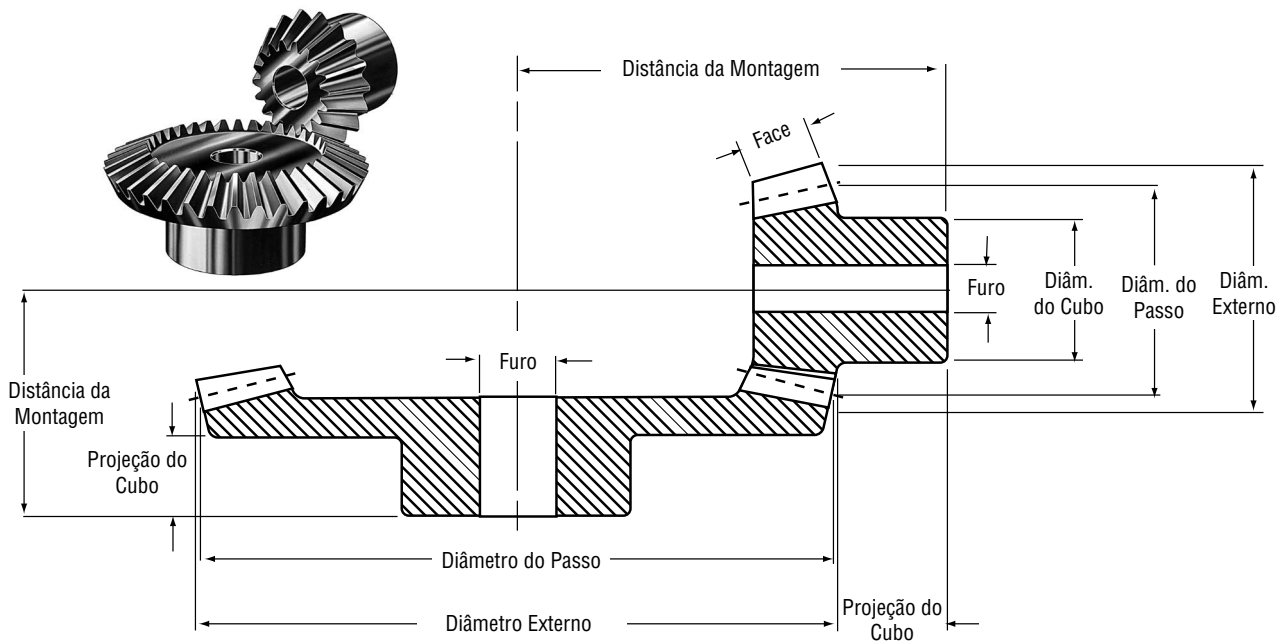


Engrenagens Cônicas Retas

Ângulo de Pressão 20°



As engrenagens cônicas retas são usadas como transmissões em ângulo reto onde é necessária alta eficiência. Elas estão disponíveis em estoque com relações de velocidade de 1:1 a 6:1. As engrenagens cônicas retas são cortadas com o sistema de adendo longo e curto e ângulo de pressão de 20° para compensar o rebaixamento nas engrenagens e pinhões de baixo número de dentes. Todas as engrenagens cônicas *Martin* são cortadas no formato do dente Coniflex, permitindo um ligeiro desalinhamento durante a operação de montagem. Essas engrenagens devem ser instaladas na distância correta entre os centros do ápice usando rolamentos axiais na parte traseira dos cubos para absorver o impulso criado por este tipo de engrenagem.

