

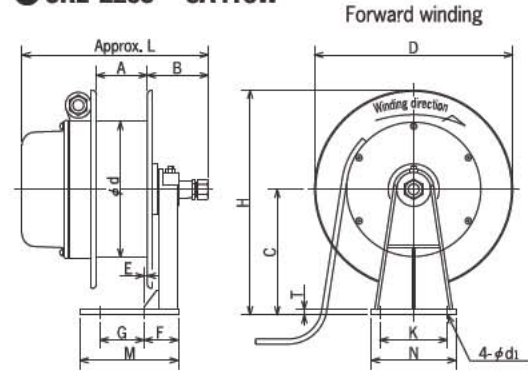
# CRL TYPE CABLE REEL

(Standard)

RoHS RoHS-complied

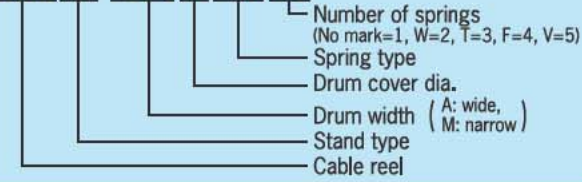
● Protective Structure ..... IP44

● CRL-2205~3A416W

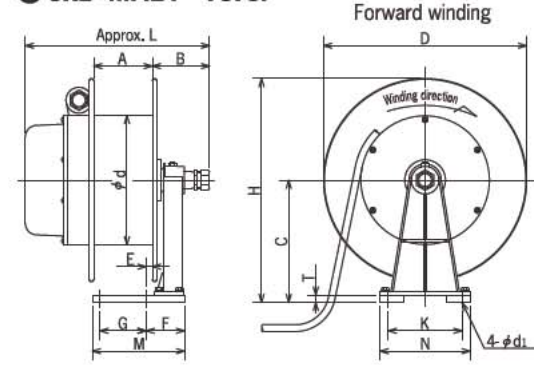


## Model description

CRL-3A416W



● CRL-4M424~7875F



## Specifications and Dimensions

Model	Max torque N·m(kgf·m)	Max spring tension N(kgf)	Max spring turns n	Dimensions (mm)				
				D	d	A	B	C
CRL-2205	4.9( 0.5)	49( 5.0)	20	292	200	75	90	185
CRL-2A205W	4.9( 0.5)	49( 5.0)	39	292	200	110	90	185
CRL-2A210	9.8( 1.0)	98(10.0)	20	292	200	110	90	185
CRL-2305	4.9( 0.5)	49( 5.0)	20	350	200	75	90	215
CRL-2A305W	4.9( 0.5)	49( 5.0)	39	350	200	110	90	215
CRL-3316	15.6( 1.6)	132(13.5)	13	350	230	75	95	215
CRL-3A309W	8.8( 0.9)	73( 7.5)	38	350	230	110	90	215
CRL-3A316W	15.6( 1.6)	132(13.5)	26	350	230	110	95	215
CRL-3409	8.8( 0.9)	73( 7.5)	19	440	230	75	90	260
CRL-3A409W	8.8( 0.9)	73( 7.5)	38	440	230	110	90	260
CRL-3A416W	15.6( 1.6)	132(13.5)	26	440	230	110	95	260
CRL-4M424	23.5( 2.4)	166(17.0)	13	440	280	127	124	265
CRL-4424W	23.5( 2.4)	166(17.0)	26	440	280	165	124	265
CRL-4424T	23.5( 2.4)	166(17.0)	39	440	280	165	124	265
CRL-4424F	23.5( 2.4)	166(17.0)	52	440	280	165	124	265
CRL-4524T	23.5( 2.4)	166(17.0)	39	510	280	165	124	305
CRL-4524F	23.5( 2.4)	166(17.0)	52	510	280	165	124	305
CRL-5M636	35.3( 3.6)	196(20.0)	13	630	360	127	120	370
CRL-5636W	35.3( 3.6)	196(20.0)	26	630	360	165	120	370
CRL-5636T	35.3( 3.6)	196(20.0)	39	630	360	165	120	370
CRL-5636F	35.3( 3.6)	196(20.0)	52	630	360	165	120	370
CRL-5655W	53.9( 5.5)	294(30.0)	24	630	360	165	120	370
CRL-5655T	53.9( 5.5)	294(30.0)	36	630	360	165	120	370
CRL-6756F	54.9( 5.6)	245(25.0)	48	750	440	220	134	435
CRL-6756V	54.9( 5.6)	245(25.0)	60	750	440	220	134	435
CRL-6775W	73.5( 7.5)	333(34.0)	24	750	440	220	134	435
CRL-6775T	73.5( 7.5)	333(34.0)	36	750	440	220	134	435
CRL-6775F	73.5( 7.5)	333(34.0)	48	750	440	220	134	435
CRL-6M7112W	109.0(11.2)	490(50.0)	24	750	440	172	134	435
CRL-7875T	73.5( 7.5)	264(27.0)	36	870	550	220	134	500
CRL-7875F	73.5( 7.5)	264(27.0)	48	870	550	220	134	500

