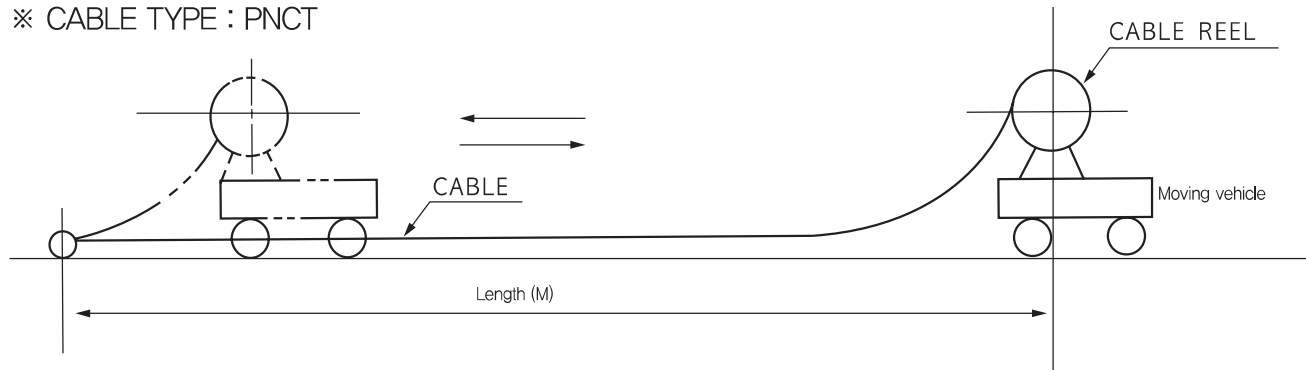


Spring Type

Spring Type Cable Reel

Horizontal Rewinding for a Moving Vehicle (Moving Reel)

※ CABLE TYPE : PNCT

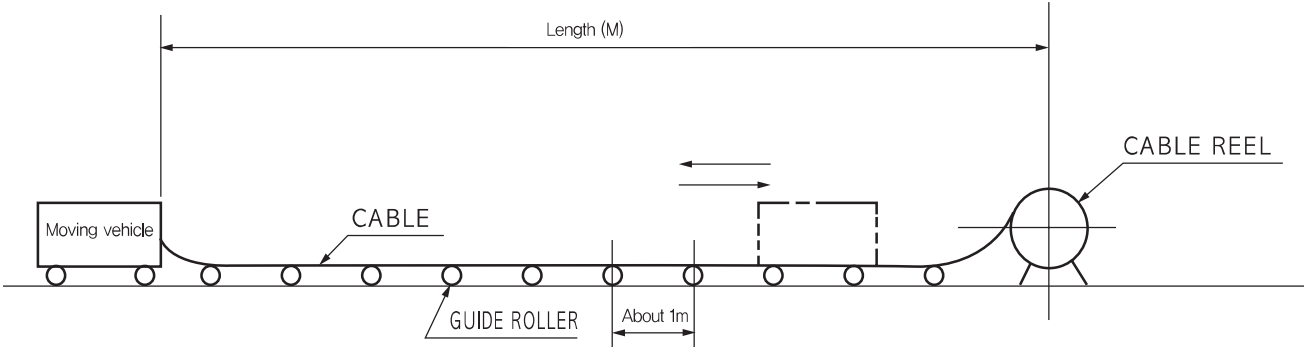


※ The number written in the following table indicates the schematic number so, you can get the sizes of the external shapes with these number at the back.