Engrenagens de Ferro Fundido com Pinhões de Aço

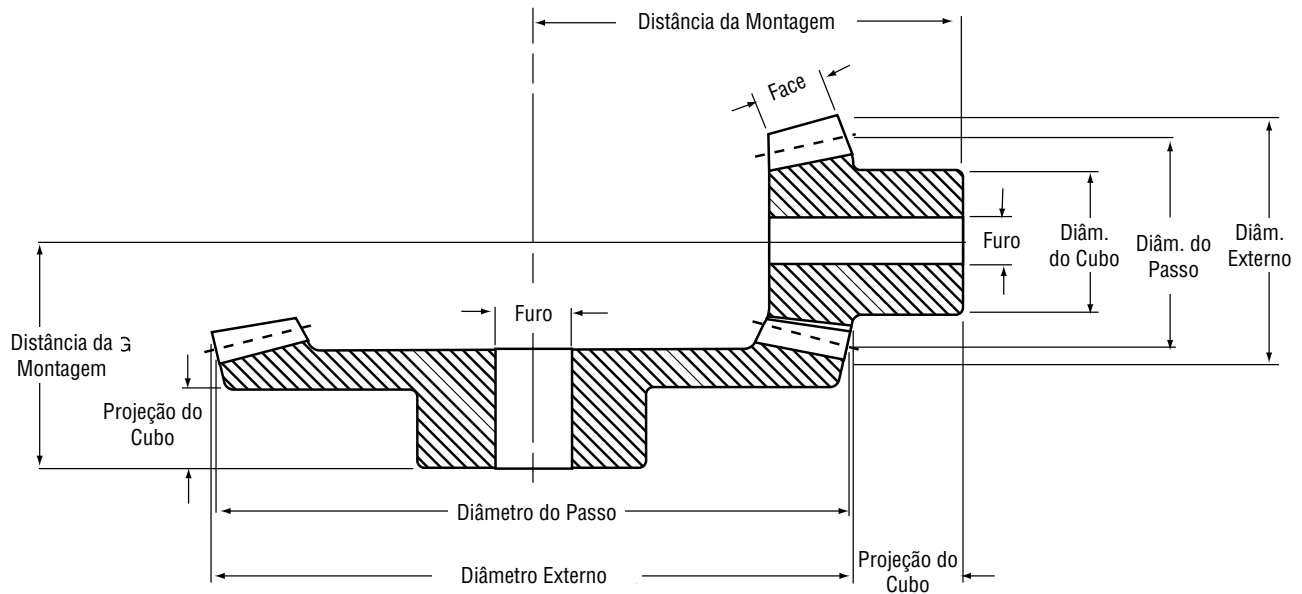
Passo	Número de Dentes	Número de Parte	Diâmetro		Face (poleg.)	Furo (Poleg.)		Montagem (poleg.)	Cubo (Poleg.)		Peso Aprox. (kg)
			Passo	Externo		Diâmetro	Compr.		Diâmetro	Proj.	
Passo 3	30	B330-2	10.00	10.19	1.87	1-1/4	3-19/32	5-1/2	5	2	14.9
	15	B315-2	5.00	5.80	1.87	1-1/8	4-1/32	7-1/4	3-3/4	1-15/16	6.1
Passo 4	32	B432-2	8.00	8.10	1.40	1-1/8	2-11/16	4-1/4	3-3/4	1-9/16	6.7
	16	B416-2	4.00	4.60	1.40	1-1/8	3-11/32	6	3-1/4	1-13/16	3.4
	42	B442-3	10.50	10.59	1.42	1-1/8	2-11/16	4	3-3/4	1-1/2	9.3
	14	B414-3	3.50	4.17	1.42	1-1/8	3-27/64	7-1/4	3-1/4	1-15/16	3.1
	56	B456-4	14.00	14.07	1.69	1-1/4	2-7/8	4-1/4	4-1/4	1-5/8	17.1
	14	B414-4	3.50	4.20	1.69	1-1/8	3-45/64	9	3-1/4	1-15/16	3.4
Passo 5	30	B530-2	6.00	6.12	1.04	1-1/8	2-1/4	3-1/2	3-1/4	1-3/8	3.9
	15	B515-2	3.00	3.48	1.04	1	2-25/64	4-3/8	2-5/8	1-9/32	1.4
	45	B545-3	9.00	9.07	1.31	1-1/4	2-1/2	3-3/4	3-3/4	1-11/16	6.6
	15	B515-3	3.00	3.54	1.31	1	2-11/16	5-7/8	2-5/8	1-5/16	1.6
	60	B560-4	12.00	12.05	1.70	1-1/4	2-5/8	3-3/4	4	1-9/16	10.5
	15	B515-4	3.00	3.56	1.70	1	3-13/64	7-1/2	3	1-7/16	2.3
Passo 6	36	BS636-2	6.00	6.10	1.06	1-1/8	2-1/4	3-1/2	3-1/4	1-1/2	3.4
	18	B618-2	3.00	3.42	1.06	1	2-49/64	4-3/4	2-1/2	1-19/32	1.5
	42	B642-2	7.00	7.10	1.05	1-1/8	2-19/64	3-3/4	3-1/2	1-1/2	4.3
	21	B621-2	3.50	3.90	1.05	1	2-33/64	5	2-1/2	1-1/4	1.7
	45	B645-3	7.50	7.56	1.07	1-1/8	2-1/8	3	3-1/4	1-1/4	4.0
	15	B615-3	2.50	2.94	1.07	7/8	2-9/16	5-1/4	2-1/8	1-7/16	1.0
	48	B648-2	8.00	8.10	1.17	1-1/8	1-57/64	3-7/16	3-1/4	1	5.3
	24	B624-2	4.00	4.40	1.17	1	2-35/64	5-7/16	2-5/8	1-1/4	2.2
	60	B660-4	10.00	10.04	1.21	1-1/8	2-1/4	3-1/4	3-1/4	1-3/8	6.5
	15	B615-4	2.50	2.97	1.21	1	2-31/32	6-3/4	2-1/2	1-3/4	1.5

