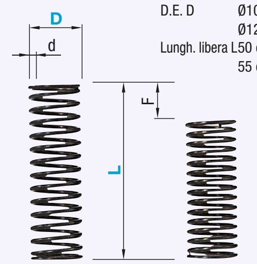
Molle con filo a sezione rotonda

WT, WM: riferimento D.E.

Ordering Example

Codice componente
WT13-60

WT
WM



Costante molla ±10%
D.E. D Ø10 o inf. $^{0}_{-0.5mm}$
Ø12 o sup. $^{0}_{-0.8mm}$
Lungh. libera L50 o inf. ±1.5mm
55 o sup. ±2mm

RoHS

Materiale JIS-SWP-A

Costante molla

D12 e 14 per WY e D12,14 e 20 per WT non disponibili.

D \ Tipo	WY	WR	WF	WL	WT	WM	WH	WB
2				0.5{0.05}				
3	N/mm 0.1 {kgf/mm} {0.01}	N/mm 0.3 {kgf/mm} {0.03}	N/mm 0.5 {kgf/mm} {0.05}	N/mm 1.0 {kgf/mm} {0.1}	1.5 {0.15}	2.0 {0.2}		3.9{0.4}
4							2.9{0.3}	4.9{0.5}
5					N/mm 2.0 {kgf/mm} {0.2}	N/mm 2.9 {kgf/mm} {0.3}	N/mm 5.9 {kgf/mm} {0.6}	N/mm 9.8 {kgf/mm} {1.0}
6								
8								
10	N/mm 0.2 {kgf/mm} {0.02}							
12								
13							N/mm 9.8 {kgf/mm} {1.0}	N/mm 19.6 {kgf/mm} {2.0}
14								
16								
18		N/mm 0.5 {kgf/mm} {0.05}	N/mm 1.0 {kgf/mm} {0.1}	N/mm 2.9 {kgf/mm} {0.3}	N/mm 3.9 {kgf/mm} {0.4}	N/mm 4.9 {kgf/mm} {0.5}	N/mm 14.7 {kgf/mm} {1.5}	29.4{3.0}
20								
22								N/mm 29.4{kgf/ mm}{3.0}
27								
Fmax	F=Lx75%	F=Lx60%	F=Lx45%	F=Lx40%	F=Lx40%	F=Lx35%	F=Lx30%	F=Lx25%

WT: Fmax (Deflessione ammessa) =Lx40% (Lx35%)

