

REAMERS



Reamers

- Hand
- Machine (Morse Taper & Chucking)
 - Bridge
 - Taper Pin
- Morse Taper Socket
 - Taper Pipe
 - Adjustable

AVAILABLE IN MULTIPLE LANGUAGES



L100 V2EN



L100 V2NL



L100 V2FR



L100 V2DE



L100 V2IT



L100 V2ES



L100 V2SE



Engineers Black Book ***The Ultimate Reference Book is here...***

The easy to use pocket-size reference tools containing a wealth of detailed and updated information for the industry and trade.

The Black Book series includes the Engineer and Fastener editions. The high quality matt laminated grease proof page ensures long life and glare-free reading. It is wire bound to ensure the book stays flat on workbench when you are reading.

The book also comes with a BONUS drill point sharpening gauge (Engineer), and thread pitch identification gauge (Fastener).

Black Books are the ultimate reference books for engineers, trades people, apprentices, machine shops, tool rooms, technical colleges and purchasing officers.

- Tables
- Standards
- Illustrations
- Conversion factors
- Lubricants-coolants
- Tolerances
- Weights of metal
- Geometrical construction
- Formulae
- Engineering drawing standards
- Tapping drill sizes
- Speeds & feeds
- Equivalent charts
- Sharpening information

ISO	VDI	Material Group	Sutton
P	A	Steel	N
M	R	Stainless Steel	VA
K	F	Cast Iron	GG
N	N	Non-Ferrous Metals, Aluminiums & Coppers	Al W
S	S	Titaniums & Super Alloys	Ti
H	H	Hard Materials (≥ 45 HRC)	H

^ VDI 3323 material groups can also be determined by referring to the material cross reference listing in the application guide at the back of this catalogue.

Page

430	432	435	436	437	438	438	439	440
								
R100	R101	R102	R104	R105	R106	R107	R108	R109
HSS		HSS Co		HSS				TCA
Brt								
N					Roughing	Finishing	Tapered Pipe	N
DIN 206 / ISO 236	DIN 208	DIN 212 / ISO 521		Sutton Standard				
L10		L15		L7		L15		Straight

ISO	VDI ³³²³	Material	Condition	HB	N/mm ²									
P	1	Steel - Non-alloy, cast & free cutting	~ 0.15 %C	A	125	440	●	●	●	●	●	●	●	●
	2		~ 0.45 %C	A	190	640	●	●	●	●	●	●	●	●
	3		~ 0.75 %C	QT	250	840	●	●	●	●	●	●	●	○
	4			A	270	910	●	●	●	●	●	●	●	○
	5			QT	300	1010	○	○	○	○	○	○	○	○
	6	Steel - Low alloy & cast < 5% of alloying elements	A	180	610	●	●	●	●	●	●	●	●	●
	7		QT	275	930	○	○	○	○	○	○	○	○	○
	8		QT	300	1010	○	○	○	○	○	○	○	○	○
	9		QT	350	1180									
	10	Steel - High alloy, cast & tool	A	200	680	○	○	○	○	○	○	○	○	○
	11		HT	325	1100									
	12	Steel - Corrosion resistant & cast	Ferritic / Martensitic	A	200	680	○	○	○	○	○	○	○	○
	13		Martensitic	QT	240	810								
M	14.1	Stainless Steel	Austenitic	AH	180	610	○	○	○	○	○	○	○	○
	14.2		Duplex		250	840	○	○	○	○	○	○	○	○
	14.3		Precipitation Hardening		250	840	○	○	○	○	○	○	○	○
K	15	Cast Iron - Grey (GG)	Ferritic / Pearlitic		180	610	●	●	●	●	●	●	●	○
	16		Pearlitic		260	880	○	○	○	○	○	○	○	○
	17	Cast Iron - Nodular (GGG)	Ferritic		160	570	○	○	○	○	○	○	○	○
	18		Pearlitic		250	840	○	○	○	○	○	○	○	○
	19	Cast Iron - Malleable	Ferritic		130	460	○	○	○	○	○	○	○	○
	20		Pearlitic		230	780	○	○	○	○	○	○	○	○
N	21	Aluminum & Magnesium - wrought alloy	Non Heat Treatable		60	210	○	○	○	○	○	○	○	○
	22		Heat Treatable	AH	100	360	○	○	○	○	○	○	○	○
	23	Aluminum & Magnesium - cast alloy ≤12% Si	Non Heat Treatable		75	270	○	○	○	○	○	○	○	○
	24		Heat Treatable	AH	90	320	○	○	○	○	○	○	○	○
	25	Al & Mg - cast alloy >12% Si	Non Heat Treatable		130	460								
	26	Copper & Cu alloys (Brass/Bronze)	Free cutting, Pb > 1%		110	390	○	○	○	○	○	○	○	○
	27		Brass (CuZn, CuSnZn)		90	320	○	○	○	○	○	○	○	○
	28		Bronze (CuSn)		100	360	○	○	○	○	○	○	○	○
	29	Non-metallic - Thermosetting & fiber-reinforced plastics												
	30	Non-metallic - Hard rubber, wood etc.												
S	31	High temp. alloys	Fe based	A	200	680								
	32			AH	280	950								
	33		Ni / Co based	A	250	840								
	34			AH	350	1180								
	35			C	320	1080								
	36	Titanium & Ti alloys	CP Titanium		400 MPa									
	37.1		Alpha alloys		860 MPa									
	37.2		Alpha / Beta alloys	A	960 MPa									
	37.3			AH	1170 MPa									
	37.4		Beta alloys	A	830 MPa									
	37.5			AH	1400 MPa									
	38.1	Hardened steel		HT	45 HRC									
	38.2			HT	55 HRC									
	39.1			HT	58 HRC									
	39.2			HT	62 HRC									
H	40	Cast Iron	Chilled	C	400	1350	○	○	○	○	○	○	○	○
	41			HT	55 HRC									

