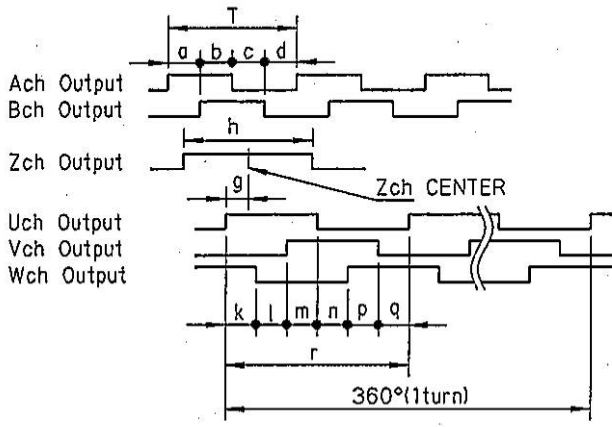
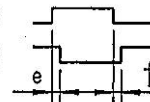


# FA-CODER SPECIFICATION

|                                                                                    |                         |                        |                                                     |                                                  |                                               |
|------------------------------------------------------------------------------------|-------------------------|------------------------|-----------------------------------------------------|--------------------------------------------------|-----------------------------------------------|
| 機能名<br>NOMENCLATURE                                                                | AR38-2500P8-L6-5V       |                        | 型式<br>MODEL                                         | TS6014N135                                       |                                               |
| 電源<br>SUPPLY                                                                       | DC+5V ±10%              |                        | 外形図<br>OUTLINE                                      | △ OTD000105Y00                                   |                                               |
|                                                                                    | 100 mA MAX.             | (NON LOAD)             |                                                     |                                                  |                                               |
| 項目<br>REQUIREMENT                                                                  | 仕様<br>VALUE             | 備考<br>NOTE             | 項目<br>REQUIREMENT                                   | 仕様<br>VALUE                                      | 備考<br>NOTE                                    |
| 符号<br>CODE                                                                         | インクリメンタル<br>INCREMENTAL |                        | 慣性率<br>MOMENT OF INERTIA                            | $1.5 \times 10^{-6} \text{ Kg-m}^2 \text{ MAX.}$ | 設計値<br>TYPICAL                                |
| 分解能<br>RESOLUTION                                                                  | 2500 C/T                | Z相 1 C/T<br>UVW相 4 C/T | 摩擦トルク<br>STARTING TORQUE                            | $6.5 \times 10^{-3} \text{ N-m MAX.}$            | AT 20°C                                       |
| 出力回路<br>OUTPUT CIRCUIT                                                             | LINE DRIVER             | 26C31                  | 最大回転速度<br>SLEW SPEED                                | $6000 \text{ min}^{-1} \text{ MAX.}$             | 機械的<br>MECHANICAL                             |
| 出力信号<br>OUTPUT SIGNAL                                                              | "1"                     | DC+2.4V MIN.           | 入力軸<br>許容位置ズレ<br>ALLOWABLE<br>SHAFT<br>DISPLACEMENT | 半径方向<br>RADIAL                                   | $0.05 \text{ mm TIR MAX.}$                    |
|                                                                                    | "0"                     | DC+0.5V MAX.           |                                                     | 軸方向<br>AXIAL                                     | $0.2 \text{ mm MAX.}$                         |
| 許容出力電流<br>SINK/SOURCE CURRENT                                                      | ±20 mA MAX.             | 設計値<br>TYPICAL         |                                                     | 軸倒れ<br>ANGLE                                     | $0.1^\circ \text{ MAX.}$                      |
| 立上り・立下り時間<br>RISE/FALL TIME                                                        | 100 nsec MAX.           | 設計値<br>TYPICAL         | 許容角加速度<br>ACCELERATION RATE                         | $10^4 \text{ rad/sec}^2$                         |                                               |
| 応答周波数<br>FREQUENCY RESPONSE                                                        | 300 kHz MAX.            | AT A.Bch               | 質量<br>MASS                                          | $0.1 \text{ Kg MAX.}$                            |                                               |
| 絶縁抵抗<br>INSULATION RESISTANCE                                                      | 10MΩ                    | DC500VMEGA<br>GND-CASE | 動作温度範囲<br>OPERATING TEMP.                           | $-20^\circ\text{C} \sim +100^\circ\text{C}$      |                                               |
| 絶縁耐圧<br>DIELECTRIC STRENGTH                                                        | AC500V 1min             | GND-CASE               | 保存温度範囲<br>STORAGE TEMP.                             | $-25^\circ\text{C} \sim +100^\circ\text{C}$      |                                               |
|  |                         |                        | 耐湿性<br>HUMIDITY                                     | 90 %RH MAX.                                      | 結露させぬこと<br>WITHOUT CONDENSATION<br>40°C, 96Hr |
|                                                                                    |                         |                        | 保護構造<br>PROTECTION                                  | IP40                                             |                                               |
|                                                                                    |                         |                        | 耐振動性<br>VIBRATION                                   | 1.5mm, 5~57Hz<br>98m/s <sup>2</sup> , 57~200Hz   | 3方向各2Hr<br>3AXIS 2Hr EACH                     |
|                                                                                    |                         |                        | 耐衝撃性<br>SHOCK                                       | 980m/s <sup>2</sup> , 11msec                     | 6方向各3回<br>6AXIS 3TIMES EACH                   |