NOTE: 1. Suffix -R on all model names identifies reverse winding.  
2. Installation plate (base plate) for CRL-2205~3A416W is welded. If it is convenient to set it in reverse, please notify us in advance. Suffix -L on model name identifies reverse setting.

## Slip ring capacity (Rated voltage AC600V)

Rated current	Number of poles												Model
	3	4	6	8	10	12	14	16	20	24	28	32	
30A	3	4	6	8	10	12	14	16	—	—	—	—	CRL-2205~3A416W
20A	3	4	6	8	10	12	14	16	20	24	28	32	
50A	3	4	6	8	10	12	—	—	—	—	—	—	CRL-4M424~7875F
100A	3	4	—	—	—	—	—	—	—	—	—	—	
150A	3	4	—	—	—	—	—	—	—	—	—	—	CRL-6756F~7875F

## Additional L length by the number of poles

(units: mm)

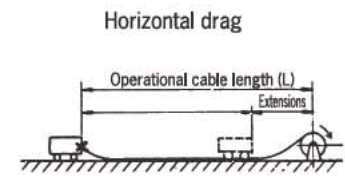
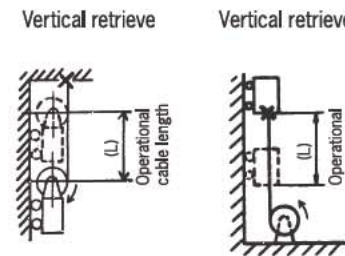
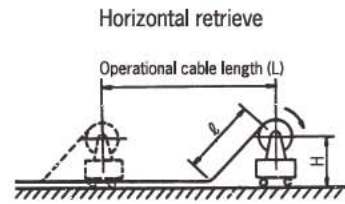
Rated current	Number of poles													
	3	4	6	8	10	12	14	16	18	20	24	28	30	32
30A	0	21	41	61	81	101	122	—	—	—	—	—	—	—
20A	0	30	50	80	100	140	200	240	280	—	—	—	—	—
50A	0	30	50	80	100	—	—	—	—	—	—	—	—	—
100A	30	50	—	—	—	—	—	—	—	—	—	—	—	—
150A	97	127	—	—	—	—	—	—	—	—	—	—	—	—

H	Dimensions (mm)									Mass (kg)
	L	E	G±1	K±1	M	N	F	T	d <sub>1</sub>	
331	275	5.0	65	100	145	125	50.5	8	9	10
331	310	22.5	65	100	145	125	68.0	8	9	13
331	310	22.5	65	100	145	125	68.0	8	9	13
390	275	5.0	65	100	145	125	50.5	8	9	11
390	310	22.5	65	100	145	125	68.0	8	9	14
390	280	4.0	65	100	145	125	50.5	8	9	13
390	310	22.5	65	100	145	125	68.0	8	9	16
390	315	21.5	65	100	145	125	68.0	8	9	16
480	275	4.0	65	100	145	125	50.5	8	9	14
480	310	22.5	65	100	145	125	68.0	8	9	18
480	315	21.5	65	100	145	125	68.0	8	9	18
485	399	13.5	100	160	200	195	83.5	16	13	28
485	437	32.5	100	160	230	195	102.5	16	13	34
485	437	32.5	100	160	230	195	102.5	16	13	40
485	437	32.5	100	160	230	195	102.5	16	13	46
560	437	32.5	100	160	230	195	102.5	16	13	42
560	437	32.5	100	160	230	195	102.5	16	13	48
685	395	13.5	100	160	245	225	94.5	19	13	42
685	433	32.5	100	160	285	225	113.5	19	13	52
685	433	32.5	100	160	285	225	113.5	19	13	62
685	433	32.5	100	160	285	225	113.5	19	13	72
685	433	32.5	100	160	285	225	113.5	19	13	57
685	433	32.5	100	160	285	225	113.5	19	13	70
810	502	50.0	120	200	355	265	146.0	19	13	97
810	502	50.0	120	200	355	265	146.0	19	13	110
810	502	50.0	120	200	355	265	146.0	19	13	85
810	502	50.0	120	200	355	265	146.0	19	13	100
810	502	50.0	120	200	355	265	146.0	19	13	115
810	454	25.0	120	200	302	265	121.0	19	13	100
935	502	50.0	120	200	355	295	146.0	22	13	115
935	502	50.0	120	200	355	295	146.0	22	13	130