| Current (A) SLIPRING | Length(m) | | 10 | | 15 | | | 20 | | | | 25 | | | | 30 | | | 35 | | | 40 | | | 50 | | 60 | | 70 | |
|-------------------------|--------------|--------------|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|-----|-----|----|-----|-----|-----|----|----|----|----|----|----|----|
| | Form | Name DRUM | ECC | | ECS | EU | ECC | | ECS | EU | ECC | | ECS | EU | ECC | | ECS | ECA | ECC | | ECS | ECA | EAJ | EA | EA | | EA | | | |
| | | | 25 | 35 | 25 | 35 | 45 | 40 | 25 | 35 | 45 | 50 | 25 | 35 | 45 | 50 | 35 | 45 | 35 | 45 | 50 | 35 | 45 | 50 | 60 | 50 | 50 | 70 | 50 | 70 |
| 20(A) | 2.5(mm)×4(c) | | 1 | 1 | | | 2 | | | 2 | | | | | 5 | 5 | | | 6 | | | | | 32 | | 32 | | 42 | | |
| | 5 | | 1 | 1 | | | 2 | | | | 4 | | | | 5 | 5 | | | 6 | | | | | 32 | | 32 | | 42 | | |
| | 6 | | 1 | 2 | | | 8 | 3 | | | 4 | | | | 5 | 6 | | | 6 | | | | | 32 | | | 42 | | 42 | |
| | 8 | | | 4 | 5 | | | | 6 | 10 | 6 | | | 7 | 7 | | | | 15 | | | | | 32 | | 34 | | 44 | | |
| | 10 | | | 5 | 6 | | 9 | 7 | | | 7 | 15 | | | 15 | 15 | | | 16 | | | | 25 | 35 | | 35 | | 35 | | |
| | 12 | | | 5 | 6 | | | | 7 | | 7 | 15 | | | 15 | 15 | | | 16 | | | | 25 | 35 | | 35 | | 37 | | |
| 30(A) | 4.0(mm)×3(c) | | 1 | 1 | | | 2 | | | 2 | | | | | 5 | | | 6 | | | | | | 32 | | 32 | | 42 | | |
| | 4 | | 1 | 2 | | | 3 | | | | 4 | | | | 5 | 6 | | 6 | | | | | | 32 | | 32 | | 42 | | |
| | 5 | | 1 | 2 | | | 3 | | | | 5 | | | | 5 | 6 | | 7 | | | | | | 32 | | 32 | | 42 | | |
| | 6 | | | 4 | 5 | | 8 | 6 | 10 | | 6 | | | 6 | 7 | | | 7 | | | | | | 32 | | 34 | | 44 | | |
| | 8 | | | 5 | 5 | | | | 6 | | 7 | | | 7 | 15 | | 15 | | 16 | | | | | 34 | | 34 | | 44 | | |
| | 10 | | | | | 14 | 9 | | 15 | 11 | | 15 | 19 | | 16 | 16 | | 16 | | 16 | | | 28 | 35 | | 35 | | 41 | | |
| 30(A) | 6.0(mm)×3(c) | | 1 | 2 | | | 3 | | | | 4 | | | 5 | 6 | | 6 | | | | | | | 32 | | 32 | | 42 | | |
| | 4 | | 1 | 2 | | | 3 | | | | 5 | | | 6 | 6 | | 7 | | | | | | | 32 | | | 42 | 44 | | |
| | 5 | | | 4 | 5 | | | 5 | | | 5 | | | 6 | 7 | | 7 | | | | | | | 32 | | | 42 | 44 | | |
| | 6 | | | 5 | 5 | | | 6 | 12 | | 6 | | | 15 | 15 | | 15 | | 15 | | | | | 34 | | 34 | | 44 | | |
| | 8 | | | 5 | 6 | | | 7 | | | 15 | | | 16 | 16 | | 16 | | 16 | | | | | 34 | | 34 | | 44 | | |
| | 10 | | | | | 15 | 9 | | 16 | | 16 | 19 | | 16 | 16 | | 22 | | 22 | | 22 | | 28 | 44 | | 44 | | 41 | | |
| 40(A) | 10(mm)×2(c) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | 4 | 2 | | | | 5 | | 5 | 17 | 6 | | 6 | | 7 | | | | | | | 32 | | | 42 | 42 | | |
| | 4 | | | 4 | 5 | | | | 6 | | 6 | 17 | 7 | | 7 | | | 15 | | | | | | 32 | | 34 | | 44 | | |
| | 5 | | | 5 | 5 | | | | 6 | 12 | 6 | 18 | | 15 | 15 | | 15 | | | | | | | 34 | | 34 | | 44 | | |
| | 6 | | | 5 | 6 | | | | 7 | | 7 | | | 16 | 16 | | 16 | | | | | | | 34 | | 34 | | 44 | | |
| 60(A) | 16(mm)×2(c) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | 5 | 5 | 14 | 8 | | 7 | 12 | 6 | 18 | | 15 | 19 | | 15 | | | | | | | 32 | | 34 | | 44 | | |
| | 4 | | | 5 | 5 | 14 | 8 | | 7 | 13 | 7 | 18 | | 16 | 16 | | 15 | 19 | | 15 | | | | 34 | | 34 | | 44 | | |
| | 4 | | | 5 | 6 | 14 | 8 | | 15 | 13 | 7 | 15 | | 16 | 19 | | 16 | 21 | | | | | | 34 | | 34 | | 36 | | |

On-ground Rewinding (Fixed Reel)

※ CABLE TYPE : PNCT



※ The guide roller must be installed at interval of 1m, ※ The number written in the following table indicates the schematic number so, you can get the sizes of the external shapes with these number at the back,

