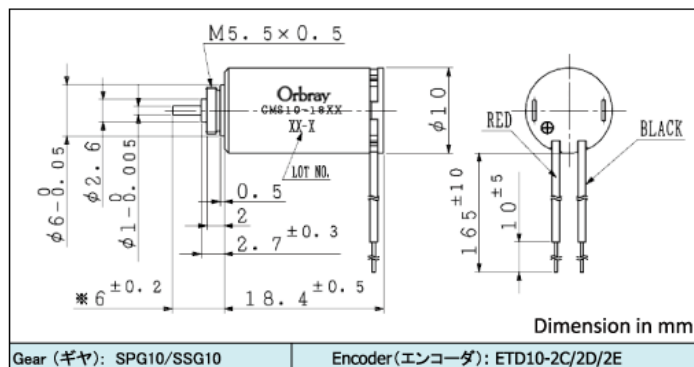
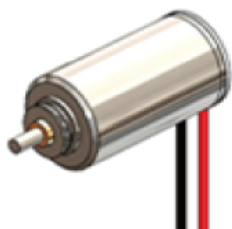


CMS10-1805/CMS10-1818/CMS10-1834

DC Coreless Motors CMS Series

[HOME](#) [Products](#) [Small Motors](#) [DC Coreless Motors](#) [Brushed Motor](#) [Brushed Motor CMS10-18](#)

Precious metal commutation, Sleeve bearing Brushed Motor.



CMS10-18 Specifications

		Brushed Motor CMS10-1805	Brushed Motor CMS10-1818	Brushed Motor CMS10-1834	
1	Nomal voltage	3.7	7.4	12.0	V
2	No load speed	12200	14600	18000	rpm
3	No load current	19	12	9	mA

		Brushed Motor CMS10-1805	Brushed Motor CMS10-1818	Brushed Motor CMS10-1834	
4	Stall torque	1.89	1.91	2.16	mNm
5	Stall current	689	418	357	mA
6	Output power	0.6	0.7	1.0	W
7	Max efficiency	69	69	71	%
8	Terminal resistance	5.37	17.72	33.66	Ω
9	Rated torque	0.271	0.273	0.293	mNm
10	Rated speed	10400	12500	15500	rpm
11	Rated current	116	70	56	mA
12	Friction torque	0.05	0.05	0.05	mNm
13	Back-EMF constant	0.295	0.492	0.651	mV/rpm
14	Torque constant	2.82	4.70	6.22	mNm/A
15	Slope of N-T curve	6444	7659	8316	rpm/mNm
16	Mechanical time constant	7.0	7.3	7.5	ms
17	Rotor inertia	0.10	0.09	0.09	gcm ²
18	Max torque	0.63	0.64	0.72	mNm

*CMS10-18 is a [Brushed Motor](#) with a diameter of 10 mm and length of 18 mm.

* How to read the model number (motor only) 「 CMS xx - yy zz 」

CMS…Coreless [Brushed Motor](#) standard series、xx…Diameter(mm)、yy…Length(mm)、zz…Terminal resistance (Ω, approximate value)

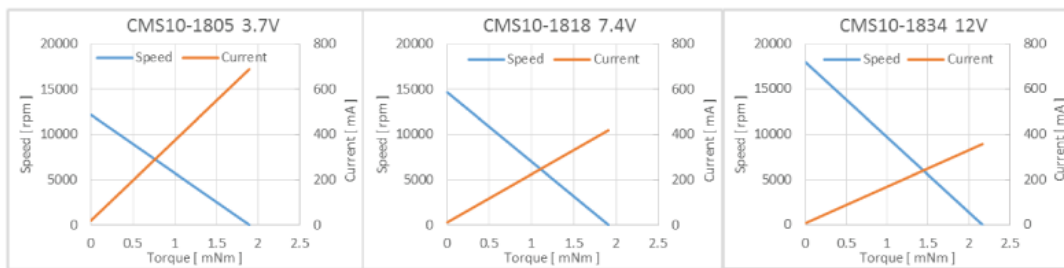
Mechanical data

19	Shaft raddial play	0.05	mm
20	Shaft axial play	0.03~0.2	mm
21	Max shaft radial load	0.5 (5mm*)	N
22	Max shaft axial load	0.15	N
23	Max shaft axial load at standstill	7.8	N

