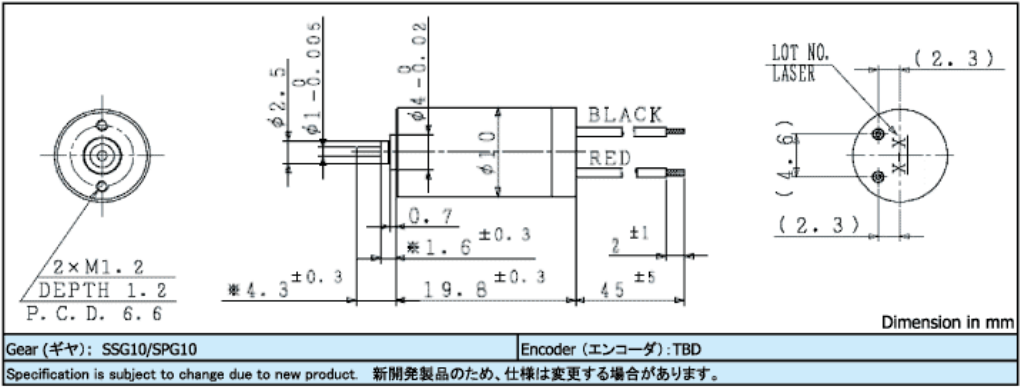


4 pole high torque brushed motor equipped with precious metal brushes and sleeve bearings.



Combination with Spur gear

Combination with Planetary gear

C4S10-1907 Specifications

Brushed Motor C4S10-1907

1	Nominal voltage	7.4	V
2	No load speed	16500	rpm
3	No load current	13	mA
4	Stall torque	4.62	mNm
5	Stall current	1100	mA
6	Output power	2.0	W
7	Max efficiency	79.6	%
8	Terminal resistance	6.7	Ω
9	Rated torque	0.45	mNm
10	Rated speed	14900	rpm
11	Rated current	120	mA
12	Friction torque	0.05	mNm
13	Back-EMF constant	0.443	mV/rpm
14	Torque constant	4.23	mNm/A
15	Slope of N-T curve	3575	rpm/mNm
16	Mechanical time constant	TBD	ms
17	Rotor inertia	0.09	gcm ²

Brushed Motor C4S10-1907

18

Max torque

1.54

mNm

Mechanical data

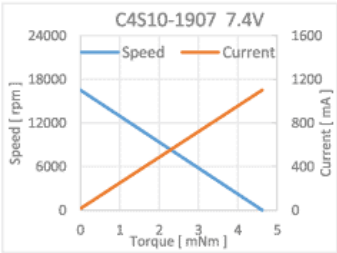
19	Shaft raddial play	0.05	mm
20	Shaft thrust play	0.03~0.2	mm
21	Max shaft radial load	TBD	N
22	Max shaft axial load	TBD	N
23	Max shaft axial load at standstill	TBD	N

*measured at () mm from flange

Environmental data

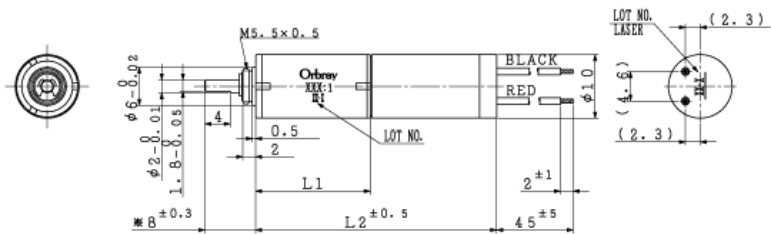
24	Operating temperature	TBD	°C
25	Max coil temperature	TBD	°C
26	Weight	8.4	g
27	Number of segments	6	
28	Bearing type	Sintered sleeve	

Sensored version available as option.



This is a combination of high efficiency / low noise spur gear head SSG12 and brushed motor C4S10-1907.

- Gearhead
- SSG10
- Brushed Motor
- C4S10-1907
- Encoder
- ETD10-2C
- ETD10-2D
- ETD10-2E



This products is under development,please inquire for details

Dimension in mm

SSG10 C4S10-1907 General specifications

Gear Ratio		15	29	49	72	93	262	
1	Reduction ratio(absolute value)	15.40 : 1	29.25 : 1	48.75 : 1	72.29 : 1	93.43 : 1	261.60 : 1	
2	Number of stage	3	4	5	5	5	6	
3	Efficiency	73	66	59	59	59	53	%
4	Direction of rotation	≠	=	≠	≠	≠	=	
5	Length (Motor + Gear = L2)	33.8	35.8	37.8	37.8	37.8	39.8	mm
	Length (Motor + Gear + Encoder)				TBD			mm
	Length (Motor + Encoder)				TBD			mm
6	Max allowable torque (Continuous)				50			mNm
7	Max allowable torque (Intermittent)				100			mNm

