

TECHNICAL GUIDE

070M20/EN3B

BS970: 1955	BS970: 1991	COLOUR CODE	DESCRIPTION
EN3B	070M20		Bright drawn / turned mild steel

CHEMICAL ANALYSIS	
Car	0.16/0.24
Sil	-
Mang	0.50/0.90
Phos	0.05 max
Sul	0.05 max

INTERNATIONAL SPECIFICATION COMPARISON	
BRITISH BS 970:1991	070M20
BRITISH BS 970:1955	EN3B
GERMAN DIN	CK20
FRENCH AFNOR	XC18
SWEDISH SS	I370
AMERICAN SAE	1021
EUROPEAN STEEL NO.	1.1151
EUROPEAN STEEL NAME	C22E
EUROPEAN STANDARD	EN10083-1

QUICK VIEW SYSTEM	
MACHINEABILITY	100
WELDABILITY	Good
HARDENABILITY	Poor
SELECTION GUIDE AND USAGE EXAMPLES	General purpose engineering

SIZES														
Size (ins. dia)	1/8	5/32	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1.1/16
	1.1/8	1.1/4	1.3/8	1.1/2	1.5/8	1.3/4	1.7/8	2	2.1/8	2.1/4	2.3/8	2.1/2	2.5/8	2.3/4
	2.7/8	3	3.1/4	3.1/2	3.3/4	4	4.1/4	4.1/2	4.3/4	5	5.1/4	5.1/2	5.3/4	6
	6.1/4	6.1/2	6.3/4	7	7.1/2	8	8.1/2	9	9.1/2	10	10.1/2	11	12	

Size (mm. dia)	3.00	4.00	5.00	6.00	8.00	10.00	12.00	15.00	16.00	17.00	18.00	19.00	20.00	22.00
	24.00	25.00	27.00	30.00	32.00	35.00	36.00	38.00	40.00	45.00	50.00	54.00	55.00	60.00
	65.00	70.00	75.00	80.00	85.00	90.00	95.00	100.00	110.00	180.00	240.00	320.00	330.00	350.00
	360.00	380.00	390.00											

SIZES						
Size (ins.)	1/4 x 3/16	1/2 x 1/8	1/2 x 1/4	1/2 x 3/8	5/8 x 1/8	5/8 x 1/4
	3/4 x 1/8	3/4 x 3/16	3/4 x 1/4	3/4 x 3/8	3/4 x 1/2	7/8 x 1/8
	7/8 x 1/4	1 x 1/8	1 x 3/16	1 x 1/4	1 x 3/8	1 x 1/2
	1 x 5/8	1 x 3/4	1.1/4 x 1/8	1.1/4 x 3/16	1.1/4 x 1/4	1.1/4 x 3/4
	1.1/4 x 1	1.1/2 x 1/8	1.1/2 x 3/16	1.1/2 x 1/4	1.1/2 x 5/16	1.1/2 x 3/8
	1.1/2 x 1/2	1.1/2 x 5/8	1.1/2 x 3/4	1.1/2 x 1	1.1/2 x 1.1/4	2 x 1/8
	2 x 3/16	2 x 1/4	2 x 3/8	2 x 1/2	2 x 5/8	2 x 3/4
	2 x 1	2 x 1.1/4	2 x 1.1/2	2.1/2 x 1/8	2.1/2 x 3/16	2.1/2 x 1/4
	2.1/2 x 5/16	2.1/2 x 3/8	2.1/2 x 1/2	2.1/2 x 5/8	2.1/2 x 3/4	2.1/2 x 1
	2.1/2 x 1.1/2	2.1/2 x 2	3 x 1/8	3 x 3/16	3 x 1/4	3 x 5/16
	3 x 3/8	3 x 1/2	3 x 5/8	3 x 3/4	3 x 1	3 x 1.1/2
	3 x 2	3 x 2.1/2	3.1/2 x 3/4	3.1/2 x 1.1/2	4 x 1/8	4 x 3/16
	4 x 1/4	4 x 3/8	4 x 1/2	4 x 5/8	4 x 3/4	4 x 1
	4 x 1.1/2	4 x 2	4 x 2.1/2	4 x 3	4.1/2 x 1/2	5 x 1/4
	5 x 5/16	5 x 3/8	5 x 1/2	5 x 5/8	5 x 3/4	5 x 1
	5 x 1.1/2	5 x 2	5 x 3	6 x 1/8	6 x 3/16	6 x 1/4
	6 x 3/8	6 x 1/2	6 x 5/8	6 x 3/4	6 x 1	6 x 1.1/2
	6 x 2	6 x 3	6 x 4	7 x 1/4	7 x 1/2	7 x 1
	8 x 1/4	8 x 3/8	8 x 1/2	8 x 5/8	8 x 3/4	8 x 1
	8 x 1.1/2	8 x 2	9 x 1/2	9 x 3/4	9 x 1	10 x 1/4
	10 x 3/8	10 x 1/2	10 x 1/2	10 x 5/8	10 x 3/4	10 x 1
	10 x 1.1/2	10 x 2	12 x 1/4	12 x 3/8	12 x 1/2	12 x 5/8
	12 x 3/4	12 x 1	14 x 1/2			