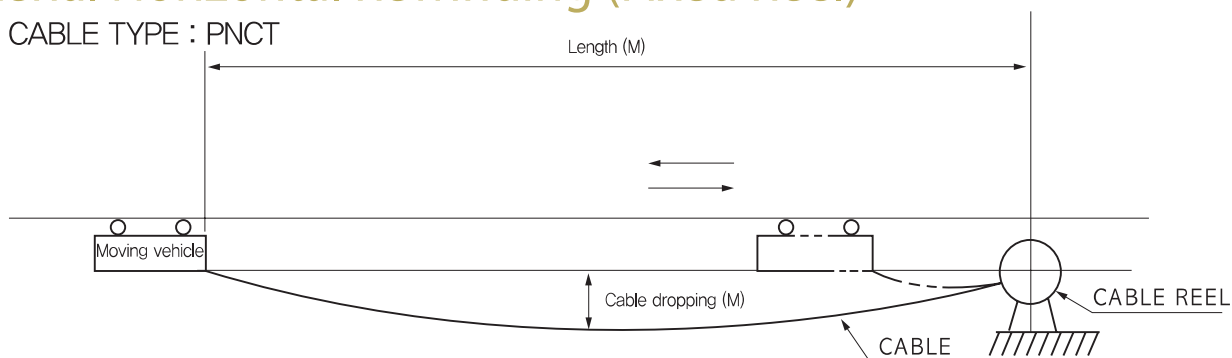
| Current (A) SLIPRING | Length(m) | | 10 | | 15 | | | | 20 | | | | 25 | | | 30 | | |
|-------------------------|----------------------------|--------------|-----|---|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|
| | Form | Name DRUM | ECC | | ECC | ECS | EU | ECC | ECS | EU | ECC | ECS | EU | ECC | ECS | | | |
| | | | 25 | | 25 | 35 | 45 | 40 | 25 | 35 | 45 | 50 | 25 | 35 | 45 | 50 | ECC | ECS |
| 20(A) | 2.5(mm ²)x4(c) | | 1 | 2 | | | | 2 | | | | | | 5 | | 5 | | |
| | | | 5 | 1 | 21 | | | | | 4 | | | | 5 | | 5 | | |
| | | | 6 | 1 | | 5 | | 8 | | 5 | | | | 5 | | 5 | | |
| | | | 8 | | | 5 | | | | 6 | 10 | | | 6 | | | 7 | |
| | | | 10 | | | | 14 | 9 | | 7 | | | | | 15 | | | 15 |
| | | | 12 | | | | 14 | | | 7 | | | | | 15 | | | 15 |
| 30(A) | 4.0(mm ²)x3(c) | | 1 | 2 | | | | 2 | | | | | 5 | | 5 | | | |
| | | | 4 | 1 | 2 | | | | | 5 | | | 5 | | 5 | | | |
| | | | 5 | 2 | | 5 | | 8 | | 5 | | | 5 | | 6 | | | |
| | | | 6 | | | 5 | | | | 6 | 10 | | 6 | | 7 | | | |
| | | | 8 | | | 6 | | | | 7 | | | 7 | | | 15 | | |
| | | | 10 | | | | 15 | 9 | | | 15 | 11 | | 15 | 21 | | 16 | |
| 30(A) | 6.0(mm ²)x3(c) | | 1 | 2 | | | | | 5 | | | | 5 | | 5 | | | |
| | | | 4 | 2 | | 5 | | | | 5 | | | 5 | | 6 | | | |
| | | | 5 | | | 5 | | | | 6 | | | 6 | | 7 | | | |
| | | | 6 | | | 5 | | | | 6 | 12 | | 6 | | | 15 | | |
| | | | 8 | | | | 14 | | | | | | | 15 | | 16 | | |
| | | | 10 | | | | 15 | 9 | | | 15 | | | 16 | 21 | 16 | | |
| 40(A) | 10(mm ²)x2(c) | | | | | | | | | | 16 | | | | | | | |
| | | | 3 | 2 | | 5 | | | | 5 | | | 5 | | | | | |
| | | | 4 | | | 5 | | | | 6 | 12 | | 6 | | | | | |
| | | | 5 | | | 5 | | | | 6 | 14 | | | 15 | 20 | 15 | | |
| | | | 6 | | | | 14 | | | | 15 | | | 15 | 20 | 16 | | |
| | | | 8 | | | | 15 | 9 | | | 15 | | | 15 | 21 | 16 | | |
| 60(A) | 16(mm ²)x2(c) | | | | 5 | | 8 | | 6 | 14 | 12 | | 6 | | 20 | 15 | | |
| | | | 3 | | | 6 | | 8 | | 7 | 14 | 13 | | 15 | 20 | 16 | | |
| | | | 4 | | | | 14 | 8 | | | 15 | 13 | | 15 | 20 | 16 | | |

Spring Type

Spring Type Cable Reel

Aerial Horizontal Rewinding (Fixed Reel)

※ CABLE TYPE : PNCT



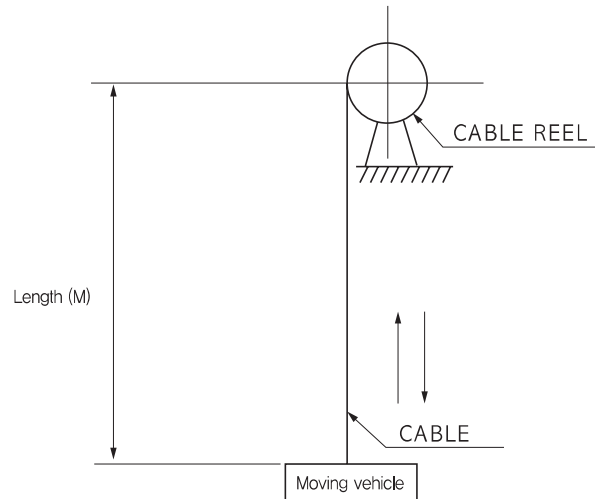
※ In above drawing, the cable dropping is calculated by the max. length $\times 0,1$.
And the rewinding length is $1,027 \times \text{max.length(m)}$.