d	Lunghezza a blocco	F max	Carico N{kgf} max	Codice componente D-L	Prezzo unitario 10 ~ 19 pz.
0.3	1.73	2	2.9{0.3}	WT3- 5*	
0.4	5	4	5.9{0.6}	10*	
0.45	8.78	6	8.8{0.9}	15*	
0.45	8.78	8	11.8{1.2}	20*	
0.5	14.5	10	14.7{1.5}	25*	
0.4	2.7	2	2.9{0.3}	WT4- 5*	
0.4	2.7	4	5.9{0.6}	10*	
0.5	6.5	6	8.8{0.9}	15*	
0.55	9.63	8	11.8{1.2}	20	
0.55	9.63	10	14.7{1.5}	25	
0.6	15	12	17.7{1.8}	30	
0.6	15	14	20.6{2.1}	35	
0.65	22.1	16	23.5{2.4}	40	
0.45	2.36	2	3.9{0.4}	WT5- 5*	
0.5	3.25	4	7.8{0.8}	10*	
0.6	6.3	6	11.8{1.2}	15	
0.6	6.3	8	15.7{1.6}	20	
0.7	12.6	10	19.6{2.0}	25	
0.7	12.6	12	23.5{2.4}	30	
0.75	17.3	14	27.5{2.8}	35	
0.75	17.3	14	27.5{2.8}	(40)	
0.8	24	15.8	30.9{3.2}	(45)	
0.8	24	17.5	34.3{3.5}	(50)	
0.85	32.3	19.3	37.8{3.9}	(55)	
0.85	32.3	21	41.2{4.2}	(60)	
0.85	34	22.7	44.5{4.5}	(65)	
0.9	44.6	24.5	48.1{4.9}	(70)	
0.5	2.38	2	3.9{0.4}	WT6- 5*	
0.6	4.35	4	7.8{0.8}	10	
0.6	4.35	6	11.8{1.2}	15	
0.7	7.7	8	15.7{1.6}	20	
0.7	7.7	10	19.6{2.0}	25	
0.8	14	12	23.5{2.4}	30	
0.8	14	14	27.5{2.8}	35	
0.85	18.7	16	31.4{3.2}	40	
0.85	18.7	18	35.3{3.6}	45	
0.9	24.8	20	39.2{4.0}	50	
0.9	24.8	19	37.8{3.9}	(55)	
0.9	24.8	21	41.2{4.2}	(60)	
0.9	26.1	22.7	44.5{4.5}	(65)	
1	43	24.5	48.1{4.9}	(70)	
1	43	28	54.9{5.6}	(80)	
0.7	4.38	4	7.8{0.8}	WT8- 10	
0.8	6.8	6	11.8{1.2}	15	
0.8	6.8	8	15.7{1.6}	20	
0.8	6.8	10	19.6{2.0}	25	
0.9	10.8	12	23.5{2.4}	30	
0.9	10.8	14	27.5{2.8}	35	
1	17.5	16	31.4{3.2}	40	
1	17.5	18	35.3{3.6}	45	
1	17.5	20	39.2{4.0}	50	
1.1	27.5	22	43.1{4.4}	55	
1.1	27.5	24	47.1{4.8}	60	
1.1	27.5	26	51.0{5.2}	65	
1.1	27.5	28	54.9{5.6}	70	
1.2	42	32	62.8{6.4}	80	
0.85	5.53	4	7.8{0.8}	WT10-10	
0.9	6.75	6	11.8{1.2}	15	
0.9	6.75	8	15.7{1.6}	20	
1	10	10	19.6{2.0}	25	
1	10	12	23.5{2.4}	30	
1	10	14	27.5{2.8}	35	
1	10	16	31.4{3.2}	40	
1.1	14.3	18	35.3{3.6}	45	
1.1	14.3	20	39.2{4.0}	50	
1.2	21.6	22	43.1{4.4}	55	
1.2	21.6	24	47.1{4.8}	60	
1.2	21.6	26	51.0{5.2}	65	
1.3	32.5	28	54.9{5.6}	70	
1.3	32.5	32	62.8{6.4}	80	
1	6	6	11.8{1.2}	WT13-15	
1.1	8.25	8	15.7{1.6}	20	
1.1	8.25	10	19.6{2.0}	25	
1.2	11.1	12	23.5{2.4}	30	
1.2	11.1	14	27.5{2.8}	35	
1.2	11.1	16	31.4{3.2}	40	
1.2	11.1	18	35.3{3.6}	45	
1.3	15.6	20	39.2{4.0}	50	
1.3	15.6	22	43.1{4.4}	55	
1.3	15.6	24	47.1{4.8}	60	
1.4	21	26	51.0{5.2}	65	
1.4	21	28	54.9{5.6}	70	
1.4	21	32	62.8{6.4}	80	
1.2	7.5	6	11.8{1.2}	WT16-15	
1.3	9.43	8	15.7{1.6}	20	
1.4	12.6	10	19.6{2.0}	25	
1.4	12.6	12	23.5{2.4}	30	
1.4	12.6	14	27.5{2.8}	35	
1.4	12.6	16	31.4{3.2}	40	
1.6	22.4	18	35.3{3.6}	45	
1.6	22.4	20	39.2{4.0}	50	
1.6	22.4	22	43.1{4.4}	55	
1.7	28.9	24	47.1{4.8}	60	
1.7	28.9	26	51.0{5.2}	65	
1.7	28.9	28	54.9{5.6}	70	
1.7	28.9	32	62.8{6.4}	80	
1.6	10.8	8	31.4{3.2}	WT18-20	
1.7	13.6	10	39.2{4.0}	25	
1.7	13.6	12	47.1{4.8}	30	
1.7	13.6	14	54.9{5.6}	35	
1.8	16.7	16	62.8{6.4}	40	
1.9	20.5	18	70.6{7.2}	45	
1.9	20.5	20	78.5{8.0}	50	
2	26	22	86.3{8.8}	55	
2	26	24	94.1{9.6}	60	
2	26	26	102.0{10.4}	65	
2	26	28	109.8{11.2}	70	
2.1	31.5	32	125.5{12.8}	80	
1.8	11.3	8	31.4{3.2}	WT22-20	
1.8	11.3	10	39.2{4.0}	25	
1.9	13.3	12	47.1{4.8}	30	
1.9	13.3	14	54.9{5.6}	35	
2	16	16	62.8{6.4}	40	
2.1	19.5	18	70.6{7.2}	45	
2.1	19.5	20	78.5{8.0}	50	
2.3	28.2	22	86.3{8.8}	55	
2.3	28.2	24	94.1{9.6}	60	
2.3	28.2	26	102.0{10.4}	65	
2.3	28.2	28	109.8{11.2}	70	
2.4	33.6	32	125.5{12.8}	80	
2.1	13.2	12	47.1{4.8}	WT27-30	
2.3	17.9	14	54.9{5.6}	35	
2.3	17.9	16	62.8{6.4}	40	
2.4	20.4	18	70.6{7.2}	45	
2.6	28.6	20	78.5{8.0}	50	
2.6	28.6	22	86.3{8.8}	55	
2.6	28.6	24	94.1{9.6}	60	
2.6	28.6	26	102.0{10.4}	65	
2.8	39.2	28	109.8{11.2}	70	
2.8	39.2	32	125.5{12.8}	80	