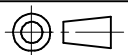
*measured at () mm from flange

Environmental data

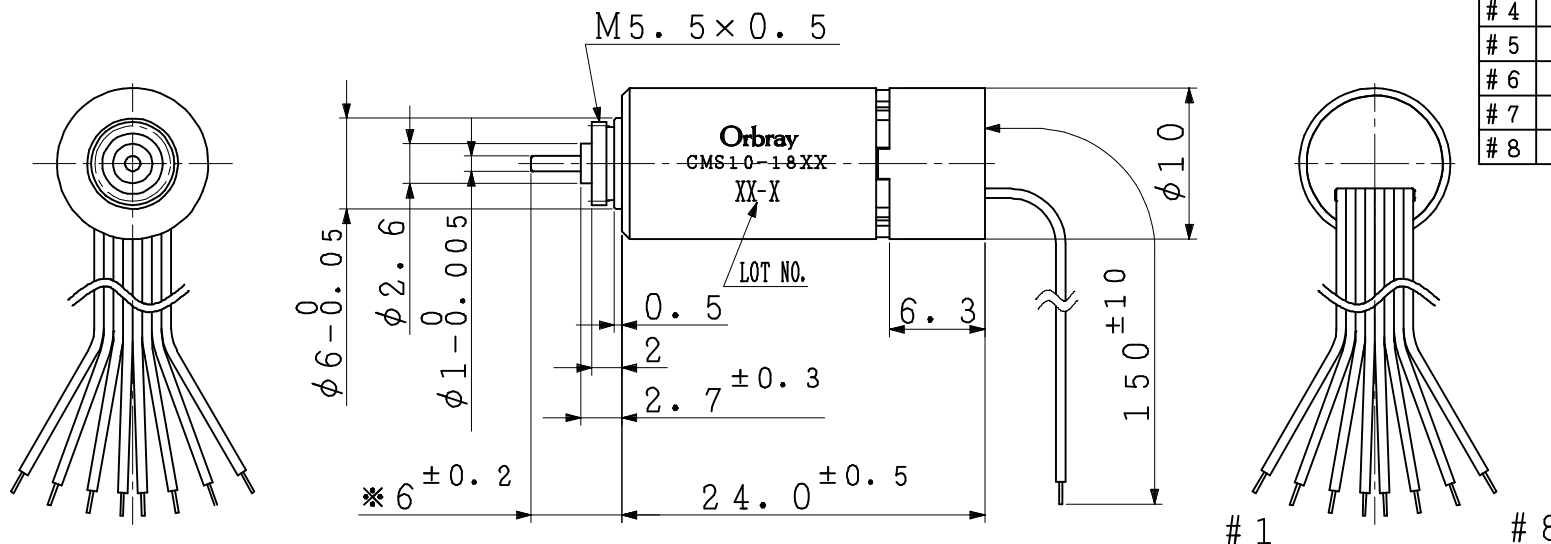
24	Operating temperature	-20~60	°C
25	Max coil temperature	80	°C
26	Weight	7.7	g
27	Number of segments	5	
28	Bearing type	Sintered sleeve	



Orbray

OPTICAL ENCODER
ELECTRICAL CONNECTIONS
PULSE/REV

# 1	(MOTOR+)
# 2	V _{cc} (DC5V±10%)
# 3	Ch. A
# 4	Ch. B
# 5	Ch. Z
# 6	GND
# 7	(MOTOR-)
# 8	NC



NOTE 1) MARKED(*) IS SHAFT LENGTH MEASURED WHEN IT IS PUSHED TO MOTOR SIDE.

※印寸法はシャフトをモータ側に押しつけた時の値を示す。

2) LOT NO.

EXAMPLE) JANUARY, 2018

「18=A」

JANUARY: A, FEBRUARY: B... DECEMBER: L

1月: A、2月: B... 12月: L

「-」 : MADE IN THAILAND

「-」有り : 海外工場生産

「-」NONE : MADE IN JAPAN

「-」無し : 国内工場生産

THE END TWO DIGIT OF CHRISTIAN YEAR

西暦年数末尾数字2桁

3) THE LEAD WIRE IS AWG30 UL2734.

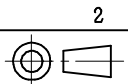
リード線はAWG30 UL2734を使用する。

4) OUTSIDE DIAMETER IS NOT APPLIED TO THE CAULKING.

