

## INDUSTRIAL ETHERNET CABLES & CONNECTIVITY



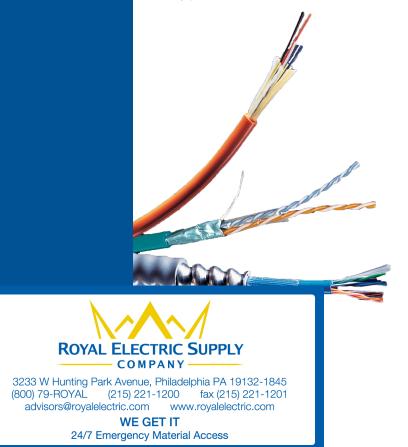
## Belden DataTuff Industrial Ethernet Cable Solutions Offer Peak Network Efficiency and Reliability

Houston Wire & Cable Company offers Belden DataTuff cabling solutions, including Category 6, Category 5e and RJ45 universal connectors—immediate availability and custom cut options.

Ethernet is a family of computer networking technologies for local area networks (LANs). Ethernet was developed well over 30 years ago, and is today one of the most popular and widely implemented network technology in the home and office environment, now also in industrial applications. As the technology has evolved in terms of better overall performance and faster speeds, so has the Ethernet's appropriateness for the industrial environment.

Although Industrial Ethernet Cabling is based upon the same standards as commercial Ethernet technology (ANSI/TIA/EIA-568B), the two environments could not differ more. The office-type environment offers its cabling system a relatively safe harbor, but the factory floor can present very harsh and hazardous environmental conditions, meaning there's a real risk in bringing commercial-type cabling and connectivity products into the industrial landscape.

Belden DataTuff Industrial Ethernet Cabling Solutions are designed specifically to withstand unique and harsh criteria in an industrial setting. Factory floor productivity depends on high quality Industrial Ethernet cables and connectivity that is able to effectively handle harsh environments, precise data transmission, factory noise and factory process needs.



## Ethernet Cable Features & Benefits\*

- Bonded-Pair technology options
- Unshielded and shielded cables
- Solid or stranded conductors
- Plenum or non-plenum
- Polyolefin or FEP insulation
- PVC, Polyethylene, FEP, or TPE jackets
- Heavy, Upjacketed, and Aluminum Armored
- Halogen-free and Low Smoke Zero Halogen (LSZH) constructions
- Burial or outdoor use, gasoline resistance, high and low temperatures
- Weldsplatter resistance
- Field proven performance in presence of EMI/RFI
- All RoHS approved
- Many are EtherNet/IP compliant
- Some MSHA approved

\*See individual data sheets for exact specifications



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## **Industrial Ethernet Cable Selection Guide**

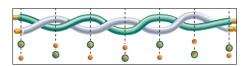
		Shielde	eding	Conductor		Installation		Environmental Issues										Industrial Grade Jacket			
Part No.	No. of Pairs		Shielded*	Solid	Stranded+	Installation Stress Resistance#	Pull Tension	Oil Resistance	UV Sunlight Resistance	Weld- Splatter Resistence	CMX/ Outdoor	Under- ground (Burial)	Gasoline Resistance	LSZH	MSHA	Hi/Lo Temp	600V UL AWM Rated	Heavy	Upjacket	Armored	
Categ	ory 5	e Cable																			
932A herNet/IP	2	•		•		•	20	•	•									•			
933A herNet/IP	2		•	•		•	20	•	•									•			
923A herNet/IP	4	•		•		•	40	•	•		•				•			•			
918A	4	•		•			35	•	•		•				•			•			
924A	4	•			•	•	40	•	•		•							•			
930A	4	•			•		25	•	•		•							•			
<b>922A</b> IT	4	•		•		•	40	•	•		•							•			
934A herNet/IP	4	•		•		•	40	•	•			•						•			
937A	4		•	•		•	40	•	•			•							•		
939A	4		•		•	•	40	•	•		•							•			
928A herNet/IP	4	•		•		•	40	•	•				•			•		•			
1700A herNet/IP	4	•		•		•	40	•	•		•				•				•		
<b>1700A2</b> il Res I & II	4	•		•		•	40	•	•										•		
21700A	4	•		•		•	40	•	•											•	
21700R	4	•		•		•	40	•	•											•	
929A	4		•	•		•	40	•	•		•				•			•			
919A	4		•	•			25	•	•		•				•			•			
921A herNet/IP	4		•	•		•	75	•	•		•							•			
957A herNet/IP	4		•	•		•	75	•	•								•	•			
935A herNet/IP	4	•		•		•	40		•					•				•			
936A	4		•	•		•	40		•					•				•			
958A herNet/IP	4		•	•		•	35	•	•								•	•			
938A igh Flex	4		•		•	•	40	•	•	•									•		
Categ	ory 6	Cable																			
927A	4	•		•		•	45	•	•									•			
931A	4	•		•		•	40	•	•				•			•		•			
940A 1872A	4	•		•		•	40 45	•	•		•							•	•		
953A	4	_	•	÷		•	40	•	•		•						•		•		
21872A		•		÷		<del>-</del>	200		•											•	

<sup>\*</sup>Shielded products are recommended for high-noise environments.

#Products with Bonded-Pair technology provide Installable Performance® advantages—refer to Belden's Bonded-Pair Cable Bulletin #BPO2.

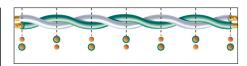
**DataTuff® Industrial Ethernet Ruggedized** RJ45 Plug Kit UTP/STP Part # R301602





### Nonbonded-Pair

Installed and manipulated nonbonded-pairs have a tendency to gap, varying the centricity of the two conductors.



## **Bonded-Pair Technology**

Belden Bonded-Pairs do not gap so the physical integrity of the pair is maintained. Since no gaps can occur, and the conductor-to-conductor spacing, or centricity, is always uniform, the cable offers excellent and consistently reliable electrical performance – even after the cable has been subjected to the bending, pulling and twisting that is inherent in the installation process, and the rigors of its use on the factory floor.

<sup>+</sup>Stranded products are recommended where more flexibility is needed.