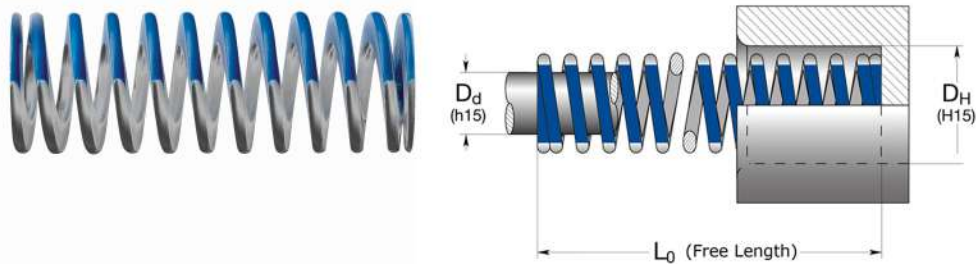


Medium Duty Springs

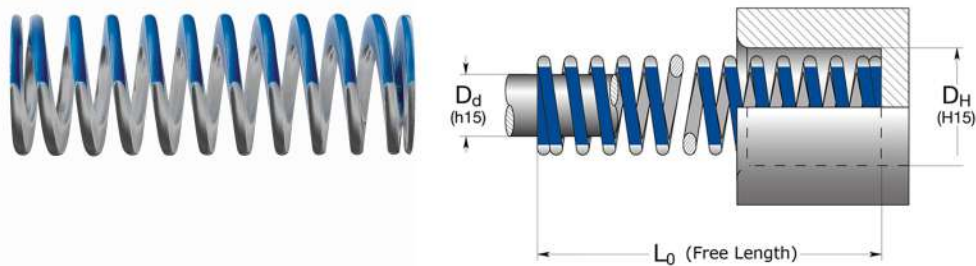


Maximum Operating Deflection	
Maximum	40%
Average Life	35%
Long Life	25%

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
04M10	3/8	3/16	1	6.00
04M12	3/8	3/16	1-1/4	5.00
04M15	3/8	3/16	1-1/2	4.20
04M17	3/8	3/16	1-3/4	3.70
04M20	3/8	3/16	2	3.10
04M25	3/8	3/16	2-1/2	2.60
04M30	3/8	3/16	3	2.10
04M120	3/8	3/16	12	0.60
05M10	1/2	9/32	1	11.00
05M12	1/2	9/32	1-1/4	8.20
05M15	1/2	9/32	1-1/2	6.80
05M17	1/2	9/32	1-3/4	6.00
05M20	1/2	9/32	2	5.50
05M25	1/2	9/32	2-1/2	4.50
05M30	1/2	9/32	3	3.50
05M35	1/2	9/32	3-1/2	3.00
05M40	1/2	9/32	4	2.60
05M45	1/2	9/32	4-1/2	2.30
05M55	1/2	9/32	5-1/2	2.00
05M65	1/2	9/32	6-1/2	1.40
05M75	1/2	9/32	7-1/2	1.20
05M120	1/2	9/32	12	0.70
06M10	5/8	11/32	1	16.40
06M12	5/8	11/32	1-1/4	12.40
06M15	5/8	11/32	1-1/2	10.80
06M17	5/8	11/32	1-3/4	9.60
06M20	5/8	11/32	2	8.60
06M25	5/8	11/32	2-1/2	6.50
06M30	5/8	11/32	3	5.80
06M35	5/8	11/32	3-1/2	5.00
06M40	5/8	11/32	4	4.40
06M45	5/8	11/32	4-1/2	3.80
06M120	5/8	11/32	12	1.50
07M10	3/4	3/8	1	32.00
07M12	3/4	3/8	1-1/4	25.60
07M15	3/4	3/8	1-1/2	20.00
07M17	3/4	3/8	1-3/4	17.60
07M20	3/4	3/8	2	15.00
07M25	3/4	3/8	2-1/2	12.00
07M30	3/4	3/8	3	10.10
07M35	3/4	3/8	3-1/2	8.30