A.B.Z.U.V.W

A.B.Z.U.V.W



$$T = \frac{360 \text{ deg}}{2500 \text{ C/T}}$$

$$a, b, c, d = \frac{T}{4} \pm \frac{T}{8}$$

$$h = T \pm \frac{T}{2}$$

k, l, m, n, p, q =  $15^\circ \pm 1^\circ$  (MECHANICAL)

r =  $90^\circ \pm 1^\circ$  (MECHANICAL)

g =  $1^\circ$  (BETWEEN Zch CENTER AND Uch RISE)

| CONNECTION | COLOR        | FUNCTION   | COLOR       | FUNCTION   | COLOR             | FUNCTION |
|------------|--------------|------------|-------------|------------|-------------------|----------|
|            | BLUE         | Ach Output | BROWN       | Uch Output | RED               | DC+5V    |
|            | BLUE/BLACK   | Ach Output | BROWN/BLACK | Uch Output | BLACK             | GND(OV)  |
|            | GREEN        | Bch Output | GRAY        | Vch Output | SHIELD            | NC       |
|            | GREEN/BLACK  | Bch Output | GRAY/BLACK  | Vch Output |                   |          |
|            | YELLOW       | Zch Output | WHITE       | Wch Output |                   |          |
|            | YELLOW/BLACK | Zch Output | WHITE/BLACK | Wch Output |                   |          |
|            |              |            |             |            | CORE SIZE : AWG28 |          |

△ 外形図変更  
03. 7.14

△

△

△

△

ED-N NO.

DS'D  
S. Nakajima

DATE

03. 1.22

MODEL NO.

TS6014N135

TITLE. FA-CODER仕様書

FA-CODER  
SPECIFICATION

CH'D  
K. Tamura

DWG NO.

3

4

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8

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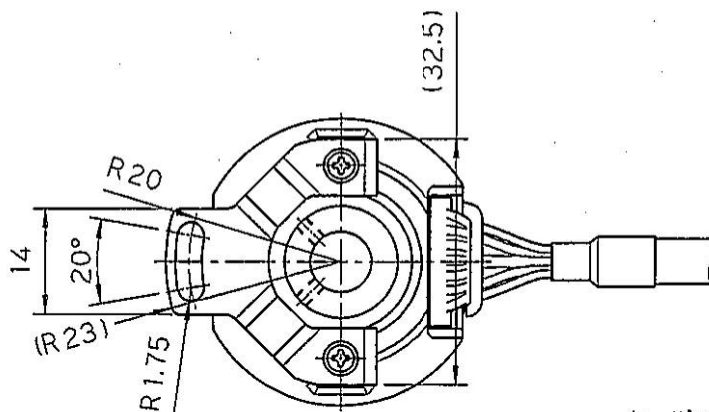
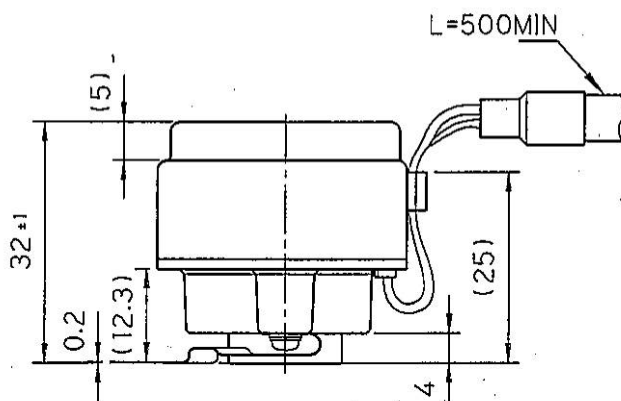
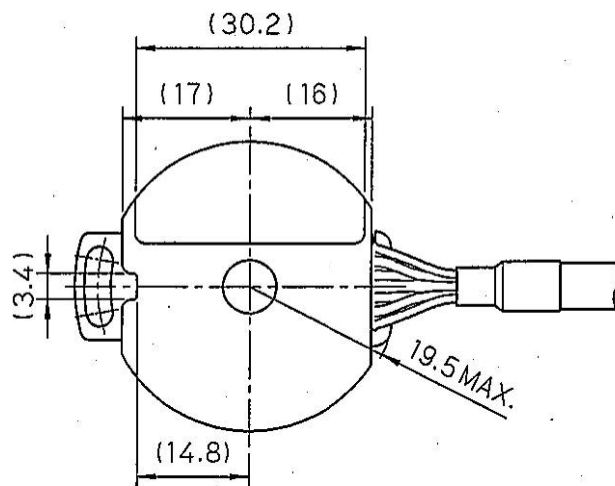
SHEET