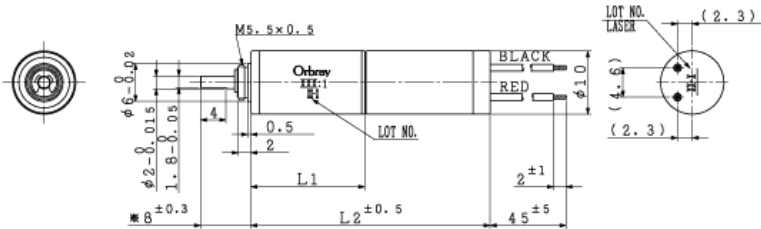
C4S10-1907S Rated voltage:7.4V

Gear Ratio		15	29	49	72	93	262	
8	No load speed	1068	563	338	228	176	63	rpm
9	No load current	17	16	16	16	15	14	mA

10	Stall torque	52	88	133	197	254	641	mNm
11	Stall current	1104	1104	1104	1104	1104	1104	mA

This is a combination of the planetary gear head SPG10, which has excellent durability under high loads / capable of transmitting high torque, and brushed motor C4S10-1907.

Gearhead
SPG10
Brushed Motor
C4S10-1907
Encoder
ETD10-2C
ETD10-2D
ETD10-2E



Dimension in mm

SPG10 C4S10-1907 General specifications

Gear Ratio		3.6	4.7	13	22	61	105	288	494	
1	Reduction ratio(absolute value)	3.60:1	4.70:1	12.96:1	22.22:1	61.10:1	104.77:1	288.03:1	493.93:1	
2	Number of stage	1	1	2	2	3	3	4	4	
3	Efficiency	85	85	72	72	61	61	52	52	%
4	Direction of rotation	=	=	=	=	=	=	=	=	
5	Length (Motor + Gear = L2)	30.3	30.3	33.4	33.4	36.3	36.3	39.4	39.4	mm
	Length (Motor + Gear + Encoder)					TBD				mm
	Length (Motor + Encoder)					TBD				mm
6	Max allowable torque (Continuous)					50				mNm
7	Max allowable torque (Intermittent)					100				mNm

C4S10-1907P Rated voltage:7.4V

Gear Ratio		3.6	4.7	13	22	61	105	288	494	
8	No load speed	4439	3431	1229	717	263	151	55	32	rpm

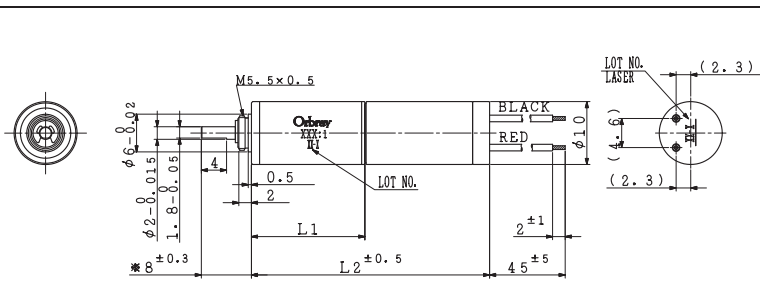
9	No load current	48	38	51	51	41	57	48	50	mA
10	Stall torque	13.7	18.0	42	72	169	285	672	1150	mNm
11	Stall current	1104	1104	1104	1104	1104	1104	1104	1104	mA

C4S10-1907 with Planetary gear (C4S10-1907 + 遊星ギヤ組合せ仕様)

Gearhead (ギヤヘッド)
SSG10

Coreless motor (コアレスモーター)
C4S10-1907

Encoder (エンコーダ)
ETD10-2C
ETD10-2D
ETD10-2E



This prducts is under development,please inquire for details
同製品は新規開発製品につき、詳細についてはお問合せ願います。

Dimension in mm

General specifications (一般仕様)

General specifications (一般仕様)		Gear Ratio (ギヤ比)								
		3.6	4.7	13	22	61	105	288		494
1	Reduction ratio(absolute value) 減速比(絶対値)	3.60 : 1	4.70 : 1	12.96 : 1	22.22 : 1	61.10 : 1	104.77 : 1	288.03 : 1	493.93 : 1	
2	Number of stage 段数	1	1	2	2	3	3	4	4	
3	Efficiency 効率	85	85	72	72	61	61	52	52	%
4	Direction of rotation 回転方向	=	=	=	=	=	=	=	=	
5	Length (Motor + Gear=L2) 全長 (モーター+ギヤ=L2)	30.3	30.3	33.4	33.4	36.3	36.3	39.4	39.4	mm
	Length (Motor + Gear + Encoder) 全長 (モーター+ギヤ+エンコーダ)	TBD (開発中)							mm	
	Length (Motor + Encoder) 全長 (モーター+エンコーダ)	TBD (開発中)							mm	
	Max allowable torque (Continuous) 最大許容 連続トルク	50							mNm	
7	Max allowable torque (Intermittent) 最大許容 断続トルク	100							mNm	

C4S10-1907P Rated voltage(定格電圧): 7.4 V

Ordering number
(組合わせ型式名)

[illegible]

※Designed value 設計値

HOW TO ORDER (ご注文の際の型式名)