※ The number written in the following table indicates the schematic number so, you can get the sizes of the external shapes with these number at the back.

| Current (A) SLIPRING | Length(m) | | 10 | | | | 13 | | | 16 | | | 20 | | 25 | |
|-------------------------|-----------|----------------------------|------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|--|
| | Form | Name | ECC | ECC | ECS | EU | ECC | ECS | EU | ECC | ECS | ECC | ECS | ECC | ECS | |
| | | | DRUM | | | | | | | | | | | | | |
| | | Cable size | 35 | 35 | 45 | 40 | 35 | 45 | 50 | 35 | 45 | 35 | 45 | 35 | 45 | |
| 20(A) | | 2.5(mm) ² ×4(c) | 1 | 4 | | | 4 | | 4 | 4 | | 4 | | 5 | | |
| | | 5 | 1 | 4 | | | 4 | | 4 | 4 | | 4 | | 5 | | |
| | | 6 | | 4 | | 8-1 | 5 | | 5 | 5 | | 5 | | 5 | | |
| | | 8 | | 5 | | | 6 | 10 | 6 | 6 | | 6 | | 6 | | |
| | | 10 | | | 14 | 9-1 | | | | | | 15 | | | 15 | |
| | | 12 | 1 | | 14 | | | | | | | 15 | | | 15 | |
| 30(A) | | 4.0(mm) ² ×3(c) | | 4 | | | 4 | | 4 | 4 | | 4 | | 5 | | |
| | | 4 | | 4 | | | 5 | | 5 | 5 | | 5 | | 5 | | |
| | | 5 | | 4 | | | 5 | | 5 | 5 | | 5 | | 6 | | |
| | | 6 | | 5 | | 8-1 | 6 | 10 | 6 | 6 | | 6 | | 6 | | |
| | | 8 | | 6 | | | 7 | | | | | 14 | | 14 | | |
| | | 10 | | | 15 | 9-1 | | 11 | | | | 15 | | 15 | | |
| 30(A) | | 6.0(mm) ² ×3(c) | 1 | 4 | | | 5 | | 5 | 5 | | 5 | | 5 | | |
| | | 4 | | 4 | | | 5 | | 5 | 5 | | 5 | | 6 | | |
| | | 5 | | 5 | | | 6 | | 5 | 5 | | 5 | | 6 | | |
| | | 6 | | 5 | | | 6 | 12 | 6 | 6 | | 6 | | 6 | 14 | |
| | | 8 | | | 14 | | | | | | | 15 | | 15 | | |
| | | 10 | | | 15 | 9-1 | | | | | | 16 | | 16 | | |
| 40(A) | | 10(mm) ² ×2(c) | | | 15 | 9-1 | | | | | 16 | | 16 | | 16 | |
| | | 3 | | 4 | | | 5 | | 5 | 5 | | 5 | | 6 | | |
| | | 4 | | 5 | | | 6 | | 6 | 6 | | 6 | | 6 | | |
| | | 5 | | 5 | | | 6 | | 6 | 6 | | 6 | 14 | 14 | | |
| | | 6 | | | 14 | | | | | | | 15 | | 15 | | |
| 60(A) | | 16(mm) ² ×2(c) | | 5 | | 8-1 | 6 | | 6 | 6 | | 6 | 14 | 14 | | |
| | | 3 | | 6 | | 8-1 | 7 | | 7 | 7 | | 7 | 14 | 14 | | |
| | | 4 | | | 14 | 8-1 | | | | | | 15 | | 15 | | |

Vertical Rewinding (Fixed Reel)

※ CABLE TYPE : PNCT



※ The number written in the following table indicates the schematic number so, you can get the sizes of the external shapes with these number at the back,

