

MIL-DTL-24640 (M24640) 船用電纜

MIL-DTL-24640 (M24640) 軍規電纜是一種重量輕的低煙無毒(LSFH)電纜，多用於船艦、地鐵及隧道。其設計考慮到高度的安全性，當有火災發生時，電纜本身不自燃也不助燃又無毒性，大大的降低災害的傷亡率。有這種電纜的許多配置可用，都是用低煙交聯聚烯烴夾套製造的，並且不含鹵素，石棉或汞。MIL-DTL-24640 提供水密或非水密以及柔性或非柔性配置，也可提供鎧甲或非鎧甲類型。因為 MIL-DTL-24640 電纜的設計和測試符合嚴格的軍用標準，所以它是電子，電源控制，通信設備和儀器和各種商業、工業應用中的完美解決方案，如船舶，水上飛機，捷運系統和更多。

M24640 規格為額定電壓 600 伏之鍍錫銅導線。在-20° C 至+ 150° C (-4° F 至+ 302° F) 的溫度範圍內使用。

注意：MIL-DTL-24640 取代了 MIL-C-24640 標準。

MIL-DTL-24640 產品規格 - 輕量型低煙無毒軍規電纜

該電纜完全符合國防物流局 (DLA) 提供的 MIL-DTL-24640 規範。

軍規型號	導體形式	AWG	類型 (A)為鎧甲型	電壓 (V)	性質
M24640 / 1	2 芯	16/14	DX (A)	600	非防水
M24640 / 2	3 芯	16/14	TX (A)	600	非防水
M24640 / 3	4 芯	16/14	FX (A)	600	非防水
M24640 / 4	多對	20	TTX (A)	600	非防水
M24640 / 5	多對	22	TTXSO / TTXS(A)	600	非防水，有隔離
M24640 / 6	多對	22	2XAO	600	非防水，有隔離
M24640 / 7	多導體	22	1XMSO	600	非防水
M24640 / 8	多導體	20	MXO	600	非防水，有隔離
M24640 / 9	多對	22	2XSO / TTXS(A)	600	非防水，有隔離



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

M24640 / 10	多對	16	MXSO	600	非防水
M24640 / 11	多組	18	3XS(A)	600	非防水
M24640 / 12	多對	26	2XO	600	非防水，有隔離
M24640 / 13	多對	26	2XSXO	600	非防水，有隔離
M24640 / 14	多導體	22	1XSOW	600	防水，有隔離
M24640 / 15	多對	22	2XSAOW / 2XSAW(A)	600	防水，有隔離
M24640 / 16	多對	18	2XSOW / 2XSWA	600	防水，有隔離
M24640 / 17	多對	26	2XOW	600	防水，有隔離
M24640 / 18	多組	18	3XOW / 3XSWA	600	防水，有隔離
M24640 / 19	2 芯	16/14	DXOW / DXW(A)	600	防水，有隔離
M24640 / 20	3 芯	16/14	TXOW / TXW(A)	600	防水，有隔離
M24640 / 21	4 芯	16/14	FXOW / FXW(A)	600	防水，有隔離
M24640 / 22	7 芯	16/14	7XW / 7XWA	600	防水，有隔離
M24640 / 23	多導體	18	MXCOW / MXCW(A)	600	防水，有隔離
M24640 / 24	多對	22	TTXOW / TTXW(A)	600	防水，有隔離
M24640 / 25	4 對+1 芯	12/8	9XS	600	非防水，無隔離
M24640 / 26	5 芯	16/12	5XO	600	非防水，有隔離

不防水，低可繞性電纜

電力用

型式	標準型	加隔離層	加鎧甲		
	DX	----	DXA	雙芯線	600 V



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

	TX	----	TXA	三芯線	600 V
	FX	----	FXA	四芯線	600 V

通訊及儀器用

型式	----	MXO	----	多芯線, AWG 20	600 V
	----	MXSO	----	多芯線, AWG 16	600 V
	TTX	----	TTXA	多對線, AWG 20	600 V
	TTXS	TTXSO	TTXSA	多對線, AWG 22	600 V
	----	1XMSO	----	多芯線, AWG 22	600 V
	----	2XAO	----	多對線, AWG 22	600 V
	----	2XO	----	多對線, AWG 26	600 V
	2XS	2XSO	2XSA	多對線, AWG 22	600 V
	----	2XSXO	----	多對線, AWG 26	600 V
	3XS	----	3XSA	多組三芯線, AWG 18	600 V

