

| | | | | | | | |
|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | D7/D8 | | | | | |
| d | Wire OD (mm) | 12.25 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 146.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 133.75 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 3.50 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 26,654.97 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 152.20 | | | | | |
| | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 24,411.92 | | | | | |
| | Wheel rate (lb/in) | 139.40 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | | | | | |
| | Distribution | 0.52 | F | | | | |
| | Front axle total (kg) | 842.03 | | | | | |
| | Unsprung weight (kg) | 52.16 | Per side | Credit/ref: fe1rx | | | |
| | Front axle sprung (kg) | 737.70 | | | | | |
| | Front axle sprung load (N) | 7,234.40 | | | | | |
| | | | | | | | |
| | Stock ride height (mm) | 602.50 | C6 spring, Koni SA, Xd tops, 18" | | | | |
| | Spring free length (mm) | 340.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 148.17 | | | | | |
| | Spring compressed length (mm) | 191.83 | | | | | |
| | Spring length delta (mm) | -1.43 | +ve is longer | | | | |
| | Ride height delta (mm) | -1.49 | | | | | |
| | Ride height - Calculated (mm) | 601.01 | | | | | |
| | Mean correction (mm) | -9.64 | | | | | |
| | Corrected (mm) | 610.65 | If no Xd tops, but with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.29 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | |
|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | D7/8 | | | | | |
| d | Wire OD (mm) | 12.00 | tlow98, OE | | | | |
| | Spring OD (mm) | 144.00 | tlow98, OE | | | | |
| D | Mean OD (mm) | 132.00 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 3.50 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 25,533.97 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 145.80 | | | | | |
| | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 23,385.26 | | | | | |
| | Wheel rate (lb/in) | 133.53 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | | | | | |
| | Distribution | 0.52 | F | | | | |
| | Front axle total (kg) | 842.03 | | | | | |
| | Unsprung weight (kg) | 52.16 | Per side | Credit/ref: fe1rx | | | |
| | Front axle sprung (kg) | 737.70 | | | | | |
| | Front axle sprung load (N) | 7,234.40 | | | | | |
| | | | | | | | |
| | Stock ride height (mm) | 602.50 | C6 spring, Koni SA, Xd tops, 18" | | | | |
| | Spring free length (mm) | 328.00 | tlow98, OE | | | | |
| | Spring compression (mm) | 154.68 | | | | | |
| | Spring compressed length (mm) | 173.32 | | | | | |
| | Spring length delta (mm) | -19.93 | +ve is longer | | | | |
| | Ride height delta (mm) | -20.83 | | | | | |
| | Ride height - Calculated (mm) | 581.67 | | | | | |
| | Mean correction (mm) | -9.64 | | | | | |
| | Corrected (mm) | 591.31 | If no Xd tops, but with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.27 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | | |
|----|-------------------------------|-----------|--|-------------------|--|--|--|--|
| | Spring Code | Y1/Y2 | | | | | | |
| d | Wire OD (mm) | 13.00 | Autodoc, Suplex | | | | | |
| | Spring OD (mm) | 149.00 | Autodoc, Suplex | | | | | |
| D | Mean OD (mm) | 136.00 | At centre of wire | | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | | |
| Na | Number of active coils | 3.50 | Approx. | | | | | |
| | | | | | | | | |
| k | Spring rate (N/m) | 32,156.73 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | | |
| | Spring rate (lb/in) | 183.62 | | | | | | |
| | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | | |
| | Wheel rate (N/m) | 29,450.71 | | | | | | |
| | Wheel rate (lb/in) | 168.17 | | | | | | |
| | | | | | | | | |
| | Total weight | 1,610.00 | | | | | | |
| | Distribution | 0.52 | F | | | | | |
| | Front axle total (kg) | 842.03 | | | | | | |
| | Unsprung weight (kg) | 52.16 | Per side | Credit/ref: fe1rx | | | | |
| | Front axle sprung (kg) | 737.70 | | | | | | |
| | Front axle sprung load (N) | 7,234.40 | | | | | | |
| | | | | | | | | |
| | Stock ride height (mm) | 602.50 | C6 spring, Koni SA, Xd tops, 18" | | | | | |
| | Spring free length (mm) | 289.00 | Autodoc, Suplex | | | | | |
| | Spring compression (mm) | 122.82 | | | | | | |
| | Spring compressed length (mm) | 166.18 | | | | | | |
| | Spring length delta (mm) | -27.08 | +ve is longer | | | | | |
| | Ride height delta (mm) | -28.29 | | | | | | |
| | Ride height - Calculated (mm) | 574.21 | | | | | | |
| | Mean correction (mm) | -9.64 | | | | | | |
| | Corrected (mm) | 583.85 | If no Xd tops, but with load in cabin | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| wn | Ride Frequency (Hz) | 1.42 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | | |