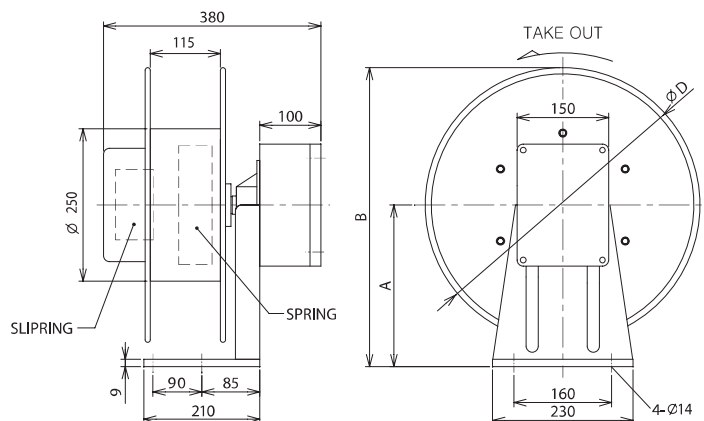
| Current (A) SLIPRING | Length(m) | | 10 | | | | 13 | | | | 16 | | | 20 | | | 25 | | |
|-------------------------|-----------|----------------------------|------------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| | Form | Name | ECC | ECC | ECS | EU | ECC | ECS | EU | ECC | ECS | ECA | ECC | ECS | ECA | ECC | ECS | ECA | |
| | | DRUM | Cable size | 25 | 35 | 45 | 40 | 35 | 45 | 50 | 35 | 45 | 50 | 35 | 45 | 50 | 35 | 45 | 50 |
| 20(A) | | 2.5(mm) ² ×4(c) | 1 | 4 | | | | | | 4 | | | 5 | | | | | | |
| | | 5 | 1 | 4 | | | | | | 4 | | | 5 | | | | | | |
| | | 6 | | 4 | | 8-1 | | | | 5 | | | 5 | | | | | | |
| | | 8 | | 5 | | | | | 10 | 6 | | | 6 | | | | | | |
| | | 10 | | | 14 | 9-1 | | 14 | | | 15 | 20 | | 15 | | | | | |
| | | 12 | | | 14 | 9-1 | | 14 | | | 15 | 20 | | 15 | | | | | |
| 30(A) | | 4.0(mm) ² ×3(c) | 1 | 4 | | | 4 | | | 4 | | | 5 | | | | | | |
| | | 4 | | 4 | | | 5 | | | 5 | | | 5 | | | | | | |
| | | 5 | | 4 | | | 5 | | 10 | 5 | | | 6 | | | | | | |
| | | 6 | | 5 | | 8-1 | 6 | 14 | | 6 | | | 6 | | | | | | |
| | | 8 | | | 14 | | | 15 | 12 | | 14 | 20 | | 14 | | | | | |
| | | 10 | | | 15 | 9-1 | | 15 | 12 | | 15 | 20 | | 15 | 21 | | | | |
| 30(A) | | 6.0(mm) ² ×3(c) | 1 | 4 | | | 5 | | | 5 | | | 5 | | | | | | |
| | | 4 | | 4 | | | 5 | | | 5 | | | 6 | | | | | | |
| | | 5 | | 5 | | | 6 | | | 5 | | | 6 | 14 | | | | | |
| | | 6 | | | 14 | | 6 | | 12 | 6 | | | 6 | | | | | | |
| | | 8 | | | 14 | | | 14 | | | 15 | | | 16 | 22 | | | | |
| | | 10 | | | 15 | 9-1 | | 15 | 13 | | 16 | 21 | | 16 | 22 | | | | |
| 40(A) | | 10(mm) ² ×2(c) | | | | | | | | | | | 6 | | | | | | |
| | | 3 | | 4 | | | 5 | | | 5 | | | 6 | | | | | | |
| | | 4 | | 5 | | | 6 | | | 6 | | | | 14 | | | | | |
| | | 5 | | 5 | | | 6 | | 12 | 6 | 14 | | | 19 | | | | | |
| | | 6 | | | 14 | | | 14 | | | 15 | | | 15 | | | | | |
| | | 8 | | | 15 | 9-1 | | 15 | | | 15 | 21 | | 15 | 21 | | | | |
| 60(A) | | 16(mm) ² ×2(c) | | 5 | 14 | 8-1 | 6 | | 12 | 6 | 14 | | | 14 | | | | | |
| | | 3 | | | 14 | 8-1 | | 14 | 13 | 7 | 14 | | | 14 | | | | | |
| | | 4 | | | 14 | 8-1 | | 14 | 13 | | 15 | | | 15 | | | | | |

Spring Type

Spring Type Cable Reel

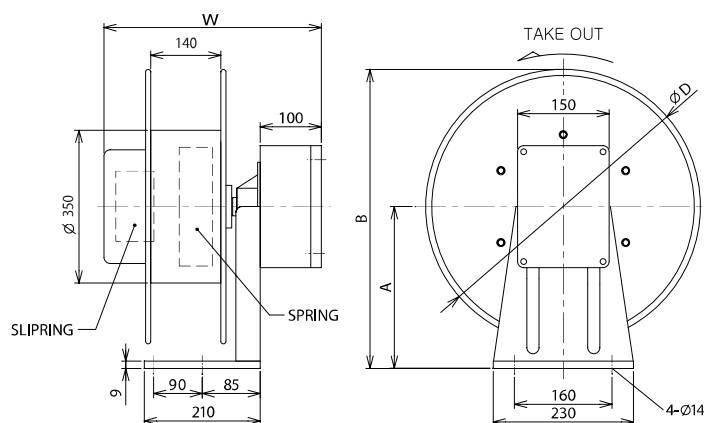
ECC 25

| No. of External schematic | Classification | | |
|---------------------------|----------------|-----|-----|
| | A | B | D |
| 1 | 240 | 440 | 400 |
| 2 | 265 | 490 | 450 |
| 3 | 290 | 540 | 500 |



