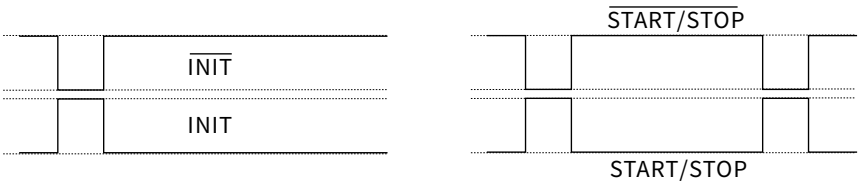
T-Series

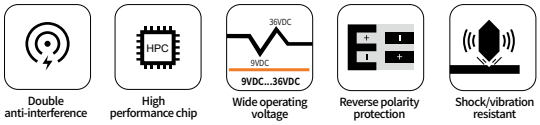
# T3D Split Type

## T-Series Ⅲ T3D-Start/Stop




+ Updated new generation: stronger performance
+ Quick installation: split type design, adaptable with installation in rather tight space
+ The highest temperature endurance of electronics housing up to 120°C , adaptable in coking industry

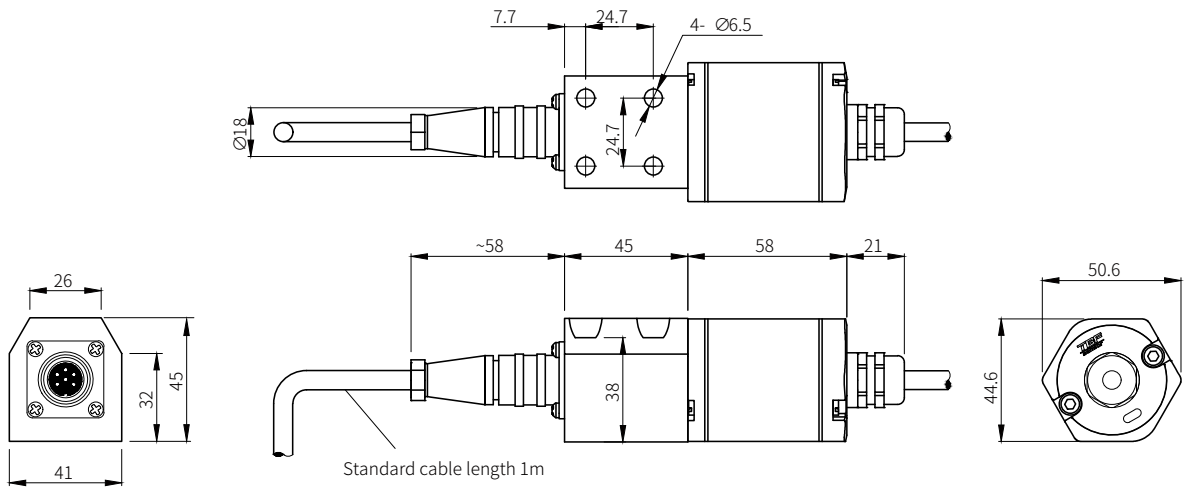
THE NEW Ⅲ GENERATION



| ITEM | CATEGORY | PARAMETER |
|---|---|---|
| **Input** | Measured data | Position |
| | Measurement range | 25mm...5600mm |
| **Output** | Digital | Start/Stop pulse, DPI/IP mode supportive |
| **Resolution** | Resolution | Depends on controller |
| | None-Linearity | ＜ ±0.02%F.S. (min. ±50μm) |
| | Repeatability | ＜ ±0.001%F.S. |
| | Update time | Depends on controller |
| | Temperature coefficient | ＜ 30ppm/°C |
| **Mounting** | Mounting position | Any |
| | Electronics housing | Fixed with M6 screw |
| | Pressure resistance outer tube | Embedded installation, thread metric M18×1.5, metric M16x1.5 |
| **Design/ Material** | Electronics housing | Aluminum alloy/zinc alloy |
