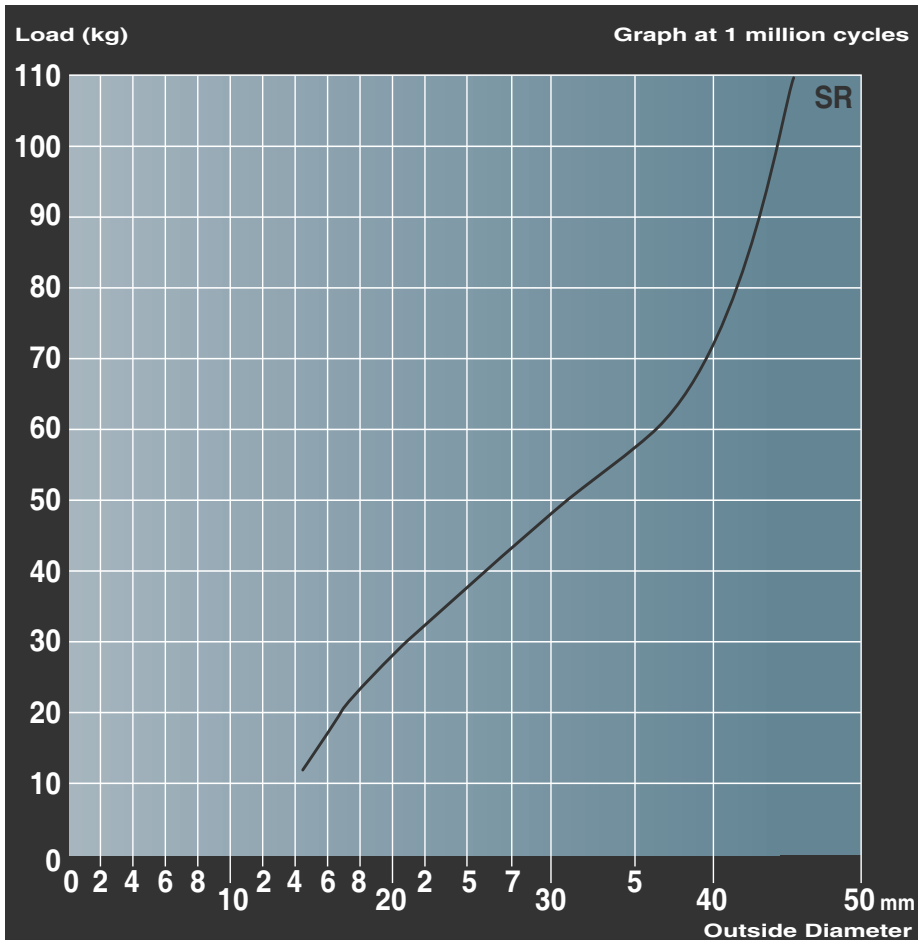


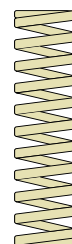
SPECIAL SPRINGS PLASTIC MOULD COIL SPRINGS

- High deflection springs for mould retrain pin
- Maximum deflection 60 %
- Spring life at 50 % deflection of free length is 1,000,000 cycles
- When working at a temperature of around 200°C and a deflection of 50 % there will be a

| TOLERANCES | |
|-------------------------------|----------------------------|
| COLOUR | Ivory Ral 1014 |
| OUTSIDE DIA. | + 0.0 mm - 1.2 mm |
| INSIDE DIA. | + 1.2 mm + 0.0 mm |
| FREE LENGTH | ± 2 % ± 0.5 mm at least |
| SQUARENESS | Below 2° |
| LOAD | ± 10 % |
| COILING | Right |
| DEFLECTION (% of free length) | 40 ÷ 50 % |
| MAX. DEFL. (% of free length) | 60 % |



