# **QUALITROL TWP and JBox2**

2<sup>nd</sup> Generation Junction Box and Tank Wall plate

## The easiest way to get your fiber sensors out of your oil-filled power transformer tank

- Easy installation and cost-effective, elegant, solution
- Quick and secure access to fiber connections
- Universal JBox2 design: will mate with all Qualitrol / Neoptix tank wall plates (TWP)
- New rugged JBox2 design is back compatible with all tank wall plates
- Recessed bolting to TWP plate insure cover is removed first, avoiding any possible damages to internal fibers
- Now has ample room to coil all unused extension cable lengths... No more messy fiber coils in your transformer control cabinet
- Internal retaining legs allow for clean and convenient fiber coiling
- JBox2 is made of 316-Stainless Steel
- New TWP design can accommodate up to 24 OFTs (12 inch plate) or 20 OFTs (10 inch plate)

## **Product Summary**

Description Designed for prolonged protection of fiber optic components in any environments, including off-shore. Removable cover for easy access to connections without removing the whole junction box and conduit offers optimal protection to internal fiber cables. Tank wall plates (TWP) are available in bolt-on and weld-on versions. New larger body diameter allows for convenient long term storage of extra cable length, eliminating messy fiber coils hanging anywhere in the control cabinet.

Application Protection of fiber optic connections at the tank wall interface of oil-filled power transformers.

Fibers by neoptix



# TWP Transformer tank wall plate, a perfect match for Neoptix optical feedthroughs (OFT)

Up to 24 OFTs on one TWP plate	<ul> <li>The TWP plate accommodates from 1 to 24 optical feedthroughs and plugs are available to seal any unused holes. OFTs have standard ¼" NPT ANSI threads</li> </ul>
Made of carbon steel or stainless steel	<ul> <li>As a standard item, the TWP is made of cold finished 1018 steel (carbon steel ASTM A108). It is also offers in 316 stainless steel</li> </ul>
Can be welded or bolted	Various versions are available: welded or bolted
Available in hundreds of combinations	<ul> <li>Neoptix has an extensive bank of CAD drawings, for different plate size, different number of OFT holes, different material and different sealing strategies (welding, gasket or O-ring)</li> </ul>
Compatible corona rings are available	<ul> <li>Corona rings are available to make the TWP plate installation even simpler. Weld the corona ring to your transformer tank, and bolt the TWP plate to the corona ring. We even supply the sealing O-ring (viton)</li> </ul>
Can be supplied with pre-installed OFTs	<ul> <li>For a small fee and for your peace of mind, TWP plates can be supplied with the OFTs pre-installed and leak tested (NXP-611)</li> </ul>





### JBox2 – Junction Box

Reliable protection of fiber optic connections	<ul> <li>Eliminates need for drilling additional holes or welding to create a "do-it-yourself" solution for protection of fiber optic connections</li> </ul>		
	<ul> <li>Two specially designed 1/8 inch (3.2 mm) thick neoprene gaskets (one for access cover and one for base of junction box isolate optical feedthroughs (OFT) and fiber extension cables (EXT-xxx) from harsh environmental conditions</li> </ul>		
Stainless Steel construction	<ul><li>No more rusting</li><li>No more painting required</li></ul>		
New design with space to coil extra cable	<ul> <li>No more messy fiber cables hanging around in your control cabinet</li> </ul>		
Easy installation	<ul> <li>Access cover makes installation and fiber connections easy</li> <li>Flat surface for quick, industry-standard conduit installation</li> </ul>		
JBox2 mates with all Qualitrol / Neoptix tank wall plates	<ul> <li>JBox2 junction box is designed to perfectly fit with either bolt-on or weld-on tank plates</li> </ul>		



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## **TECHNICAL SPECIFICATIONS**

Tank wall plate	Material	<ul> <li>Standard: 1018 cold rolled steel, 0.5 inch (12.5 mm) thick</li> <li>Optional: Other material, such as Stainless Steel 316</li> </ul>
	Number of feedthroughs	<ul> <li>Up to 20 (10 inch version); up to 12 if corona ring is used</li> <li>Up to 24 (12 inch version)</li> </ul>
	Dimensions	<ul> <li>Standard: Ø 10 inches, 0.5 inch (12.5 mm) thick</li> <li>Optional: Ø 12 inches, 0.5 inch (12.5 mm) thick</li> </ul>
	Mounting	<ul> <li>Standard: Direct welding on tank wall</li> <li>Optional: Bolting pattern, for gasket or O-ring sealing</li> </ul>
	NPT type	Standard: NPT 1/4-18, ANSI threads
	Compatibility	Compatible with Neoptix OFT optical feedthroughs
	Options	NXP-611: OFT installation on TWP plate ( with high pressure leak testing)
	Ordering code (TWP):	Material:       Diameter:         0 = Carbon steel (Standard)       10 = 10 inches (standard)         1 = Stainless steel (optional)       2 = Aluminum (optional)         2 = Aluminum (optional)       3 = 0 ther         3 = 0 ther       - D         - M       - D         - F       -J         Number of OFT:       0 = Weldes (standard)         1 = 1 feedtrough       1 = 1 feedtrough         2 = 24 feedtrough       2 = Bolted without O'Ring groove (optional)
Corona ring	TWP compatibility	Designed to mate with TWPF2
	Ordering code (COR):	0 = Carbon Steel         10 = 10 inches           1 = Stainless Steel         12 = 12 inches           OCR- M           -D         -F           - = With 0-ring groove           1 = With 0-ring groove
Junction box	Material	14 gauge stainless steel
	Mounting	<ul> <li>Bolted to tank wall plate (1/4-20-UNC SS bolts, supplied)</li> </ul>
	Dimensions	<ul> <li>Diameter: 10 inch (254 mm)</li> <li>Height: 6 inch (plus cover and gasket thickness)</li> </ul>
	Finish	Stainless steel: unpainted
	Access cover	<ul> <li>Removable. Bolted with 9 x ¼-20 UNC SS bolts (supplied)</li> </ul>
	Sealing	• 2 x Neoprene gaskets, 1/8 inch (3.2 mm) thick
	Fiber capacity	<ul> <li>Can safely coiled up to 150 meters of standard Neoptix extension cables (EXT-3MP-xxx)</li> </ul>
	Conduit installation flat	<ul> <li>5 x 6 inches (125 x 150 mm)</li> <li>Hole must be made by user, as required</li> </ul>
	Ordering code:	JB2-SS

About QUALITROL®: QUALITROL® manufactures substation and transformer monitoring and protection devices used by electric utilities and manufacturing companies. It is the global leader in sales and installations of transformer asset protection equipment, fault recorders, and fault locators. Established in 1945, QUALITROL® produces thousands of different types of products on demand, each customized to customers' unique requirements.

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