| | Measuring rod | Stainless steel 304/316L |
| | Operating pressure | 35MPa (continuous) ,70MPa (peak) |
| **Electrical connection** | Wiring connection | Straight out cable or aviation plug |
| | Operating voltage | 9VDC...36VDC |
| | Polarity protection | Up to -36VDC |
| | Overvoltage protection | Up to +36VDC |
| | Power consumption | ＜ 80mA (varies with range size) |
| | Dielectric strength | 500 VDC (DC ground to machine ground) |
| **Operating conditions** | Loop velocity | Any |
| | Operating temperature | -40...120°C (DPI mode only)/-40...105°C (DPI/IP mode) |
| | Humidity | 90 % relative humidity, no condensation |
| | Ingress protection | Measuring rod IP68, Electronics housing IP67 |
| | Shock | 100 g/11 ms, IEC standard 60068-2-27 |
| | Vibration | 10 g/10...2000 Hz, IEC standard 60068-2-6 (resonant frequencies excluded) |
| | EMC | Electromagnetic emission according to EN 61000-6-3<br>Electromagnetic immunity according to EN 61000-6-2 |

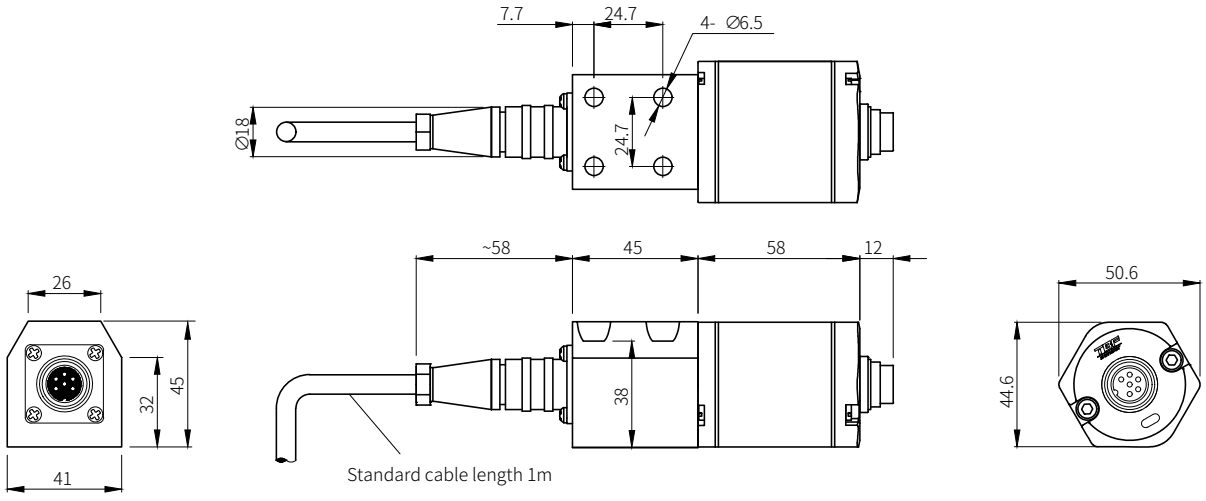
T3D- ____- **RP_ _ - _____**
T3D- ____- **RT_ _ - _____**