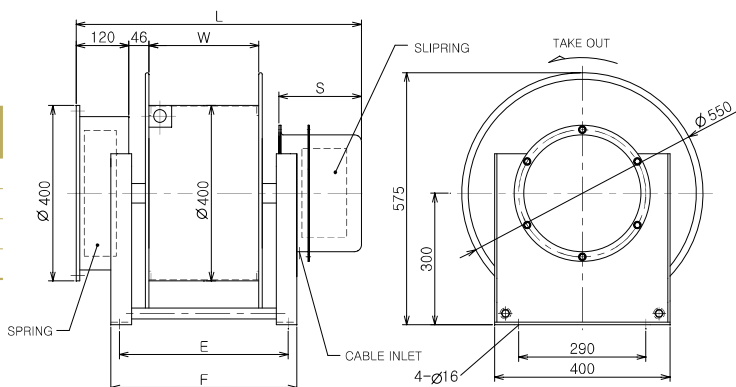
ECC 35

| No. of External schematic | Classification | | | W | |
|---------------------------|----------------|-----|-----|----------|-----------|
| | A | B | D | Pole 2~6 | Pole 6~12 |
| 4 | 290 | 540 | 500 | 410 | 510 |
| 5 | 315 | 590 | 550 | 410 | 510 |
| 6 | 340 | 640 | 600 | 410 | 510 |
| 7 | 365 | 690 | 650 | 410 | 510 |



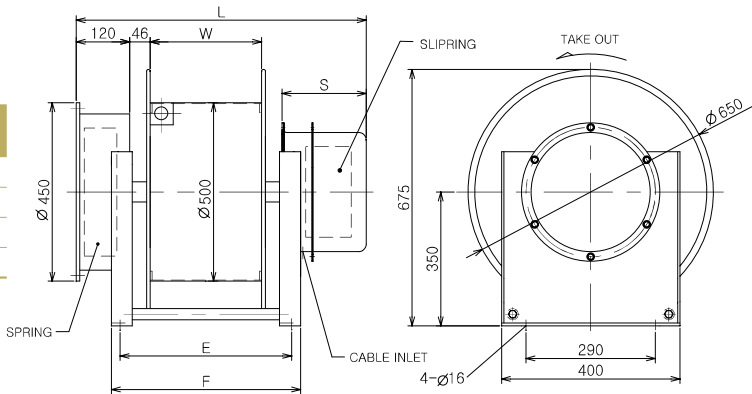
EU 40

| No. of External schematic | SP | Pole (P) | E | F | L | S | W |
|---------------------------|----|----------|-----|-----|-----|-----|-----|
| 8 | D1 | 2~6 | 385 | 424 | 650 | 180 | 250 |
| 9 | D1 | 7~10 | 485 | 524 | 850 | 280 | 350 |
| 8-1 | D2 | 2~6 | 385 | 424 | 650 | 180 | 250 |
| 9-1 | D2 | 7~10 | 485 | 524 | 850 | 280 | 350 |



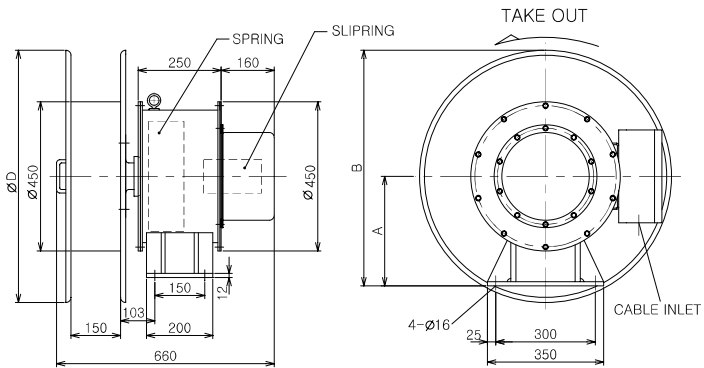
EU 50

| No. of External schematic | SP | Pole (P) | E | F | L | S | W |
|---------------------------|----|----------|-----|-----|-----|-----|-----|
| 10 | D1 | 2~6 | 385 | 424 | 650 | 180 | 250 |
| 11 | D1 | 2~10 | 485 | 524 | 850 | 280 | 350 |
| 12 | D2 | 3~6 | 385 | 424 | 650 | 180 | 250 |
| 13 | D2 | 7~10 | 485 | 524 | 850 | 280 | 350 |



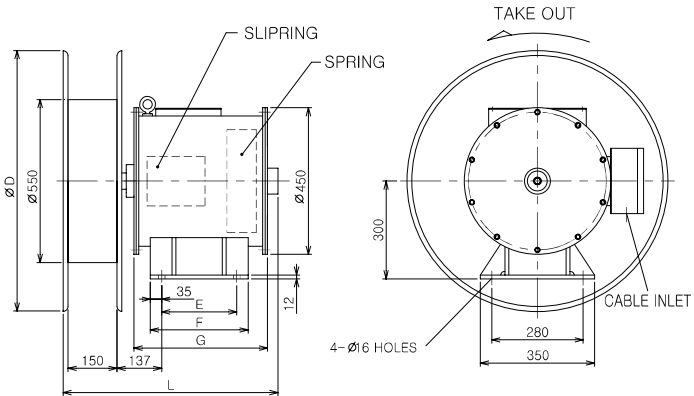
ECS 45

| No. of External schematic | Classification | | |
|---------------------------|----------------|-----|-----|
| | A | B | D |
| 14 | 280 | 605 | 650 |
| 15 | 350 | 730 | 760 |
| 16 | 350 | 780 | 860 |



