

### 1.6.3 Reducers: concentric and eccentric

Table 1.6.3_1: Reducers in stainless steel, concentric and eccentric															
Inside diameter (mm) D <sub>i</sub> /d <sub>i</sub>	Outside diameter (mm)		Length L (mm)		Shape		Individual weights (kg) for each wall thickness (mm)								
	D <sub>a</sub>	d <sub>a</sub>	formerly DIN 2616	Other	Conc.	Ecc.	1.5	2	2.6*	3	4	5	6	8	10
	33.7	21.3	50		B / 1	A / 2		0.06	0.08	0.09	0.12				
		26.9	50		A / 1	A / 2		0.07	0.09	0.10	0.13				
32/25				25	A / 2	A / 2	0.03	0.04							
				75	A / 2	A / 2	0.09	0.11							
	42.4	21.3	50		A / 2	A / 2		0.08	0.10	0.11	0.14				
		26.9	50		A / 1	A / 2		0.08	0.11	0.12	0.15				
		33.7	50		A / 1	A / 2		0.09	0.12	0.13	0.17				
40/25 /32				45	A / 2	A / 2	0.06	0.08							
				25	A / 2	A / 2	0.04	0.05							
				75	A / 2	A / 2	0.11	0.14							
	48.3	26.9	64		A / 2	A / 2		0.11	0.15	0.17	0.21				
		33.7	64		B / 1	A / 2		0.12	0.16	0.18	0.23				
		42.4	64		A / 1	A / 2		0.14	0.18	0.20	0.26				
50/25 /32 /40				75	A / 2	A / 2	0.11	0.15	0.19	0.23					
				54	A / 2	A / 2	0.09	0.12	0.15	0.18					
				75	A / 2	A / 2	0.12	0.16	0.21	0.25					
				30	A / 2	A / 2	0.05	0.07	0.09	0.11					
	60.3	26.9	76		A / 2	A / 2		0.16	0.21	0.23	0.30				
		33.7	76		A / 2	A / 2		0.17	0.22	0.25	0.33				
		42.4	76		A / 1	A / 2		0.19	0.24	0.28	0.36				
		48.3	76		B / 1	A / 2		0.20	0.26	0.29	0.38				
65/32 /40 /50				100	A / 2	A / 2	0.19	0.26	0.33	0.39					
				75	A / 2	A / 2	0.16	0.21	0.26	0.32					
				45	A / 2	A / 2	0.10	0.14	0.17	0.21					
				80	A / 2	A / 2	0.18	0.24	0.30	0.36					
	76.1	33.7	90		A / 2	A / 2		0.24	0.32	0.36	0.47				
		42.4	90		A / 2	A / 2		0.26	0.34	0.38	0.50				
		48.3	90		B / 1	A / 2		0.27	0.35	0.40	0.53				
		60.3	90		B / 1	B / 1		0.30	0.39	0.44	0.58				
80/40 /50 /65				120	A / 2	A / 2	0.28	0.38	0.48	0.57					
				90	A / 2	A / 2	0.23	0.31	0.39	0.46					
				100	A / 2	A / 2	0.25	0.34	0.43	0.51					
				45	A / 2	A / 2	0.13	0.17	0.22	0.26					
				100	A / 2	A / 2	0.28	0.37	0.47	0.57					
	88.9	42.4	90		A / 2	A / 2		0.29	0.38	0.43	0.56				
		48.3	90		A / 2	A / 2		0.30	0.39	0.45	0.59	0.72			
		60.3	90		A / 2	A / 2		0.33	0.43	0.48	0.64	0.78			
		76.1	90		B / 1	B / 1		0.36	0.47	0.53	0.70	0.87			
100/50 /65 /80				150	A / 2	A / 2	0.44	0.58	0.74	0.89	1.20				
				100	A / 2	A / 2	0.32	0.43	0.54	0.65	0.88				
				60	A / 2	A / 2	0.21	0.28	0.35	0.42	0.57				
				100	A / 2	A / 2	0.35	0.46	0.58	0.70	0.94				
	114.3	48.3	100		A / 2	A / 2		0.41	0.54	0.61	0.81				
		60.3	100		A / 2	A / 2		0.44	0.57	0.65	0.86				
		76.1	100		B / 1	A / 2		0.47	0.61	0.70	0.92				
		88.9	100		B / 1	A / 2		0.50	0.65	0.74	0.98				

