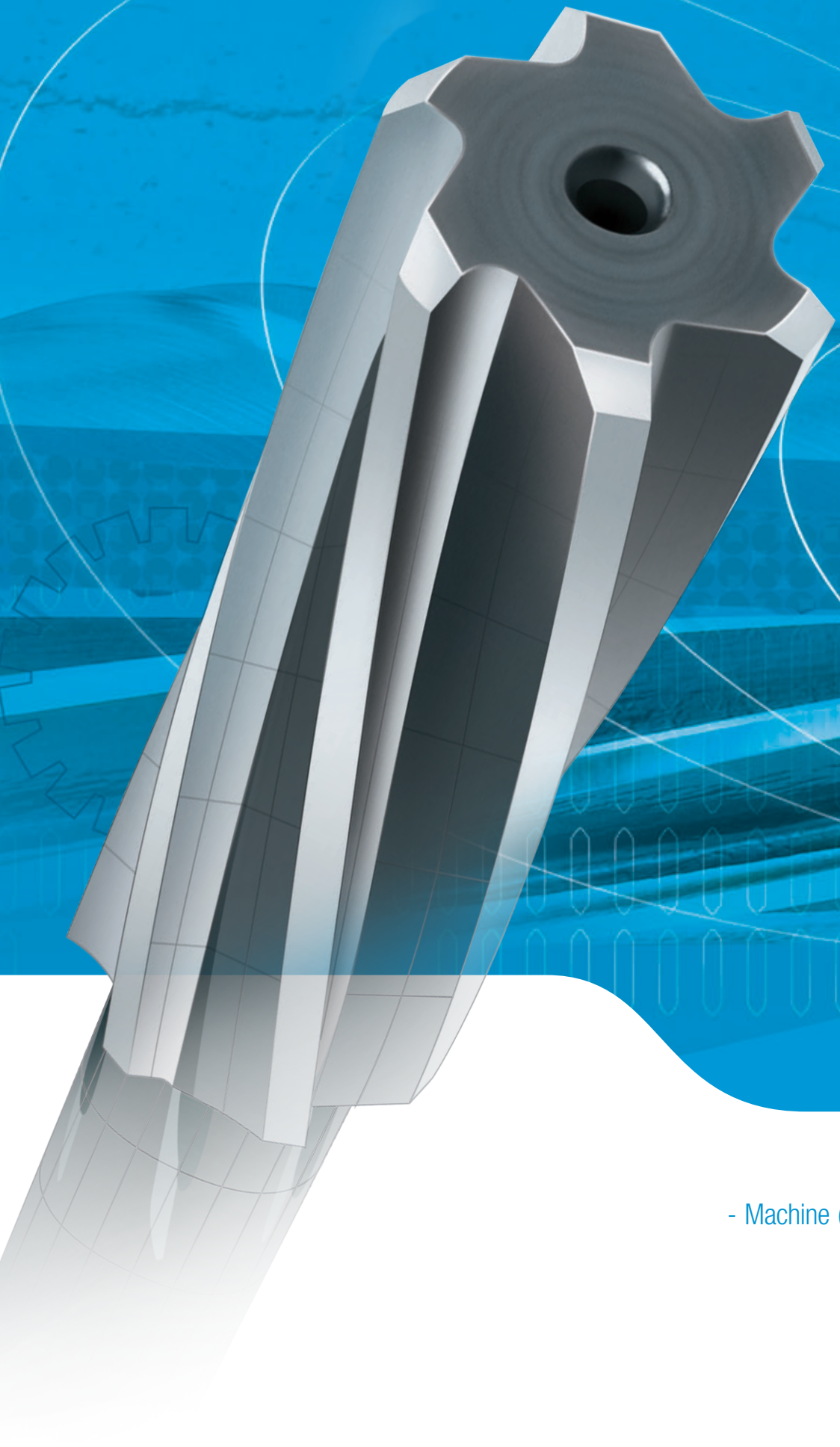
REAMERS

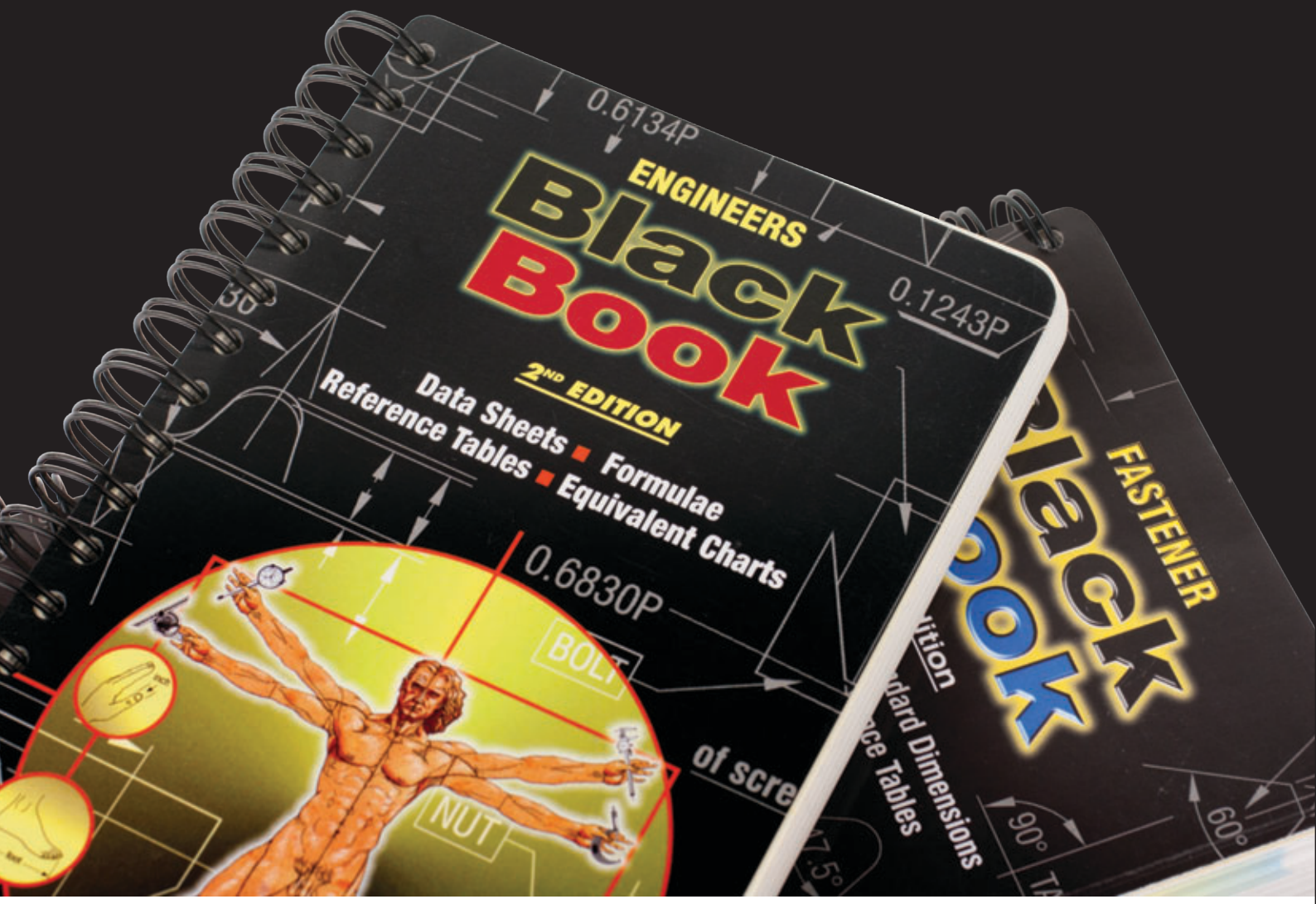


Reamers

- 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.

