

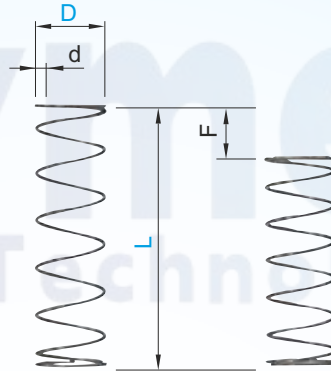
# HEAT PROOF WIRE SPRINGS

## DWLH (50% DEFLECTION) • Heat resistant up to 200



### Spring constant

D	Type	DWFH	DWLH	DWMH	DWHH
4				2.0 (0.2)	0.9 (0.3)
5					
6					
8		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 5.9 (kgf/mm) (0.6)
10					
12					N/mm 9.8 (kgf/mm) (1.0)
13					
16		1.0 (0.1)	2.9 (0.3)	4.9 (0.5)	14.7 (1.5)
18					
Fmax.		F=Lx60%	F=Lx50%	F=Lx40%	F=Lx35%



Spring constant  $\pm 10\%$   
 Diameter D  $\varnothing 10$  or less  $-0.5\text{mm}$   
 $\varnothing 13$  or more  $+0.8\text{mm}$   
 Free length L 50 or less  $\pm 1\text{mm}$   
 55 or more  $\pm 1.5\text{mm}$

● **DWLH: Fmax (Allowable Deflection) = L x 50%**

● **F (Allowable deflection) is due to the measurement at normal temperature (40°C)**

Maximum allowable deflection at high temperature (150°/200°C).

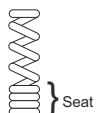
Part No. Type D-L	d	Height Solid	F max.	Load N(kgf) max.
DWLH4 - 5*	0.35	2.1	2.5	2.5 (0.25)
10*	0.4	3.6	5	4.9 (0.5)
15*	0.45	5	7.5	7.4 (0.75)
20*	0.5	8.5	10	9.8 (1.0)
25*	0.5	9	12.5	12.3 (1.25)
30*	0.5	10.5	15	14.7 (1.5)
35*	0.55	12	17.5	17.2 (1.75)
40*	0.55	16	20	19.6 (2.0)
DWLH5 - 5*	0.4	1.8	2.5	2.5 (0.25)
10*	0.45	3.2	5	4.9 (0.5)
15	0.5	5	7.5	7.4 (0.75)
20	0.55	6.6	10	9.8 (1.0)
25	0.6	10	12.5	12.3 (1.3)
30	0.6	12	15	14.7 (1.5)
35	0.65	14.3	17.5	17.2 (1.8)
40	0.65	16.3	20	19.6 (2.0)
45	0.65	17.6	22.5	22.1 (2.3)
50	0.7	21	25	24.5 (2.5)
DWLH6 - 5*	0.5	2.2	2.5	2.9 (0.3)
10*	0.5	3.3	5	4.9 (0.5)
15	0.6	6.5	7.5	7.8 (0.8)
20*	0.6	8.5	10	9.8 (1.0)
25*	0.6	10	12.5	12.7 (1.3)
30	0.7	13	15	14.7 (1.5)
35*	0.7	15	17.5	17.7 (1.8)
40*	0.7	17	20	19.6 (2.0)
45*	0.7	20	22.5	22.6 (2.3)
50	0.8	23.5	25	24.5 (2.5)
55	0.8	23.5	27.5	27.0 (2.8)
60*	0.8	27	30	29.4 (3.0)
65	0.8	27	32.5	31.9 (3.3)
70*	0.8	31	35	34.3 (3.5)
80	0.8	35	40	39.2 (4.0)