Straight out cable




T3D- ____- **D616 - _____**
T3D- ____- **D716 - _____**
T3D- ____- **D816 - _____**
T3D- ____- **D812 - _____**

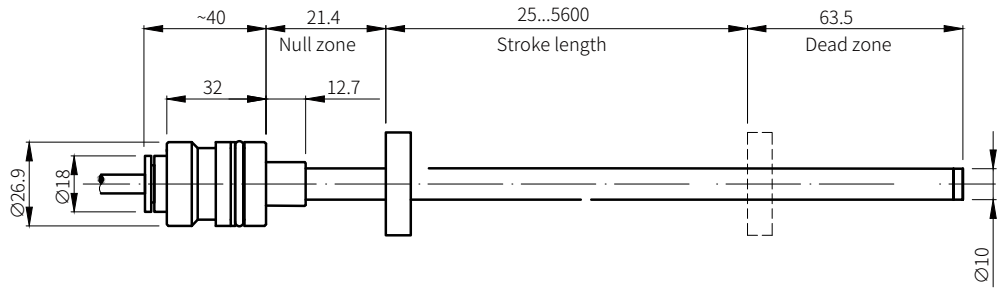
Aviation plug



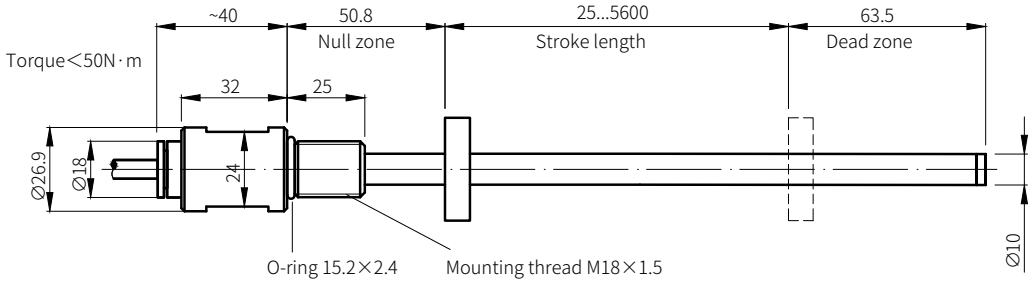
# MEASURING ROD DRAWING



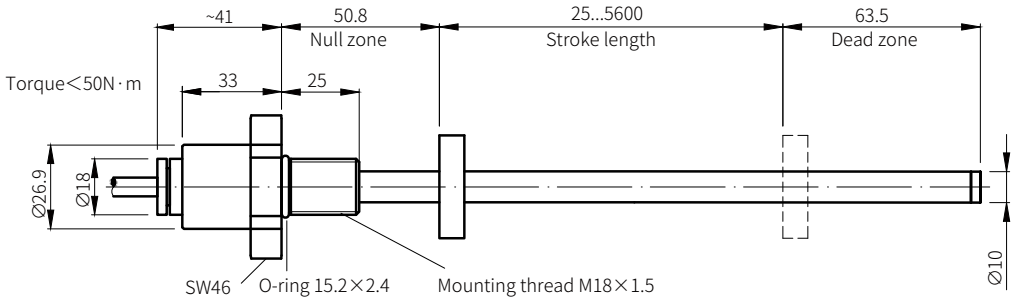
## S Type




## M Type



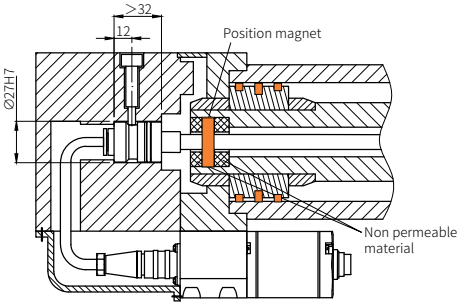

## C Type



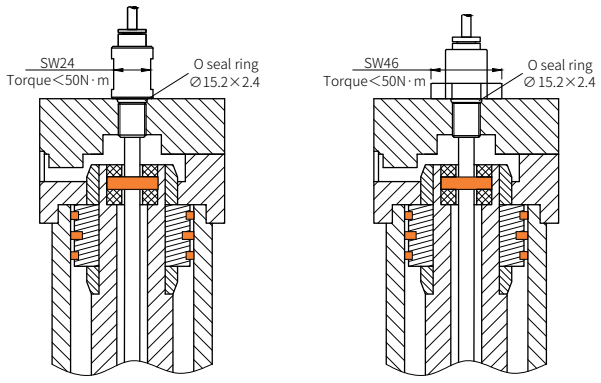

## MECHANICAL MOUNTING DIAGRAM

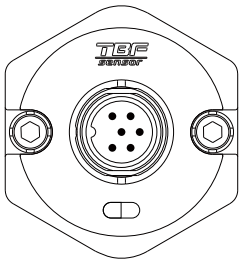
+ Secure the magnet with non-permeable gasket.
+ The size of hole in the piston rod depends on factors such as hydraulic pressure and piston speed. The minimum hole size is Φ13.5 (Φ10 measuring rod) .