Condition: A (Annealed), AH (Age Hardened), C (Cast), HT (Hardened & Tempered), QT (Quenched & Tempered)

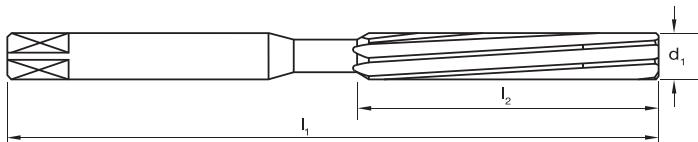
● Optimal ○ Effective

- For use by hand with suitable wrench
- Suitable for tool rooms & workshop use
- Produces clean, accurate holes, to a H7 tolerance

DIN
206

ISO
236


H7



Catalogue Code

Discount Group

Material

Surface Finish

Sutton Designation

Geometry

R100

B0302

HSS
Brt
N

L10

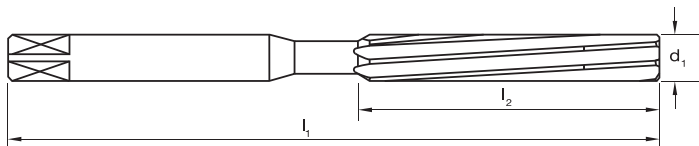
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0300	3.000	62	31	-	-	6	R100 0300
0318	3.175 1/8	66	33	-	-	6	R100 0318
0350	3.500	71	35	-	-	6	R100 0350
0357	3.572 9/64	71	35	-	-	6	R100 0357
0397	3.969 5/32	76	38	-	-	6	R100 0397
0400	4.000	76	38	-	-	6	R100 0400
0437	4.366 11/64	81	41	-	-	6	R100 0437
0450	4.500	81	41	-	-	6	R100 0450
0476	4.762 3/16	87	44	-	-	6	R100 0476
0500	5.000	87	44	-	-	6	R100 0500
0516	5.159 13/64	87	44	-	-	6	R100 0516
0550	5.500	93	47	-	-	6	R100 0550
0556	5.556 7/32	93	47	-	-	6	R100 0556
0595	5.953 15/64	93	47	-	-	6	R100 0595
0600	6.000	93	47	-	-	6	R100 0600
0635	6.350 1/4	100	50	-	-	6	R100 0635
0650	6.500	100	50	-	-	6	R100 0650
0675	6.747 17/64	100	50	-	-	6	R100 0675
0700	7.000	107	54	-	-	6	R100 0700
0714	7.144 9/32	107	54	-	-	6	R100 0714
0750	7.500	107	54	-	-	6	R100 0750
0754	7.541 19/64	107	54	-	-	6	R100 0754
0794	7.938 5/16	115	58	-	-	6	R100 0794
0800	8.000	115	58	-	-	6	R100 0800
0833	8.334 21/64	115	58	-	-	6	R100 0833
0850	8.500	115	58	-	-	6	R100 0850
0873	8.731 11/32	124	62	-	-	6	R100 0873
0900	9.000	124	62	-	-	6	R100 0900
0913	9.128 23/64	124	62	-	-	8	R100 0913
0950	9.500	124	62	-	-	6	R100 0950
0953	9.525 3/8	133	66	-	-	8	R100 0953
0992	9.922 25/64	133	66	-	-	8	R100 0992
1000	10.000	133	66	-	-	6	R100 1000
1032	10.319 13/32	133	66	-	-	8	R100 1032
1050	10.500	133	66	-	-	6	R100 1050
1100	11.000	142	71	-	-	6	R100 1100
1111	11.112 7/16	142	71	-	-	8	R100 1111
1150	11.500	142	71	-	-	6	R100 1150
1151	11.509 29/64	142	71	-	-	8	R100 1151
1191	11.906 15/32	152	76	-	-	8	R100 1191