Part No. Type D-L	d	Height Solid	F max.	Load N(kgf) max.
DWLH8 - 10	0.6	3.5	5	4.9 (0.5)
15	0.7	6	7.5	7.8 (0.8)
20	0.7	7.5	10	9.8 (1.0)
25	0.8	10	12.5	12.7 (1.3)
30*	0.8	12	15	14.7 (1.5)
35*	0.8	15	17.5	17.7 (1.8)
40	0.9	17.5	20	19.6 (2.0)
45*	0.9	19.5	22.5	22.6 (2.3)
50*	0.9	21	25	24.5 (2.5)
55*	0.9	20	27.5	27.0 (2.8)
60*	0.9	25	30	29.4 (3.0)
65	1.0	29	32.5	31.9 (3.3)
70*	1.0	30.5	35	34.3 (3.5)
80*	1.0	35	40	39.2 (4.0)
DWLH10 - 10	0.7	4	5	4.9 (0.5)
15	0.8	6	7.5	7.8 (0.8)
20	0.9	8.5	10	9.8 (1.0)
25	0.9	9.5	12.5	12.7 (1.3)
30*	0.9	11.5	15	14.7 (1.5)
35	1.0	15	17.5	17.7 (1.8)
40*	1.0	17.5	20	19.6 (2.0)
45*	1.0	20	22.5	22.6 (2.3)
50*	1.0	22.5	25	24.5 (2.5)
55	1.1	23	27.5	27.0 (2.8)
60*	1.1	24	30	29.4 (3.0)
65*	1.1	25.5	32.5	31.9 (3.3)
70*	1.1	28	35	34.3 (3.5)
80	1.2	36	40	39.2 (4.0)
DWLH13 - 15	0.9	5.2	7.5	7.8 (0.8)
20	1.0	7.5	10	9.8 (1.0)
25	1.0	7.5	12.5	12.7 (1.3)
30	1.1	10.5	15	14.7 (1.5)
35	1.1	11	17.5	17.7 (1.8)
40	1.2	17	20	19.6 (2.0)
45	1.2	17	22.5	22.6 (2.3)
50*	1.2	20	25	24.5 (2.5)
55*	1.2	21	27.5	27.0 (2.8)
60*	1.2	22	30	29.4 (3.0)
65*	1.2	22	32.5	31.9 (3.3)
70*	1.2	25	35	34.3 (3.5)
80	1.4	35	40	39.2 (4.0)
90	1.4	40	45	44.1 (4.5)

Part No. Type D-L	d	Height Solid	F max.	Load N(kgf) max.
DWLH16 - 15	1.0	5.5	7.5	7.8 (0.8)
20	1.1	7.5	10	9.8 (1.0)
25	1.2	10	12.5	12.7 (1.3)
30*	1.2	12.5	15	14.7 (1.5)
35*	1.2	13	17.5	17.7 (1.8)
40*	1.2	15	20	19.6 (2.0)
45	1.4	19.5	22.5	22.6 (2.3)
50*	1.4	22	25	24.5 (2.5)
55*	1.4	23	27.5	27.0 (2.8)
60*	1.4	25	30	29.4 (3.0)
65*	1.4	25	32.5	31.9 (3.3)
70*	1.4	29	35	34.3 (3.5)
80*	1.6	36	40	39.2 (4.0)
90*	1.6	37	45	44.1 (4.5)
DWLH18 - 20	1.4	7	10	29.4 (3.0)
25	1.6	10.5	12.5	37.3 (3.8)
30*	1.6	13	15	44.1 (4.5)
35*	1.8	15	17.5	52.0 (5.3)
40	1.8	17	20	58.8 (6.0)
45*	1.8	20	22.5	66.7 (6.8)
50*	2	22	25	73.5 (7.5)
55*	1.8	19	27.5	80.9 (8.25)
60*	2	28	30	88.3 (9.0)
65	2	28	32.5	95.6 (9.75)
70*	2	31	35	103.0 (10.5)
80*	2	35	40	117.7 (12.0)
90*	2	40	45	132.4 (13.5)
100	2.1	47	50	147.1 (15.0)

● **N (load) N/mm (spring constant) x Fmm (deflection)**  
 Load (kgf) Load N x 0.101972

- No grinding on both ends of springs marked with\*
- The solid height values are for reference only. There may be some dispersions depending on the lot.
- Times used: 1 million
- Instructions and notes for coil springs
- Coil springs marked with ● have spring seat(s) on one end or both ends in order to reduce excessive stress or potential breakage when deflecting.  
 (The seat becomes 4 rolling extent from 0.5)  
 Solid height/spring constant values are the same as those without spring seats.



ORDERING GUIDE



DWLH 13 - 60

www.dymextech.com

india@dymextech.com