- Metodo di calcolo del carico = Costante molla x Deflessione
  (Unità internaz.) N=N/mmxFmm
  kgf=kgf/mmxFmm
  (kgf=Nx0.101972)

Deflessione ammessa della dimensione (L)
WT5-40Fmax=Lx35%
WT5-45Fmax=Lx35%
WT5-50Fmax=Lx35%
WT5-55Fmax=Lx35%
WT5-60Fmax=Lx35%
WT5-65Fmax=Lx35%
WT5-70Fmax=Lx35%
WT6-55Fmax=Lx35%
WT6-60Fmax=Lx35%
WT6-65Fmax=Lx35%
WT6-70Fmax=Lx35%
WT6-80Fmax=Lx35%

Le due estremità delle molle WT con * non sono rettificate.

I valori della lunghezza a blocco sono solo di riferimento.
Possono esserci alcune variazioni in base al lotto.
Numero utilizzi: 1 milione di volte
Descrizione prodotto P.327
Utilizzo e precauzioni per le molle a spirale P.328

WM: Fmax (Deflessione ammessa) =Lx35%

d	Lunghezza a blocco	F max	Carico N{kgf} max	Codice componente D-L	Prezzo unitario 10 ~ 19 pz.
0.35	2.5	1.8	3.4{0.4}	WM 3- 5*	
0.38	3.3	3.5	6.9{0.7}	10*	
0.45	7	5.3	10.3{1.1}	15*	
0.5	11.5	7	13.7{1.4}	20*	
0.5	11.5	7.5	14.7{1.5}	(25)	
0.55	20.4	9	17.7{1.8}	(30)	
0.4	2.3	1.7	3.9{0.4}	WM 4- 5*	
0.45	3.4	3.5	6.9{0.7}	10*	
0.5	5.1	5.2	10.8{1.1}	15*	
0.55	7.7	7	13.7{1.4}	20	
0.6	11.7	8.7	17.7{1.8}	25	
0.6	11.7	10.5	20.6{2.1}	30	
0.65	17.6	12.2	24.0{2.5}	35	
0.65	17.6	12	23.5{2.4}	(40)	
0.5	2.8	1.7	4.9{0.5}	WM 5- 5*	
0.6	4.2	3.5	9.8{1.0}	10	
0.65	6.5	5.2	14.7{1.5}	15	
0.65	6.5	7	20.6{2.1}	20	
0.7	9.1	8.7	25.5{2.6}	25	
0.75	12.7	10.5	30.4{3.1}	30	
0.8	17.4	12.2	35.3{3.6}	35	
0.85	23.8	14	41.2{4.2}	40	
0.85	23.8	15.8	46.1{4.7}	45	
0.9	23.8	15	43.5{4.5}	(50)	
0.9	30	16.5	49.0{5.0}	(55)	
0.9	30	18	53.0{5.4}	(60)	
0.9	30	17.6	52.0{5.3}	(65)	
0.9	30	19.6	58.8{6.0}	(70)	
0.55	2.8	1.7	4.9{0.5}	WM 6- 5*	
0.65	4.7	3.5	9.8{1.0}	10	
0.75	8	5.2	14.7{1.5}	15	
0.75	8	7	20.6{2.1}	20	
0.85	13.6	8.7	25.5{2.6}	25	
0.85	13.6	10.5	30.4{3.1}	30	
0.9	18	12.2	35.3{3.6}	35	
0.9	18	14	41.2{4.2}	40	
0.9	18	15.8	46.1{4.7}	45	
0.85	18	17.5	51.0{5.2}	50	
1.0	31	19.2	55.9{5.7}	55	
1.0	31	18	53.0{5.4}	(60)	
1.0	31	18.8	54.9{5.6}	(65)	
1.1	47.3	20	58.8{6.0}	(70)	
1.1	48.4	22.4	65.9{6.7}	(80)	
0.75	4.2	3.5	9.8{1.0}	WM 8- 10	
0.9	8.5	5.2	14.7{1.5}	15	
0.9	8.5	7	20.6{2.1}	20	
0.9	8.5	8.7	25.5{2.6}	25	
0.9	8.5	10.5	30.4{3.1}	30	
1.0	13	12.2	35.3{3.6}	35	