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

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

suttontools

ISO	VDI	Material Group	Sutton	
P	A	Steel	N	UNI
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	Ni
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	346	348	351	352	353	354	354	355	356
Catalogue Code	R100	R101	R102	R104	R105	R106	R107	R108	R109
Material	HSS		HSS Co	HSS					TCA
Surface Finish	*Brt*								
Sutton Designation	N					Roughing	Finishing	Tapered Pipe	N
Standard	DIN 206 / ISO 236	DIN 208	DIN 212 / ISO 521	Sutton Standard					
Geometry	L10			L15	L7			L15	Straight

ISO	VDI^ 3323	Material		Condition	HB	N/mm²	346	348	351	352	353	354	354	355	356
	1	Steel - Non-alloy, cast & free cutting	~ 0.15 %C	A	125	440	●	●	●	●	●	●	●	●	●
	2		~ 0.45 %C	A	190	640	●	●	●	●	●	●	●	●	●
	3			QT	250	840	●	●	●	●	●	●	●	●	○
	4		~ 0.75 %C	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										
H	38.1	Hardened steel		HT	45 HRC										
	38.2			HT	55 HRC										
	39.1			HT	58 HRC										
	39.2			HT	62 HRC										
	40	Cast Iron	Chilled	C	400	1350	○	○	○	○	○	○	○	○	
	41			HT	55 HRC										

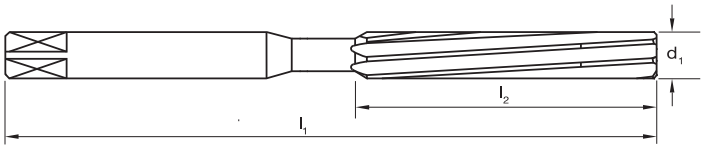
Condition: **A** (Annealed), **AH** (Age Hardened), **C** (Cast), **HT** (Hardened & Tempered), **QT** (Quenched & Tempered)

● **Optimal** ○ **Effective**

suttontools

- 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	**R100**
Discount Group	B0302
Material	HSS
Surface Finish	*Brt*
Sutton Designation	N
Geometry	L10

Size Ref.	d_1		l_1	l_2	l_3	d_2	z	Item #
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

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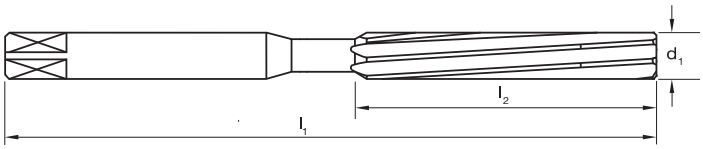
DIN 208 | ISO 236 | H7



Catalogue Code	**R100**
Discount Group	B0302
Material	**HSS**
Surface Finish	***Brt***
Sutton Designation	**N**
Geometry	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	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	

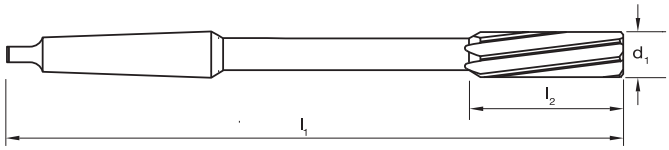
P Steel | M Stainless Steel | K Cast Iron | N Non-Ferrous Metals | S Titanium & Super Alloys | H Hard Materials

● Optimal ○ Effective

suttontools

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

DIN 208 | H7



Catalogue Code	**R101**
Discount Group	B0302
Material	**HSS**
Surface Finish	***Brt***
Sutton Designation	**N**
Geometry	L10