防水，低可繞性

通訊及儀器用

型式	標準型	加隔離層	加鎧甲		
	----	1XSOW	----	多芯線 · AWG 22	600 V
	----	2XOW	----	多對線 · AWG 26	600 V
	2XSAW	2XSAOW	2XSAWA	多對線 · AWG 22	600 V
	2XSW	2XSOW	2XSWA	多對線 · AWG 18	600 V
	3XSW	3XSOW	3XSWA	多組三芯線 · AWG 22	600 V

電力用

型式	標準型	加隔離層	加鎧甲		
	DXW	DXOW	DXWA	雙芯線	600 V
	TXW	----	TXWA	三芯線	600 V
	FXW	----	FXWA	四芯線	600 V
	7XW	----	7XWA	七芯線	600 V

通訊及儀器用

型式	標準型	加隔離層	加鎧甲		
	TTXW	TTXOW	TTXWA	多對線 · AWG 22	600 V

控制用

型式	標準型	加隔離層	加鎧甲		
	MXCW	MXCOW	MXCWA	多芯線 · AWG 18	600 V

*需更詳盡規格或詢價請洽佳昭公司



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

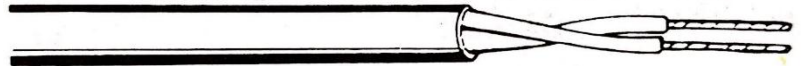
TYPE DX, DXA

MIL-C-24640/1

Non- Watertight, Power Supply

APPLICATIONS:

These two conductor power cables are suitable for non-watertight, non-flexing service. They are available with or without armor. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, syncho, etc.) require a special type of cable. These cables shall be used only for runs within one compartment or within two contiguous compartments. They shall not be used to penetrate a watertight deck or bulkhead.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
 3. ASSEMBLY: Two conductors cabled, optional binder tape.
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: Calculated at 60Hz AC (rms) or DC for 75 °C conductor temperature.
- DXA, same construction with overall braided aluminium armor.

NEC Number Type & Size	Military Part Number M24640/1	Number of Cond.	Overall Armor	Cond. Size & Standing	Minimum Jacket Thick.	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity At 60 Hz 40 °C	Approx. Weight Lbs./Ft
					IN	IN	IN	Amps	
DX-3	-01UN	2	No	16 AWG (19/29)	0.031	0.223	0.241	13	.0394
DX-4	-02UN	2	No	14 AWG (19/27)	0.034	0.266	0.286	22	.0568
DXA-3	-01AN	2	Yes	16 AWG (19/29)	0.031	0.273	0.291	13	.0544
DXA-4	-02AN	2	Yes	14 AWG (19/27)	0.034	0.316	0.336	22	.0738

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

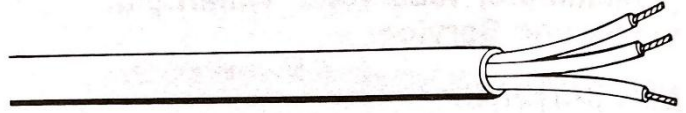
TYPE TX, TXA

MIL-C-24640/2

Non- Watertight, Power Supply

APPLICATIONS:

These three conductor power cables are suitable for non-watertight, non-flexing service. They are available with or without armor. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, syncho, etc.) require a special type of cable. These cables shall be used only for runs within one compartment or within two contiguous compartments. They shall not be used to penetrate a watertight deck or bulkhead.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12)
 3. ASSEMBLY: Three conductors cabled, optional binder tape.
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: Calculated at 60Hz AC (rms) or DC for 75 °C conductor temperature.
- TXA, same construction with overall braided aluminium armor.

NEC Number Type & Size	Military Part Number M24640/2	Number of Cond.	Overall Armor	Cond. Size & Standing	Minimum Jacket Thick.	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity At 60 Hz 40 °C	Approx. Weight Lbs./Ft
					IN	IN	IN	Amps	
TX-3	-01UN	3	No	16 AWG (19/29)	0.034	0.243	0.261	11	.0516
TX-4	-02UN	3	No	14 AWG (19/27)	0.038	0.288	0.310	18	.0756
TXA-3	-01AN	3	Yes	16 AWG (19/29)	0.034	0.293	0.311	11	.0676
TXA-4	-02AN	3	Yes	14 AWG (19/27)	0.038	0.338	0.360	18	.0946

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

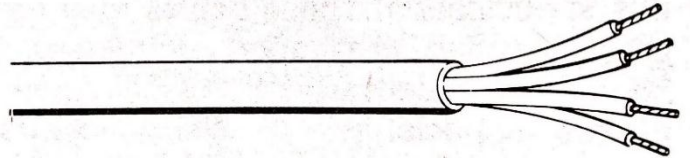
TYPE FX, FXA

MIL-C-24640/3

Non- Watertight, Power Supply

APPLICATIONS:

These four conductor power cables are suitable for non-watertight, non-flexing service. They are available with or without armor. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require a special type of cable. These cables shall be used only for runs within one compartment or within two contiguous compartments. They shall not be used to penetrate a watertight deck or bulkhead.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
 3. ASSEMBLY: Four conductors cabled, optional binder tape.
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: Calculated at 60Hz AC (rms) or DC for 75 °C conductor temperature.
- FXA, same construction with overall braided aluminium armor, paint.

