TURCK Sensors Part Number Key

B	i	10	U	-		G	T	30		-	A	DZ	30	X2		Wiring Option*	Special Option Code*

Mounting

B = embeddable
BID 2 = high pressure sensor
N = nonembeddable
S = slot
W = position

Principle of Operation

C = capacitive
CC = ESD immune
CF = capacitive (noise immune)
i = inductive
IM = inductive magnet operated
R = reed

Rated Operating Distance (mm)

Sensing Characteristics

F = front sensing on Q26 and Q34 sensor
FE = ferrous only
NF = nonferrous only
R = ring sensor
S = side sensing on Q26 sensor
T = side sensing on Q34 sensor
U = ***uprox***® sensor

Housing Material Modifier

E = stainless steel

Housing Style

Barrel - Metal
G = full threading, generally chrome plated brass
GS = threaded side sensor
H = smooth, chrome plated brass or stainless steel
HS = smooth side sensor
M = partial threading, chrome plated brass

Barrel - Plastic
K = smooth
P = full threading
PT = PVDF, full threading
S = partial threading
SK = side sensing / slot sensor, plastic housing
T = right angle
TS = tube sensing

Rectangular
Q = metal or plastic, various rectangular styles
QV = plastic, variable position

Limit Switch
CA = ***stubby***®, short aluminum housing, connector
CK = ***stubby***®, short plastic housing, connector
CP = ***combiprox***®, plastic housing, terminal chamber base with removable sensor

Slot
K = slot sensor, plastic housing

Ring
32SR = large plastic housing, static or dynamic output
Q = small rectangular plastic housing, static output
W = small plastic housing, dynamic output

permaprox®
A23 = metal, clamp-on; active face centered
AKT = plastic, clamp-on; active face centered
IKE = metal, clamp- or strap-on; active face on end
IKM = metal, clamp- or strap-on; active face on end
IKT = metal, clamp- or strap-on; active face centered
INT = plastic, groove mount or strap-on; active face on end
INR = plastic, groove mount; active face on end
KST = metal/plastic, strap-on; active face centered
NST = plastic, clamp-on; active face centered
PSM = metal/plastic, strap-on; active face on end
PST = plastic, strap-on; active face on end
QST = plastic, clamp-on; active face on end
UNT = new version of INT, plastic, groove mount or strap-on; active face on end

Cylinder Rotatable
CRS = cylinder rotatable sensor with probe, metal

Primary Barrel Modifier

T = teflon® coated

Load Dump

LD = load dump

Number of LEDs

(blank) = no LED's
X = 1 LED
X2 = 2 LED's

Voltage Range

AC/DC: (No SCP)**
3 = 20-250 VAC, 10-300 VDC
14 = 20-132 VAC, 10-140 VDC
31 = 20-250 VAC, 10-300 VDC, plastic barrel
33 = 35-250 VAC, grounded metal barrel

AC/DC: (Latched SCP)
30 = 20-250 VAC, 10-300 VDC
32 = 20-250 VAC, 10-300 VDC
40 = 20-140 VAC/DC, high off-state current

DC:
4 = 10-65 VDC, polarity protected, pulsed SCP**
6 = 10-30 VDC, polarity protected, pulsed SCP
7 = 10-30 VDC, TTL compatible
8 = 20-30 VDC, polarity protected, pulsed SCP
41 = 10-65 VDC, polarity protected, pulsed SCP
44 = 10-55 VDC
45 = 8.4-64 Volts
61 = 10-30 VDC, polarity protected, pulsed SCP
**SCP = short-circuit and overload protection

Output

D = 2-wire DC (transistor output)
DZ = 2-wire AC/DC, (power MOSFET output)
LF = frequency output
G = 2-wire DC, low voltage drop
LI(LU) = linear analog output current (LI, 15-30 VDC) or voltage (LU, 18-30 VDC)
LIU = linear analog output (current and voltage, 15-30 VDC)
N = NPN transistor (current sinking)
P = PNP transistor (current sourcing)
R = relay output
SIU = analog output (non-linear)
Z = 2-wire AC or 2-wire AC/DC