外径寸法公差はカシメ部を除く。

TOLERANCE					△×					
DIMENSION(±)				ANGLE	△×					
	0	1	2	3		△×				
L≤6	0.05	0.1	0.1	0.2	±1°	△×				
6<L≤30	0.1	0.1	0.2	0.5		△×				
30<L≤120	0.15	0.2	0.3	0.8		△×				
120<L	0.2	0.3	0.5	1.2		△×				
MATERIAL	FINISH				QTY.	SYM.	DATE	NOTE		DRW. CHK. APPD.
						SCALE	2/1	TYPE	CMS10-18 0	
						UNIT	1/1mm	TITLE	OUTLINE DRAWING	
APPD.	CHK.	DSGN.	DRW.		DWG.NO.					
					REF.NO.					
.	.	27-Jan-18	27-Jan-18		CHK.NO.		REMARK	Rev. 00		

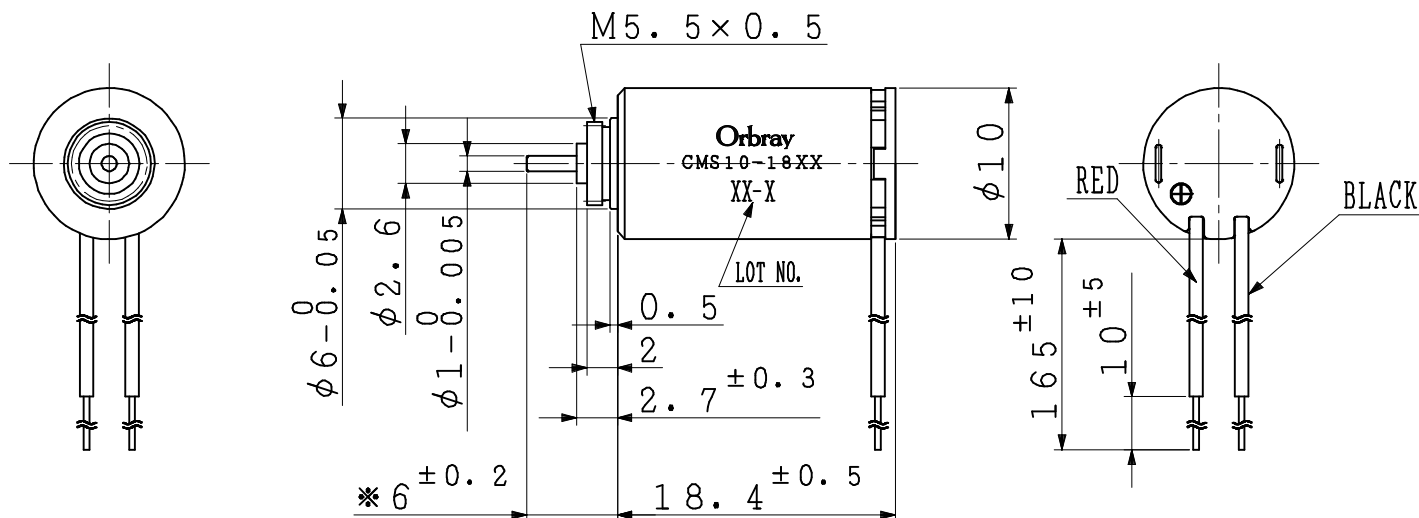
1
Orbray



3

4

5



NOTE 1) MARKED(*) IS SHAFT LENGTH MEASURED WHEN IT IS PUSHED TO MOTOR SIDE.

*印寸法はシャフトをモータ側に押しつけた時の値を示す。

2) LOT NO.

EXAMPLE) JANUARY, 2018

「18-A」

JANUARY: A, FEBRUARY: B... DECEMBER: L

1月: A、2月: B... 12月: L

「-」 : MADE IN THAILAND

「-」有り : 海外工場生産

「-」NONE : MADE IN JAPAN

「-」無し : 国内工場生産

THE END TWO DIGIT OF CHRISTIAN YEAR

西暦年数末尾数字2桁

3) THE LEAD WIRE IS AWG28 UL3302.

リード線はAWG28 UL3302を使用する。

4) OUTSIDE DIAMETER IS NOT APPLIED TO THE CAULKING.

外径寸法公差はカシメ部を除く。

TOLERANCE					△	×					
DIMENSION (±)				ANGLE	△	×					
	0	1	2	3	±1°	△	×				
L ≤ 6	0.05	0.1	0.1	0.2		△	×				
6 < L ≤ 30	0.1	0.1	0.2	0.5		△	×				
30 < L ≤ 120	0.15	0.2	0.3	0.8		△	×				
120 < L	0.2	0.3	0.5	1.2		△	×				
MATERIAL	FINISH			QTY.	SCALE	DATE	NOTE		DRW.	CHK.	APPD.
					UNIT	2/1	TYPE	CMS10-18			
					UNIT	1/1mm	TITLE	OUTLINE DRAWING			
APPD.	CHK.	DSGN.	DRW.	DWG.NO.							
				REF.NO.							
.	.	27-Jan-18	27-Jan-18	CHK.NO.		REMARK	Rev. 00				