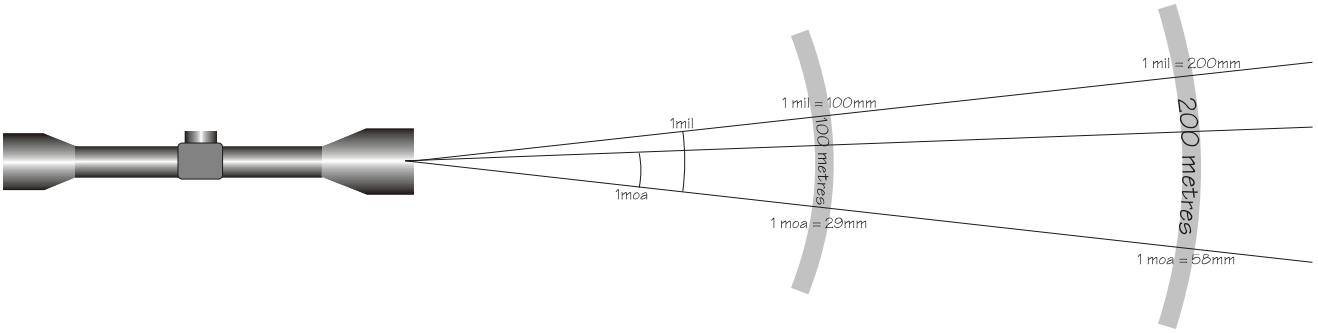
LYNX mil-dot graticule instruction supplement

Revision 1.0

Range finding graticule:

Like a degree and a minute of arc (moa), a mil is an angular measurement representing a given size at a given distance. 1 moa is 0.00029 of the distance to the viewed target (i.e. 29mm @ 100m). 1 mil is 0.001 (one thousandth) of the distance to the viewed target (i.e. 10mm @ 100m).



Because 1 mil is 1m @ 1000m, 2m at 2000m etc. (doubling the distance doubles the mil measure, halving the distance halves the mil measure), you can determine the distance to a target of known size using the graduations on the mil-dot graticule.

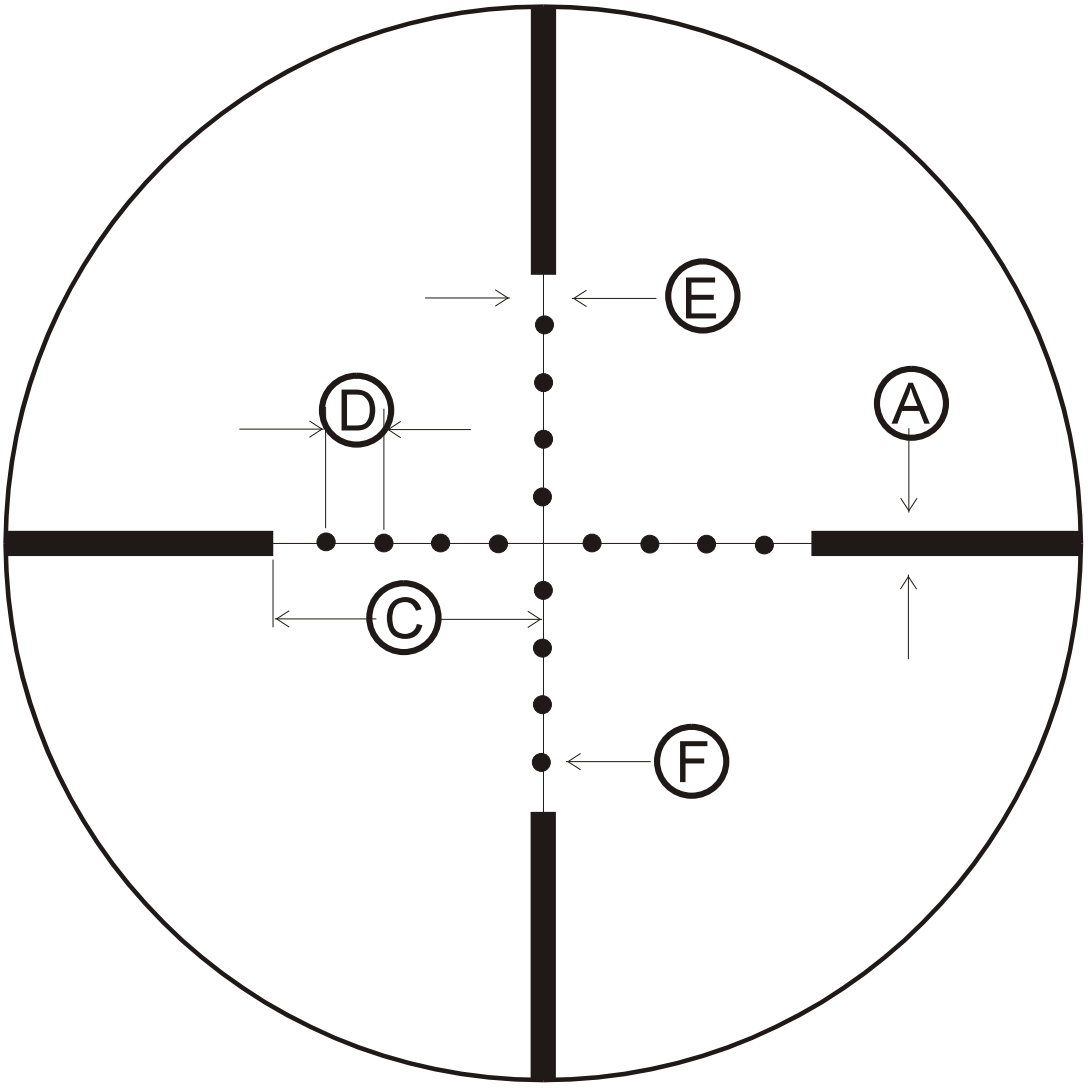
Lynx variable power riflescopes have the graticules mounted in the second plane (the position where the graticule is mounted inside the riflescope. 2nd plane means that the graticule remains the same size regardless of the magnification setting). So because you are effectively changing the viewed distance to the target when you change the power on a variable riflescope, magnification has to be considered when calculating subtended angles.

Below is a table of subtended angles of the Lynx mil-dot graticule at various commonly used magnifications. Refer to the diagram overleaf for figures A-F.

		angular measurement at given magnification							
	measure	3x	4x	5x	6x	7x	8x	9x	10x
A	moa	3.3	2.5	2	1.7	1.4	1.25	1.1	1moa
C	mil	16.6	12.5	10	8.3	7.1	6.25	5.6	5mil
D	mil	3.3	2.5	2	1.7	1.4	1.25	1.1	1mil
E	moa	0.7	0.5	0.4	0.34	0.3	0.25	0.2	1/5moa
F	moa	2.5	1.9	1.5	1.25	1.1	0.9	0.8	3/4moa

Please note

In order to convert these range figures to any other power, use the figure given in the 10x column in the table above multiplied by 10 and divided by the desired magnification.
Example 1: 2x magnification for measure A is required. 1moa x 10 / 2 = 5moa.
Example 2: 6x magnification for measure C (given above). 5mil x 10 / 6 = 8.3mil.



Figures given for 1x magnification

divide these figures by the magnification being used

Figure	Subtended angle
A	10 moa
C	50 mil
D	10 mil
E	2 moa
F	7.5 moa

3.4 minutes of arc (moa) = 1 mil
1 moa = 29mm at 100 metres
1 mil = 100mm at 100 metres
1 mil subtends one thousandth of the viewed distance
(i.e. 1m at 1000m, 2yds at 2000yds etc.)