| | | | | | | | |
|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | X2/X3 | | | | | |
| d | Wire OD (mm) | 12.50 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 147.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 134.50 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 3.50 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 28,417.66 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 162.27 | | | | | |
| | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 26,026.29 | | | | | |
| | Wheel rate (lb/in) | 148.61 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | | | | | |
| | Distribution | 0.52 | F | | | | |
| | Front axle total (kg) | 842.03 | | | | | |
| | Unsprung weight (kg) | 52.16 | Per side | Credit/ref: fe1rx | | | |
| | Front axle sprung (kg) | 737.70 | | | | | |
| | Front axle sprung load (N) | 7,234.40 | | | | | |
| | | | | | | | |
| | Stock ride height (mm) | 602.50 | C6 spring, Koni SA, Xd tops, 18" | | | | |
| | Spring free length (mm) | 299.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 138.98 | | | | | |
| | Spring compressed length (mm) | 160.02 | | | | | |
| | Spring length delta (mm) | -33.24 | +ve is longer | | | | |
| | Ride height delta (mm) | -34.73 | | | | | |
| | Ride height - Calculated (mm) | 567.77 | | | | | |
| | Mean correction (mm) | -9.64 | | | | | |
| | Corrected (mm) | 577.41 | If no Xd tops, but with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.34 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

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|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | C5 | | | | | |
| d | Wire OD (mm) | 11.90 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 149.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 137.10 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 3.50 | Approx. | | | | |
| | | | | | | | |
| ks | Spring rate (N/m) | 22,038.94 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| ks | Spring rate (lb/in) | 125.85 | | | | | |
| MR | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | |
| kw | Wheel rate (N/m) | 20,184.34 | | | | | |
| kw | Wheel rate (lb/in) | 115.26 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | | | | | |
| | Distribution | 0.52 | F | | | | |
| | Front axle total (kg) | 842.03 | | | | | |
| | Unsprung weight (kg) | 52.16 | Per side | Credit/ref: fe1rx | | | |
| | Front axle sprung (kg) | 737.70 | | | | | |
| | Front axle sprung load (N) | 7,234.40 | | | | | |
| | | | | | | | |
| | Stock ride height (mm) | 602.50 | C6 spring, Koni SA, Xd tops, 18" | | | | |
| | Spring free length (mm) | 360.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 179.21 | | | | | |
| | Spring compressed length (mm) | 180.79 | | | | | |
| | Spring length delta (mm) | -12.46 | +ve is longer | | | | |
| | Ride height delta (mm) | -13.02 | | | | | |
| | Ride height - Calculated (mm) | 589.48 | | | | | |
| | Mean correction (mm) | -9.64 | | | | | |
| | Corrected (mm) | 599.12 | If no Xd tops, but with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.18 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