NOTE: For CRL-4M424~7875F, setting the installation plate (base plate) reverse is available by yourself, unless the base plate is not welded (special spec.). However, in case of reinforced bracket type (special spec.), the reverse setting is not applied. Please notify us in advance.

# CRL TYPE CABLE REEL

Operational cable length (L) Cable size	CRL TYPE Mobile application /Horizontal & vertical retrieve,				
	5m	10m	15m	20m	25m
2mm <sup>2</sup> ×3C 0.2kg/m φ 11.5	2205	2305	2A305W	3A309W	3A409W
2mm <sup>2</sup> ×4C 0.245kg/m φ 12.5	2205	2305	2A305W	3A309W	3A409W
3.5mm <sup>2</sup> ×3C 0.29kg/m φ 13	2205	2305	2A305W	3A409W	3A409W
3.5mm <sup>2</sup> ×4C 0.355kg/m φ 14.5	3409	3409	3A409W	3A409W	3A409W
5.5mm <sup>2</sup> ×3C 0.415kg/m φ 15.5	3409	3409	3A409W	3A409W	4424T
5.5mm <sup>2</sup> ×4C 0.515kg/m φ 17	3316	3A416W	3A416W	4424T	4524T
8mm <sup>2</sup> ×3C 0.525kg/m φ 17	4M424	4424W	4424W	4424T	4524T
8mm <sup>2</sup> ×4C 0.655kg/m φ 18.5	4M424	4424W	4424W	4524T	4524T
2mm <sup>2</sup> ×10C 0.515kg/m φ 19.5	4M424	4424W	4424W	4524T	4524T
14mm <sup>2</sup> ×3C 0.795kg/m φ 20	4M424	4424W	4524T	4524T	4524T
14mm <sup>2</sup> ×4C 1.0kg/m φ 22	5M636	5M636	5636W	5636W	5636T
5.5mm <sup>2</sup> ×8C 1.0kg/m φ 24	5M636	5M636	5636W	5636W	5636T
22mm <sup>2</sup> ×3C 1.33kg/m φ 27	5M636	5636W	6775W	6775W	6775T
22mm <sup>2</sup> ×4C 1.67kg/m φ 29	6775W	6775W	6775W	6775W	6775T
38mm <sup>2</sup> ×3C 2.02kg/m φ 32	6775W	6775W	6775W	6775W	6775T
38mm <sup>2</sup> ×4C 2.55kg/m φ 35	7875T	7875T	7875T	7875T	7875T



\*To protect the cable on the ground, using rollers is recommended.

