



## **FEATURES & BENEFITS**

#### **High Density**

• Compact, high density footprint in 20 and 48 position options

#### Ease-of-Use

- Seamless mating operation with integrated lever
- Prevents mis-mating of connectors with four coding options and colors
- Optimal flexibility with wire-to-wire inline and flange-mount options with tool-free panel installation
- Uses robust and proven TE accessories like backshells and mounting clips

#### The Trusted & Reliable Choice

- Utilizes the high-performance DEUTSCH size 16 and 20 common contact system
- Achieves IP67, IP68 and IP6K9K sealing levels (with backshell)
- Designed for extreme temperatures (-40°C to 125°C) and engine-level vibrations
- Terminal Position Assurance (TPA)helps ensure proper contact installation
- Connector Position Assurance (CPA) helps ensure correct assembly and prevent accidental unlocking

# NTSEAL Sealed Wire-to-Wire Connectors

Providing robust wire-to-wire connectivity in a compact footprint, TE Connectivity's (TE) family of innovative NTSEAL sealed connectors utilize the proven DEUTSCH common contact system for serviceable applications in harsh environments. The rugged connector system is available in 20 and 48 positions and is IP67, IP68 and IP6K9K-rated (with backshells) for use in agricultural vehicles, buses, construction equipment, trucks, and other applications where proven environmental protection is required.

Integrated TPA, CPA, and tool-free panel installation help eliminate the need for additional components or specific tools, allowing for quick and easy harness assembly, installation and repair. This hybrid connector system allows for signal and power together in one connector by using size 16 and size 20 contacts. This is coupled with a small footprint to enable flexibility for the harness designer.

The new 48 position connector introduces an improved design with an integrated locking lever which facilitates mating operation. This locking mechanism enhances user experience by speeding up assembly and helping to ensure proper connector mating.

### **APPLICATIONS**



Wire

Wire-To-

Engine





Automation

Specialty

Vehicles



After-Treatment

## **KEY INDUSTRIES**



Marine



Agriculture

Panel/

Bulkhead

Mount





Bus

Lift Truck



Power Sports



#### Recreational

## **PRODUCT FEATURES**

Contact/Terminal System	DEUTSCH Size 20 and 16
20 Position	Size 20 (x16), size 16 (x4)
48 Position	Size 20 (x40), size 16 (x8)
Protection	IP67, IP68 and IP6K9K (with backshell)
Operating Temperature	-40°C to 125°C
Contact Operating Current	7.5 A / 13 A (at 125°C)
Operating Voltage	12 V / 24 V
Material (Housing/CPA/TPA)	РВТ
Standards & Specifications	Product Specification: 108-101662 Application Specification: 114-32209

#### **NTSEAL 20 POSITION**

Contact Arrangement: size 20 (x16), size 16 (x4)

## Plugs (Socket Housings)

With CPA			With	out CPA	
Coding	Color	Part Number	Coding	Color	Part Number
Code A	Black	2350890-1	Code A	Black	1-2350890-1
Code B	Grey	2350890-2	Code B	Grey	1-2350890-2
Code C	Green	2350890-3	Code C	Green	1-2350890-3
Code D	Blue	2350890-4	Code D	Blue	1-2350890-4

#### **Receptacles (Pin Housings)**

With Flange (Cushion)				Witho	ut Flange	
Coding	Color	Part Number		Coding	Color	Part Number
Code A	Black	1-2350891-1		Code A	Black	2350891-1
Code B	Grey	1-2350891-2	1.4	Code B	Grey	2350891-2
Code C	Green	1-2350891-3		Code C	Green	2350891-3
Code D	Blue	1-2350891-4		Code D	Blue	2350891-4
With Flange	e (Facial S	eal)				

With Flange (Facial Seal)							
Coding Color Part Number							
	Code A	Black	2-2350891-1				
	Code B	Grey	2-2350891-2				
	Code C	Green	2-2350891-3				
	Code D	Blue	2-2350891-4				

## **Mounting Rings**

Panel Thickness (mm)	Color	Part Number
1.5±0.1	Yellow	2350943-1
3.0±0.1	Grey	2350943-2

Used on pin housing with flange



#### Backshells

Adaptive Parameters	Tubing Size	Color	Part Number
90° Adapter (to be used on 180° backshell)	NW17	Black	2357921-1
180° Receptacle	NW17	Black	2357302-1
180° Tab	NW17	Black	2357302-2

90° backshell needs to be operated based on 180° backshell. 90° backshell can be rotated 360°.