SIZES														
Size (mm)	6 x 3	10 x 3	10 x 5	10 x 6	12 x 3	12 x 5	12 x 6	12 x 8	12 x 10					
	15 x 3	15 x 5	15 x 6	16 x 3	16 x 5	16 x 6	16 x 8	16 x 10	16 x 12					
	20 x 3	20 x 4	20 x 5	20 x 6	20 x 8	20 x 10	20 x 12	20 x 16	25 x 3					
	25 x 4	25 x 5	25 x 6	25 x 8	25 x 10	25 x 12	25 x 16	25 x 20	30 x 3					
	30 x 5	30 x 6	30 x 8	30 x 10	30 x 12	30 x 16	30 x 20	30 x 25	32 x 10					
	32 x 12	32 x 16	32 x 20	32 x 25	35 x 10	35 x 12	35 x 16	35 x 20	35 x 25					
	35 x 30	40 x 1.25	40 x 3	40 x 5	40 x 6	40 x 8	40 x 10	40 x 12	40 x 16					
	40 x 20	40 x 25	40 x 30	45 x 6	45 x 8	45 x 10	45 x 12	45 x 16	45 x 20					
	45 x 25	45 x 30	45 x 40	50 x 3	50 x 5	50 x 6	50 x 8	50 x 10	50 x 12					
	50 x 16	50 x 20	50 x 25	50 x 30	50 x 40	60 x 6	60 x 8	60 x 10	60 x 12					
	60 x 16	60 x 20	60 x 25	60 x 30	60 x 40	65 x 6	65 x 10	65 x 12	65 x 16					
	65 x 20	65 x 25	70 x 6	70 x 8	70 x 10	70 x 12	70 x 16	70 x 20	70 x 25					
	70 x 30	70 x 40	70 x 50	75 x 1.5	75 x 6	75 x 8	75 x 10	75 x 12	75 x 16					
	75 x 20	75 x 25	80 x 6	80 x 8	80 x 10	80 x 12	80 x 16	80 x 20	80 x 25					
	80 x 30	80 x 40	80 x 50	80 x 60	90 x 6	90 x 10	90 x 12	90 x 16	90 x 20					
	90 x 25	90 x 30	90 x 40	90 x 50	100 x 6	100 x 8	100 x 10	100 x 12	100 x 16					
	100 x 20	100 x 25	100 x 30	100 x 40	100 x 50	110 x 10	110 x 20	125 x 6	125 x 10					
	125 x 12	125 x 16	125 x 20	125 x 25	125 x 30	125 x 40	125 x 50	150 x 10	150 x 12					
	150 x 16	150 x 20	150 x 25	160 x 6	160 x 8	160 x 10	160 x 12	160 x 16	160 x 20					
	160 x 25	160 x 30	160 x 50	200 x 10	200 x 12	200 x 20	200 x 25							

Size (ins. sq)	3/16	1/4	3/8	1/2	5/8	3/4	7/8	1	1.1/4	1.1/2	1.3/4	2	2.1/4	2.1/2
	3	3.1/2	4	4.1/2	5	6								

Size (mm sq)	6	8	10	12	16	18	20	25	30	32	35	40	45	50
	60	70	80	90	100									