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|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | L5 | | | | | |
| d | Wire OD (mm) | 12.25 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 149.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 136.75 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 3.50 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 24,938.91 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 142.40 | | | | | |
| | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 22,840.28 | | | | | |
| | Wheel rate (lb/in) | 130.42 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | | | | | |
| | Distribution | 0.52 | F | | | | |
| | Front axle total (kg) | 842.03 | | | | | |
| | Unsprung weight (kg) | 52.16 | Per side | Credit/ref: fe1rx | | | |
| | Front axle sprung (kg) | 737.70 | | | | | |
| | Front axle sprung load (N) | 7,234.40 | | | | | |
| | | | | | | | |
| | Stock ride height (mm) | 602.50 | C6 spring, Koni SA, Xd tops, 18" | | | | |
| | Spring free length (mm) | 351.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 158.37 | | | | | |
| | Spring compressed length (mm) | 192.63 | | | | | |
| | Spring length delta (mm) | -0.62 | +ve is longer | | | | |
| | Ride height delta (mm) | -0.65 | | | | | |
| | Ride height - Calculated (mm) | 601.85 | | | | | |
| | Mean correction (mm) | -9.64 | | | | | |
| | Corrected (mm) | 611.49 | If no Xd tops, but with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.25 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | | |
|----|------------------------|-----------|--|-------------------|--|--|--|--|
| | Spring Code | L5 | | | | | | |
| d | Wire OD (mm) | 12.25 | Autodoc, Suplex | | | | | |
| | Spring OD (mm) | 149.00 | Autodoc, Suplex | | | | | |
| D | Mean OD (mm) | 136.75 | At centre of wire | | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | | |
| Na | Number of active coils | 3.70 | Approx. | | | | | |
| | | | | | | | | |
| k | Spring rate (N/m) | 23,590.86 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | | |
| | Spring rate (lb/in) | 134.71 | | | | | | |
| | Motion ratio | 0.96 | | Credit/ref: fe1rx | | | | |
| | Wheel rate (N/m) | 21,605.67 | | | | | | |
| | Wheel rate (lb/in) | 123.37 | | | | | | |

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|----|-------------------------------|------------|--|-------------------|--|--|--|
| | Spring Code | K5 | | | | | |
| d | Wire OD (mm) | 14.50 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 100.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 84.50 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 107,592.33 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 614.37 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 34,346.16 | | | | | |
| | Wheel rate (lb/in) | 196.12 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 312.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 103.38 | | | | | |
| | Spring compressed length (mm) | 208.62 | | | | | |
| | Custom spring spacer (mm) | 0.00 | | | | | |
| | Spring length delta (mm) | -5.52 | +ve is longer | | | | |
| | Ride height delta (mm) | -9.77 | | | | | |
| | Ride height - Calculated (mm) | 594.73 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 579.86 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.55 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

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|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | D6 | | | | | |
| d | Wire OD (mm) | 14.25 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 101.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 85.75 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 96,036.54 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 548.38 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 30,657.26 | | | | | |
| | Wheel rate (lb/in) | 175.06 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 319.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 115.81 | | | | | |
| | Spring compressed length (mm) | 203.19 | | | | | |
| | Custom spring spacer (mm) | 0.00 | | | | | |
| | Spring length delta (mm) | -10.96 | +ve is longer | | | | |
| | Ride height delta (mm) | -19.40 | | | | | |
| | Ride height - Calculated (mm) | 585.10 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 570.23 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.46 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

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|----|-------------------------------|-----------|--|-------------------|--|--|--|--|
| | Spring Code | K3 | L=316 | | | | | |
| d | Wire OD (mm) | 14.25 | Autodoc, Suplex | | | | | |
| | Spring OD (mm) | 100.00 | Autodoc, Suplex | | | | | |
| D | Mean OD (mm) | 84.75 | At centre of wire | | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | | |
| | | | | | | | | |
| k | Spring rate (N/m) | 99,476.33 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | | |
| | Spring rate (lb/in) | 568.02 | | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | | |
| | Wheel rate (N/m) | 31,755.33 | | | | | | |
| | Wheel rate (lb/in) | 181.33 | | | | | | |
| | | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | | |
| | Distribution | 0.48 | R | | | | | |
| | Rear axle total (kg) | 832.97 | | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | | |
| | | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | | |
| | Spring free length (mm) | 316.00 | Autodoc, Suplex | | | | | |
| | Spring compression (mm) | 111.81 | | | | | | |
| | Spring compressed length (mm) | 204.19 | | | | | | |
| | Custom spring spacer (mm) | 6.00 | | | | | | |
| | Spring length delta (mm) | -3.96 | +ve is longer | | | | | |
| | Ride height delta (mm) | -7.00 | | | | | | |
| | Ride height - Calculated (mm) | 597.50 | | | | | | |
| | Mean correction (mm) | 14.87 | | | | | | |
| | Corrected (mm) | 582.63 | If stock RSFB, with load in cabin | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| wn | Ride Frequency (Hz) | 1.49 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | | |

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|----|-------------------------------|-----------|--|-------------------|--|--|--|--|
| | Spring Code | C4 | L=342 | | | | | |
| d | Wire OD (mm) | 13.50 | Autodoc, Suplex | | | | | |
| | Spring OD (mm) | 100.00 | Autodoc, Suplex | | | | | |
| D | Mean OD (mm) | 85.50 | At centre of wire | | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | | |
| | | | | | | | | |
| k | Spring rate (N/m) | 78,039.80 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | | |
| | Spring rate (lb/in) | 445.62 | | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | | |
| | Wheel rate (N/m) | 24,912.26 | | | | | | |
| | Wheel rate (lb/in) | 142.25 | | | | | | |
| | | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | | |
| | Distribution | 0.48 | R | | | | | |
| | Rear axle total (kg) | 832.97 | | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | | |
| | | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | | |
| | Spring free length (mm) | 342.00 | Autodoc, Suplex | | | | | |
| | Spring compression (mm) | 142.52 | | | | | | |
| | Spring compressed length (mm) | 199.48 | | | | | | |
| | Custom spring spacer (mm) | 6.00 | | | | | | |
| | Spring length delta (mm) | -8.67 | +ve is longer | | | | | |
| | Ride height delta (mm) | -15.34 | | | | | | |
| | Ride height - Calculated (mm) | 589.16 | | | | | | |
| | Mean correction (mm) | 14.87 | | | | | | |
| | Corrected (mm) | 574.29 | If stock RSFB, with load in cabin | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| wn | Ride Frequency (Hz) | 1.32 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | | |

| | | | | | | | |
|----|-------------------------------|------------|--|-------------------|--|--|--|
| | Spring Code | D8 | | | | | |
| d | Wire OD (mm) | 14.50 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 100.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 84.50 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 107,592.33 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 614.37 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 34,346.16 | | | | | |
| | Wheel rate (lb/in) | 196.12 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 317.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 103.38 | | | | | |
| | Spring compressed length (mm) | 213.62 | | | | | |
| | Custom spring spacer (mm) | 2.00 | | | | | |
| | Spring length delta (mm) | 1.48 | +ve is longer | | | | |
| | Ride height delta (mm) | 2.62 | | | | | |
| | Ride height - Calculated (mm) | 607.12 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 592.25 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.55 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | |
|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | D1/D2 | | | | | |
| d | Wire OD (mm) | 13.50 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 99.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 84.50 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 80,843.36 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 461.63 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 25,807.22 | | | | | |
| | Wheel rate (lb/in) | 147.36 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 321.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 137.58 | | | | | |
| | Spring compressed length (mm) | 183.42 | | | | | |
| | Custom spring spacer (mm) | 2.00 | | | | | |
| | Spring length delta (mm) | -28.73 | +ve is longer | | | | |
| | Ride height delta (mm) | -50.84 | | | | | |
| | Ride height - Calculated (mm) | 553.66 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 538.79 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.34 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