NEC Number Type & Size	Military Part Number M24640/3	Number of Cond.	Overall Armor	Cond. Size & Standing	Minimum Jacket Thick.	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity At 60 Hz 40 °C	Approx. Weight Lbs./Ft
					IN	IN	IN	Amps	
FX-3	-01UN	4	No	16 AWG (19/29)	0.034	0.262	0.282	11	.0630
FX-4	-02UN	4	No	14 AWG (19/27)	0.038	0.311	0.335	18	.0926
FXA-3	-01AN	4	Yes	16 AWG (19/29)	0.034	0.312	0.332	11	.0800
FXA-4	-02AN	4	Yes	14 AWG (19/27)	0.038	0.361	0.385	18	.1126

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986.

Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

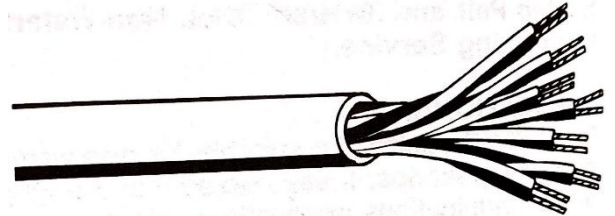
TYPE TTX, TTXA

MIL-C-24640/4 (20 AWG)

Non- Watertight, Twisted Pair

APPLICATIONS:

These unshielded multi pair constructions are suitable for non-watertight, non-flexing service. They may be supplied either armored or unarmored. They may be used to interconnect audio, telephone, call bell, announcing, and alarm systems. They may also be used for other interior communication and weapon control system provided the ampere rating of the cable and voltage drop for the system are not exceeded. They shall be used only for runs within one compartment or within two contiguous compartments. They shall not be used to penetrate a watertight deck or bulkhead.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
 3. ASSEMBLY: The required pairs twisted and cabled consecutively, optional binder tape.
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: Calculated at 60Hz AC (rms) or DC for 75 °C conductor temperature.
- TTXA, same construction with overall braided aluminium armor, paint.

NEC Number Type & Size	Military Part Number M24640/4	Number of Conductors	Overall Armor	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity At 60 Hz 40 °C	Approx. Weight Lbs./Ft
				IN	IN	IN	Amps Ind/Avg. °	
TTX-3	-01UN	3	No	0.038	0.296	0.320	5/4.0*	.0621
TTX-15	-02UN	15	No	0.044	0.549	0.591	5/0.6	.2210
TTXA-3	-01AN	3	Yes	0.038	0.346	0.370	5/4.0	.0821
TTXA-15	-02AN	15	Yes	0.044	0.599	0.641	5/0.6	.2754

- IND/AVG indicates the maximum current per conductor (IND), and the maximum current (AVG) per conductor when all conductors in the cable are used.

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986.

Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

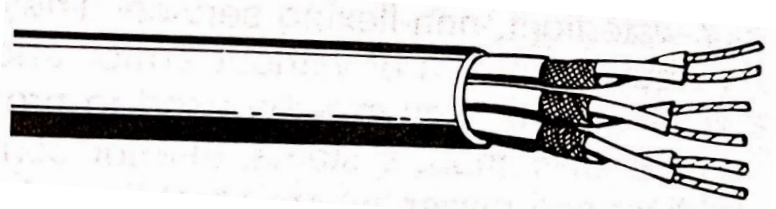
TYPE TTXS, TTXSA, TTXSO

MIL-C-24640/5 (20 AWG)

Non- Watertight, Shielded Pairs

APPLICATIONS:

Type cables are 45 ohm individually shielded multi pair constructions suitable for non-watertight, non-flexing service. They are available both with and without armor or an overall shield. They may be used to interconnect electronic, communication, and instrumentation systems for radio frequency application sup to two megahertz. The maximum total copper operating temperature shall not exceed 75°C. The overall shielding of type TTXSO conforms to the surface impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
 3. PAIR: Two conductors twisted to the pair.
 4. SHIELD: Shielded with braided tinned copper, plus a tape shield isolation.
 5. ASSEMBLY: The required number of pairs cabled consecutively, optional binder tape.
 6. OVERALL JACKET: Crosslinked polyolefin, surface marking.
- TTXSA, same construction with overall braided aluminium armor.
TTXSO, same construction as TTXS with additional overall tinned copper braided shield