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
07M35	3/4	3/8	3-1/2	8.30
07M40	3/4	3/8	4	7.50
07M45	3/4	3/8	4-1/2	6.40
07M50	3/4	3/8	5	6.00
07M55	3/4	3/8	5-1/2	5.50
07M60	3/4	3/8	6	5.00
07M65	3/4	3/8	6-1/2	4.70
07M75	3/4	3/8	7-1/2	3.80
07M120	3/4	3/8	12	2.40
10M10	1	1/2	1	55.00
10M12	1	1/2	1-1/4	45.00
10M15	1	1/2	1-1/2	37.30
10M17	1	1/2	1-3/4	32.00
10M20	1	1/2	2	26.80
10M25	1	1/2	2-1/2	20.90
10M30	1	1/2	3	17.10
10M35	1	1/2	3-1/2	14.50
10M40	1	1/2	4	12.50
10M45	1	1/2	4-1/2	11.00
10M50	1	1/2	5	9.60
10M55	1	1/2	5-1/2	8.80
10M60	1	1/2	6	8.00
10M70	1	1/2	7	7.20
10M80	1	1/2	8	6.00
10M120	1	1/2	12	4.00
12M15	1-1/4	5/8	1-1/2	49.60
12M17	1-1/4	5/8	1-3/4	40.60
12M20	1-1/4	5/8	2	37.60
12M25	1-1/4	5/8	2-1/2	28.80
12M30	1-1/4	5/8	3	24.00
12M35	1-1/4	5/8	3-1/2	20.00
12M40	1-1/4	5/8	4	17.60
12M45	1-1/4	5/8	4-1/2	16.00
12M50	1-1/4	5/8	5	14.30
12M55	1-1/4	5/8	5-1/2	12.80
12M60	1-1/4	5/8	6	12.00
12M70	1-1/4	5/8	7	10.40
12M80	1-1/4	5/8	8	8.80
12M100	1-1/4	5/8	10	7.20
12M120	1-1/4	5/8	12	6.00
15M20	1-1/2	3/4	2	53.00

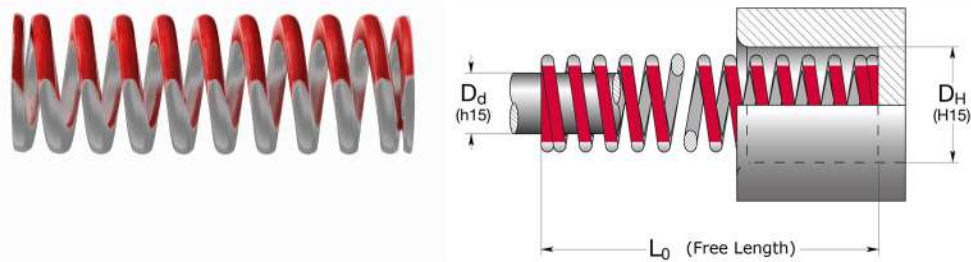
Medium Duty Springs



Maximum Operating Deflection	
Maximum	40%
Average Life	35%
Long Life	25%

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
15M25	1-1/2	3/4	2-1/2	42.70
15M30	1-1/2	3/4	3	36.00
15M35	1-1/2	3/4	3-1/2	30.00
15M40	1-1/2	3/4	4	24.90
15M45	1-1/2	3/4	4-1/2	23.00
15M50	1-1/2	3/4	5	21.00
15M55	1-1/2	3/4	5-1/2	18.50
15M60	1-1/2	3/4	6	17.00
15M70	1-1/2	3/4	7	15.30
15M80	1-1/2	3/4	8	13.20
15M100	1-1/2	3/4	10	10.60
15M120	1-1/2	3/4	12	8.50
20M25	2	1	2-1/2	100.00
20M30	2	1	3	83.00
20M35	2	1	3-1/2	67.70
20M40	2	1	4	60.00
20M45	2	1	4-1/2	53.00
20M50	2	1	5	47.00
20M55	2	1	5-1/2	40.50
20M60	2	1	6	39.00
20M70	2	1	7	31.20
20M80	2	1	8	28.50
20M100	2	1	10	21.60
20M120	2	1	12	18.50
25M30	2-1/2	1-1/2	3	108.10
25M35	2-1/2	1-1/2	3-1/2	89.60
25M40	2-1/2	1-1/2	4	76.20
25M45	2-1/2	1-1/2	4-1/2	66.60
25M50	2-1/2	1-1/2	5	59.40
25M55	2-1/2	1-1/2	5-1/2	53.20
25M60	2-1/2	1-1/2	6	48.10
25M70	2-1/2	1-1/2	7	41.50
25M80	2-1/2	1-1/2	8	35.90
25M100	2-1/2	1-1/2	10	26.90
25M120	2-1/2	1-1/2	12	23.40

