

# CONTORQ TYPE CABLE REEL

● **Protective structure** ..... **Approx.IP55**

■ **Features**

Totally-enclosed-fan-cooled motor (IP55) for winding cable reel  
Suitable for hazardous environments

■ **Applications**

Quayside crane, mixer, transfer car in a hot and dusty environment etc.

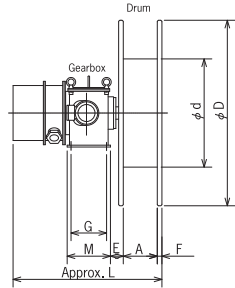
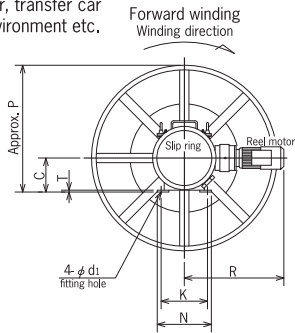
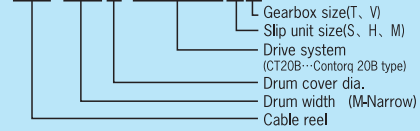


Fig.1

**Model description**

**CR-7M9-CT20BST**



**Slip ring capacity (Rated voltage AC600V)**

Slip ring capacity	Rated current	Number of poles											
		3	4	6	8	10	12	14	16	20	24	28	32
20	20A	3	4	6	8	10	12	14	16	20	24	28	32
50	50A	3	4	6	8	10	12	—	—	—	—	—	—
100	100A	3	4	—	—	—	—	—	—	—	—	—	—
150	150A	3	4	—	—	—	—	—	—	—	—	—	—

NOTE: 1. In case slip ring capacity is over 20A x 20P, L length will increase.  
2. Number of poles not listed above could be customized upon request.

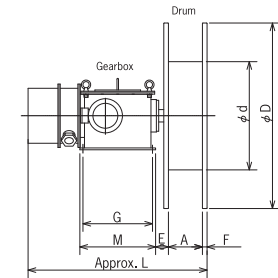
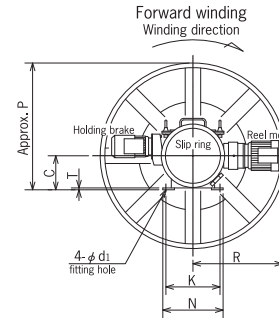


Fig.2

■ **Specifications and Dimensions**

Code	Model	Max torque N·m	Slip ring capacity	Reel motor <sup>1)</sup> capacity kW	Figure	Dimensions (mm)					Mass (kg)	
						D	d	A	C	E		F
530010	CR-6M8-CT20BST	70	20~150	1.5	Fig.1	870	440	170	220	78	5	200
530020	CR-6M8-CT20BSV	70	20~150	1.5	Fig.2	870	440	170	220	78	5	270
530030	CR-6M8-CT20BHV	100	20~150	1.5	Fig.2	870	440	170	220	78	5	280
530040	CR-6M8-CT20BMV	130	20~150	1.5	Fig.2	870	440	170	220	78	5	280
530050	CR-78-CT20BMV	130	20~150	1.5	Fig.2	870	550	220	220	78	5	290
530060	CR-7M9-CT20BST	70	20~150	1.5	Fig.1	1000	550	170	220	83	30	200
530070	CR-79-CT20BST	70	20~150	1.5	Fig.1	1000	550	220	220	83	30	210
530080	CR-8M10-CT20BST	70	20~150	1.5	Fig.1	1200	700	220	220	83	30	210
530090	CR-810-CT20BST	70	20~150	1.5	Fig.1	1200	700	275	220	83	30	220
530100	CR-811-CT20BST	70	20~150	1.5	Fig.1	1400	700	275	220	83	30	220
530110	CR-811-CT20BHV	100	20~150	1.5	Fig.2	1400	700	275	220	83	30	300
530120	CR-812-CT20BHV	100	20~150	1.5	Fig.2	1600	700	275	220	83	30	310
530130	CR-812-CT20BMV	130	20~150	1.5	Fig.2	1600	700	275	220	83	30	310
530140	CR-913-CT20BMV	130	20~150	2.2	Fig.2	1800	900	305	220	83	30	390

NOTE: No upside down setting allowed.