No guarantee for correctness

Continuation &gt;

Table 1.6.3\_1: Reducers in stainless steel, concentric and eccentric (continuation)

Inside diameter (mm) D <sub>i</sub> / d <sub>i</sub>	Outside diameter (mm)		Length L (mm)		Shape		Individual weights (kg) for each wall thickness (mm)								
	D <sub>a</sub>	d <sub>a</sub>	formerly DIN 2616	Other	Conc.	Ecc.	1.5	2	2.6*	3	4	5	6	8	10
125 / 65 / 80 / 100				180	A / 2	A / 2	0.66	0.88	1.12	1.34	1.80				
				60	A / 2	A / 2	0.25	0.33	0.42	0.51	0.68				
				150	A / 2	A / 2	0.59	0.79	1.00	1.20	1.61				
				75	A / 2	A / 2	0.33	0.44	0.55	0.66	0.89				
				150	A / 2	A / 2	0.65	0.86	1.09	1.30	1.75				
	139.7	60.3	127		A / 2	A / 2		0.65	0.84	0.96	1.27	1.57	1.86		
		88.9	127		A / 2	A / 2		0.72	0.94	1.07	1.42	1.75	2.08		
		114.3	127		B / 1	B / 1		0.79	1.03	1.18	1.56	1.94	2.31		
150 / 80 / 100 / 125				210	A / 2	A / 2	0.93	1.24	1.57	1.88	2.53	3.19	3.86		
				150	A / 2	A / 2	0.72	0.96	1.21	1.46	1.96	2.47	2.98		
				75	A / 2	A / 2	0.40	0.53	0.67	0.80	1.07	1.35	1.63		
				150	A / 2	A / 2	0.79	1.05	1.32	1.58	2.13	2.68	3.24		
	168.3	76.1	140		A / 2	A / 2		0.88	1.15	1.31	1.73	2.15	2.56		
		88.9	140		A / 2	A / 2		0.92	1.19	1.36	1.80	2.23	2.66		
		114.3	140		B / 1	A / 2		0.99	1.29	1.47	1.95	2.42	2.88		
		139.7	140		B / 1	B / 1		1.06	1.38	1.59	2.10	2.61	3.11		
200 / 100 / 125 / 150				300	A / 2	A / 2		2.31	2.90	3.49	4.68	5.89	7.11		
				225	A / 2	A / 2		1.87	2.36	2.83	3.79	4.77	5.76		
				150	A / 2	A / 2		1.34	1.69	2.03	2.72	3.42	4.12		
	219.1	88.9	152		A / 2	A / 2		1.25	1.63	1.86	2.47	3.06	3.65	4.79	
		114.3	152		A / 2	A / 2		1.32	1.72	1.97	2.61	3.24	3.86	5.08	
		139.7	152		A / 2	A / 2		1.39	1.81	2.07	2.74	3.41	4.07	5.36	
		168.3	152		B / 1	B / 1		1.47	1.92	2.20	2.92	3.63	4.33	5.71	
250 / 125 / 150 / 200				375	A / 2	A / 2		3.60	4.52	5.42	7.27	9.14	11.02		
				300	A / 2	A / 2		3.07	3.86	4.62	6.20	7.78	9.38		
				150	A / 2	A / 2		1.72	2.17	2.60	3.48	4.36	5.26		
	273.0	114.3	178		A / 2	A / 2			2.42	2.78	3.68	4.58	5.46	7.20	
		139.7	178		A / 2	A / 2		1.94	2.52	2.89	3.83	4.77	5.69	7.51	
		168.3	178		A / 2	A / 2			2.63	3.02	4.01	4.99	5.96	7.87	
		219.1	178		B / 1	A / 2				3.28	4.35	5.42	6.48	8.56	
300 / 150 / 200 / 250				450	A / 2	A / 2		5.17	6.50	7.79	10.43	13.10	15.79		
				300	A / 2	A / 2		3.83	4.81	5.76	7.72	9.68	11.66		
				150	A / 2	A / 2		2.10	2.64	3.17	4.24	5.32	6.40		
				225	A / 2	A / 2		3.38	3.93	4.72	6.31	7.92	9.53		
	323.9	139.7	203		A / 2	A / 2				3.80	5.05	6.28	7.50	9.90	
		168.3	203		A / 2	A / 2				3.95	5.24	6.52	7.78	10.29	
		219.1	203		A / 2	A / 2				4.21	5.59	6.96	8.32	11.00	
		273.0	203		A / 2	A / 2				4.52	6.01	7.48	8.95	11.85	
350 / 200 / 250 / 300				450	A / 2	A / 2				9.50	12.71	15.95	19.20		
				300	A / 2	A / 2				6.90	9.24	11.58	13.95		
				150	A / 2	A / 2				3.74	5.00	6.27	7.54		
	355.6	168.3	330		A / 2	A / 2				6.64	8.82	10.98	13.12	17.35	
		219.1	330		A / 2	A / 2				7.17	9.52	11.86	14.18	18.78	
	273.0	330		A / 2	A / 2				7.75	10.30	12.83	15.35	20.33		
	323.9	330		A / 2	A / 2				8.32	11.06	13.78	16.49	21.84		