Size Ref.	d_1		l_1	l_2	l_3	d_2	z	MT #	Item #
0600	**6.000**		138	26	-	-	6	1	R101 0600
0635	6.350	**1/4**	144	28	-	-	6	1	R101 0635
0650	**6.500**		144	28	-	-	6	1	R101 0650
0675	6.747	**17/64**	144	28	-	-	6	1	R101 0675
0700	**7.000**		150	31	-	-	6	1	R101 0700
0714	7.144	**9/32**	150	31	-	-	6	1	R101 0714
0750	**7.500**		150	31	-	-	6	1	R101 0750
0754	7.541	**19/64**	150	31	-	-	6	1	R101 0754
0794	7.938	**5/16**	156	33	-	-	6	1	R101 0794
0800	**8.000**		156	33	-	-	6	1	R101 0800
0833	8.334	**21/64**	156	33	-	-	6	1	R101 0833
0850	**8.500**		156	33	-	-	6	1	R101 0850
0873	8.731	**11/32**	162	36	-	-	6	1	R101 0873
0900	**9.000**		162	36	-	-	6	1	R101 0900
0913	9.128	**23/64**	162	36	-	-	6	1	R101 0913
0950	**9.500**		162	36	-	-	6	1	R101 0950
0953	9.525	**3/8**	162	36	-	-	6	1	R101 0953
0992	9.922	**25/64**	168	38	-	-	6	1	R101 0992
1000	**10.000**		168	38	-	-	6	1	R101 1000
1032	10.319	**13/32**	168	38	-	-	6	1	R101 1032
1050	**10.500**		168	38	-	-	6	1	R101 1050
1072	10.716	**27/64**	175	41	-	-	6	1	R101 1072
1100	**11.000**		175	41	-	-	6	1	R101 1100
1111	11.112	**7/16**	175	41	-	-	6	1	R101 1111
1150	**11.500**		175	41	-	-	6	1	R101 1150
1151	11.509	**29/64**	175	41	-	-	6	1	R101 1151
1191	11.906	**15/32**	175	41	-	-	6	1	R101 1191
1200	**12.000**		182	44	-	-	6	1	R101 1200
1230	12.303	**31/64**	182	44	-	-	6	1	R101 1230
1250	**12.500**		182	44	-	-	6	1	R101 1250
1270	12.700	**1/2**	182	44	-	-	6	1	R101 1270
1300	**13.000**		182	44	-	-	6	1	R101 1300
1310	13.097	**33/64**	182	44	-	-	6	1	R101 1310
1349	13.494	**17/32**	189	47	-	-	6	1	R101 1349
1350	**13.500**		189	47	-	-	6	1	R101 1350
1389	13.891	**35/64**	189	47	-	-	6	1	R101 1389
1400	**14.000**		189	47	-	-	8	1	R101 1400
1429	14.288	**9/16**	204	50	-	-	8	2	R101 1429
1450	**14.500**		204	50	-	-	8	2	R101 1450
1468	14.684	**37/64**	204	50	-	-	8	2	R101 1468

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

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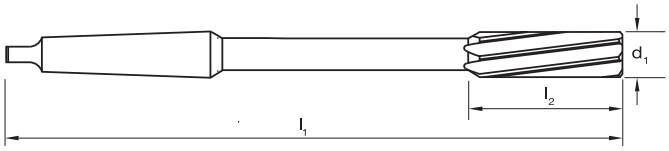
DIN 208 | H7



Catalogue Code	**R101**
Discount Group	B0302
Material	HSS
Surface Finish	*Brt*
Sutton Designation	N
Geometry	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	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	

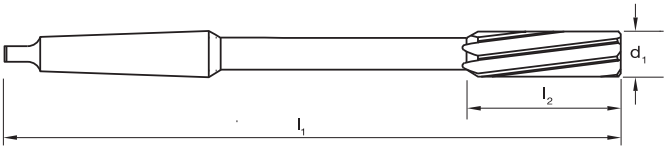
P Steel | M Stainless Steel | K Cast Iron | N Non-Ferrous Metals | S Titanium & Super Alloys | H Hard Materials