NEC Number Type & Size	Military Part Number M24640/5	Number of Conductors	Overall Armor	Overall Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
					IN	IN	IN	
TTXS-2	-01UN	2	No	No	0.038	0.335	0.361	.0743
TTXS-4	-02UN	4	No	No	0.041	0.393	0.424	.1150
TTXSA-2	-01AN	2	Yes	No	0.038	0.385	0.411	.1002
TTXSA-4	-02AN	4	Yes	No	0.041	0.443	0.474	.1504
TTXSO-2	-01UO	2	No	Yes	0.041	0.386	0.416	.1260
TTXSO-6	-02UO	6	No	Yes	0.044	0.506	0.546	.2160
TTXSO-8	-03UO	8	No	Yes	0.044	0.587	0.633	.2840
TTXSO-10	-04UO	10	No	Yes	0.044	0.627	0.675	.3110

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

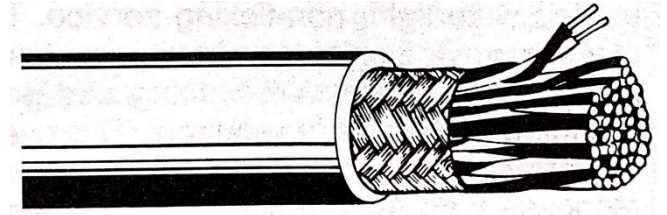
TYPE 2XAO

MIL-C-24640/6 (22 AWG)

Non- Watertight, Overall Shielded, Pairs

APPLICATIONS:

These cables are overall shielded multi pair constructions suitable for non-watertight, non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g. synchro, pulse, scale voltage) is required. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
3. PAIR: Two conductors twisted to form pair.
4. ASSEMBLY: The required number of pairs cabled consecutively, optional binder tape.
5. SHIELD: Tinned copper braid shield, (optional binder tape).
6. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type & Size	Military Part Number M24640/6	Number of Conductors	Diameter Overall Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
			IN	IN	IN	IN	
2XAO-2	-01UO	2	0.201	0.038	0.307	0.331	.0794
2XAO-7	-02UO	7	0.289	0.041	0.392	0.422	.1250
2XAO-10	-03UO	10	0.383	0.041	0.475	0.511	.1701
2XAO-18	-04UO	18	0.471	0.044	0.567	0.611	.2450
2XAO-40	-05UO	40	0.712	0.047	0.796	0.858	.4490

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

· TEL:886-2-2957-9823 · FAX:886-2-2957-9712
· <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE 1XMSO

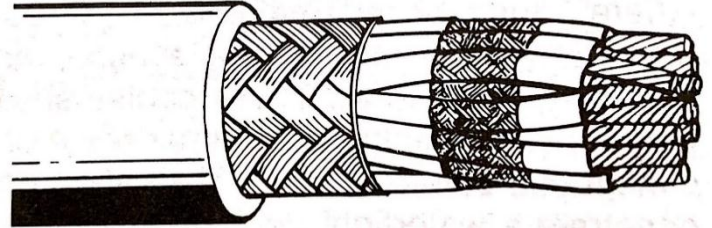
MIL-C-24640/7 (22 AWG)

Non- Watertight, Shielded Component

Overall Shield

APPLICATIONS:

These cables are individually shielded, 55 ohm multi conductor constructions suitable for non-watertight, non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g., synchro, pulse, scale voltage) is required. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
3. SHIELD: Individual conductors shielded with braided tinned copper, plus tape shield isolation.
4. ASSEMBLY: The required number of pairs cabled consecutively, optional binder tape.
5. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type & Size	Military Part Number M24640/7	Number of Conductors	Diameter Overall Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
			IN	IN	IN	IN	
1XMSO-7	-01UO	7	0.247	0.038	0.344	0.370	.1130
1XMSO-16	-02UO	16	0.379	0.041	0.471	0.507	.2080
1XMSO-70	-03UO	70	0.785	0.047	0.859	0.925	.6610

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

N

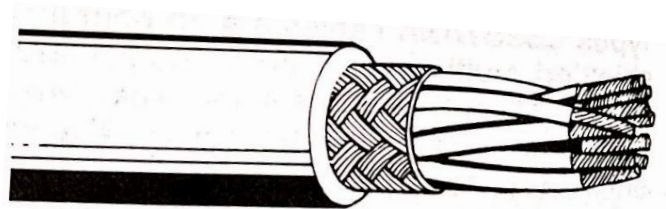
TYPE MXO

MIL-C-24640/8 (20 AWG)