Operational cable length (L) Cable size	CRL TYPE Stationary application /Horizontal retrieve				
	5m	10m	15m	20m	25m
2mm <sup>2</sup> ×3C 0.2kg/m φ 11.5	2205	2A205W	3A309W	3A409W	
2mm <sup>2</sup> ×4C 0.245kg/m φ 12.5	2205	2A205W	3A309W	3A409W	
3.5mm <sup>2</sup> ×3C 0.29kg/m φ 13	2205	2A205W	3A309W	3A409W	4424T
3.5mm <sup>2</sup> ×4C 0.355kg/m φ 14.5	3409	3409	3A409W	4424T	4424T
5.5mm <sup>2</sup> ×3C 0.415kg/m φ 15.5	3409	3409	3A409W	4424T	4424T
5.5mm <sup>2</sup> ×4C 0.515kg/m φ 17	3316	3A416W	3A416W	4424T	4524T
2mm <sup>2</sup> ×10C 0.515kg/m φ 19.5	4M424	4424W	4424W	4524T	4524F
8mm <sup>2</sup> ×3C 0.525kg/m φ 17	4M424	4424W	4424W	4524T	4524T
8mm <sup>2</sup> ×4C 0.655kg/m φ 18.5	4M424	4424W	4424W	4524T	5636T
14mm <sup>2</sup> ×3C 0.795kg/m φ 20	4M424	4424W	4524T	5636W	5655T
14mm <sup>2</sup> ×4C 1.0kg/m φ 22	5M636	5M636	5636W	5655T	6775T
5.5mm <sup>2</sup> ×8C 1.0kg/m φ 24	5M636	5M636	5636W	5655T	6775T
22mm <sup>2</sup> ×3C 1.33kg/m φ 27	5M636	5655W	6775W	6M7112W	6M7112W
22mm <sup>2</sup> ×4C 1.67kg/m φ 29	6775W	6775W	6775W	6M7112W	
38mm <sup>2</sup> ×3C 2.02kg/m φ 32	6775W	6775W	6M7112W		
38mm <sup>2</sup> ×4C 2.55kg/m φ 35	7875T				

Stationary application /Vertical retrieve							
30m	35m	40m	45m	50m	55m	60m	65m
4424F	4424F	4524F					
4424F	4524F	4524F	5636F				
4424F	4524F	4524F	5636F	5636F	6756F	6756V	6756V
4524F	4524F	4524F	5636F	5636F	6756F	6756V	6756V
4524F	4524F	4524F	5636F	5636F	6756F	6756V	6756V
4524F	4524F	5636F	5636F	5636F	6756F	6756V	6756V
4524F	5636F	5636F	5636F	6756F	6756V	6756V	6756V
5636T	5636F	5636F	6756F	6756F	6756V	6756V	
5636T	6775T	6775F	6775F	6775F	7875F	7875F	
5636T	6775T	6775F	6775F	6775F	7875F	7875F	
6775T	6775T	7875T	7875F				
6775T	6775F	7875T					
7875T							

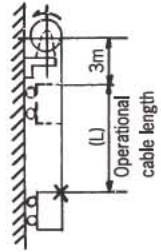
30m	35m	40m	45m
4424F	4424F		
4424F	4524F	4524F	
4524F	4524F	5636F	6756V
5636T	6775T	6775F	6775F
5636T	6775T	6775F	
5636T	6775T	6775F	6775F
5655T	6775T		
5655T			

- NOTE: 1. Calculated at following conditions:  
 ① Cable type ..... 2PNCT  
 ② Max travel/ lift speed ..... less than 40mm/min
2. Mobile application /Horizontal, vertical retrieve  
 Stationary application /Vertical retrieve  
 ① Installation height  
 (CRL-2205 ~ 3A416W ... less than 0.5m)  
 (CRL-4M424 ~ 7875F ... less than 1.0m)
3. Stationary application /Horizontal drag  
 ① Coefficient of friction  $\mu \approx 0.65$   
 (Between cable reel includes extensions and ground surface <flat and smooth concrete>)
4. The chart is not applicable to two-way payout. When selecting two-way payout, please take into consideration of extra reel torque.
5. Deviations due to roller guide, non-straight cable payout, concave-convex surface, low ambient temperature, etc. are not calculated. When selecting a model, please take into consideration of high mechanical stress and harsh environment conditions.
6. For high speed or high operation frequency rate, please use premium cables.
7. For any special requirements, please contact us.