ISO	P													M	K					N											S										H								
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R100	●	●	●	●		●		○			○		○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P	Steel	M	Stainless Steel		K	Cast Iron		N	Non-Ferrous Metals		S	Titanium & Super Alloys		H	Hard Materials																										●	Optimal		○	Effective				

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

- For use by hand with suitable wrench
- Suitable for tool rooms & workshop use
- Produces clean, accurate holes, to a H7 tolerance



Catalogue Code
Discount Group
Material
Surface Finish
Sutton Designation
Geometry

R100

B0302

HSS

Brt

N

L10

Size Ref.	d ₁	l ₁	l ₂	l ₃	d ₂	z	Item #
1200	12.000	152	76	-	-	6	R100 1200
1230	12.303 31/64	152	76	-	-	8	R100 1230
1250	12.500	152	76	-	-	6	R100 1250
1270	12.700 1/2	152	76	-	-	8	R100 1270
1300	13.000	152	76	-	-	6	R100 1300
1310	13.097 33/64	152	76	-	-	8	R100 1310
1349	13.494 17/32	163	81	-	-	8	R100 1349
1389	13.891 35/64	163	81	-	-	8	R100 1389
1350	13.500	163	81	-	-	6	R100 1350
1400	14.000	163	81	-	-	8	R100 1400
1429	14.288 9/16	163	81	-	-	8	R100 1429
1450	14.500	163	81	-	-	8	R100 1450
1468	14.684 37/64	163	81	-	-	8	R100 1468
1500	15.000	163	81	-	-	8	R100 1500
1508	15.081 19/32	175	87	-	-	8	R100 1508
1548	15.478 39/64	175	87	-	-	8	R100 1548
1588	15.875 5/8	175	87	-	-	8	R100 1588
1600	16.000	175	87	-	-	8	R100 1600
1627	16.272 41/64	175	87	-	-	8	R100 1627
1667	16.669 21/32	175	87	-	-	8	R100 1667
1700	17.000	175	87	-	-	8	R100 1700
1707	17.066 43/64	188	93	-	-	8	R100 1707
1746	17.463 11/16	188	93	-	-	8	R100 1746
1800	18.000	188	93	-	-	8	R100 1800
1826	18.256 23/32	188	93	-	-	8	R100 1826
1900	19.000	188	93	-	-	8	R100 1900
1905	19.050 3/4	201	100	-	-	10	R100 1905
1984	19.844 25/32	201	100	-	-	10	R100 1984
2000	20.000	201	100	-	-	8	R100 2000
2064	20.638 13/16	201	100	-	-	10	R100 2064
2100	21.000	201	100	-	-	8	R100 2100
2143	21.431 27/32	215	107	-	-	10	R100 2143
2200	22.000	215	107	-	-	8	R100 2200
2223	22.225 7/8	215	107	-	-	10	R100 2223
2300	23.000	215	107	-	-	8	R100 2300
2302	23.019 29/32	215	107	-	-	10	R100 2302
2381	23.813 15/16	231	115	-	-	10	R100 2381
2400	24.000	231	115	-	-	8	R100 2400
2461	24.606 31/32	231	115	-	-	10	R100 2461
2500	25.000	231	115	-	-	10	R100 2500
2540	25.400 1	231	115	-	-	10	R100 2540