Non- Watertight, Overall Shielded

APPLICATIONS:

These overall shielded multi conductor cables are suitable for non-watertight, non-flexing service. They may be used for power, lighting, interior communication weapons control, and electronic systems; except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) required a special type of cable. These cables shall be used only for runs within one compartment or within two contiguous compartments. They shall not be used to penetrate a watertight deck or bulkhead. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
3. ASSEMBLY: Individual conductors cabled consecutively.
4. SHIELD: Overall braided tinned copper shield, (optional binder tape).
5. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type & Size	Military Part Number M24640/8	Number of Conductors	Diameter Overall Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
			IN	IN	IN	IN	
MXO-10	-01UO	10	0.253	0.038	0.349	0.377	.1180
MXO-14	-02UO	14	0.277	0.041	0.380	0.410	.1470

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

· TEL:886-2-2957-9823 · FAX:886-2-2957-9712
· <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

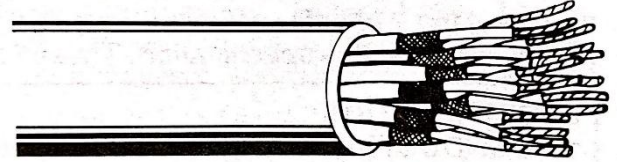
TYPE 2XS, 2SXA, 2SXO

MIL-C-24640/9 (22 AWG)

Non- Watertight, Shielded Pairs

APPLICATIONS:

These cables are 55 ohm individually shielded multi pair conduction suitable for non-watertight, non-flexing service. They are available both with and without armor and an overall shield. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g., synchro, pulse, scale voltage) is required. The overall shielding of type 2XS0 conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12)
 3. PAIR: Two conductors twisted to the pair.
 4. SHIELD: Shielded with braided tinned copper, plus a tape shield isolation.
 5. ASSEMBLY: The required number of pairs cabled consecutively, (optional binder tape).
 6. OVERALL JACKET: Crosslinked polyolefin, surface marking.
- 2XSA, same construction with overall braided aluminium armor.
2XS0, same construction as 2XS with additional overall tinned copper braided shield

NEC Number Type & Size	Military Part Number M24640/9	Number of Pairs	Overall Armor	Overall Shield Diameter	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	
2XS-2	-01UN	2	No	No	0.038	0.308	0.332	.0614
2XS-3	-02UN	3	No	No	0.038	0.325	0.350	.0742
2XS-7	-03UN	7	No	No	0.041	0.423	0.455	.1320
2XS-10	-04UN	10	No	No	0.044	0.537	0.579	.1920
2XS-14	-05UN	14	No	No	0.044	0.582	0.627	.2400
2XS-19	-06UN	19	No	No	0.044	0.644	0.694	.3080
2XS-24	-07UN	24	No	No	0.047	0.758	0.818	.3900
2XS-30	-08UN	30	No	No	0.047	0.804	0.866	.4680
2XSA-2	-01AN	2	Yes	No	0.038	0.358	0.382	.0814
2XSA-3	-02AN	3	Yes	No	0.038	0.375	0.400	.1017
2XSA-7	-03AN	7	Yes	No	0.041	0.473	0.505	.1761
2XSA-10	-04UN	10	Yes	No	0.044	0.587	0.629	.2285
2XSA-14	-05AN	14	Yes	No	0.044	0.632	0.677	.2800
2XSA-19	-06AN	19	Yes	No	0.044	0.694	0.744	.3595
2XSA-24	-07AN	24	Yes	No	0.047	0.808	0.868	.4428
2XSA-30	-08AN	30	Yes	No	0.047	0.854	0.916	.5313
2XS0-3	-01UO	3	No	0.271	0.038	0.380	0.410	.1170
2XS0-7	-02UO	7	No	0.373	0.041	0.474	0.510	.1840
2XS0-10	-03UO	10	No	0.487	0.044	0.594	0.640	.2620
2XS0-14	-04UO	14	No	0.541	0.044	0.636	0.686	.3010
2XS0-19	-05UO	19	No	0.607	0.044	0.709	0.765	.3830
2XS0-30	-06UO	30	No	0.777	0.047	0.869	0.937	.5540

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

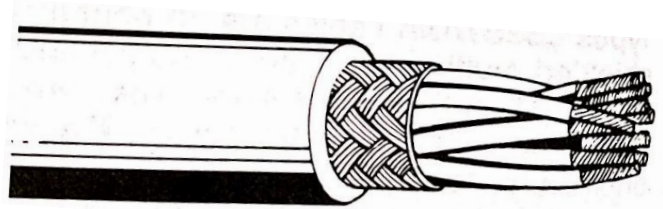
TYPE MXSO

MIL-C-24640/10 (16 AWG)