As engrenagens cônicas de aço podem ser fornecidas com dentes endurecidos por um pequeno custo adicional.



Engrenagens Cônicas Retas

Ângulo de Pressão 20°



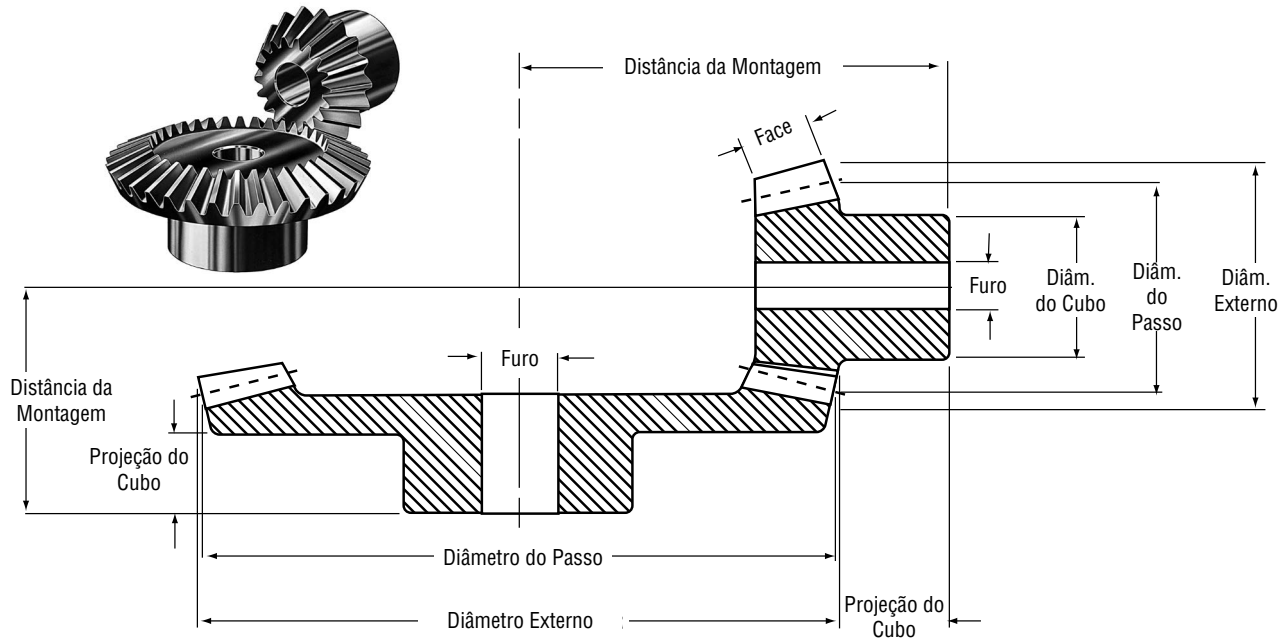
Engrenagens de Ferro Fundido com Pinhões de Aço

