

**Example:**  
 Horizontal FOV = 30 mm  
 Working Dist. = 420 mm  
**Best Lens:**  
 50 mm plus  
 5 mm Extension Tube

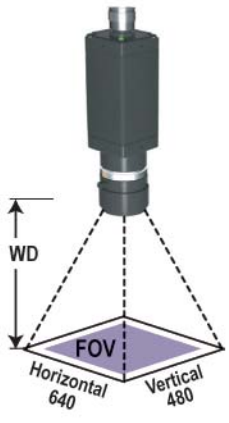
- Directions:**
1. Determine Field-of-View (FOV) in millimeters.
  2. Determine working distance in millimeters.
  3. Locate FOV in the first column of the table at right.
  4. Scan across the row to the working distance closest to desired application.
  5. Use the lens size and extension tube indicated for that row.

**Definitions:**

**Field-of-View (FOV):**  
 The area of the inspection to be captured by the sensor.

**Working Distance (WD):** The distance between the front of the sensor and the target object.

**Extension Tubes:**  
 Spacers between the lens and the sensor that allow the lens to focus at closer working distances.



Horizontal x Vertical FOV (mm)	Working Distance in Millimeters (+ Extension Tube in Millimeters)							
	Lens Choices							
	4mm	6.5mm	8mm	12mm	16mm	25mm	50mm	75mm
5 X 4							168 40*	
10 X 8							219 20*	324 25*
15 X 11						113 5*	270 10*	396 20*
20 X 15						140 5*	321 5*	467 10*
25 X 19						166 3*	372 5*	539 5*
30 X 23					125 4.0*	192 2*	423 5*	610 5*
40 X 30				116 2.0*	159 3.0*	244 2*	525 5*	753
50 X 38		127 0.5*	125 0.5*	142 2.0*	193 2.0*	296 2*	627	896
60 X 45		142 0.5*	140 1.0*	167 0.5*	227 1.0*	349 2*	729	1039
70 X 53			156	192 0.5*	261 1.0*	401 2*	831	1182
80 X 60		157 0.25*	171	218 0.5*	296 0.5*	453	933	1325
90 X 68		173 0.25*	186	243 0.5*	330 0.5*	506	1035	1468
100 X 75			202	268 0.5*	364 0.5*	558	1137	1611
110 X 83			217	293 0.5*	398 0.5*	610	1239	1754
120 X 90			232	319	432	663	1341	1897
130 X 98			248	344	467	715	1443	2040
140 X 105			263	369	501	767	1545	2183
150 X 113			278	395	535	819	1647	2326
160 X 120	102		293	420	569	872	1749	2469
170 X 128	110		309	445	603	924	1851	2612
180 X 135	117		324	471	638	976	1953	2755
190 X 143	125		339	496	672	1029	2055	2898
200 X 150	133		355	521	706	1081	2157	3041
210 X 158	141	311	370	546	740	1133	2259	3184
220 X 165	149	322	385	572	774	1186	2361	3327
230 X 173	157	334	401	597	809	1238	2463	3470
240 X 180	164	345	416	622	843	1290	2565	3613
250 X 188	172	357	431	648	877	1342	2667	3756
260 X 195	180	368	446	673	911	1395	2769	3899
270 X 203	188	380	462	698	945	1447	2871	4042
280 X 210	196	391	477	724	980	1499	2973	4185
290 X 218	204	403	492	749	1014	1552	3075	4328
300 X 225	212	414	508	774	1048	1604	3177	4471
310 X 233	219	426	523	799	1082	1656	3279	4614
320 X 240	227	437	538	825	1116	1709	3381	4757
330 X 248	235	449	554	850	1151	1761	3483	4900
340 X 255	243	460	569	875	1185	1813	3585	5043
350 X 263	251	472	584	901	1219	1865	3687	5186
360 X 270	259	483	599	926	1253	1918	3789	5329
370 X 278	266	495	615	951	1287	1970	3891	5472
380 X 285	274	506	630	977	1322	2022	3993	5615
390 X 293	282	518	645	1002	1356	2075	4095	5758
400 X 300	290	529	661	1027	1390	2127	4197	5901