355.6
946/0400x0350	400 x 350	406.4 x 355.6	391 x 340	7.9 x 7.9	355.6
946/0450x0250	*450 x 250	457.2 x 273.0	441 x 254	7.9 x 6.6	381.0
946/0450x0300	*450 x 300	457.2 x 323.8	441 x 305	7.9 x 6.9	381.0
946/0450x0350	450 x 350	457.2 x 355.6	441 x 340	7.9 x 7.9	381.0
946/0450x0400	450 x 400	457.2 x 406.4	441 x 391	7.9 x 7.9	381.0
946/0500x0200	*500 x 200	508.0 x 219.1	492 x 205	7.9 x 5.8	508.0
946/0500x0250	*500 x 250	508.0 x 273.0	492 x 254	7.9 x 6.6	508.0
946/0500x0300	*500 x 300	508.0 x 323.8	492 x 305	7.9 x 6.9	508.0
946/0500x0350	500 x 350	508.0 x 355.6	492 x 340	7.9 x 7.9	508.0
946/0500x0400	500 x 400	508.0 x 406.4	492 x 391	7.9 x 7.9	508.0
946/0500x0450	500 x 450	508.0 x 457.2	492 x 441	7.9 x 7.9	508.0
946/0550x0350	550 x 350	508.8 x 355.6		7.9 x 7.9	508.0
946/0550x0400	550 x 400	558.8 x 406.4		7.9 x 7.9	508.0
946/0550x0450	550 x 450	558.8 x 457.2		7.9 x 7.9	508.0
946/0550x0500	550 x 500	558.8 x 508.0		7.9 x 7.9	508.0
946/0600x0400	600 x 400	609.6 x 406.4		7.9 x 7.9	508.0
946/0600x0450	600 x 450	609.6 x 457.2		7.9 x 7.9	508.0
946/0600x0500	600 x 500	609.6 x 508.0		7.9 x 7.9	508.0
946/0600x0550	600 x 550	609.6 x 558.8		7.9 x 7.9	508.0

DIMENSIONAL TOLERANCES AND PERMISSIBLE VALUES						
ITEM	TYPES OF PIPE FITTINGS	NOMINAL DIAMETER mm				
		15-65	80-100	125-200	250-450	500-600 650-750
Outside diameter at end	All types of pipe fittings	± 2.0	± 2.5	± 3.5	+5.0 - 4.5	+6.4 - 4.8
Inside diameter at end face		± 2.0	± 2.5	± 3.5	± 4.5	± 4.8
Thickness		*not specified -15%				
Bevel angle		See Fig				
Height of root face		See Fig				
Dimensions from centerline to end face (H F)	45 ° Elbow 90 ° Elbow	± 2.0		± 3.2		
Overall length (H)	Reducers	± 2.0		± 3.2		± 4.8
Dimension from centerline to end face (C M)	Tees	± 2.0		± 3.2		± 4.8
Dimensions from back to end face (E)	Caps	± 3.2		± 6.4		-