ISO	P													M	K							N										S										H							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R100	●	●	●	●	●	●	●	○		○		○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○																	○	
P	Steel			M	Stainless Steel			K	Cast Iron			N	Non-Ferrous Metals			S	Titanium & Super Alloys			H	Hard Materials													●	Optimal			○	Effective										

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

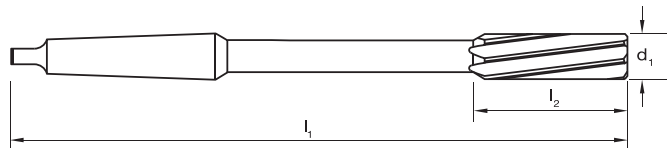
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Size Ref.	Geometry							Item #
	d ₁		l ₁	l ₂	l ₃	d ₂	z	MT #
0600	6.000		138	26	-	-	6	1
0635	6.350	1/4	144	28	-	-	6	1
0650	6.500		144	28	-	-	6	1
0675	6.747	17/64	144	28	-	-	6	1
0700	7.000		150	31	-	-	6	1
0714	7.144	9/32	150	31	-	-	6	1
0750	7.500		150	31	-	-	6	1
0754	7.541	19/64	150	31	-	-	6	1
0794	7.938	5/16	156	33	-	-	6	1
0800	8.000		156	33	-	-	6	1
0833	8.334	21/64	156	33	-	-	6	1
0850	8.500		156	33	-	-	6	1
0873	8.731	11/32	162	36	-	-	6	1
0900	9.000		162	36	-	-	6	1
0913	9.128	23/64	162	36	-	-	6	1
0950	9.500		162	36	-	-	6	1
0953	9.525	3/8	162	36	-	-	6	1
0992	9.922	25/64	168	38	-	-	6	1
1000	10.000		168	38	-	-	6	1
1032	10.319	13/32	168	38	-	-	6	1
1050	10.500		168	38	-	-	6	1
1072	10.716	27/64	175	41	-	-	6	1
1100	11.000		175	41	-	-	6	1
1111	11.112	7/16	175	41	-	-	6	1
1150	11.500		175	41	-	-	6	1
1151	11.509	29/64	175	41	-	-	6	1
1191	11.906	15/32	175	41	-	-	6	1
1200	12.000		182	44	-	-	6	1
1230	12.303	31/64	182	44	-	-	6	1
1250	12.500		182	44	-	-	6	1
1270	12.700	1/2	182	44	-	-	6	1
1300	13.000		182	44	-	-	6	1
1310	13.097	33/64	182	44	-	-	6	1
1349	13.494	17/32	189	47	-	-	6	1
1350	13.500		189	47	-	-	6	1
1389	13.891	35/64	189	47	-	-	6	1
1400	14.000		189	47	-	-	8	1
1429	14.288	9/16	204	50	-	-	8	2
1450	14.500		204	50	-	-	8	2
1468	14.684	37/64	204	50	-	-	8	2

ISO	P													M			K					N										S										H							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R101	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P	Steel			M	Stainless Steel			K	Cast Iron			N	Non-Ferrous Metals			S	Titanium & Super Alloys			H	Hard Materials																							●	Optimal		○	Effective	

- Machine use
- Suitable for toolroom & workshop use
- Produces clean, accurate holes, to a H7 tolerance



Catalogue Code
Discount Group
Material
Surface Finish
Sutton Designation
Geometry