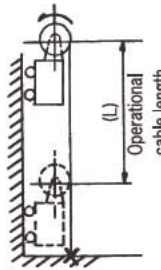


# CRL TYPE CABLE REEL

Vertical lift



Vertical lift



Operational cable length (L) Cable size	CRL TYPE Stationary application /Vertical lift, Mobile application			
	5m	10m	15m	20m
2mm <sup>2</sup> ×3C 0.2kg/m φ 11.5	2205	2305	3A309W	
2mm <sup>2</sup> ×4C 0.245kg/m φ 12.5	2205	2A210	3A316W	
3.5mm <sup>2</sup> ×3C 0.29kg/m φ 13	2205	2A210	3A316W	4424T
3.5mm <sup>2</sup> ×4C 0.355kg/m φ 14.5	3409	3A316W	3A416W	4424T
5.5mm <sup>2</sup> ×3C 0.415kg/m φ 15.5	3409	3A416W	4424W	4424T
5.5mm <sup>2</sup> ×4C 0.515kg/m φ 17	3316	3A416W	4424W	5655W
2mm <sup>2</sup> ×10C 0.515kg/m φ 19.5	4M424	4424W	4524T	5655W
8mm <sup>2</sup> ×3C 0.525kg/m φ 17	4M424	4424W	4424W	5655W
8mm <sup>2</sup> ×4C 0.655kg/m φ 18.5	4M424	4424W	5655W	5655W
14mm <sup>2</sup> ×3C 0.795kg/m φ 20	4M424	5636W	5655W	6M7112W
14mm <sup>2</sup> ×4C 1.0kg/m φ 22	5M636	5655W	6M7112W	6M7112W
5.5mm <sup>2</sup> ×8C 1.0kg/m φ 24	5M636	5655W	6M7112W	6M7112W
22mm <sup>2</sup> ×3C 1.33kg/m φ 27	6775W	6M7112W	6M7112W	
22mm <sup>2</sup> ×4C 1.67kg/m φ 29	6775W	6M7112W		
38mm <sup>2</sup> ×3C 2.02kg/m φ 32	6775W			

/Vertical lift		
	25m	30m
4424T		4424F
5636T		5655T
5655T		5655T
5655T		6775T
5655T		6775T
5655T		6775T
6M7112W		
6M7112W		

NOTE: 1. Calculated at following conditions:

- ① Cable type.....2PNCT
  - ② Max travel/lift speed .....less than 40mm/min
2. Mobile application /Vertical lift Stationary application /Vertical lift
- ① Extensions 3m
  - ② Mass of accessories are not included.
  - ③ Deviations due to wind load, tidal current, buoyancy, etc. are not calculated.

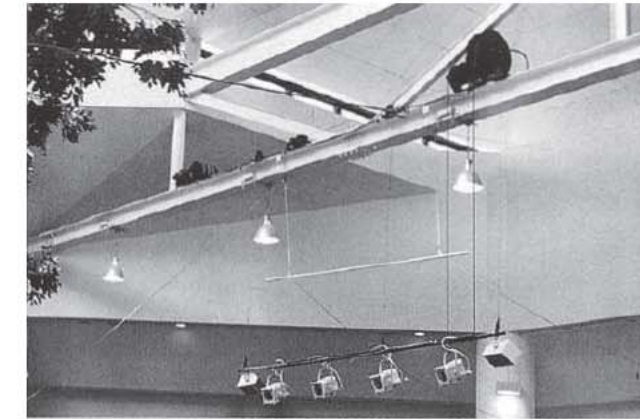
3. Mobile, stationary application /Horizontal stretch

- ① Sag factor(S) = L×6% includes extensions

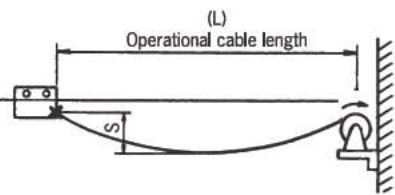
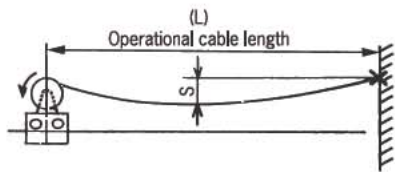
4. Deviations due to roller guide, non-straight cable payout, concave-convex surface, low ambient temperature, etc. are not calculated. When selecting a model, please take into consideration of high mechanical stress and harsh environment conditions.