1.0	13	14	41.2{4.2}	40	
1.1	19.8	15.8	46.1{4.7}	45	
1.1	19.8	17.5	51.0{5.2}	50	
1.2	31.2	19.2	55.9{5.7}	55	
1.2	31.2	21	61.8{6.3}	60	
1.2	31.2	22.7	64.7{6.6}	65	
1.2	31.2	24.5	71.6{7.3}	70	
1.3	44.2	28	82.4{8.4}	80	
0.9	5.2	3.5	9.8{1.0}	WM 10- 10	
1.0	7.7	5.2	14.7{1.5}	15	
1.0	7.7	7	20.6{2.1}	20	
1.1	11	8.7	25.5{2.6}	25	
1.1	11	10.5	30.4{3.1}	30	
1.2	16.2	12.2	35.3{3.6}	35	
1.2	16.2	14	41.2{4.2}	40	
1.3	22.1	15.8	46.1{4.7}	45	
1.3	22.1	17.5	51.0{5.2}	50	
1.3	22.1	19.2	55.9{5.7}	55	
1.4	32.1	21	61.8{6.3}	60	
1.4	32.1	22.7	64.7{6.6}	65	
1.4	32.1	24.5	71.6{7.3}	70	
1.4	32.2	28	82.4{8.4}	80	
1.0	5.5	3.5	10.3{1.1}	WM 12- 10	
1.1	7.4	5.2	14.7{1.5}	15	
1.1	7.4	7	20.6{2.1}	20	
1.1	7.4	8.7	25.5{2.6}	25	
1.2	10.2	10.5	30.4{3.1}	30	
1.2	10.2	12.2	35.3{3.6}	35	
1.3	14.3	14	41.2{4.2}	40	
1.3	14.3	15.8	46.1{4.7}	45	
1.3	14.3	17.5	51.0{5.2}	50	
1.4	19.6	19.2	55.9{5.7}	55	
1.4	19.6	21	61.8{6.3}	60	
1.5	26.3	22.7	64.7{6.6}	65	
1.5	26.3	24.5	71.6{7.3}	70	
1.6	36.8	28	82.4{8.4}	80	
1.0	5	3.5	10.3{1.1}	WM 13- 10	
1.2	8.4	5.2	14.7{1.5}	15	
1.3	11.7	7	20.6{2.1}	20	
1.3	11.7	8.7	25.5{2.6}	25	
1.4	14.5	10.5	30.4{3.1}	30	
1.4	14.5	12.2	35.3{3.6}	35	
1.4	14.5	14	41.2{4.2}	40	
1.4	14.5	15.8	46.1{4.7}	45	
1.4	14.5	17.5	51.0{5.2}	50	
1.5	22.5	19.2	55.9{5.7}	55	
1.5	22.5	21	61.8{6.3}	60	
1.6	28.8	22.7	64.7{6.6}	65	
1.6	28.8	24.5	71.6{7.3}	70	
1.7	37.4	28	82.4{8.4}	80	
1.7	37.4	31.5	92.9{9.5}	90	
1.2	7.5	5.2	14.7{1.5}	WM 14- 15	
1.3	9.8	7	20.6{2.1}	20	
1.4	13.3	8.7	25.5{2.6}	25	
1.4	13.3	10.5	30.4{3.1}	30	
1.4	13.3	12.2	35.3{3.6}	35	
1.4	13.3	14	41.2{4.2}	40	
1.5	17.3	15.8	46.1{4.7}	45	
1.5	17.3	17.5	51.0{5.2}	50	
1.5	17.3	19.2	55.9{5.7}	55	
1.6	23.2	21	61.8{6.3}	60	
1.6	23.2	22.7	64.7{6.6}	65	
1.7	30.6	24.5	71.6{7.3}	70	
1.7	30.6	28	82.4{8.4}	80	
1.8	39.6	31.5	92.7{9.5}	90	
1.3	7.8	5.2	14.7{1.5}	WM 16- 15	
1.4	9.8	7	20.6{2.1}	20	
1.5	12.5	8.7	25.5{2.6}	25	
1.5	12.5	10.5	30.4{3.1}	30	
1.6	15	12.2	35.3{3.6}	35	
1.6	15	14	41.2{4.2}	40	
1.7	20.4	15.8	46.1{4.7}	45	
1.7	20.4	17.5	51.0{5.2}	50	
1.8	27	19.2	55.9{5.7}	55	
1.8	27	21	61.8{6.3}	60	
1.8	27	22.7	64.7{6.6}	65	
1.8	27	24.5	71.6{7.3}	70	
1.8	27	28	82.4{8.4}	80	
1.9	34.2	31.5	92.7{9.5}	90	