● Optimal ○ Effective

suttontools

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

DIN 208 | H7



Catalogue Code	**R101**
Discount Group	B0302
Material	**HSS**
Surface Finish	***Brt***
Sutton Designation	**N**
Geometry	L10

Size Ref.	d_1		l_1	l_2	l_3	d_2	z	MT #	Item #
2650	**26.500**		273	70	-	-	10	3	R101 2650
2699	26.987	**1-1/16**	277	71	-	-	10	3	R101 2699
2700	**27.000**		277	71	-	-	10	3	R101 2700
2750	**27.500**		277	71	-	-	10	3	R101 2750
2800	**28.000**		277	71	-	-	10	3	R101 2800
2850	**28.500**		281	73	-	-	10	3	R101 2850
2858	28.575	**1-1/8**	281	73	-	-	10	3	R101 2858
2900	**29.000**		281	73	-	-	10	3	R101 2900
2950	**29.500**		281	73	-	-	10	3	R101 2950
3000	**30.000**		281	73	-	-	10	3	R101 3000
3016	30.162	**1-3/16**	285	75	-	-	10	3	R101 3016
3050	**30.500**		285	75	-	-	10	3	R101 3050
3100	**31.000**		285	75	-	-	10	3	R101 3100
3150	**31.500**		285	75	-	-	10	3	R101 3150
3175	31.750	**1-1/4**	290	77	-	-	10	3	R101 3175
3200	**32.000**		317	77	-	-	10	4	R101 3200
3300	**33.000**		317	77	-	-	10	4	R101 3300
3334	33.338	**1-5/16**	317	77	-	-	10	4	R101 3334
3400	**34.000**		321	78	-	-	10	4	R101 3400
3493	34.925	**1-3/8**	321	78	-	-	10	4	R101 3493
3500	**35.000**		321	78	-	-	10	4	R101 3500
3600	**36.000**		325	79	-	-	12	4	R101 3600
3651	36.512	**1-7/16**	325	79	-	-	12	4	R101 3651
3700	**37.000**		325	79	-	-	12	4	R101 3700
3800	**38.000**		329	81	-	-	12	4	R101 3800
3810	38.100	**1-1/2**	329	83	-	-	12	4	R101 3810
3900	**39.000**		329	81	-	-	12	4	R101 3900
4000	**40.000**		329	81	-	-	12	4	R101 4000
4128	41.275	**1-5/8**	333	82	-	-	12	4	R101 4128
4445	44.450	**1-3/4**	336	83	-	-	12	4	R101 4445
4763	47.625	**1-7/8**	344	86	-	-	12	4	R101 4763
5080	50.800	**2**	344	86	-	-	12	4	R101 5080

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	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	

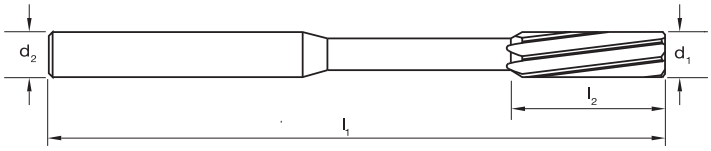
P Steel | M Stainless Steel | K Cast Iron | N Non-Ferrous Metals | S Titanium & Super Alloys | H Hard Materials

● Optimal ○ Effective

suttontools

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

DIN 212 | ISO 521 | H7



Catalogue Code	**R102**
Discount Group	B0302
Material	HSS Co
Surface Finish	***Brt***
Sutton Designation	N
Geometry	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	●	●	●	●	○	●	●	○		○		○		○	○	○	●	○	●	○	●	○	○	○	○	○		○	○	○																		○	

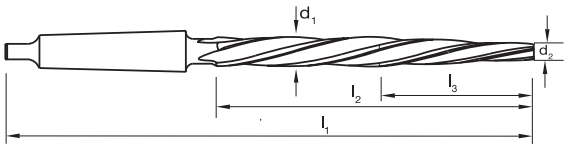
P Steel | M Stainless Steel | K Cast Iron | N Non-Ferrous Metals | S Titanium & Super Alloys | H Hard Materials