Dimensions (mm)										Mass (kg)
L	R	S	P	G±1	K±1	M	N	T	d <sub>1</sub>	
890	724	—	655	230	300	280	350	12	18	200
1105	724	666	655	450	350	490	390	12	18	270
1105	724	666	655	450	350	490	390	12	18	280
1105	724	666	655	450	350	490	390	12	18	280
1155	724	666	655	450	350	490	390	12	18	290
913	724	—	720	230	300	280	350	12	18	200
963	724	—	720	230	300	280	350	12	18	210
963	724	—	820	230	300	280	350	12	18	210
1018	724	—	820	230	300	280	350	12	18	220
1018	724	—	920	230	300	280	350	12	18	220
1228	724	666	920	450	350	490	390	12	18	300
1228	724	666	1020	450	350	490	390	12	18	310
1228	724	666	1020	450	350	490	390	12	18	310
1258	773	666	1120	450	350	490	390	12	18	390

■ **What is Contorq type cable reel?**

● **Structure**

Winding cable with Totally-enclosed-fan-cooled motor (IP55) drive.

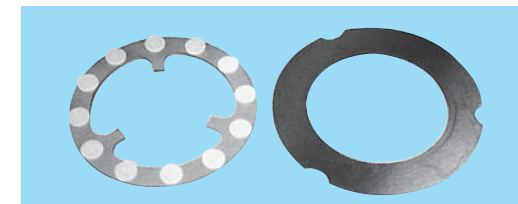
Assembled from the following modular components:

- SLIP UNIT (slip mechanism)
- Gearbox containing reduction gear
- Slip ring
- Drum etc.

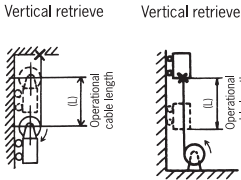
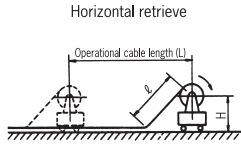
● **Slip unit**

SLIP UNIT is an equipment to maintain a torque transmission from motor.

The friction surface is composed between the friction plates radially arranged on the spindle and circular plate connected to the gears with the internal bearing (See the picture on the next page), and the friction force caused by the oil film adjusts and provides a stable torque.



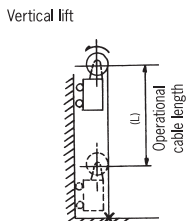
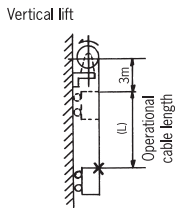
Operational cable length (L) Cable size	Contorq type Mobile application/Horizontal & vertical retrieve,				
	60m	70m	80m	90m	100m
8mm <sup>2</sup> ×3C 0.525kg/m φ 17	6M8-CT20BST	6M8-CT20BST	6M8-CT20BST	6M8-CT20BST	6M8-CT20BST
14mm <sup>2</sup> ×3C 0.795kg/m φ 20	6M8-CT20BST	6M8-CT20BST	6M8-CT20BST	6M8-CT20BST	7M9-CT20BST
14mm <sup>2</sup> ×4C 1.0kg/m φ 22	6M8-CT20BST	6M8-CT20BST	7M9-CT20BST	79-CT20BST	79-CT20BST
5.5mm <sup>2</sup> ×8C 1.0kg/m φ 24	79-CT20BST	79-CT20BST	79-CT20BST	79-CT20BST	79-CT20BST
22mm <sup>2</sup> ×3C 1.33kg/m φ 27	79-CT20BST	79-CT20BST	8M10-CT20BST	8M10-CT20BST	8M10-CT20BST
22mm <sup>2</sup> ×4C 1.67kg/m φ 29	8M10-CT20BST	8M10-CT20BST	8M10-CT20BST	810-CT20BST	810-CT20BST
38mm <sup>2</sup> ×3C 2.02kg/m φ 32	8M10-CT20BST	8M10-CT20BST	810-CT20BST	810-CT20BST	810-CT20BST
38mm <sup>2</sup> ×4C 2.55kg/m φ 35	811-CT20BHV	811-CT20BHV	811-CT20BHV	811-CT20BHV	811-CT20BHV
60mm <sup>2</sup> ×3C 3.15kg/m φ 39	811-CT20BHV	811-CT20BHV	811-CT20BHV	811-CT20BHV	812-CT20BMV



NOTE: 1. Calculated at following conditions:

- ① Cable type 2PNCT ② Applications Mobile application /Vertical & horizontal retrieve, Stationary application /Vertical retrieve
- ③ Maximum travel/lift speed less than 40mm/min ④ Installation height less than 1.0m
2. Deviations due to roller guide, non-straight cable payout, low ambient temperature, etc. are not calculated. When selecting a model, please take into consideration of high mechanical stress and harsh environment conditions.
3. For high speed or high operation frequency rate, please use premium cables.
4. Suffix -R on all model names identifies reverse winding.
5. For any special requirements, please contact us.