| Outside Dia. mm | Inside Dia. mm | Free Length mm | Spring Code | Spring Costant Kgf / mm | 1 million 50 % | | Solid Length mm |
|--------------------|-------------------|-------------------|-------------|----------------------------|-------------------|-----------------|--------------------|
| | | | | | Deflection mm | Load Kgf (N) | |
| 14.5 | 8.5 | 20 | SR 14 - 020 | 1.30 | 10.0 | 13 (127.5) | 8 |
| | | 25 | SR 14 - 025 | 1.04 | 12.5 | | 10 |
| | | 30 | SR 14 - 030 | 0.87 | 15.0 | | 12 |
| | | 35 | SR 14 - 035 | 0.74 | 17.5 | | 14 |
| | | 40 | SR 14 - 040 | 0.65 | 20.0 | | 16 |
| | | 45 | SR 14 - 045 | 0.58 | 22.5 | | 18 |
| | | 50 | SR 14 - 050 | 0.52 | 25.0 | | 20 |
| | | 55 | SR 14 - 055 | 0.47 | 27.5 | | 22 |
| | | 60 | SR 14 - 060 | 0.43 | 30.0 | | 24 |
| | | 65 | SR 14 - 065 | 0.40 | 32.5 | | 26 |
| | | 70 | SR 14 - 070 | 0.37 | 35.0 | | 28 |
| | | 75 | SR 14 - 075 | 0.35 | 37.5 | | 30 |
| | | 80 | SR 14 - 080 | 0.33 | 40.0 | | 32 |
| | | 90 | SR 14 - 090 | 0.29 | 45.0 | | 36 |
| | | 100 | SR 14 - 100 | 0.26 | 50.0 | | 40 |
| 125 | SR 14 - 125 | 0.21 | 62.5 | 50 | | | |



SR SERIES

| Outside Dia. | Inside Dia. | Free Length | Spring Code | Spring Constant | 1 million 50 % | | Solid Length |
|--------------|-------------|-------------|-------------|-----------------|----------------|---------------|--------------|
| | | | | | Deflection | Load | |
| mm | mm | mm | | Kgf / mm | mm | Kgf (N) | mm |
| 17 | 10.5 | 25 | SR 17 - 025 | 1.60 | 12.5 | 20 (196.1) | 10 |
| | | 30 | SR 17 - 030 | 1.33 | 15.0 | | 12 |
| | | 35 | SR 17 - 035 | 1.14 | 17.5 | | 14 |
| | | 40 | SR 17 - 040 | 1.00 | 20.0 | | 16 |
| | | 45 | SR 17 - 045 | 0.89 | 22.5 | | 18 |
| | | 50 | SR 17 - 050 | 0.80 | 25.0 | | 20 |
| | | 55 | SR 17 - 055 | 0.73 | 27.5 | | 22 |
| | | 60 | SR 17 - 060 | 0.67 | 30.0 | | 24 |
| | | 65 | SR 17 - 065 | 0.62 | 32.5 | | 26 |
| | | 70 | SR 17 - 070 | 0.57 | 35.0 | | 28 |
| | | 75 | SR 17 - 075 | 0.53 | 37.5 | | 30 |
| | | 80 | SR 17 - 080 | 0.50 | 40.0 | | 32 |
| | | 90 | SR 17 - 090 | 0.44 | 45.0 | | 36 |