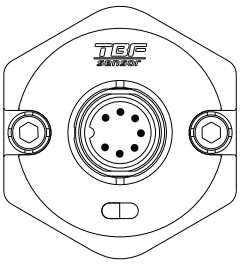
### Mounting drawing for S Type

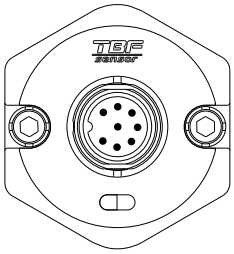


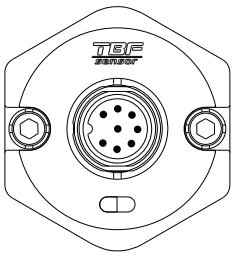

### Mounting drawing for M and C Type

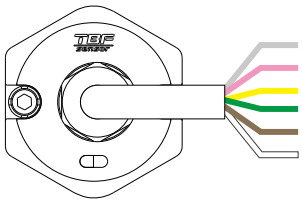


| 6 pin M16 connector | D616 | PIN | Function |
|---|---|---|---|
|  |  View on sensor | 1 | Start/Stop- |
| | | 2 | Start/Stop+ |
| | | 3 | Init+ |
| | | 4 | Init- |
| | | 5 | 9VDC...36VDC |
| | | 6 | 0 VDC(GND) |

| 7 pin M16 connector | D716 | PIN | Function |
|---|---|---|---|
|  |  View on sensor | 1 | Init+ |
| | | 2 | Start/Stop+ |
| | | 3 | Init- |
| | | 4 | NC |
| | | 5 | Start/Stop- |
| | | 6 | 0 VDC(GND) |
| | | 7 | 9VDC...36VDC |

| 8 pin M12 connector | D812 | PIN | Function |
|---|---|---|---|
|  |  View on sensor | 1 | Init+ |
| | | 2 | Start/Stop+ |
| | | 3 | Init- |
| | | 4 | NC |
| | | 5 | Start/Stop- |
| | | 6 | 0 VDC(GND) |
| | | 7 | 9VDC...36VDC |
| | | 8 | NC |

| 8 pin M16 connector | D816 | PIN | Function |
|---|---|---|---|
|  |  View on sensor | 1 | Init+ |
| | | 2 | Start/Stop+ |
| | | 3 | Init- |
| | | 4 | NC |
| | | 5 | Data- |
| | | 6 | 0 VDC(GND) |
| | | 7 | 9VDC...36VDC |
| | | 8 | NC |

| Straight out cable | | Color | Function |
|---|---|---|---|
|  | | Gray | Start/Stop- |
| | | Pink | Start/Stop+ |
| | | Yellow | Init+ |
| | | Green | Init- |
| | | Brown | 9VDC...36VDC |
| | | White | 0 VDC(GND) |

# ORDER CODE



**T3D - _ - _ _ _ _M-_ _ _ _ - _ _ - _ _**

**Measuring rod**

S S type
N M type, M16x1.5
M M type, M18x1.5
C C type, M18x1.5

**Stroke length**

0025...5600mm
(5mm increments)

**Connection type**

RP/T_ _ Straight out _ _m high performance /high temperature cable
(Fill in zero if less than 2 places )
D616 6 pin M16 connector
D716 7 pin M16 connector
D816 8 pin M16 connector
D812 8 pin M12 connector