No guarantee for correctness

Continuation &gt;

Table 1.6.3\_1: Reducers in stainless steel, concentric and eccentric (continuation)

Inside diameter (mm) $D_i / d_i$	Outside diameter (mm)		Length L (mm)		Shape		Individual weights (kg) for each wall thickness (mm)								
	$D_a$	$d_a$	formerly DIN 2616	Other	Conc.	Ecc.	1.5	2	2.6*	3	4	5	6	8	10
400 / 200				600	A / 2	A / 2				13.81	18.47	23.16	27.89		
/ 250				450	A / 2	A / 2				11.21	15.00	18.80	22.63		
/ 300				300	A / 2	A / 2				8.04	10.76	13.48	16.22		
/ 350				150	A / 2	A / 2				4.31	5.76	7.22	8.68		
	406.4	168.3	355		A / 2	A / 2				7.96	10.58	13.17	15.75	20.84	
		219.1	355		A / 2	A / 2				8.51	11.31	14.09	16.85	22.32	
		273.0	355		A / 2	A / 2				9.10	12.10	15.08	18.05	23.91	
		323.9	355		A / 2	A / 2				9.68	12.87	16.05	19.20	25.45	
		355.6	355		A / 2	A / 2				10.07	13.39	16.69	19.97	26.49	32.93
450 / 250				600	A / 2	A / 2				16.09	21.51	26.96	32.44		
/ 300				450	A / 2	A / 2				12.92	17.27	21.64	26.44		
/ 350				300	A / 2	A / 2				9.18	12.27	15.38	18.50		
/ 400				150	A / 2	A / 2				4.87	6.51	8.16	9.82		
	457.0	219.1	381		A / 2	A / 2				10.02	13.31	16.59	19.84	26.29	
		273.0	381		A / 2	A / 2				10.63	14.13	17.61	21.07	27.94	
		323.9	381		A / 2	A / 2				11.21	14.91	18.60	22.25	29.52	
		355.6	381		A / 2	A / 2				11.60	15.44	19.25	23.04	30.56	38.01
		406.4	381		A / 2	A / 2				12.26	16.31	20.34	24.35	32.31	40.20
500 / 300				600	A / 2	A / 2				18.37	24.55	30.76	37.00		
/ 350				450	A / 2	A / 2				14.63	19.55	24.49	29.46		
/ 400				300	A / 2	A / 2				10.32	13.79	17.28	20.78		
/ 450				150	A / 2	A / 2				5.45	7.28	9.12	10.96		
	508.0	219.1	508		A / 2	A / 2				14.26	18.96	23.63	28.28	37.49	
		273.0	508		A / 2	A / 2				15.14	20.13	25.10	30.03	39.83	
		323.9	508		A / 2	A / 2				15.96	21.22	26.47	31.68	42.03	
		355.6	508		A / 2	A / 2				16.49	21.94	27.36	32.75	43.46	54.07
		406.4	508		A / 2	A / 2				17.37	23.10	28.81	34.51	45.79	57.00
		457.0	508		A / 2	A / 2				18.27	24.31	30.33	36.32	48.23	60.02
600 / 400				600	A / 2	A / 2				30.62	38.35	46.11			
/ 450				450	A / 2	A / 2				24.11	30.19	36.29			
/ 500				300	A / 2	A / 2				16.83	21.07	25.33			
	610.0	273.0	508		A / 2	A / 2				17.58	23.38	29.16	34.90	46.31	
		323.9	508		A / 2	A / 2				18.33	24.38	30.41	36.41	48.33	
		355.6	508		A / 2	A / 2				18.82	25.03	31.22	37.38	49.63	61.77
		406.4	508		A / 2	A / 2				19.60	26.09	32.54	38.97	51.74	64.42
		457.0	508		A / 2	A / 2				20.42	27.17	33.90	40.60	53.93	67.15
		508.0	508		A / 2	A / 2				21.27	28.31	35.32	42.30	56.21	69.99