Non-Watertight, Overall Shield

APPLICATIONS:

These cables are overall shielded multi conductor constructions suitable for non-watertight, non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g. synchro, pulse, scale voltage) is required. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12).
3. ASSEMBLY: The required number of conductors cabled consecutively, optional binder tape
4. SHIELD: Tinned copper braid shield, (optional binder tape).
5. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type and Size	Military Part Number M24640/10	Number of Conductors	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approximate Weight Lbs./Ft
			IN	IN	IN	IN	
MXSO-2	-01 UO	2	0.175	0.034	0.282	0.304	.0764
MXSO-9	-02 UO	9	0.325	0.041	0.424	0.458	.1760
MXSO-21	-03 UO	21	0.456	0.044	0.552	0.596	.3290
MXSO-37	-04UO	37	0.562	0.044	0.644	0.694	.4730

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

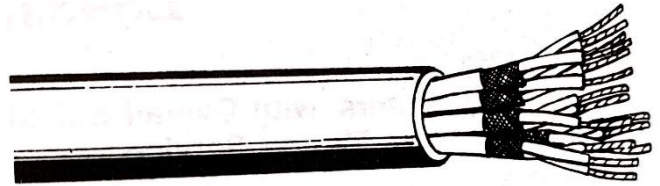
MIL-C-24640 (LIGHTWEIGHT)

TYPE 3XS, 3XSA

MIL-C-24640/11 (18 AWG) Non-Watertight, Shielded Triad

APPLICATIONS:

These cables are individually shielded, 40 ohm multi triad constructions suitable for non-watertight, non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g. synchro, pulse, scale voltage) is required.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12).
3. TRIAD: Three conductors cabled to form triad.
4. SHIELD: Shielded with braided tinned copper, plus a tape shield isolation.
5. ASSEMBLY: The required number of triads cabled consecutively, (optional binder tape)
6. OVERAL JACKET: Crosslinked polyolefin, surface marking.
3XSA, same construction with braided aluminum armor.

NEC Number Type and Size	Military Part Number M24640/11	Number of Conductors	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approximate Weight Lbs./Ft
			IN	IN	IN	IN	
3XS-7	-01 UN	7	No	0.044	0.601	0.647	.2890
3XSA-7	-01 AN	7	Yes	0.044	0.651	0.697	.3419

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

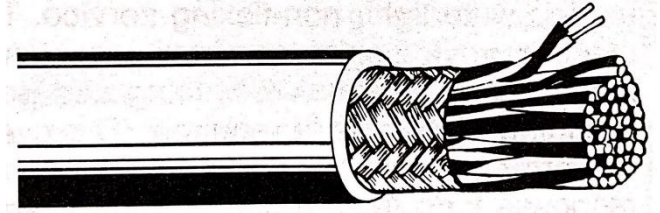
TYPE 2XO

MIL-C-24640/12 (26 AWG)

Non-Watertight, Overall Shielded, Pairs

APPLICATIONS:

These cables are overall shielded multi pair constructions suitable for non-watertight, non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g. synchro, pulse, scale voltage) is required. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12).
3. ASSEMBLY: Two conductors twisted to form pair, the required number of pairs cabled consecutively, (optional binder tape).
4. SHIELD: Tinned copper braid shield, (optional binder tape).
5. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type and Size	Military Part Number M24640/12	Number of Conductors	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approximate Weight Lbs./Ft
			IN	IN	IN	IN	
2XO-6	-01 UO	6	0.220	0.038	0.305	0.329	.0815
2XO-18	-02 UO	18	0.356	0.041	0.417	0.449	.1400
2XO-24	-03 UO	24	0.420	0.044	0.473	0.509	.1710
2XO-42	-04 UO	42	0.536	0.044	0.565	0.609	.2450
2XO-60	-05 UO	60	0.622	0.047	0.641	0.691	.3120
2XO-77	-06 UO	77	0.714	0.047	0.728	0.785	.3950

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

· TEL:886-2-2957-9823 · FAX:886-2-2957-9712
· <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

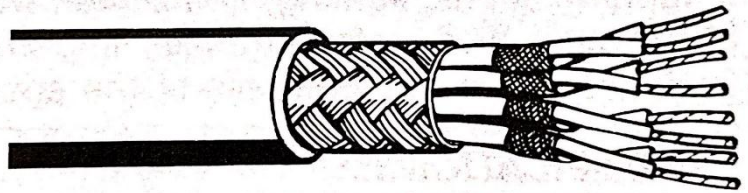
TYPE 2XSXO

MIL-C-24640/13 (26 AWG)