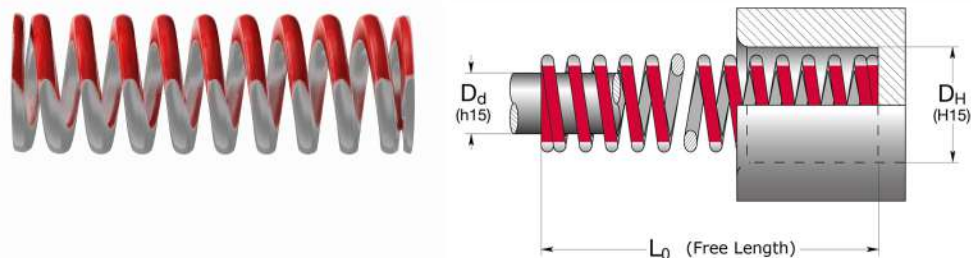
Medium Heavy Duty Springs



Maximum Operating Deflection	
Maximum	50%
Average Life	25%
Long Life	35%

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
04MH10	3/8	3/16	1	8.4
04MH12	3/8	3/16	1-1/4	7.3
04MH15	3/8	3/16	1-1/2	6.7
04MH17	3/8	3/16	1-3/4	5.8
04MH20	3/8	3/16	2	5
04MH25	3/8	3/16	2-1/2	3.7
04MH30	3/8	3/16	3	3
04MH120	3/8	3/16	12	0.8
05MH10	1/2	9/32	1	15.5
05MH12	1/2	9/32	1-1/4	12.2
05MH15	1/2	9/32	1-1/2	9.8
05MH17	1/2	9/32	1-3/4	8.5
05MH20	1/2	9/32	2	7.5
05MH25	1/2	9/32	2-1/2	6
05MH30	1/2	9/32	3	5.1
05MH35	1/2	9/32	3-1/2	4
05MH40	1/2	9/32	4	3.7
05MH120	1/2	9/32	12	1.1
06MH10	5/8	11/32	1	30
06MH12	5/8	11/32	1-1/4	21.5
06MH15	5/8	11/32	1-1/2	19
06MH17	5/8	11/32	1-3/4	16.8
06MH20	5/8	11/32	2	15.5
06MH25	5/8	11/32	2-1/2	11.5
06MH30	5/8	11/32	3	10
06MH35	5/8	11/32	3-1/2	8.5
06MH40	5/8	11/32	4	7.6
06MH45	5/8	11/32	4-1/2	6.6
06MH120	5/8	11/32	12	2.6
07MH10	3/4	3/8	1	50
07MH12	3/4	3/8	1-1/4	38
07MH15	3/4	3/8	1-1/2	31
07MH17	3/4	3/8	1-3/4	27
07MH20	3/4	3/8	2	24
07MH25	3/4	3/8	2-1/2	18.8
07MH30	3/4	3/8	3	14.9
07MH35	3/4	3/8	3-1/2	12.8
07MH40	3/4	3/8	4	11
07MH45	3/4	3/8	4-1/2	10