Output Function

A = normally open (N.O.)
DA = dynamic output (ring sensor), normally open
F = connection programmable (N.O. or N.C.)
R = normally closed (N.C.)
U = jumper programmable (N.O. or N.C.)
V = complementary outputs: one N.O., one N.C.
Y0 = NAMUR output, requires switching amplifier
Y1 = NAMUR output, requires switching amplifier

Secondary Barrel Modifier

CA = conduit adaptor
E = extended barrel length
EE = extra long barrel length
F = stainless steel face
FE = stainless steel face, extended barrel length
FM = stainless steel face, medium barrel length
H = ***weldguard***®/***stoneface***®
K = short barrel length
M = medium barrel length
S = Side sensing
SE = extended length (Q8SE only)
SK = right-angle terminal chamber
SR = straight terminal chamber
T = barb fitting at cable entry
TC = terminal chamber
WD = washdown IP67/IP68/IP69K
WDTC = washdown IP67/IP68/IP69K and terminal chamber

Housing Diameter or Height (mm) or CRS Probe Length (mm = Number/10)

NOTE: Part Number Keys are to assist in IDENTIFICATION ONLY.
Verify New Part Numbers with Factory; Some Configurations Are Not Possible.
* See reverse side for Wiring Options and Special Option Codes

Wiring Options

A) Connectorized Sensor

Bi2-M12-AN6X - H1 1 4 1

Connector Family

B1 = ***minifast***®, 7/8"-16UN, metal, male
B2 = ***minifast***®, 7/8"-16UN, plastic, male
B3 = ***microfast***®, 1/2"-20UNF, metal, male
H1 = ***eurofast***®, M12x1, metal or plastic, male
V1 = ***picofast***®, snap and M8x1, metal, male (Q08 snap only)
V2 = ***picofast***®, snap and M8x1, male (Q08 only)

Connector/Sensor Transition

1 = straight
3 = straight with adapter
4 = right-angle with adapter

Factory Code

examples:
0 = non-standard wiring
1 = standard wiring
3 = N.C. DC output on pin 4 (for US)
4 = N.O. 2 wire DC output on pin 4

Number of Pins

3 = 3
4 = 4
5 = 5

B) Potted Cable

Bi2-G12-AN6X 7M

Cable Length

(blank) = 2 meter cable
7M = 7 meter cable
*M = custom cable lengths available

C) Potted Cable with Molded Connector

Bi2-G12-Y0X - 0.2M - RS 4.21T

Cable Length

examples:
0.2M = 0.2 meters (minimum)
2M = 2 meters
*M = custom cable lengths available

Standard Cordset Connector

AC: RSM 30 = ***minifast***, 7/8"-16UN, metal, male, 3-conductor
SB 3T = ***microfast***, 1/2"-20UNF, metal, male, 3-conductor
DC: RS 4T = ***eurofast***, M12x1, metal or plastic, male, 3-conductor
RS 4.2T = ***eurofast***, M12x1, metal or plastic, male, 2-conductor
RS 4.21T = ***eurofast***, M12x1, metal or plastic, male, NAMUR, 2-conductor
RS 4.4T = ***eurofast***, M12x1, metal or plastic, male, 4-conductor
RSM 40 = ***minifast***, 7/8"-16UN, metal, male, 4-conductor
PSG 3 = ***picofast***, snap, plastic, male, 3-conductor
PSG 3M = ***picofast***, M8x1, metal, male, 3-conductor

Special Option Codes

Option Codes for Special or Custom-Built Sensors

Bi 2-S12-AN7X /S100 OR **Bi10R-W30-DAN6X-H1141 /F2**

examples:
/S34 = weld field immune
/S90 = PUR cable
/S97 = -40°C (-40°F) operating temperature
/S100 = +100°C (+212°F) operating temperature
/S120 = +120°C (+248°F) operating temperature
/S139 = submersible
/S250 = without potentiometer (capacitive only)
/S907 = +160°C (+320°F) operating temperature
/S1589 = barrel sensors with ***weldguard***® laminate
/S1590 = CA40 sensor with ***weldguard***® laminate
/S1610 = barrel sensors with ***armorguard*** sleeve and ***weldguard***® laminate
/S1751 = FM2 approved

example:
/F2 = alternate oscillator frequency