C4S10-1907 MOTOR + SPG10(105:1) → C4S10-1907P105

Specifications are subject to change without notice. 仕様はやむなく変更する場合があります。

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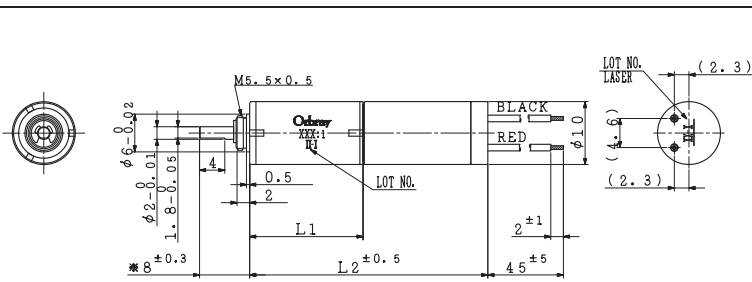
Orbray

C4S10-1907 with Spur gear (C4S10-1907 + スパーギヤ組合せ仕様)

Gearhead (ギヤヘッド)
SSG10

Coreless motor (コアレスモーター)
C4S10-1907

Encoder (エンコーダ)
ETD10-2C
ETD10-2D
ETD10-2E



This prducts is under development,please inquire for details
同製品は新規開発製品につき、詳細についてはお問合せ願います。

Dimension in mm

General specifications (一般仕様)

General specifications (一般仕様)		Gear Ratio (ギヤ比)						
		15	29	49	72	93	262	
1	Reduction ratio(absolute value) 減速比(絶対値)	15.40 : 1	29.25 : 1	48.75 : 1	72.29 : 1	93.43 : 1	261.60 : 1	
2	Number of stage 段数	3	4	5	5	5	6	
3	Efficiency 効率	73	66	59	59	59	53	%
4	Direction of rotation 回転方向	≠	=	≠	≠	≠	=	
5	Length (Motor + Gear=L2) 全長 (モーター+ギヤ=L2)	33.8	35.8	37.8	37.8	37.8	39.8	mm
	Length (Motor + Gear + Encoder) 全長 (モーター+ギヤ+エンコーダ)	TBD (開発中)						mm
	Length (Motor + Encoder) 全長 (モーター+エンコーダ)	TBD (開発中)						mm
6	Max allowable torque (Continuous) 最大許容 連続トルク	12						mNm
7	Max allowable torque (Intermittent) 最大許容 断続トルク	30						mNm

C4S10-1907S Rated voltage(定格電圧): 7.4 V

[illegible]

※Designed value 設計値

HOW TO ORDER (ご注文の際の型式名)

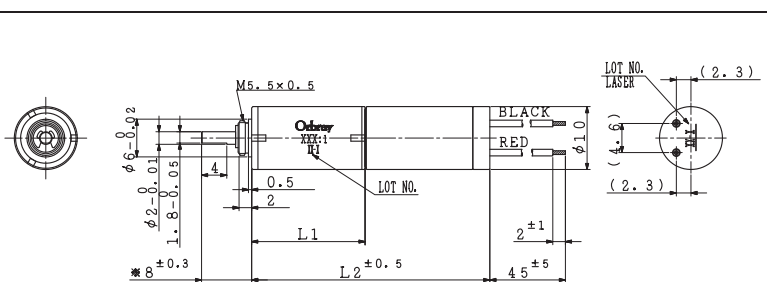
C4S10-1907 MOTOR + SSG10(262:1) → C4S10-1907S262

C4S10-1907 with Spur gear (C4S10-1907 + スパーギヤ組合せ仕様)

Gearhead (ギヤヘッド)

Coreless motor (コアレスモーター)
C4S10-1907

Encoder (エンコーダ)
ETD10-2C
ETD10-2D
ETD10-2E



This prproducts is under development,please inquire for details
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Dimension in mm

General specifications (一般仕様)

General specifications (一般仕様)			Gear Ratio (ギヤ比)						
			15	29	49	72	93	262	
1	Reduction ratio(absolute value)	減速比(絶対値)	15.40 : 1	29.25 : 1	48.75 : 1	72.29 : 1	93.43 : 1	261.60 : 1	
2	Number of stage	段数	3	4	5	5	5	6	
3	Efficiency	効率	73	66	59	59	59	53	%
4	Direction of rotation	回転方向	≠	=	≠	≠	≠	=	
5	Length (Motor + Gear=L2)	全長 (モーター+ギヤ=L2)	33.8	35.8	37.8	37.8	37.8	39.8	mm
	Length (Motor + Gear + Encoder)	全長 (モーター+ギヤ+エンコーダ)	TBD (開発中)						mm
	Length (Motor + Encoder)	全長 (モーター+エンコーダ)	TBD (開発中)						mm
6	Max allowable torque (Continuous)	最大許容 連続トルク	12						mNm
7	Max allowable torque (Intermittent)	最大許容 断続トルク	30						mNm

C4S10-1907S Rated voltage(定格電圧): 7.4 V

[illegible]

※Designed value 設計値

HOW TO ORDER (ご注文の際の型式名)

C4S10-1907 MOTOR + SSG10(262:1) → C4S10-1907S262

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