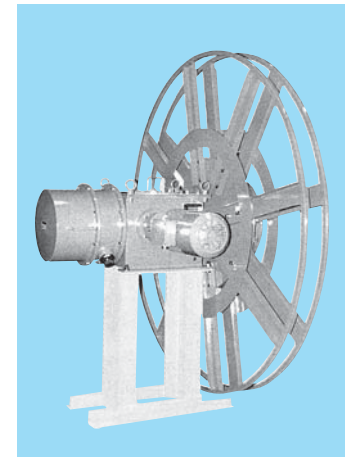
Operational cable length (L) Cable size	Contorq type Stationary application/Vertical lift, Mobile application/Vertical lift				
	10m	15m	20m	25m	30m
8mm <sup>2</sup> ×3C 0.525kg/m φ 17	6M8-CT20BSV	6M8-CT20BSV	6M8-CT20BSV	6M8-CT20BSV	6M8-CT20BHV
14mm <sup>2</sup> ×3C 0.795kg/m φ 20	6M8-CT20BSV	6M8-CT20BSV	6M8-CT20BHV	6M8-CT20BMV	6M8-CT20BMV
14mm <sup>2</sup> ×4C 1.0kg/m φ 22	6M8-CT20BSV	6M8-CT20BHV	6M8-CT20BMV	6M8-CT20BMV	
5.5mm <sup>2</sup> ×8C 1.0kg/m φ 24	6M8-CT20BSV	6M8-CT20BHV	6M8-CT20BMV	6M8-CT20BMV	
22mm <sup>2</sup> ×3C 1.33kg/m φ 27	78-CT20BMV	78-CT20BMV			
22mm <sup>2</sup> ×4C 1.67kg/m φ 29	78-CT20BMV				
38mm <sup>2</sup> ×3C 2.02kg/m φ 32	78-CT20BMV				



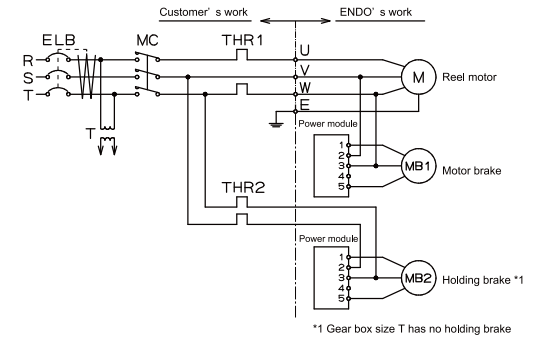
NOTE: 1. Calculated at following conditions:

- ① Cable type 2PNCT ② Applications Stationary application /Vertical lift, Mobile application /Vertical lift ③ Maximum travel/lift speed less than 30mm/min
- ④ Extensions 3m
2. Mass of accessories are not included
3. Deviations due to wind load, tidal current, buoyancy, low ambient temperature, etc. are not calculated. When selecting a model, please take into consideration of harsh environment conditions.
4. Suffix -R on all model names identifies reverse winding.
5. For any special requirements, please contact us.

Stationary application/Vertical retrieve				
110m	120m	130m	140m	150m
6M8-CT20BST	6M8-CT20BST			
7M9-CT20BST	79-CT20BST	79-CT20BST	79-CT20BST	
8M10-CT20BST	8M10-CT20BST	8M10-CT20BST	8M10-CT20BST	8M10-CT20BST
8M10-CT20BST	8M10-CT20BST	8M10-CT20BST	8M10-CT20BST	8M10-CT20BST
810-CT20BST	810-CT20BST	810-CT20BST	810-CT20BST	811-CT20BST
810-CT20BST	811-CT20BST	811-CT20BST	811-CT20BST	811-CT20BST
811-CT20BHV	811-CT20BHV	811-CT20BHV	811-CT20BHV	811-CT20BHV
811-CT20BHV	812-CT20BMV	812-CT20BMV	812-CT20BMV	812-CT20BMV
812-CT20BMV	812-CT20BMV	913-CT20BMV		

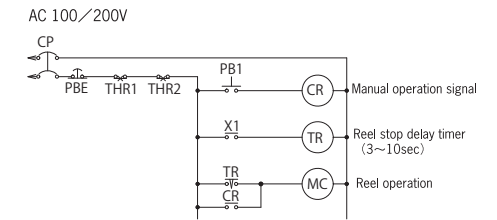


### Electric circuit (200/220/400/440V)



### Control circuit (Reference)

● M Rotate in winding direction at all times



X1 : auto operation signal for reel operation  
Please Input the transfer car travel signal

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