| | | 100 | SR 17 - 100 | 0.40 | 50.0 | | 40 |
| | | 125 | SR 17 - 125 | 0.32 | 62.5 | | 50 |
| 150 | SR 17 - 150 | 0.27 | 75.0 | 60 | | | |
| 21 | 13.5 | 30 | SR 21 - 030 | 2.00 | 15.0 | 30 (294.1) | 12 |
| | | 35 | SR 21 - 035 | 1.71 | 17.5 | | 14 |
| | | 40 | SR 21 - 040 | 1.50 | 20.0 | | 16 |
| | | 45 | SR 21 - 045 | 1.33 | 22.5 | | 18 |
| | | 50 | SR 21 - 050 | 1.20 | 25.0 | | 20 |
| | | 55 | SR 21 - 055 | 1.09 | 27.5 | | 22 |
| | | 60 | SR 21 - 060 | 1.00 | 30.0 | | 24 |
| | | 65 | SR 21 - 065 | 0.92 | 32.5 | | 26 |
| | | 70 | SR 21 - 070 | 0.86 | 35.0 | | 28 |
| | | 75 | SR 21 - 075 | 0.80 | 37.5 | | 30 |
| | | 80 | SR 21 - 080 | 0.75 | 40.0 | | 32 |
| | | 90 | SR 21 - 090 | 0.67 | 45.0 | | 36 |
| | | 100 | SR 21 - 100 | 0.60 | 50.0 | | 40 |
| | | 110 | SR 21 - 110 | 0.55 | 55.0 | | 44 |
| | | 120 | SR 21 - 120 | 0.50 | 60.0 | | 48 |
| 125 | SR 21 - 125 | 0.48 | 62.5 | 50 | | | |
| 130 | SR 21 - 130 | 0.46 | 65.0 | 52 | | | |
| 140 | SR 21 - 140 | 0.43 | 70.0 | 56 | | | |
| 150 | SR 21 - 150 | 0.40 | 75.0 | 60 | | | |
| 26 | 16.5 | 30 | SR 26 - 030 | 2.67 | 15.0 | 40 (392.3) | 12 |
| | | 35 | SR 26 - 035 | 2.29 | 17.5 | | 14 |
| | | 40 | SR 26 - 040 | 2.00 | 20.0 | | 16 |
| | | 45 | SR 26 - 045 | 1.78 | 22.5 | | 18 |
| | | 50 | SR 26 - 050 | 1.60 | 25.0 | | 20 |
| | | 55 | SR 26 - 055 | 1.45 | 27.5 | | 22 |
| | | 60 | SR 26 - 060 | 1.33 | 30.0 | | 24 |
| | | 65 | SR 26 - 065 | 1.23 | 32.5 | | 26 |
| | | 70 | SR 26 - 070 | 1.14 | 35.0 | | 28 |
| | | 75 | SR 26 - 075 | 1.07 | 37.5 | | 30 |
| | | 80 | SR 26 - 080 | 1.00 | 40.0 | | 32 |
| | | 90 | SR 26 - 090 | 0.89 | 45.0 | | 36 |
| | | 100 | SR 26 - 100 | 0.80 | 50.0 | | 40 |
| | | 110 | SR 26 - 110 | 0.73 | 55.0 | | 44 |
| | | 120 | SR 26 - 120 | 0.67 | 60.0 | | 48 |
| 125 | SR 26 - 125 | 0.64 | 62.5 | 50 | | | |
| 130 | SR 26 - 130 | 0.62 | 65.0 | 52 | | | |
| 140 | SR 26 - 140 | 0.57 | 70.0 | 56 | | | |
| 150 | SR 26 - 150 | 0.53 | 75.0 | 60 | | | |
| 175 | SR 26 - 175 | 0.46 | 87.5 | 70 | | | |
| 200 | SR 26 - 200 | 0.40 | 100.0 | 80 | | | |