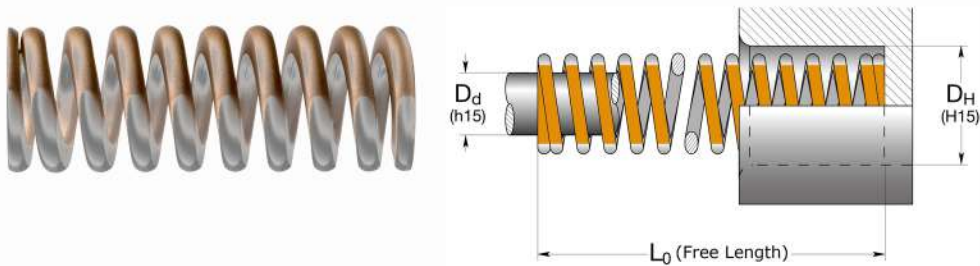
Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
07MH50	3/4	3/8	5	9
07MH55	3/4	3/8	5-1/2	8
07MH60	3/4	3/8	6	7.5
07MH120	3/4	3/8	12	3.5
10MH10	1	1/2	1	82.7
10MH12	1	1/2	1-1/4	65.3
10MH15	1	1/2	1-1/2	53.8
10MH17	1	1/2	1-3/4	46.1
10MH20	1	1/2	2	40
10MH25	1	1/2	2-1/2	32.2
10MH30	1	1/2	3	26.7
10MH35	1	1/2	3-1/2	22.9
10MH40	1	1/2	4	20.2
10MH45	1	1/2	4-1/2	17.8
10MH50	1	1/2	5	15.7
10MH55	1	1/2	5-1/2	13.7
10MH60	1	1/2	6	12.5
10MH70	1	1/2	7	10.9
10MH80	1	1/2	8	9.6
10MH120	1	1/2	12	6.5
12MH15	1-1/4	5/8	1-1/2	114.4
12MH17	1-1/4	5/8	1-3/4	100.8
12MH20	1-1/4	5/8	2	83.8
12MH25	1-1/4	5/8	2-1/2	62.4
12MH30	1-1/4	5/8	3	51.2
12MH35	1-1/4	5/8	3-1/2	44
12MH40	1-1/4	5/8	4	38.1
12MH45	1-1/4	5/8	4-1/2	32.9
12MH50	1-1/4	5/8	5	30
12MH55	1-1/4	5/8	5-1/2	26.4
12MH60	1-1/4	5/8	6	25
12MH70	1-1/4	5/8	7	21
12MH80	1-1/4	5/8	8	18.4
12MH100	1-1/4	5/8	10	14.5
12MH120	1-1/4	5/8	12	12.4
15MH20	1-1/2	3/4	2	103
15MH25	1-1/2	3/4	2-1/2	81.2
15MH30	1-1/2	3/4	3	62.4
15MH35	1-1/2	3/4	3-1/2	54



Maximum Operating Deflection	
Maximum	50%
Average Life	25%
Long Life	35%

[illegible]