**Output**

(Output Code)

**Start/Stop Output Code** [1][2]-[3][4]

**[1][2] Output**

SS DPI mode only
SD DPI/IP mode

**[3][4]Magnet**

01 one magnet
02 two magnets

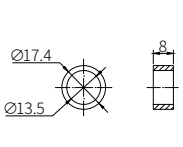
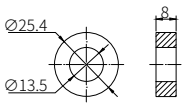
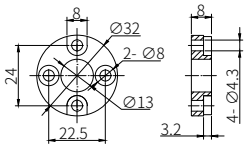
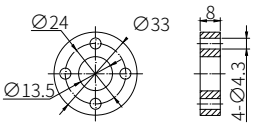
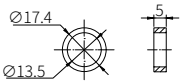
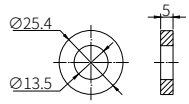
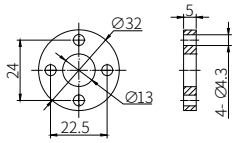
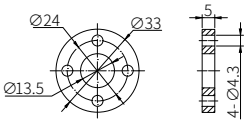
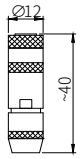
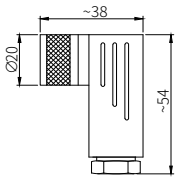
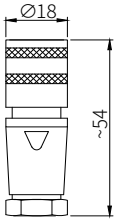
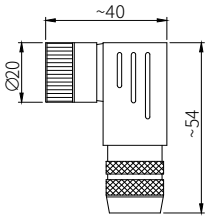
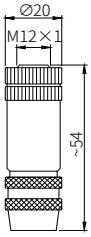
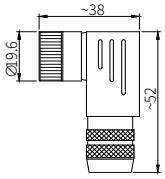
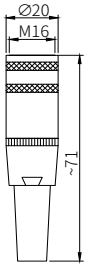
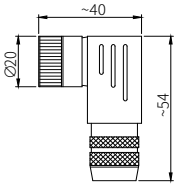
**Model selection** Model: T3D-M-0600M-D616-SS-01

Explanation: T series III generation, T3D split type sensor with measuring rod M type, mounting thread metric M18x1.5, stroke length 600mm, 6pin M16 aviation plug, Start/Stop output, DPI mode only, single magnet.

**Please contact us for more customized products.**

# PARTS SELECTION



| | | | | |
|---|---|---|---|---|
| |  |  |  |  |
| Name | Ring magnet | Ring magnet | Ring magnet | Ring magnet |
| Operating temperature | -40...125°C | | | |
| **Order code** | **12-1032** | **12-1019** | **12-1024** | **12-1001** |
| Fitting non-permeable gasket |  |  |  |  |
| Name | Non-permeable gasket | Non-permeable gasket | Non-permeable gasket | Non-permeable gasket |
| Operating temperature | -40...125°C | | | |
| **Order code** | **12-1037** | **12-1021** | **12-1025** | **12-1008** |
| |  |  |  |  |
| Name | 6 pin M16 female connector | 6 pin M16 female connector (90 degree angle) | 7 pin M16 female connector | 7 pin M16 female connector (90 degree angle) |
| End view drawing |  | |  | |
| Material | Galvanized nickel | | | |
| Fitting diameter | 6...8mm | | | |
| Connection | Welding | | | |
| **Order code** | **18-3001** | **18-3003** | **18-4001** | **18-4002** |
| |  |  |  |  |
| Name | 8 pin M12 female connector | 8 pin M12 female connector (90 degree angle) | 8 pin M16 female connector | 8 pin M16 female connector (90 degree angle) |
| End view drawing |  | |  | |
| Material | Galvanized nickel | | | |
| Fitting diameter | 8...10mm | 6...8mm | 6...9mm | 6...8mm |
| Connection | Threaded | | Welding | |
| **Order code** | **18-5004** | **18-5005** | **18-5002** | **18-5003** |

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