1.7	11.9	7	34.3{3.5}	WM 18- 20	
1.8	14.4	8.7	42.2{4.3}	25	
1.8	14.4	10.5	51.0{5.2}	30	
1.8	14.4	12.2	59.8{6.1}	35	
1.8	14.4	14	68.6{7.0}	40	
2.0	22	15.8	77.5{7.9}	45	
2.0	22	17.5	85.3{8.7}	50	
2.0	22	19.2	94.1{9.6}	55	
2.0	22	21	103.0{10.5}	60	
2.2	34.1	22.7	110.8{11.3}	65	
2.2	34.1	24.5	119.6{12.2}	70	
2.2	34.1	28	137.3{14.0}	80	
2.3	41.4	31.5	154.0{15.7}	90	
2.3	41.4	35	171.6{17.5}	100	
1.8	11.7	7	34.3{3.5}	WM 20- 20	
1.8	11.7	8.7	42.2{4.3}	25	
1.9	14.3	10.5	51.0{5.2}	30	
1.9	14.3	12.2	59.8{6.1}	35	
1.9	14.3	14	68.6{7.0}	40	
2.0	17	15.8	77.5{7.9}	45	
2.0	17	17.5	85.3{8.7}	50	
2.2	24.8	19.2	94.1{9.6}	55	
2.2	24.8	21	103.0{10.5}	60	
2.2	24.8	22.7	110.8{11.3}	65	
2.2	24.8	24.5	119.6{12.2}	70	
2.4	36	28	137.3{14.0}	80	
2.4	36	31.5	154.0{15.7}	90	
2.4	36	35	171.6{17.5}	100	
1.9	12	7	34.3{3.5}	WM 22- 20	
2.0	14	8.7	42.2{4.3}	25	
2.0	14	10.5	51.0{5.2}	30	
2.0	14	12.2	59.8{6.1}	35	
2.0	14	14	68.6{7.0}	40	
2.3	23	15.8	77.5{7.9}	45	
2.3	23	17.5	85.3{8.7}	50	
2.3	23	19.2	94.1{9.6}	55	
2.3	23	21	103.0{10.5}	60	
2.4	30	22.7	110.8{11.3}	65	
2.4	30	24.5	119.6{12.2}	70	
2.4	30	28	137.3{14.0}	80	
2.6	40	31.5	154.0{15.7}	90	
2.6	40	35	171.6{17.5}	100	
2.3	14	10.5	51.0{5.2}	WM 27- 30	
2.4	17	12.2	59.8{6.1}	35	
2.4	17	14	68.6{7.0}	40	
2.4	18	15.8	77.5{7.9}	45	
2.6	23	17.5	85.3{8.7}	50	
2.6	23	19.2	94.1{9.6}	55	
2.6	23	21	103.0{10.5}	60	
2.8	31	22.7	110.8{11.3}	65	
2.8	31	24.5	119.6{12.2}	70	
2.8	31	28	137.3{14.0}	80	
3.0	43.5	31.5	154.0{15.7}	90	
3.0	43.5	35	171.6{17.5}	100	

- Metodo di calcolo del carico = Costante molla x Deflessione
  (Unità internaz.) N=N/mmxFmm
  kgf=kgf/mmxFmm
  (kgf=Nx0.101972)

I valori della lunghezza a blocco sono solo di riferimento.
Possono esserci alcune variazioni in base al lotto.
Numero utilizzi: 1 milione di volte
Descrizione prodotto P.327
Utilizzo e precauzioni per le molle a spirale P.328

Deflessione ammessa della dimensione (L)
WM3-25Fmax=Lx30%
WM3-30Fmax=Lx30%
WM4-40Fmax=Lx30%
WM5-50Fmax=Lx30%
WM5-55Fmax=Lx30%
WM5-60Fmax=Lx30%
WM5-65Fmax=Lx27%
WM5-70Fmax=Lx28%
WM6-60Fmax=Lx30%
WM6-65Fmax=Lx29%
WM6-70Fmax=Lx28%
WM6-80Fmax=Lx28%

Le due estremità delle molle WM con * non sono rettificate.