Non-Watertight, Individual and Overall Shielded Pair

APPLICATIONS:

These cables are individually shielded multi pair constructions suitable for non-watertight, non-flexing service. They have an additional overall shield and may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g. synchro, pulse, voltage) is required. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar[®] insulation jacket, (single conductors per MIL-W-81044/12).
3. SHIELD: Two conductors twisted to form pair, shielded with braided tinned copper, plus a tape shield isolation.
4. ASSEMBLY: Four pairs cabled, binder tape, tinned copper braid shield, overall, (optional binder tape).
5. OVERALL JACKET: Crosslinked polyolefin, surface marking

NEC Number Type and Size	Military Part Number M24640/13	Number of Conductors	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approximate Weight Lbs./Ft
			IN	IN	IN	IN	
2XSXO-4	-07UO	4	0.243	0.038	0.333	0.359	.1010

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE 1XSOW

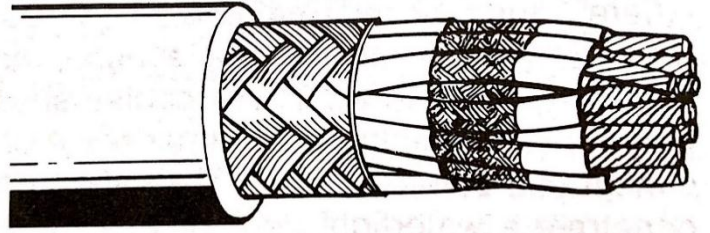
MIL-C-24640/14 (22 AWG)

Watertight, Shielded Component

Overall Shield

APPLICATIONS:

These cables are individually shielded, 60 ohm multi conductor constructions suitable for watertight (25 psi), non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated KYnar[®] insulation jacket, (single conductors per MIL-W-81044/12).
3. SHIELD: Individual conductors shielded with braided tinned copper, plus tape shield isolation.
4. ASSEMBLY: The required conductors cabled consecutively, (optional binder tape).
5. OVERALL SHIELD: Overall braided tinned copper shield, (optional binder tape).
6. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type and Size	Military Part Number M24640/14	Number of Conductors	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approximate Weight Lbs./Ft
			IN	IN	IN	IN	
1XSOW-2	-01 UO	2	0.173	0.034	0.292	0.314	.0830
1XSOW-14	-02 UO	14	0.362	0.041	0.470	0.506	.2330
1XSOW-20	-03 UO	20	0.429	0.044	0.542	0.584	.3070
1XSOW-30	-04UO	30	0.529	0.044	0.614	0.662	.4290

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

· TEL:886-2-2957-9823 · FAX:886-2-2957-9712
· <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

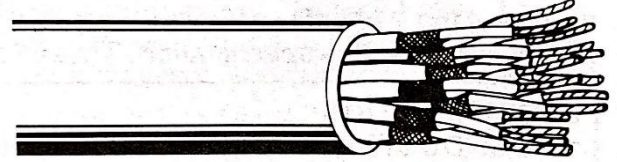
TYPE 2XSAW, 2XSAOW, 2XSAWA

MIL-C-24640/15 (22 AWG)

Watertight, Shielded Pair

APPLICATIONS:

These cables are 60 ohm individually shielded multi pair constructions suitable for watertight (25 psi), on-flexing service. They are available both with and without armor or an overall shield. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g., synchro, pulse, scale voltage) is required. The overall shielding of Type 2XSAOW conforms to the surface impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated KYnar[®] insulation jacket, (single conductors per MIL-W-81044/12).
 3. SHIELD: Two conductors twisted to form pair, shielded with braided tinned copper, plus a tape shield isolation.
 4. ASSEMBLY: The required number of pairs cabled consecutively, (optional binder tape).
 5. OVERALL JACKET: Crosslinked polyolefin, surface marking.
- 2XSAWA, same construction with braided aluminium armor.
 2XSAOW, same construction as 2XSAW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/15	Number of Pairs	Overall Armor	Overall Shield Diameter	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	
2XSAW-3	-01 UN	3	NO	NO	0.041	0.368	0.396	.1120
2XSAW-7	-02 UN	7	NO	NO	0.041	0.461	0.497	.1950
2XSAW-14	-03 UN	14	NO	NO	0.044	0.641	0.691	.3840
2XSAWA-3	-01 AN	3	YES	NO	0.041	0.418	0.446	.1478
2XSAWA-7	-02 AN	7	YES	NO	0.041	0.511	0.547	.2438
2XSAWA-14	-03 AN	14	YES	NO	0.044	0.691	0.741	.4454
2XSAOW-3	-01 UO	3	NO	0.291	0.041	0.405	0.437	.1530
2XSAOW-7	-02 UO	7	NO	0.400	0.044	0.510	0.550	.2530
2XSAOW-10	-03 UO	10	NO	0.533	0.044	0.631	0.681	.3620
2XSAOW-14	-04 UO	14	NO	0.585	0.047	0.689	0.743	.4420
2XSAOW-19	-05 UO	19	NO	0.656	0.047	0.757	0.817	.5450
2XSAOW-24	-06 UO	24	NO	0.791	0.047	0.884	0.952	.7200
2XSAOW-30	-07 UO	30	NO	0.843	0.050	0.941	1.020	.8330
2XSAOW-37	-08 UO	37	NO	0.924	0.050	1.010	1.090	.9710