APP'D  
K. Hatakeyama

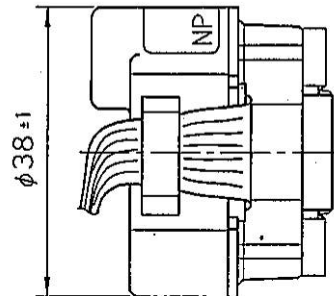
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# REVISIONS

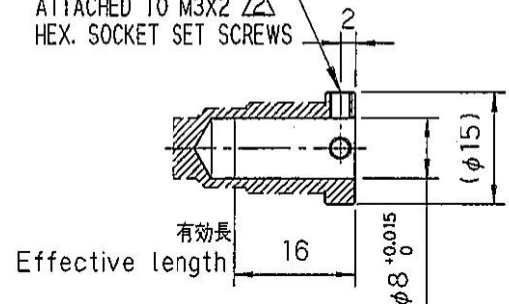
| NO. | DESCRIPTION      | DATE / SIGN |
|-----|------------------|-------------|
| △   | Error in writing | 04. 2. 2    |
| △   | Error in writing | 05.12.28    |



上図軸位置にてZ相出力(0° ±5°) △  
Z IS GENERATED WHEN HUB IS ORIENTED AS SHOWN ABOVE. (0° ±5°)  
指定無き寸法公差±0.5mm  
UNLESS OTHERWISE SPECIFIED.TOLERANCE ±0.5mm

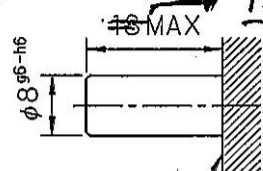


2-M3 六角穴付止めネジ  
(クボミ先)付属  
ATTACHED TO M3X2  
HEX. SOCKET SET SCREWS



## 軸詳細図

Shaft details



エンコーダ取付面  
Encoder mounting surface

## 推奨モータ軸

Recommend dimensions  
on motor shaft

ケーブルは0.5kgf以上の力で引っ張らないで下さい。  
コネクタの抜き差しは行わないで下さい。  
軸のM3セットネジの推奨締め付けトルク:0.9N-m  
バネの取付ネジは平座金を使用して下さい。  
Don't pull the cable.(max pulling force 0.5kgf.)  
Don't recommend to connect and disconnect.(connector)  
Tighten torqu of M3 socket screw:0.9N-m  
Plain washer should be used for fixing spring plate.

|                         |                  |                      |                  |                       |
|-------------------------|------------------|----------------------|------------------|-----------------------|
| DS'D<br>T. Fukuda       | DATE<br>03. 6. 2 | MODEL NO.            | TITLE<br>OUTLINE | TSC<br>05.12.29<br>PC |
| CH'D<br>T. Fukuda       | SCALE<br>1/1     | 3RD ANGLE PROJECTION |                  |                       |
| APP'D<br>M. Furukayashi | DWG NO.          | 3                    | 4                | 5                     |
|                         |                  | 6                    | 7                | 8                     |
|                         |                  | 9                    | 10               | 11                    |
|                         |                  | 12                   | SHEET            |                       |
|                         |                  | 0                    | T                | D                     |
|                         |                  | 0                    | 0                | 0                     |
|                         |                  | 1                    | 0                | 5                     |
|                         |                  | Y                    | 0                | 0                     |
|                         |                  | /                    |                  |                       |