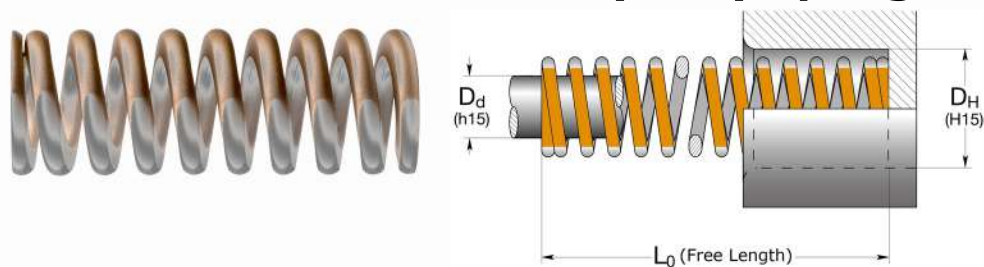
Heavy Duty Springs



Maximum Operating Deflection	
Maximum	30%
Average Life	15%
Long Life	20%

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
04H10	3/8	3/16	1	11.6
04H12	3/8	3/16	1-1/4	9.8
04H15	3/8	3/16	1-1/2	8
04H17	3/8	3/16	1-3/4	7.5
04H20	3/8	3/16	2	6.2
04H25	3/8	3/16	2-1/2	5
04H30	3/8	3/16	3	4.1
04H120	3/8	3/16	12	1.1
05H10	1/2	9/32	1	22.5
05H12	1/2	9/32	1-1/4	18.2
05H15	1/2	9/32	1-1/2	14.8
05H17	1/2	9/32	1-3/4	12.6
05H20	1/2	9/32	2	11
05H25	1/2	9/32	2-1/2	8.6
05H30	1/2	9/32	3	7.4
05H35	1/2	9/32	3-1/2	6
05H40	1/2	9/32	4	5.3
05H120	1/2	9/32	12	1.7
06H10	5/8	11/32	1	42.4
06H12	5/8	11/32	1-1/4	32.5
06H15	5/8	11/32	1-1/2	28
06H17	5/8	11/32	1-3/4	24
06H20	5/8	11/32	2	20.8
06H25	5/8	11/32	2-1/2	17
06H30	5/8	11/32	3	14
06H35	5/8	11/32	3-1/2	12.2
06H40	5/8	11/32	4	10.8
06H45	5/8	11/32	4-1/2	9.5
06H120	5/8	11/32	12	3
07H10	3/4	3/8	1	108
07H12	3/4	3/8	1-1/4	88
07H15	3/4	3/8	1-1/2	69
07H17	3/4	3/8	1-3/4	60
07H20	3/4	3/8	2	51.5
07H25	3/4	3/8	2-1/2	40
07H30	3/4	3/8	3	33
07H35	3/4	3/8	3-1/2	29
07H40	3/4	3/8	4	25
07H45	3/4	3/8	4-1/2	22
07H50	3/4	3/8	5	19.5

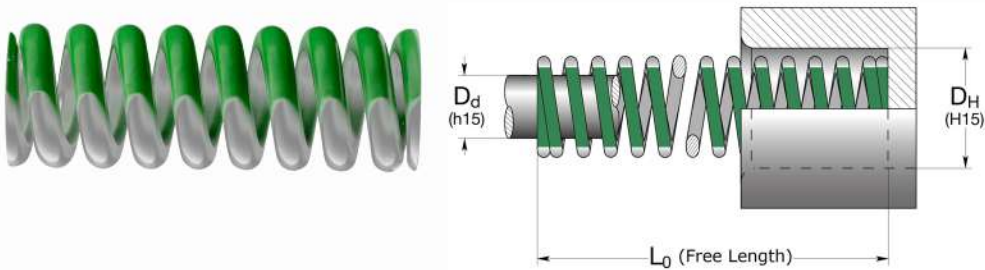
Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
07H55	3/4	3/8	5-1/2	17.8
07H60	3/4	3/8	6	16
07H120	3/4	3/8	12	8
10H10	1	1/2	1	193.2
10H12	1	1/2	1-1/4	146.5
10H15	1	1/2	1-1/2	120
10H17	1	1/2	1-3/4	104
10H20	1	1/2	2	87.2
10H25	1	1/2	2-1/2	66.5
10H30	1	1/2	3	54.4
10H35	1	1/2	3-1/2	45.6
10H40	1	1/2	4	40
10H45	1	1/2	4-1/2	35.2
10H50	1	1/2	5	31.2
10H55	1	1/2	5-1/2	28.8
10H60	1	1/2	6	25.6
10H70	1	1/2	7	22.4
10H80	1	1/2	8	19.2
10H120	1	1/2	12	12.8
12H15	1-1/4	5/8	1-1/2	220
12H17	1-1/4	5/8	1-3/4	181.6
12H20	1-1/4	5/8	2	149.6
12H25	1-1/4	5/8	2-1/2	117.6
12H30	1-1/4	5/8	3	95.2
12H35	1-1/4	5/8	3-1/2	78
12H40	1-1/4	5/8	4	66.4
12H45	1-1/4	5/8	4-1/2	58.4
12H50	1-1/4	5/8	5	53
12H55	1-1/4	5/8	5-1/2	47.2
12H60	1-1/4	5/8	6	45
12H70	1-1/4	5/8	7	36.8
12H80	1-1/4	5/8	8	32.8
12H100	1-1/4	5/8	10	25.6
12H120	1-1/4	5/8	12	22
15H20	1-1/2	3/4	2	198
15H25	1-1/2	3/4	2-1/2	155
15H30	1-1/2	3/4	3	130
15H35	1-1/2	3/4	3-1/2	106.4
15H40	1-1/2	3/4	4	91.2
15H45	1-1/2	3/4	4-1/2	81.6



Maximum Operating Deflection	
Maximum	30%
Average Life	15%
Long Life	20%

[illegible]