R101

B0302

HSS

Brt

N

L10

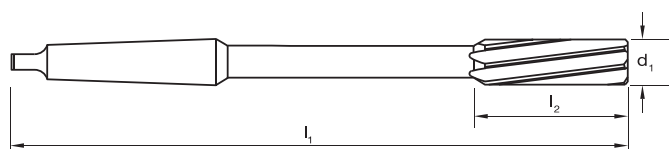
Size Ref.	d ₁	l ₁	l ₂	l ₃	d ₂	z	MT #	Item #
1500	15.000	204	50	-	-	8	2	R101 1500
1508	15.081 19/32	210	52	-	-	8	2	R101 1508
1550	15.500	210	52	-	-	8	2	R101 1550
1548	15.478 39/64	210	52	-	-	8	2	R101 1548
1588	15.875 5/8	210	52	-	-	8	2	R101 1588
1600	16.000	210	52	-	-	8	2	R101 1600
1627	16.272 41/64	214	54	-	-	8	2	R101 1627
1650	16.500	214	54	-	-	8	2	R101 1650
1667	16.669 21/32	214	54	-	-	8	2	R101 1667
1700	17.000	214	54	-	-	8	2	R101 1700
1707	17.066 43/64	219	56	-	-	8	2	R101 1707
1746	17.463 11/16	219	56	-	-	8	2	R101 1746
1750	17.500	219	56	-	-	8	2	R101 1750
1786	17.859 45/64	219	56	-	-	8	2	R101 1786
1800	18.000	219	56	-	-	8	2	R101 1800
1826	18.256 23/32	219	56	-	-	8	2	R101 1826
1850	18.500	223	58	-	-	8	2	R101 1850
1900	19.000	223	58	-	-	8	2	R101 1900
1905	19.050 3/4	223	58	-	-	8	2	R101 1905
1950	19.500	228	60	-	-	8	2	R101 1950
2000	20.000	228	60	-	-	8	2	R101 2000
2050	20.500	232	62	-	-	8	2	R101 2050
2064	20.638 13/16	232	62	-	-	8	2	R101 2064
2100	21.000	232	62	-	-	8	2	R101 2100
2143	21.431 27/32	232	62	-	-	8	2	R101 2143
2150	21.500	237	64	-	-	8	2	R101 2150
2200	22.000	237	64	-	-	8	2	R101 2200
2223	22.225 7/8	237	64	-	-	8	2	R101 2223
2250	22.500	241	66	-	-	8	2	R101 2250
2300	23.000	241	66	-	-	8	2	R101 2300
2302	23.019 29/32	237	64	-	-	8	2	R101 2302
2350	23.500	241	66	-	-	8	3	R101 2350
2381	23.813 15/16	268	68	-	-	8	3	R101 2381
2400	24.000	268	68	-	-	8	3	R101 2400
2450	24.500	268	68	-	-	8	3	R101 2450
2461	24.606 31/32	268	68	-	-	8	3	R101 2461
2500	25.000	268	68	-	-	10	3	R101 2500
2540	25.400 1	268	68	-	-	8	3	R101 2540
2550	25.500	273	70	-	-	10	3	R101 2550
2600	26.000	273	70	-	-	10	3	R101 2600

ISO	P													M	K							N										S										H									
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41		
R101	●	●	●	●	○	●	○			○		○		○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P	Steel			M	Stainless Steel			K	Cast Iron			N	Non-Ferrous Metals			S	Titanium & Super Alloys			H	Hard Materials													●	Optimal		○	Effective													

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

-



Catalogue Code	R101
Discount Group	B0302
Material	HSS
Surface Finish	<i>Brt</i>
Sutton Designation	N
Geometry	L10

[illegible]

ISO	P													M			K					N										S										H								
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
R101	●	●	●	●		●		○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○																		○	

P Steel

M Stainless Steel

K Cast Iron

N Non-Ferrous Metals

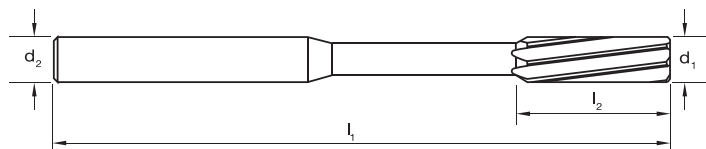
S Titanium & Super Alloys

H Hard Materials

● Optimal

○ Effective

- Machine use
- Suitable for toolroom & workshop use
- Produces clean, accurate holes, to a H7 tolerance



Catalogue Code
Discount Group
Material
Surface Finish
Sutton Designation
Geometry

