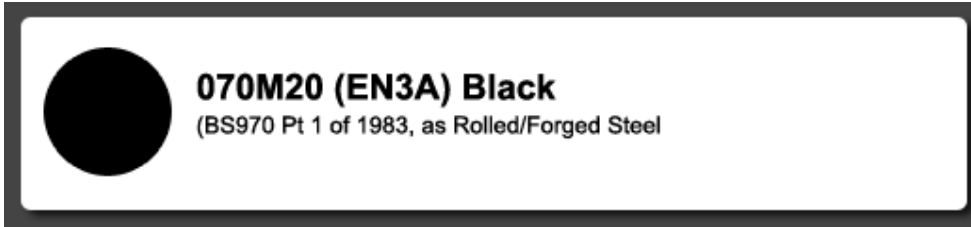


MACSTEEL - SPECIAL STEELS CATALOGUE

Lea Road
Dunswart
P O Box 6130, Dunswart 1508
South Africa

Tel: (011) 897-5000
Fax: (011) 918-1125
Email: mac.dun@mactrading.co.za
Web: www.macsteel.co.za



Typical Uses

Shafts, bolts, nuts, couplings, and machinery components where a low tensile strength material is required.

BS970 of 1955 EN3A, AISI (American) 1020	
Carbon	0.16 – 0.24
Silicon	0.10 – 0.40
Manganese	0.50 – 0.90
Sulphur	0.050 max
Phosphorus	0.050 max

Properties minima unless stated

Heat Treatment	Tensile Strength Rm MPa	Yield Stress Re MPa	Rp 0.2 MPa	A min on 5.65 √ So	Impact		Hardness HB	Limiting Ruling Section mm
					Izod Ft.lb	KCV J		
N	430	215	-	21	-	-	126/179	150
	400	200	-	21	-	-	116/170	250

A division of Macsteel Service Centre SA (Pty) Ltd: Reg. No 2005/016292/07

MACSTEEL - SPECIAL STEELS CATALOGUE

Lea Road
Dunswart
P O Box 6130, Dunswart 1508
South Africa

Tel: (011) 897-5000
Fax: (011) 918-1125
Email: mac.dun@mactrading.co.za
Web: www.macsteel.co.za



Size Range			
Diameter in mm	Theoretical Mass Kg/m	Diameter in mm	Theoretical Mass Kg/m
16	1.578	110	74.597
19	2.226	115	81.532
20	2.466	120	88.776
22	2.984	130	104.189
25	3.853	140	120.834
27	4.494	150	138.713
28	4.833	160	157.824
30	5.549	165	167.842
32	6.313	170	178.169
35	7.552	180	199.746
36	7.990	190	222.557
38	8.902	203	254.053
40	9.864	215	284.977
45	12.484	230	326.129
50	15.413	240	355.104
55	18.649	250	385.313
60	22.194	260	416.754
65	26.047	270	449.429
70	30.209	280	483.336
75	34.678	290	518.477
80	39.456	300	554.850
85	44.542	305	573.499
90	49.937	320	631.296
95	55.639	340	712.674
100	61.650	350	755.213
105	67.969	405	1011.214
108	71.909		

A division of Macsteel Service Centre SA (Pty) Ltd: Reg. No 2005/016292/07

MACSTEEL - SPECIAL STEELS CATALOGUE

Lea Road
Dunswart
P O Box 6130, Dunswart 1508
South Africa

Tel: (011) 897-5000
Fax: (011) 918-1125
Email: mac.dun@mactrading.co.za
Web: www.macsteel.co.za



N.B.

1. Actual mass will vary from theoretical mass due to manufacturing tolerances.
2. A 6 % allowance should always be made for removal of surface defects during machining.
3. For sizes not listed please contact our sales department - we may be able to assist you.
4. Normalised hardness given for guidance only.
5. Impact only applicable if fine grain controlled material is ordered.

Although every care has been taken in the compilation of this brochure, which is for information only, no responsibility can be accepted for inaccuracies.

A division of Macsteel Service Centre SA (Pty) Ltd: Reg. No 2005/016292/07

A M A C S T E E L G R O U P C O M P A N Y