	711.0	323.9	610		A / 2	A / 2				24.65	32.79	40.91	48.99	65.05	
		355.6	610		A / 2	A / 2				25.23	33.57	41.88	50.16	66.61	82.94
		406.4	610		A / 2	A / 2				26.17	34.83	43.45	52.04	69.13	86.08
		457.0	610		A / 2	A / 2				27.12	36.10	45.05	53.96	71.69	89.29
		508.0	610		A / 2	A / 2				28.10	37.40	46.67	55.92	74.31	92.57
		610.0	610		A / 2	A / 2				30.15	40.14	50.10	60.03	79.80	99.43
	813.0	355.6	610		A / 2	A / 2				28.36	37.74	47.08	56.40	74.93	
		406.4	610		A / 2	A / 2				29.21	38.89	48.52	58.13	77.23	96.19
		457.0	610		A / 2	A / 2				30.08	40.04	49.98	59.87	79.56	99.13
		508.0	610		A / 2	A / 2				30.97	41.23	51.45	61.66	81.95	102.11
		610.0	610		A / 2	A / 2				32.83	43.70	54.55	65.37	86.91	108.33
		711.0	610		A / 2	A / 2				34.81	46.35	57.86	69.34	92.21	114.96

No guarantee for correctness

Continuation &gt;

Table 1.6.3\_1: Reducers in stainless steel, concentric and eccentric (continuation)

Inside diameter (mm) $D_i / d_i$	Outside diameter (mm)		Length L (mm)		Shape		Individual weights (kg) for each wall thickness (mm)																												
	$D_a$	$d_a$	formerly DIN 2616	Other	Conc.	Ecc.	1.5	2	2.6*	3	4	5	6	8	10																				
914	406.4	610			A / 2	A / 2										43.29	54.02	64.71	86.00	107.15															
																457.0	610		A / 2	A / 2										44.33	55.33	66.29	88.11	109.79	
																508.0	610		A / 2	A / 2											45.40	56.66	67.89	90.25	112.47
																610.0	610		A / 2	A / 2											47.60	59.41	71.20	94.69	118.03
																711.0	610		A / 2	A / 2											49.95	62.35	74.72	99.39	123.29
																813.0	610		A / 2	A / 2											52.56	65.62	78.65	104.62	130.47
1016	457.0	610			A / 2	A / 2										49.08	61.26	73.40	97.57	121.59															
																508.0	610		A / 2	A / 2										50.01	62.43	74.81	99.46	123.97	
																610.0	610		A / 2	A / 2											51.95	64.85	77.72	103.35	128.86
																711.0	610		A / 2	A / 2											53.98	67.40	80.78	107.45	133.99
																813.0	610		A / 2	A / 2											56.25	70.22	84.18	111.99	139.68
																914.0	610		A / 2	A / 2											58.77	73.39	87.96	117.04	146.02
1220	610.0	711			A / 2	A / 2										70.39	87.88	105.33	140.10	174.72															
																711.0	711		A / 2	A / 2										72.52	90.56	108.54	144.41	180.10	
																813.0	711		A / 2	A / 2											74.80	93.40	111.96	148.97	185.85
																914.0	711		A / 2	A / 2											77.23	96.43	115.62	153.87	191.96
																1,016.0	711		A / 2	A / 2											79.94	99.83	119.69	159.27	198.76