R102

B0302

HSS Co

Brt

N

L10

Size Ref.	d ₁	l ₁	l ₂	l ₃	d ₂	z	Item #
0200	2.000	49	11	-	2.0	3	R102 0200
0250	2.500	57	14	-	2.5	5	R102 0250
0300	3.000	61	15	-	3.0	5	R102 0300
0318	3.175 1/8	65	16	-	3.2	5	R102 0318
0350	3.500	70	18	-	3.5	5	R102 0350
0357	3.572 9/64	70	18	-	3.6	5	R102 0357
0397	3.969 5/32	75	19	-	4.0	6	R102 0397
0400	4.000	75	19	-	4.0	6	R102 0400
0437*	4.36 11/64	80	21	-	4.5	6	R102 0437
0450	4.500	80	21	-	4.5	6	R102 0450
0476	4.762 3/16	86	23	-	5.0	6	R102 0476
0500	5.000	86	23	-	5.0	6	R102 0500
0516	5.159 13/64	86	23	-	5.0	6	R102 0516
0550	5.500	93	26	-	5.6	6	R102 0550
0595	5.953 15/64	93	26	-	5.6	6	R102 0595
0600	6.000	93	26	-	5.6	6	R102 0600
0635	6.350 1/4	101	28	-	6.3	6	R102 0635
0650	6.500	101	28	-	6.3	6	R102 0650
0700	7.000	109	31	-	7.1	6	R102 0700
0750	7.500	109	31	-	7.1	6	R102 0750
0794	7.938 5/16	117	31	-	8.0	6	R102 0794
0800	8.000	117	33	-	8.0	6	R102 0800
0850	8.500	117	33	-	8.0	6	R102 0850
0900	9.000	125	36	-	9.0	6	R102 0900
0950	9.500	125	36	-	9.0	6	R102 0950
0953	9.525 3/8	133	38	-	10.0	6	R102 0953
1000	10.000	133	38	-	10.0	6	R102 1000
1050	10.500	133	38	-	10.0	6	R102 1050
1100	11.000	142	41	-	10.0	6	R102 1100
1111	11.112 7/16	142	41	-	10.0	6	R102 1111
1150	11.500	142	41	-	10.0	6	R102 1150
1200	12.000	151	44	-	10.0	6	R102 1200
1250	12.500	151	44	-	10.0	6	R102 1250
1270	12.700 1/2	151	44	-	10.0	6	R102 1270
1300	13.000	151	44	-	10.0	6	R102 1300
1350	13.500	160	47	-	12.5	6	R102 1350
1400	14.000	160	47	-	12.5	8	R102 1400
1429	14.288 9/16	162	50	-	12.5	8	R102 1429
1450	14.500	162	50	-	12.5	8	R102 1450
1500	15.000	162	50	-	12.5	8	R102 1500
1550	15.500	170	52	-	12.5	8	R102 1550
1588	15.875 5/8	170	52	-	12.5	8	R102 1588
1600	16.000	170	52	-	12.5	8	R102 1600

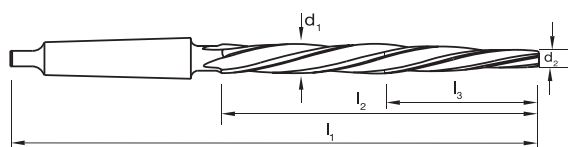
ISO	P													M	K										N										S										H					
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
R102	●	●	●	●	○	●	●	○		○		○		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P	Steel			M	Stainless Steel			K	Cast Iron			N	Non-Ferrous Metals			S	Titanium & Super Alloys			H	Hard Materials																							●	Optimal		○	Effective		

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective

*Not available once current stock is depleted

- 



Size Ref.	Geometry								Item #
	d ₁		l ₁	l ₂	l ₃	d ₂	z	MT #	
1111*	11.11	7/16	176	100	33	7.7	5	2	R104 1111
1270*	12.7	1/2	199	105	39	8.1	5	2	R104 1270
1300	13.0		199	105	42	8.8	5	2	R104 1300
1400	14.0		209	115	46	9.4	5	2	R104 1400
1429*	14.29	9/16	219	125	45	10.5	5	2	R104 1429
1600	16.0		229	135	54	10.6	5	2	R104 1600
1700	17.0		251	135	54	11.6	5	3	R104 1700
1746*	17.46	11/16	261	145	58	12.2	5	3	R104 1746
1800	18.0		261	145	58	12.2	5	3	R104 1800
1900	19.0		261	145	58	13.2	5	3	R104 1900
1905*	19.05	3/4	271	155	62	13.8	5	3	R104 1905
2000	20.0		271	155	62	13.8	5	3	R104 2000
2100	21.0		271	155	62	14.8	5	3	R104 2100
2200	22.0		281	165	66	15.4	5	3	R104 2200
2300	23.0		281	165	66	16.4	5	3	R104 2300
2500	25.0		296	180	72	17.8	5	3	R104 2500
2540*	25.4	1	296	180	72	18.8	5	3	R104 2540
2600	26.0		296	180	72	18.8	5	3	R104 2600
2699*	26.99	1-1/16	311	195	78	19.2	5	3	R104 2699
2800	28.0		311	195	78	20.2	5	3	R104 2800
2858*	28.58	1-1/8	311	195	78	21.2	5	3	R104 2858
3000	30.0		311	195	78	22.2	5	3	R104 3000
3016*	30.16	1-3/16	326	210	84	22.6	5	3	R104 3016
3175*	31.75	1-1/4	354	210	84	23.6	5	4	R104 3175
3200	32.0		354	210	84	23.6	5	4	R104 3200