SR SERIES

| Outside Dia. | Inside Dia. | Free Length | Spring Code | Spring Costant | 1 million 50 % | | Solid Length |
|--------------|-------------|-------------|-------------|----------------|----------------|------------------|--------------|
| | | | | | Deflection | Load | |
| mm | mm | mm | | Kgf / mm | mm | Kgf (N) | mm |
| 31 | 21 | 40 | SR 31 - 040 | 2.50 | 20.0 | 50 (490.3) | 16 |
| | | 45 | SR 31 - 045 | 2.22 | 22.5 | | 18 |
| | | 50 | SR 31 - 050 | 2.00 | 25.0 | | 20 |
| | | 60 | SR 31 - 060 | 1.67 | 30.0 | | 24 |
| | | 70 | SR 31 - 070 | 1.43 | 35.0 | | 28 |
| | | 80 | SR 31 - 080 | 1.25 | 40.0 | | 32 |
| | | 90 | SR 31 - 090 | 1.11 | 45.0 | | 36 |
| | | 100 | SR 31 - 100 | 1.00 | 50.0 | | 40 |
| | | 110 | SR 31 - 110 | 0.91 | 55.0 | | 44 |
| | | 120 | SR 31 - 120 | 0.83 | 60.0 | | 48 |
| | | 125 | SR 31 - 125 | 0.80 | 62.5 | | 50 |
| | | 130 | SR 31 - 130 | 0.77 | 65.0 | | 52 |
| | | 140 | SR 31 - 140 | 0.71 | 70.0 | | 56 |
| | | 150 | SR 31 - 150 | 0.67 | 75.0 | | 60 |
| | | 160 | SR 31 - 160 | 0.63 | 80.0 | | 64 |
| | | 170 | SR 31 - 170 | 0.59 | 85.0 | | 68 |
| | | 175 | SR 31 - 175 | 0.57 | 87.5 | | 70 |
| | | 180 | SR 31 - 180 | 0.56 | 90.0 | | 72 |
| | | 190 | SR 31 - 190 | 0.53 | 95.0 | | 76 |
| | | 200 | SR 31 - 200 | 0.50 | 100.0 | | 80 |
| 250 | SR 31 - 250 | 0.40 | 125.0 | 100 | | | |
| 300 | SR 31 - 300 | 0.33 | 150.0 | 120 | | | |
| 37 | 26 | 40 | SR 37 - 040 | 3.00 | 20.0 | 60 (588.4) | 16 |
| | | 45 | SR 37 - 045 | 2.67 | 22.5 | | 18 |
| | | 50 | SR 37 - 050 | 2.40 | 25.0 | | 20 |
| | | 60 | SR 37 - 060 | 2.00 | 30.0 | | 24 |
| | | 70 | SR 37 - 070 | 1.71 | 35.0 | | 28 |
| | | 80 | SR 37 - 080 | 1.50 | 40.0 | | 32 |
| | | 90 | SR 37 - 090 | 1.33 | 45.0 | | 36 |
| | | 100 | SR 37 - 100 | 1.20 | 50.0 | | 40 |
| | | 110 | SR 37 - 110 | 1.09 | 55.0 | | 44 |
| | | 120 | SR 37 - 120 | 1.00 | 60.0 | | 48 |
| | | 125 | SR 37 - 125 | 0.96 | 62.5 | | 50 |
| | | 130 | SR 37 - 130 | 0.92 | 65.0 | | 52 |
| | | 140 | SR 37 - 140 | 0.86 | 70.0 | | 56 |
| | | 150 | SR 37 - 150 | 0.80 | 75.0 | | 60 |
| | | 160 | SR 37 - 160 | 0.75 | 80.0 | | 64 |
| | | 170 | SR 37 - 170 | 0.71 | 85.0 | | 68 |
| | | 175 | SR 37 - 175 | 0.69 | 87.5 | | 70 |
| | | 180 | SR 37 - 180 | 0.67 | 90.0 | | 72 |
| | | 190 | SR 37 - 190 | 0.63 | 95.0 | | 76 |
| | | 200 | SR 37 - 200 | 0.60 | 100.0 | | 80 |
| 250 | SR 37 - 250 | 0.48 | 125.0 | 100 | | | |
| 300 | SR 37 - 300 | 0.40 | 150.0 | 120 | | | |
| 46 | 33 | 50 | SR 46 - 050 | 4.40 | 25.0 | 110 (1,078.7) | 20 |
| | | 60 | SR 46 - 060 | 3.67 | 30.0 | | 24 |
| | | 70 | SR 46 - 070 | 3.14 | 35.0 | | 28 |
| | | 80 | SR 46 - 080 | 2.75 | 40.0 | | 32 |
| | | 90 | SR 46 - 090 | 2.44 | 45.0 | | 36 |
| | | 100 | SR 46 - 100 | 2.20 | 50.0 | | 40 |
| | | 110 | SR 46 - 110 | 2.00 | 55.0 | | 44 |
| | | 120 | SR 46 - 120 | 1.83 | 60.0 | | 48 |
| | | 125 | SR 46 - 125 | 1.76 | 62.5 | | 50 |
| | | 130 | SR 46 - 130 | 1.69 | 65.0 | | 52 |
| | | 140 | SR 46 - 140 | 1.57 | 70.0 | | 56 |
| | | 150 | SR 46 - 150 | 1.47 | 75.0 | | 60 |
| | | 175 | SR 46 - 175 | 1.26 | 87.5 | | 70 |
| | | 200 | SR 46 - 200 | 1.10 | 100.0 | | 80 |
| | | 225 | SR 46 - 225 | 0.98 | 112.5 | | 90 |
| | | 250 | SR 46 - 250 | 0.88 | 125.0 | | 100 |
| | | 275 | SR 46 - 275 | 0.80 | 137.5 | | 110 |
| 300 | SR 46 - 300 | 0.73 | 150.0 | 120 | | | |