Extra Heavy Duty Springs



Maximum Operating Deflection	
Maximum	37%
Average Life	20%
Long Life	25%

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
04X10	3/8	3/16	1	21
04X12	3/8	3/16	1-1/4	14.6
04X15	3/8	3/16	1-1/2	12.5
04X17	3/8	3/16	1-3/4	10.5
04X20	3/8	3/16	2	9
04X25	3/8	3/16	2-1/2	7.5
04X30	3/8	3/16	3	6.3
04X120	3/8	3/16	12	1.5
05X10	1/2	9/32	1	31
05X12	1/2	9/32	1-1/4	24
05X15	1/2	9/32	1-1/2	19.2
05X17	1/2	9/32	1-3/4	17
05X20	1/2	9/32	2	14
05X25	1/2	9/32	2-1/2	11.5
05X30	1/2	9/32	3	9.4
05X35	1/2	9/32	3-1/2	8
05X40	1/2	9/32	4	7.1
05X120	1/2	9/32	12	2.4
06X10	5/8	11/32	1	63
06X12	5/8	11/32	1-1/4	43.8
06X15	5/8	11/32	1-1/2	37
06X17	5/8	11/32	1-3/4	31
06X20	5/8	11/32	2	28
06X25	5/8	11/32	2-1/2	22
06X30	5/8	11/32	3	19
06X35	5/8	11/32	3-1/2	15.4
06X40	5/8	11/32	4	13.5
06X45	5/8	11/32	4-1/2	12
06X120	5/8	11/32	12	4.5
07X10	3/4	3/8	1	140
07X12	3/4	3/8	1-1/4	110
07X15	3/4	3/8	1-1/2	89
07X17	3/4	3/8	1-3/4	75
07X20	3/4	3/8	2	66
07X25	3/4	3/8	2-1/2	50
07X30	3/4	3/8	3	40.5
07X35	3/4	3/8	3-1/2	34.5
07X40	3/4	3/8	4	30
07X45	3/4	3/8	4-1/2	26.5
07X50	3/4	3/8	5	23.5

Item Number	DH Hole Diameter	Dd Rod Diameter	LO Free Length	R Spring Rate +/- 10% (lbs/.10 Inch Deflec.)
07X55	3/4	3/8	5-1/2	21.5
07X60	3/4	3/8	6	19.5
07X120	3/4	3/8	12	9.5
10X10	1	1/2	1	243.7
10X12	1	1/2	1-1/4	187.6
10X15	1	1/2	1-1/2	160
10X17	1	1/2	1-3/4	133.9
10X20	1	1/2	2	116
10X25	1	1/2	2-1/2	89.6
10X30	1	1/2	3	73.6
10X35	1	1/2	3-1/2	62.4
10X40	1	1/2	4	55.2
10X45	1	1/2	4-1/2	48.8
10X50	1	1/2	5	43.2
10X55	1	1/2	5-1/2	39.3
10X60	1	1/2	6	36
10X70	1	1/2	7	30.5
10X80	1	1/2	8	26.6
10X120	1	1/2	12	17.6
12X15	1-1/4	5/8	1-1/2	269
12X17	1-1/4	5/8	1-3/4	237
12X20	1-1/4	5/8	2	205
12X25	1-1/4	5/8	2-1/2	152.5
12X30	1-1/4	5/8	3	122
12X35	1-1/4	5/8	3-1/2	108.5
12X40	1-1/4	5/8	4	89
12X45	1-1/4	5/8	4-1/2	83.5
12X50	1-1/4	5/8	5	70
12X55	1-1/4	5/8	5-1/2	62.8
12X60	1-1/4	5/8	6	57.5
12X70	1-1/4	5/8	7	51.4
12X80	1-1/4	5/8	8	46
12X100	1-1/4	5/8	10	34.5
12X120	1-1/4	5/8	12	27
15X20	1-1/2	3/4	2	408.5
15X25	1-1/2	3/4	2-1/2	328.5
15X30	1-1/2	3/4	3	255
15X35	1-1/2	3/4	3-1/2	213.5
15X40	1-1/2	3/4	4	184.5
15X45	1-1/2	3/4	4-1/2	162.5

[illegible]