Passo	Número de Dentes	Número de Parte	Diâmetro		Face (poleg.)	Furo (Poleg.)		Montagem (poleg.)	Cubo (Poleg.)		Peso Aprox. (kg)
			Passo	Externo		Diâmetro	Compr.		Diâmetro	Proj.	
Passo 8	40	BS840-2	5.00	5.07	.82	1	1-27/32	2-7/8	3	1-1/4	2.2
	20	B820-2	2.50	2.80	.82	7/8	2-9/32	4	2-1/8	1-13/32	0.9
	48	B848-3	6.05	6.20	.84	7/8	1-5/8	2-3/8	2-3/4	1	2.0
	16	B816-3	2.00	2.33	.84	3/4	2-5/64	4-1/4	1-3/4	1-3/16	0.5
	64	B864-4	8.00	8.03	.84	1	1-7/8	2-3/4	2-3/4	1-1/4	4.1
	16	B816-4	2.00	2.35	.84	7/8	2-3/32	5-1/4	1-7/8	1-7/32	0.6
	72	B872-4	9.00	9.03	1.22	1-1/8	2-5/16	3-1/4	3	1-11/16	5.5
	18	B818-4	2.25	2.60	1.22	7/8	2-15/32	5-3/4	2-1/8	1-7/32	0.9
Passo 10	60	B1060-3	6.00	6.04	.78	7/8	1-29/32	2-3/4	3	1-3/8	2.3
	20	B1020-3	2.00	2.27	.78	3/4	2-5/32	4-3/8	1-3/4	1-5/16	0.6
	60	B1060-4	6.00	6.03	.72	7/8	1-5/8	2-1/4	2-1/2	1-1/8	2.0
	15	B1015-4	1.50	1.78	.72	5/8	1-39/64	3-7/8	1-7/16	27/32	0.3
	90	B1090-6	9.00	9.03	.86	1	1-13/16	2-1/2	2-3/4	1-5/16	4.4
	15	B1015-6	1.50	1.79	.86	5/8	1-55/64	5-1/2	1-7/16	31/32	0.3
Passo 12	36	B1236-2	3.00	3.05	.46	5/8	7/8	1-1/2	1-7/16	1/2	0.4
	18	B1218-2	1.50	1.70	.46	1/2	1-13/64	2-1/4	1-1/4	11/16	0.2
	72	B1272-4	6.00	6.02	.60	3/4	1-5/16	2	2	61/64	1.2
	18	B1218-4	1.50	1.73	.60	1/2	1-23/64	3-3/4	1-1/4	23/32	0.2
	72	B1272-6	6.00	6.02	.74	3/4	1-5/16	1-3/4	2	61/64	1.2
	12	B1212-6	1.00	1.24	.74	1/2	1-31/64	3-3/4	15/16	23/32	0.2

As engrenagens cônicas de aço podem ser fornecidas com dentes endurecidos por um pequeno custo adicional.

Engrenagens Cônicas Retas

Ângulo de Pressão 20°



Engrenagens de Ferro Fundido com Pinhões de Aço

Passo	Número de Dentes	Número de Parte	Diâmetro		Face (poleg.)	Furo (Poleg.)		Montagem (poleg.)	Cubo (Poleg.)		Peso Aprox. (kg)
			Passo	Externo		Diâmetro	Compr.		Diâmetro	Proj.	
Passo 6	36	BS636-2	6.00	6.10	1.06	1-1/8	2-1/4	3-1/2	3-1/4	1-1/2	3.9
	18	BS618-2	3.00	3.42	1.06	1-1/8	2-49/64	4-3/4	2-1/2	1-19/32	1.5
Passo 8	40	BS840-2	5.00	5.07	.82	1	1-27/32	2-7/8	3	1-1/4	2.2
	20	BS820-2	2.50	2.80	.82	1	2-9/32	4	2-1/8	1-13/32	0.8
Passo 10	30	BS1030-15	3.00	3.08	.57	3/4	1-7/16	2-1/4	2-1/2	1	0.9
	20	BS1020-15	2.00	2.21	.57	3/4	1-33/64	2-1/2	1-3/4	29/32	0.4
	40	BS1040-2	4.00	4.06	.71	7/8	1-11/16	2-1/2	3	1-3/16	1.7
	20	BS1020-2	2.00	2.24	.71	3/4	1-51/64	3-1/8	1-3/4	1-1/16	0.5
	50	BS1050-2	5.00	5.06	.70	3/4	1-19/32	2-5/8	2	1	1.8
	25	B1025-2	2.50	2.74	.70	3/4	1-35/64	3-3/8	2	3/4	0.7
	60	BS1060-3	6.00	6.04	.78	1	1-55/64	2-3/4	3	1-3/8	2.7
20	BS1020-3	2.00	2.27	.78	7/8	2-5/32	4-3/8	1-3/4	1-5/16	0.4	
Passo 12	27	BS1227-15	2.25	2.32	.41	1/2	1-1/8	1-3/4	1-1/2	25/32	0.3
	18	BS1218-15	1.50	1.67	.41	1/2	1-1/8	1-7/8	1-1/4	21/32	0.1
	36	BS1236-2	3.00	3.05	.53	1	1-17/64	1-7/8	2-1/8	7/8	0.6
	18	BS1218-2	1.50	1.70	.53	3/4	1-3/8	2-3/8	1-5/16	13/16	0.1
	36	BS1236-2A	3.00	3.05	.53	5/8	1-17/64	1-7/8	2-1/8	7/8	0.6
	18	BS1218-2A	1.50	1.70	.53	1/2	1-3/8	2-3/8	1-5/16	13/16	0.2
	48	BS1248-2	4.00	4.05	.59	5/8	1-11/64	2	1-5/8	3/4	0.7
	24	B1224-2	2.00	2.20	.59	1/2	1-7/16	2-7/8	1-1/2	3/4	0.4
	54	BS1254-3	4.50	4.53	.60	5/8	1-1/16	1-3/4	1-3/4	3/4	0.9
18	B1218-3	1.50	1.72	.60	1/2	1-11/32	3	1-1/4	11/16	0.2	
Passo 14	28	BS1428-2	2.00	2.04	.35	1/2	15/16	1-3/8	1-5/8	21/32	0.2
	14	BS1414-2	1.00	1.17	.35	1/2	31/32	1-5/8	13/16	9/16	0.05
Passo 16	24	BS1624-2	1.50	1.54	.19	1/2	5/8	1	1	7/16	0.1
	12	BS1612-2	.75	.91	.19	3/8	37/64	1-1/8	21/32	11/32	0.04
	24	BS1624-15	1.50	1.55	.25	1/2	3/4	1-3/16	1-1/8	9/16	0.2
	16	BS1616-15	1.00	1.13	.25	3/8	47/64	1-1/4	13/16	7/16	0.04
	32	BS1632-2	2.00	2.04	.35	1/2	49/64	1-3/16	1-1/8	1/2	0.1
	16	BS1616-2	1.00	1.15	.35	3/8	27/32	1-1/2	13/16	7/16	0.02
	48	BS1648-3	3.00	3.02	.42	5/8	7/8	1-5/16	1-1/2	9/16	0.3
	16	B1616-3	1.00	1.17	.42	7/16	59/64	2	7/8	15/32	0.06
	64	BS1664-4	4.00	4.02	.48	5/8	57/64	1-3/8	2-1/4	9/16	0.8
16	B1616-4	1.00	1.17	.48	1/2	63/64	2-1/2	13/16	15/32	.005	