ISO	P													M			K					N										S										H							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R104	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

P

Steel

M

Stainless Steel

K

Cast Iron

N

Non-Ferrous Metals

S

Titanium & Super Alloys

H

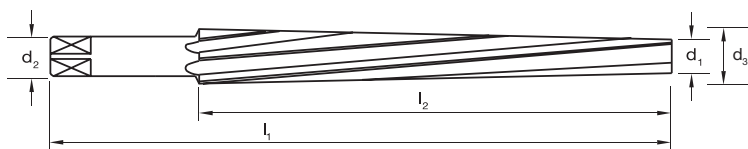
Hard Materials

●

Optimal

○

Effective



R105

B0302

HSS

Brt

N

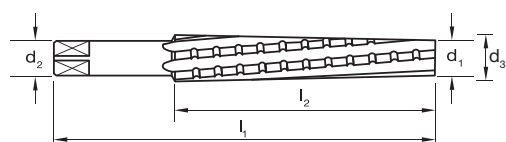
L7

Size Ref.	BS Size	Series	l_1	l_2	d_1	d_2	d_3	z	Item #
0238	3/32	#5/0	57	32	1.75	3.0	2.41	4	R105 0238
0278	7/64	#4/0	57	32	2.23	3.0	2.89	4	R105 0278
0318	1/8	#3/0	62	35	2.56	3.5	3.29	4	R105 0318
0357	9/64	#2/0	70	38	2.89	4.0	3.68	4	R105 0357
0397	5/32	#0	70	42	3.22	4.5	4.10	6	R105 0397
0437	11/64	#1	75	45	3.70	5.0	4.64	6	R105 0437
0476	3/16	#2	82	52	4.11	5.5	5.19	6	R105 0476
0556	7/32	#3	90	58	4.64	6.0	5.85	6	R105 0556
0635	1/4	#4	105	65	5.28	6.5	6.63	6	R105 0635
0714	9/32	#5	115	78	6.09	6.5	7.72	6	R105 0714
0873	11/32	#6	130	92	7.08	7.5	9.00	6	R105 0873
1032	13/32	#7	155	115	8.40	9.0	10.80	6	R105 1032
1270	1/2	#8	175	135	10.11	11.0	12.92	6	R105 1270
1429	9/16	#9	205	155	12.24	14.5	15.47	6	R105 1429
1905	3/4	#10	230	180	14.75	16.0	18.50	6	R105 1905
2223	7/8	#11	285	210	17.93	19.0	22.31	6	R105 2223

ISO	P													M		K				N										S										H										
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
R105	●	●	●	●	●	○	○			○		○		○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials ● Optimal ○ Effective																																																		

suttontools

- For use by hand with suitable wrench
- Suitable for tool rooms & workshop use
- Rougher, opens out existing parallel holes
- Finishing, to be used after rougher for final sizing



Catalogue Code	R106	R107
Discount Group	B0302	B0302
Material	HSS	HSS
Surface Finish	Brt	Brt
Sutton Designation	Roughing	Finishing
Geometry	L7	L7

Size Ref.	MT #	l_1	l_2	d_1	d_2	d_3	z	Item #	Item #
0000	0	83	57	6.59	8.72	9.24	6	R106 0000	R107 0000
0001	1	95	64	9.63	11.90	12.52	6	R106 0001	R107 0001
0002	2	114	76	14.79	16.65	18.27	6	R106 0002	R107 0002
0003	3	140	95	19.98	22.22	24.44	8	R106 0003	R107 0003
0004	4	175	117	26.14	25.40	31.90	8	R106 0004	R107 0004
0005	5	216	152	37.69	34.92	45.27	10	R106 0005	R107 0005

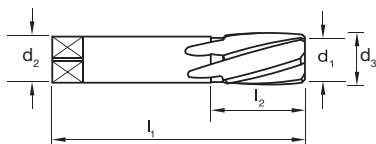
[illegible]