Dimensions / tolerances acc. to former DIN 2616, longitudinally welded, ends not cut square but sawn, pickled

- 1: pressed from pipe
  - 2: bent round from plate
- A: without cylindrical shapes ends
  - B: with cylindrical shapes ends

\* Paper dimension with 2.5 mm wall thickness

No guarantee for correctness

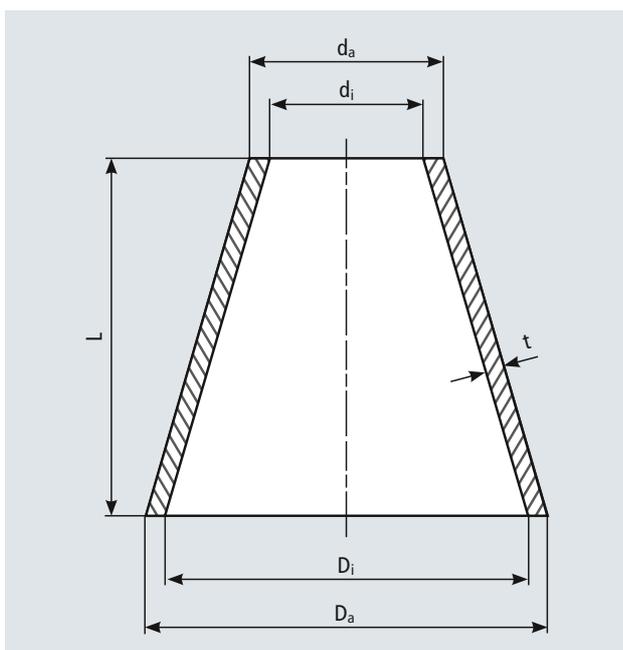


Fig. 1.6.3\_1: Concentric reducer

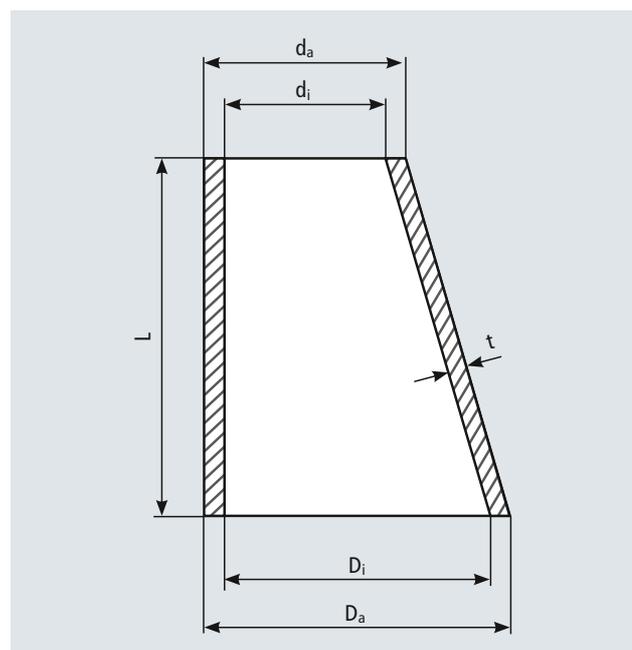


Fig. 1.6.3\_2: Eccentric reducer