As engrenagens cônicas de aço podem ser fornecidas com dentes endurecidos por um pequeno custo adicional.



Capacidade de Potência HP das Engrenagens Cônicas Retas

Ângulo de Pressão 20°

Ferro Fundido

Número de Parte	Revoluções por Minuto							
	50	100	200	300	600	900	1200	1800
B330-2	2.5	4.5	7.7	10.0	15.3			
B315-2	2.5	4.5	7.7	10.0	15.3			
B432-2	1.33	2.3	4.0	5.3	8.0	9.5		
B416-2	1.33	2.3	4.0	5.3	8.0	9.5		
B442-3	1.10	2.0	3.7	5.0	7.5	9.0		
B414-3	1.10	2.0	3.7	5.0	7.5	9.0		
B456-4	1.4	2.5	4.4	6.0	9.0	10.9		
B414-4	1.4	2.5	4.4	6.0	9.0	10.9		
B530-2	.5	1.0	1.9	2.5	3.9	4.8	5.5	
B515-2	.5	1.0	1.9	2.5	3.9	4.8	5.5	
B545-3	.7	1.4	2.4	3.3	5.2	6.4	7.2	
B515-3	.7	1.4	2.4	3.3	5.2	6.4	7.2	
B560-4	1.0	1.8	3.3	4.4	6.9	8.4	9.5	
B515-4	1.0	1.8	3.3	4.4	6.9	8.4	9.5	
B636-2	.5	1.0	1.7	2.3	3.7	4.4	5.0	
B618-2	.5	1.0	1.7	2.3	3.7	4.4	5.0	
B642-2	.6	1.1	2.0	2.7	4.0	5.0		
B621-2	.6	1.1	2.0	2.7	4.0	5.0		
B645-3	.4	.8	1.4	2.0	3.2	3.9	4.6	
B615-3	.4	.8	1.4	2.0	3.2	3.9	4.6	
B648-2	.8	1.5	2.5	3.4	5.1	6.1		
B624-2	.8	1.5	2.5	3.4	5.1	6.1		
B660-4	.5	.9	1.7	2.3	3.7	4.6	5.2	
B615-4	.5	.9	1.7	2.3	3.7	4.6	5.2	
B840-2	.4	.7	1.3	1.8	2.9	3.7	4.2	
B820-2	.4	.7	1.3	1.8	2.9	3.7	4.2	
B848-3	.2	.4	.7	1.0	1.7	2.2	2.5	2.9
B816-3	.2	.4	.7	1.0	1.7	2.2	2.5	2.9
B864-4	.2	.4	.7	1.0	1.7	2.2	2.5	
B816-4	.2	.4	.7	1.0	1.7	2.2	2.5	
B872-4	.4	.7	1.2	1.8	2.8	3.6	4.2	
B818-4	.4	.7	1.2	1.8	2.8	3.6	4.2	
B1060-3	.17	.3	.6	.8	1.3	1.7	1.9	2.3
B1020-3	.17	.3	.6	.8	1.3	1.7	1.9	2.3
B1060-4	.1	.2	.4	.5	.9	1.2	1.4	1.8
B1015-4	.1	.2	.4	.5	.9	1.2	1.4	1.8
B1090-6	.14	.25	.5	.7	1.2	1.7	1.9	2.3
B1015-6	.14	.25	.5	.7	1.2	1.7	1.9	2.3
B1236-2	.05	.11	.2	.3	.5	.6	.8	1.0
B1218-2	.05	.11	.2	.3	.5	.6	.8	1.0
B1254-3	.07	.15	.3	.4	.7	.9	1.0	1.3
B1218-3	.07	.15	.3	.4	.7	.9	1.0	1.3
B1272-4	.07	.15	.3	.4	.7	.9	1.1	1.4
B1218-4	.07	.15	.3	.4	.7	.9	1.1	1.4
B1272-6	.06	.11	.2	.3	.6	.8	1.0	1.2
B1212-6	.06	.11	.2	.3	.6	.8	1.0	1.2