P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

suttontools

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[illegible]

ISO	P													M	K								N										S										H							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41	
R108	●	●	●	●	●	○	○			○		○		○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
P Steel	M Stainless Steel	K Cast Iron	N Non-Ferrous Metals	S Titanium & Super Alloys	H Hard Materials																																													

● Optimal ○ Effective

Reamers Adjustable

suttontools

- For use by hand with suitable wrench
- General purpose
- Adjustable size range
- TCA (Tungsten Chrome Alloy)



Catalogue Code
Discount Group

Material

Surface Finish

Sutton Designation

Geometry

				R109 B0304	R110 B0304	R111 B0304	R112 B0304
				TCA	TCA	TCA	TCA
				Br	Br	Br	Br
				N	-	-	-
				Reamer	Blade Sets	Pilots	Nuts
Size Ref.	Size	Range (mm)	Range (inch)	Item #	Item #	Item #	Item #
0635	MA8	6.35 - 7.15	1/4 - 9/32	R109 0635			
0715	MA7	7.15 - 7.95	9/32 - 5/16	R109 0715			
0795	MA6	7.95 - 8.70	5/16 - 11/32	R109 0795			
0870	MA5	8.70 - 9.50	11/32 - 3/8	R109 0870			
0950	MA4	9.50 - 10.25	3/8 - 13/32	R109 0950			
1025	MA3	10.25 - 11.00	13/32 - 7/16	R109 1025			
1100	MA2	11.00 - 12.00	7/16 - 15/32	R109 1100			
1200	MA	12.00 - 13.50	15/32 - 17/32	R109 1200	R110 1200	R111 1200	R112 1200
1350	MB	13.50 - 15.00	17/32 - 19/32	R109 1350	R110 1350	R111 1350	R112 1350
1500	MC	15.00 - 16.75	19/32 - 21/32	R109 1500	R110 1500	R111 1500	R112 1500
1675	MD	16.75 - 18.25	21/32 - 23/32	R109 1675	R110 1675	R111 1675	R112 1675
1825	ME	18.25 - 19.75	23/32 - 25/32	R109 1825	R110 1825	R111 1825	R112 1825
1975	MF	19.75 - 21.50	25/32 - 27/32	R109 1975	R110 1975	R111 1975	R112 1975
2150	MG	21.50 - 23.75	27/32 - 15/16	R109 2150	R110 2150	R111 2150	R112 2150
2375	MH	23.75 - 27.00	15/16 - 1-1/16	R109 2375	R110 2375	R111 2375	R112 2375
2700	MI	27.00 - 30.25	1-1/16 - 1-3/16	R109 2700	R110 2700	R111 2700	R112 2700
3025	MJ	30.25 - 34.25	1-3/16 - 1-11/32	R109 3025	R110 3025	R111 3025	R112 3025
3425	MK	34.25 - 38.00	1-11/32 - 1-1/2	R109 3425	R110 3425	R111 3425	R112 3425
3800	ML	38.00 - 46.00	1-1/2 - 1-13/16	R109 3800	R110 3800	R111 3800	R112 3800
4600	MM	46.00 - 56.00	1-13/16 - 2-7/32	R109 4600	R110 4600		R112 4600
5600	MN	56.00 - 69.75	2-7/32 - 2-3/4	R109 5600	R110 5600		R112 5600
6975	MO	69.75 - 85.00	2-3/4 - 3-11/32	R109 6975	R110 6975		R112 6975

Adjustable Reamer Set

Pieces

M1	MA4 to ME (Reamers Only)	8	R109 M1
M2P	MA to MH (Reamers & Pilots)	16	R109 M2P
M3	MA4 to MH (Reamers Only)	11	R109 M3
M6	MA8 to MK (Reamers Only)	18	R109 M6
M8	MA to MI (Reamers Only)	9	R109 M8

Adjustable Reamer Pilot Set

MA1	MA to MI (Pilots Only)	9	
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R111 MA1



R111 MA1

R109 M8

ISO	P													M			K					N										S										H							
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R109	●	●	○	○		●				○				○			○						○	○	○	○		○		○																			
R110																																																	
R111																																																	
R112																																																	

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metals S Titanium & Super Alloys H Hard Materials

● Optimal ○ Effective