● Optimal ○ Effective

*Not available once current stock is depleted

suttontools

- Machine use
- For opening out existing holes
- Ideal for alignment in fabrication & construction work



Catalogue Code	**R104**
Discount Group	B0302
Material	**HSS**
Surface Finish	***Brt***
Sutton Designation	**N**
Geometry	L15

Size Ref.	d_1		l_1	l_2	l_3	d_2	z	MT #	Item #
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	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	

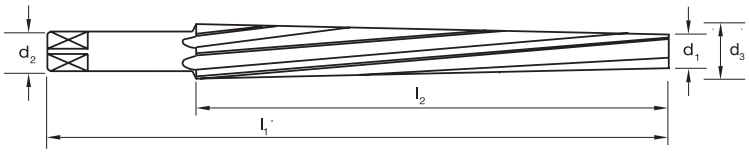
P Steel **M** Stainless Steel **K** Cast Iron **N** Non-Ferrous Metals **S** Titanium & Super Alloys **H** Hard Materials

● Optimal ○ Effective

*Not available once current stock is depleted

suttontools

- For use by hand with suitable wrench
- For opening out parallel holes to suit 1:48 taper pins



Catalogue Code	**R105**
Discount Group	B0302
Material	HSS
Surface Finish	*Brt*
Sutton Designation	N
Geometry	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

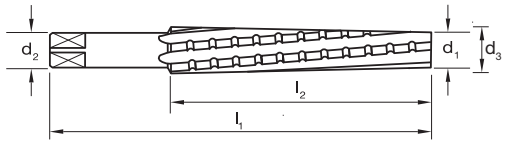
ISO	P												M			K					N									S										H				
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R105	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	

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

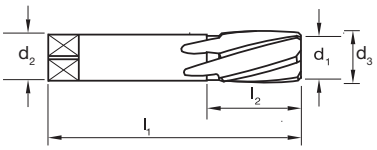
ISO	P													M			K						N									S											H					
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14.1	14.2	14.3	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37.1	37.2	37.3	37.4	37.5	38.1	38.2	39.1	39.2	40	41
R106	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	
R107	●	●	●	●	○	●	○	○		○		○		○	○	○	●	○	○	○	○	○	○	○	○	○		○	○	○																		○	

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
- Used prior to tapping tapered thread forms 1:16 taper (BSPT, NPT)
- Prolongs tap life, especially in tough materials



Catalogue Code	**R108**
Discount Group	B0302
Material	HSS
Surface Finish	*Brt*
Sutton Designation	Tapered Pipe
Geometry	L15

Size Ref.	Size	d_1	l_1	l_2	d_2	d_3	z	Item #
0803	1/8	8.00	60	15	8.00	8.97	6	R108 0803
1031	1/4	10.31	67	20	10.00	11.50	6	R108 1031
1372	3/8	13.72	75	22	12.50	15.63	6	R108 1372
1689	1/2	16.89	87	26	16.00	18.52	6	R108 1689
2225	3/4	22.25	96	29	20.00	24.00	6	R108 2225
2802	1	28.00	110	33	25.00	30.08	6	R108 2802
3668	1-1/4	36.58	119	37	31.50	38.83	6	R108 3668
4277	1-1/2	42.77	125	37	35.50	15.08	8	R108 4277
5484	2	54.84	140	41	40.00	57.40	8	R108 5484

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

suttontools

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

				R109	R110	R111	R112
			Catalogue Code	R109	R110	R111	R112
			Discount Group	B0304	B0304	B0304	B0304
			Material	TCA	TCA	TCA	TCA
			Surface Finish	*Brt*	*Brt*	*Brt*	*Brt*
			Sutton Designation	N	-	-	-
			Geometry	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			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	●	●	○	○		●				○				○			○						○	○	○	○		○		○																			
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