5. For high speed or high operation frequency rate, please use premium cables.

6. For any special requirements, please contact us.



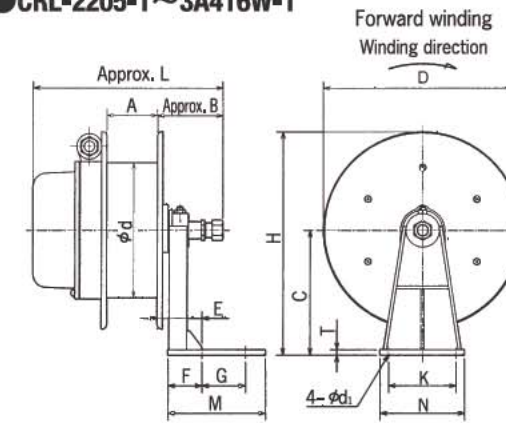
Horizontal stretch



Operational cable length (L) Cable size	CRL TYPE Mobile & stationary application /Horizontal stretch		
	5m	10m	15m
2mm <sup>2</sup> ×3C 0.2kg/m φ 11.5	2205	2A210	3A316W
2mm <sup>2</sup> ×4C 0.245kg/m φ 12.5	2205	2A210	3A316W
3.5mm <sup>2</sup> ×3C 0.29kg/m φ 13	2A210	3A316W	4424W
3.5mm <sup>2</sup> ×4C 0.355kg/m φ 14.5	3316	4424W	5636W
5.5mm <sup>2</sup> ×3C 0.415kg/m φ 15.5	3316	4424W	5655W
5.5mm <sup>2</sup> ×4C 0.515kg/m φ 17	4M424	5636W	5655W
2mm <sup>2</sup> ×10C 0.515kg/m φ 19.5	4M424	5636W	5655W
8mm <sup>2</sup> ×3C 0.525kg/m φ 17	4M424	5636W	5655W
8mm <sup>2</sup> ×4C 0.655kg/m φ 18.5	4M424	5655W	6M7112W
14mm <sup>2</sup> ×3C 0.795kg/m φ 20	5M636	6775W	6M7112W
14mm <sup>2</sup> ×4C 1.0kg/m φ 22	5M636	6M7112W	
5.5mm <sup>2</sup> ×8C 1.0kg/m φ 24	5M636	6M7112W	
22mm <sup>2</sup> ×3C 1.33kg/m φ 27	6775W		
22mm <sup>2</sup> ×4C 1.67kg/m φ 29	6M7112W		
38mm <sup>2</sup> ×3C 2.02kg/m φ 32	6M7112W		

## Dimensions of Reverse setting

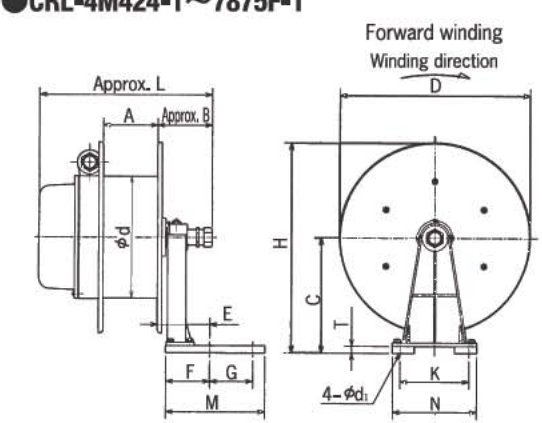
●CRL-2205-1~3A416W-1



(Units: mm)

Model	Dimensions	E	F	G	M
CRL-	2205-1 · 2305-1	66.5	50.5	65	145
	2A205W-1 · 2A210-1				
	2A305W-1 · 3409-1				
	3A309W-1 · 3A409W-1				
CRL-	3316-1 · 3A316W-1	67.5	50.5	65	145
	3A416W-1				

●CRL-4M424-1~7875F-1



(Units: mm)

Model	Dimensions	E	F	G	M
CRL-	4M424-1	86.5	83.5	100	200
CRL-	4424W-1~4524F-1	105.5	102.5	100	230
CRL-	5M636-1	98.5	94.5	100	245
CRL-	5636W-1~5655T-1	117.5	113.5	100	285
CRL-	6756F-1~6775F-1	150	146.0	120	355
CRL-	7875T-1 · 7875F-1	150	146.0	120	355
CRL-	6M7112W-1	125	121.0	120	302

\*Please refer to the page 9 for other models.