Aço

Número de Parte	Revoluções por Minuto							
	50	100	200	300	600	900	1200	1800
BS636-2	.9	1.7	3.0	4.1	6.4	8.0	9.0	
BS618-2	.9	1.7	3.0	4.1	6.4	8.0	9.0	
BS840-2	.5	.9	1.5	2.1	3.5	4.4	5.0	
BS820-2	.5	.9	1.5	2.1	3.5	4.4	5.0	
BS1030-15	.2	.4	.7	1.0	1.7	2.1	2.3	2.9
BS1020-15	.2	.4	.7	1.0	1.7	2.1	2.3	2.9
BS1040-2	.25	.5	.9	1.3	2.1	2.7	3.0	3.7
BS1020-2	.25	.5	.9	1.3	2.1	2.7	3.0	3.7
BS1050-2	.33	.64	1.2	1.6	2.5	3.2	3.7	
B1025-2	.33	.64	1.2	1.6	2.5	3.2	3.7	
BS1060-3	.3	.5	1.0	1.4	2.4	3.0	3.5	4.3
BS1020-3	.3	.5	1.0	1.4	2.4	3.0	3.5	4.3
BS1227-15	.09	.17	.33	.5	.8	1.0	1.2	1.6
BS1218-15	.09	.17	.33	.5	.8	1.0	1.2	1.6
BS1236-2	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1218-2	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1236-2A	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1218-2A	.12	.25	.4	.6	1.0	1.4	1.7	2.0
BS1248-2	.18	.37	.7	.9	1.6	2.0	2.3	2.8
B1224-2	.18	.37	.7	.9	1.6	2.0	2.3	2.8
BS1254-3	.14	.28	.5	.7	1.2	1.6	1.9	2.3
B1218-3	.14	.28	.5	.7	1.2	1.6	1.9	2.3
BS1428-2	.05	.08	.16	.20	.40	.54	.7	.8
BS1414-2	.05	.08	.16	.20	.40	.54	.7	.8
BS1624-2	.02	.03	.05	.08	.14	.20	.25	.3
BS1612-2	.02	.03	.05	.08	.14	.20	.25	.3
BS1624-15	.03	.05	.09	.14	.25	.33	.4	.5
BS1612-15	.03	.05	.09	.14	.25	.33	.4	.5
BS1632-2	.03	.08	.14	.20	.37	.5	.6	.8
BS1616-2	.03	.08	.14	.20	.37	.5	.6	.8
BS1648-3	.05	.09	.17	.25	.50	.6	.8	1.0
BS1616-3	.05	.09	.17	.25	.50	.6	.8	1.0
BS1664-4	.05	.10	.20	.33	.50	.7	.9	1.1
BS1616-4	.05	.10	.20	.33	.50	.7	.9	1.1