180° Outlet for Housing w/ CPA



90° Outlet for Housing w/ CPA

#### **NTSEAL 48 POSITION**

Contact Arrangement: size 20 (x40), size 16 (x8)

## Plugs (Socket Housings)

With CPA							
Coding Color Part Number							
	Code A	Black	2366494-1				
And a	Code B	Grey	2366494-2				
	Code C	Green	2366494-3				
	Code D	Blue	2366494-4				

#### **Receptacles (Pin Housings)**

With Flange			Without Flange			
Coding	Color	Part Number		Coding	Color	Part Number
Code A	Black	2-2366509-1		Code A	Black	2366509-1
Code B	Grey	2-2366509-2		Code B	Grey	2366509-2
Code C	Green	2-2366509-3		Code C	Green	2366509-3
Code D	Blue	2-2366509-4		Code D	Blue	2366509-4

#### **Mounting Rings**

Panel Thickness (mm)	Color	Part Number
1.5±0.05	Yellow	2366517-1
3.0±0.1	Grey	2366517-2
3.5±0.05	Green	2366517-3
4.0±0.05	Blue	2366517-4

#### Backshells

Adaptive Parameters	Tubing Size	Color	Part Number
180° Backshell	NW26	Black	2378521-1
90° Backshell	NW26	Black	2378527-1

Used on pin housing with flange





180° Outlet



90° Outlet

## CONTACTS

#### **Stamped & Formed Contacts**

Contact Series	Wire Size (mm <sup>2</sup> )	Insulation Diameter (mm)	Socket Part Number	Pin Part Number
DEUTSCH	1.0~1.5	1.9~3.0	1062-16-01**	1060-16-01**
Size 16 Contact	1.0~2.5	1.9~3.0	1062-16-12**	1060-16-12**
	0.5~1.5	1.9~2.4	1062-20-01**	1060-20-01**
DEUTSCH	0.5~1.5	1.4~2.16	1062-20-02**	1060-20-02**
Size 20 Contact	1.0~1.5	1.9~2.4	1062-20-06**	1060-20-06**
	0.5~1.5	1.9~2.4	1062-20-03**	-

\*\* Contact plating codes: 22=Nickel, 44=Gold, 77=Tin

## **Solid Contacts**

Contact Series	Wire Size (mm <sup>2</sup> )	Insulation Diameter (mm)	Socket Part Number	Pin Part Number
DEUTSCH Size 16 Contact	1.0~1.5	1.9~3.0	0462-201-16**	0460-202-16**
DEUTSCH	0.5	1.4~2.4	0462-201-20**	0460-202-20**
Size 20 Contact	0.75~1.0	1.4~2.4	0462-005-20**	0460-010-20**

\*\* Contact plating codes: 31=Gold, 141=Nickel

## **SEALING PLUGS**

#### 20 Position

Contact Size	Color	Part Number	Contact Size	Color	Part Number
Size 16	Grey	2373921-1	Size 16	Blue	2373921-3
Size 20	Yellow	2373921-2	Size 20	Green	2373921-4

**48** Position

#### **MOUNTING CLIPS**

Adaptive Parameters	Color	Part Number
Bracket Hole Size ø7.0 mm Panel Thickness: 1-2 mm	Black	2355806-1
Panel Thickness: 2.0-4.0 mm Through Hole / ø6.35 mm above 2.0-6.0 mm Threaded M8	Black	2357922-1

Used on housings without flange

	Mounting Direction	Color/Material	Hole O.D. (in [mm])	Part Number
	Straight	Stainless steel	0.433 [11.0]	1027-003-1200
-3	Straight	Stainless steel	0.512 [13.0]	1027-005-1200
	Straight	Steel w/zinc plating	0.512 [13.0]	027-004-1200
	Straight	Grey plastic	0.200 [5.08]	1011-026-0205
2	Straight	Black plastic	-	1011-030-0205
	Straight	Black plastic	-	1011-310-0205

Used on housings without flange

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