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|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | C0 | | | | | |
| d | Wire OD (mm) | 12.75 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 98.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 84.25 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 64,894.88 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 370.56 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 20,716.07 | | | | | |
| | Wheel rate (lb/in) | 118.29 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 348.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 171.39 | | | | | |
| | Spring compressed length (mm) | 176.61 | | | | | |
| | Custom spring spacer (mm) | 2.00 | | | | | |
| | Spring length delta (mm) | -35.54 | +ve is longer | | | | |
| | Ride height delta (mm) | -62.90 | | | | | |
| | Ride height - Calculated (mm) | 541.60 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 526.74 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.20 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | |
|----|-------------------------------|-----------|--|-------------------|--|--|--|
| | Spring Code | C1 | | | | | |
| d | Wire OD (mm) | 13.00 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 98.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 84.00 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 70,764.42 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 404.07 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 22,589.77 | | | | | |
| | Wheel rate (lb/in) | 128.99 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 348.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 157.17 | | | | | |
| | Spring compressed length (mm) | 190.83 | | | | | |
| | Custom spring spacer (mm) | 2.00 | | | | | |
| | Spring length delta (mm) | -21.32 | +ve is longer | | | | |
| | Ride height delta (mm) | -37.74 | | | | | |
| | Ride height - Calculated (mm) | 566.76 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 551.90 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.26 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | |
|----|-------------------------------|------------|--|-------------------|--|--|--|
| | Spring Code | Y4 | | | | | |
| d | Wire OD (mm) | 15.50 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 102.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 85.50 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 135,615.05 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 774.38 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 43,291.71 | | | | | |
| | Wheel rate (lb/in) | 247.20 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 312.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 82.01 | | | | | |
| | Spring compressed length (mm) | 229.99 | | | | | |
| | Custom spring spacer (mm) | 2.00 | | | | | |
| | Spring length delta (mm) | 17.84 | +ve is longer | | | | |
| | Ride height delta (mm) | 31.57 | | | | | |
| | Ride height - Calculated (mm) | 636.07 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 621.21 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.74 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | | | | | |
|----|-------------------------------|------------|--|-------------------|--|--|--|
| | Spring Code | Y4 | | | | | |
| d | Wire OD (mm) | 15.50 | Autodoc, Suplex | | | | |
| | Spring OD (mm) | 102.00 | Autodoc, Suplex | | | | |
| D | Mean OD (mm) | 85.50 | At centre of wire | | | | |
| G | Shear modulus (GPa) | 79.30 | 77.6 - 79.3 - 82.7 | | | | |
| Na | Number of active coils | 6.75 | Approx. | | | | |
| | | | | | | | |
| k | Spring rate (N/m) | 135,615.05 | Formula explained: http://kuhol.net/2013/12/tip-coilover-spring-rates-and-suspension-tuning-part-1/ | | | | |
| | Spring rate (lb/in) | 774.38 | | | | | |
| | Motion ratio | 0.57 | | Credit/ref: fe1rx | | | |
| | Wheel rate (N/m) | 43,291.71 | | | | | |
| | Wheel rate (lb/in) | 247.20 | | | | | |
| | | | | | | | |
| | Total weight | 1,610.00 | 1675 | Touring | | | |
| | Distribution | 0.48 | R | | | | |
| | Rear axle total (kg) | 832.97 | | | | | |
| | Unsprung weight (kg) | 54.43 | Per side | Credit/ref: fe1rx | | | |
| | Rear axle sprung (kg) | 724.11 | | | | | |
| | Rear axle sprung load (N) | 7,101.07 | | | | | |
| | | | | | | | |
| | Ride height (mm) | 604.50 | F3 spring, Koni SA, M3 RSFB, 18" | | | | |
| | Spring free length (mm) | 312.00 | Autodoc, Suplex | | | | |
| | Spring compression (mm) | 82.01 | | | | | |
| | Spring compressed length (mm) | 229.99 | | | | | |
| | Custom spring spacer (mm) | 2.00 | | | | | |
| | Spring length delta (mm) | 17.84 | +ve is longer | | | | |
| | Ride height delta (mm) | 31.57 | | | | | |
| | Ride height - Calculated (mm) | 636.07 | | | | | |
| | Mean correction (mm) | 14.87 | | | | | |
| | Corrected (mm) | 621.21 | If stock RSFB, with load in cabin | | | | |
| | | | | | | | |
| | | | | | | | |
| wn | Ride Frequency (Hz) | 1.74 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | | | | |

| | | | |
|----------------------------|------------|---|--|
| FRONT | | | |
| Ride Frequency (Hz) | 1.47 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | |
| Axle Sprung Mass (kg) | 737.70 | | |
| Sprung Mass Per Wheel (kg) | 368.85 | | |
| Motion Ratio | 0.96 | | |
| Spring Rate (N/m) | 34,124.24 | | |
| Spring Rate (lb/in) | 194.85 | | |
| | | | |
| | | | |
| REAR | | | |
| Ride Frequency (Hz) | 1.50 | 0.5-1.2 = passenger, 1.2-1.5 = sports, 1.5-2.0 race | |
| Axle Sprung Mass (kg) | 724.11 | | |
| Sprung Mass Per Wheel (kg) | 362.05 | | |
| Motion Ratio | 0.57 | | |
| Spring Rate (N/m) | 100,743.85 | | |
| Spring Rate (lb/in) | 575.26 | | |