ECA 50

| No. of External schematic | Classification | | | | | | |
|---------------------------|----------------|----------|-----|-----|-----|-----|-----|
| | SP | Pole (P) | D | E | F | G | L |
| 17 | D1 | 2~12 | 700 | 230 | 300 | 409 | 660 |
| 18 | D1 | 2~12 | 760 | 230 | 300 | 409 | 660 |
| 19 | D1 | 2~12 | 860 | 230 | 300 | 409 | 660 |
| No. of External schematic | Classification | | | | | | |
| | SP | Pole (P) | D | E | F | G | L |
| 20 | D2 | 2~12 | 760 | 250 | 320 | 450 | 700 |
| 21 | D2 | 2~12 | 860 | 250 | 320 | 450 | 700 |
| 22 | D2 | 2~12 | 960 | 250 | 320 | 450 | 700 |



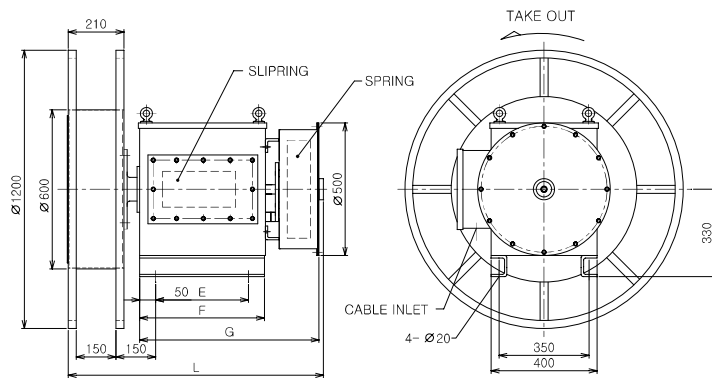
Spring Type

Spring Type Cable Reel

EAJ 60

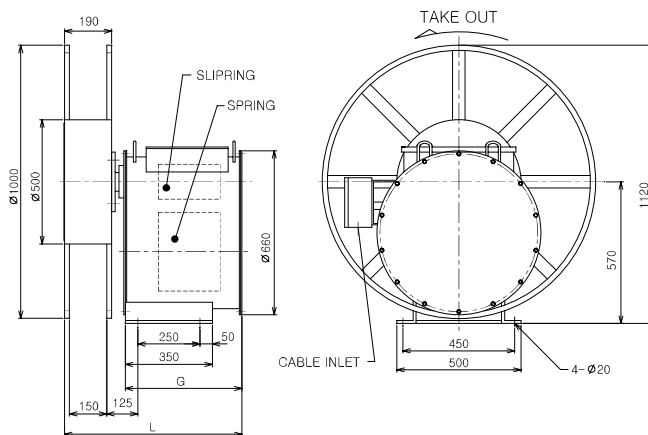
| No. of External schematic | SP | Pole (P) | E | F | G | L |
|---------------------------|----|----------|-----|-----|-----|------|
| 23 | D1 | 2~5 | 250 | 350 | 470 | 750 |
| 24 | D1 | 6~10 | 350 | 450 | 615 | 900 |
| 25 | D1 | 11~12 | 350 | 450 | 715 | 1000 |
| 26 | D2 | 2~5 | 250 | 350 | 470 | 750 |
| 27 | D2 | 6~10 | 350 | 450 | 615 | 900 |

| No. of External schematic | SP | Pole (P) | E | F | G | L |
|---------------------------|----|----------|-----|-----|-----|------|
| 28 | D2 | 11~12 | 350 | 450 | 715 | 1000 |
| 29 | D3 | 2~5 | 250 | 350 | 520 | 830 |
| 30 | D3 | 6~10 | 350 | 450 | 665 | 980 |
| 31 | D3 | 11~12 | 350 | 450 | 765 | 1100 |



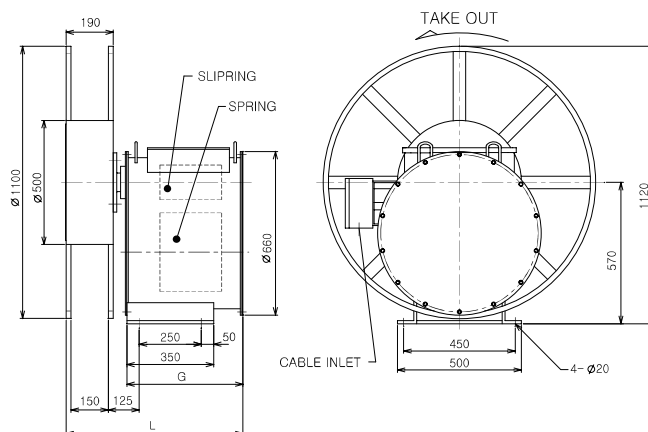
EA 50

| No. of External schematic | SP | Pole (P) | G | L |
|---------------------------|----|----------|-----|-----|
| 32 | D1 | 2~8 | 400 | 650 |
| 33 | D1 | 9~12 | 475 | 725 |
| 34 | D2 | 2~8 | 400 | 650 |
| 35 | D2 | 9~12 | 475 | 725 |
| 36 | D3 | 2~8 | 400 | 650 |
| 37 | D3 | 9~12 | 475 | 725 |



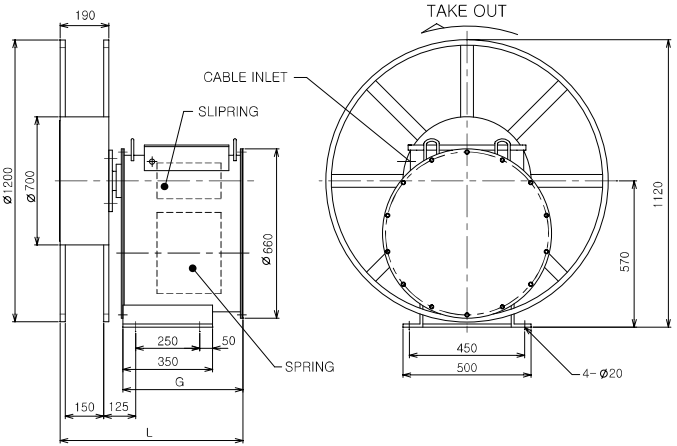
EA 50

| No. of External schematic | SP | Pole (P) | G | L |
|---------------------------|----|----------|-----|-----|
| 38 | D2 | 2~6 | 400 | 650 |
| 39 | D2 | 9~12 | 475 | 725 |
| 40 | D3 | 2~8 | 400 | 650 |
| 41 | D3 | 9~12 | 475 | 725 |

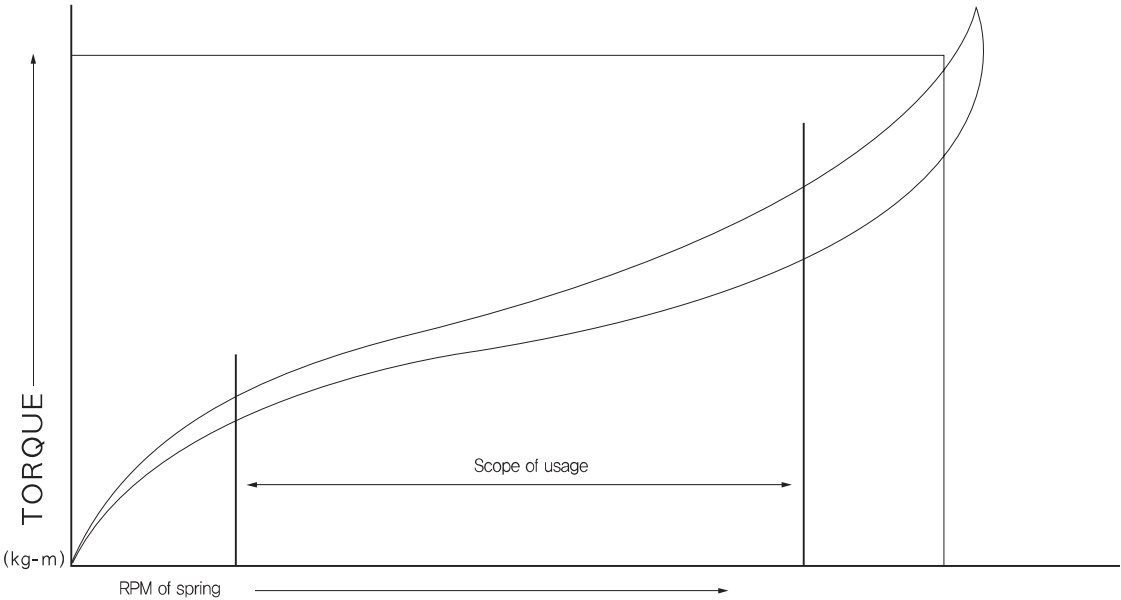


EA 70

| No. of External schematic | SP | Pole (P) | G | L |
|---------------------------|----|----------|-----|-----|
| 42 | D1 | 2~8 | 400 | 650 |
| 43 | D1 | 9~12 | 475 | 725 |
| 44 | D2 | 2~8 | 400 | 650 |



Vertical Rewinding (Fixed Reel)



- It is custom built with various specifications, appropriate to on-site conditions, installation places and environment to use it.
- Special equipments (for sound, image and underwater) are also custom built and over 50 pole is manufactured as well.