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
 NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
 • <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

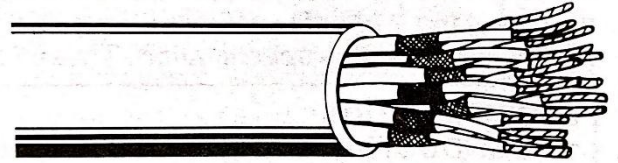
TYPR 2XSW, 2XSOW, 2XSWA

MIL-C-24640/16 (18 AWG)

Watertight, Shielded Pair

APPLICATIONS:

These cables are 45 ohm individually shielded multi pair constructions suitable for watertight (25 psi), non-flexing service. They are available both with and without armor or an overall shield. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g., synchro, pulse, scale voltage) is required. The overall shielding of Type 2XSOW conforms to the surface impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12).
3. SHIELD: Two conductors twisted to form pair, shielded with braided tinned copper, plus a tape shield isolation.
4. ASSEMBLY: The required number of pairs cabled consecutively, (optional binder tape).
5. OVERALL JACKET: Crosslinked polyolefin, surface marking.
2XSWA, same construction with braided aluminum armor.
2XSOW, same construction as 2XSW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/16	Number of Pairs	Overall Armor	Overall Shield Diameter	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	
2XSW-1	-01 UN	1	NO	NO	0.034	0.240	0.258	.0529
2XSW-3	-02 UN	3	NO	NO	0.044	0.436	0.470	.1670
2XSW-7	-03 UN	7	NO	NO	0.044	0.573	0.617	.3180
2XSWA-1	-01 AN	1	YES	NO	0.034	0.290	0.308	.0689
2XSWA-3	-02 AN	3	YES	NO	0.041	0.486	0.520	.2104
2XSWA-7	-03 AN	7	YES	NO	0.044	0.623	0.667	.3752
2XSOW-3	-01 UO	3	NO	0.374	0.041	0.487	0.525	.2270
2XSOW-7	-02 UO	7	NO	0.514	0.044	0.608	0.656	.4010
2XSOW-12	-03 UO	12	NO	0.702	0.047	0.802	0.864	.6260
2XSOW-19	-04 UO	19	NO	0.844	0.844	0.938	1.010	.8840
2XSOW-30	-05 UO	30	NO	1.080	1.080	1.180	1.270	1.378

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

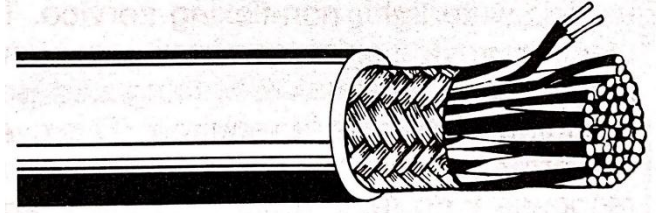
TYPE 2XOW

MIL-C-24640/17 (26 AWG)

Watertight, Overall Shielded, Pairs

APPLICATIONS:

These cables are overall shielded multi pair constructions suitable for watertight (25 psi), non-flexing service. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g. synchro, pulse, scale voltage) is required. The overall shielding conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12).
3. ASSEMBLY: Two conductors twisted to form pair, the required number of pairs cabled consecutively, (optional binder tape).
4. SHIELD: Tinned overall braided tinned copper shield, (optional binder tape).
5. OVERALL JACKET: Crosslinked polyolefin, surface marking.

NEC Number Type and Size	Military Part Number M24640/17	Number of Pairs	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approximate Weight Lbs./Ft
			IN	IN	IN	IN	
2XOW-6	-01 UO	6	0.229	0.038	0.336	0.363	.1070
2XOW-18	-02 UO	18	0.374	0.041	0.468	0.504	.2010
2XOW-24	-03 UO	24	0.447	0.044	0.546	0.588	.2660
2XOW-42	-04 UO	42	0.567	0.044	0.646	0.696	.3650
2XOW-60	-05 UO	60	0.661	0.047	0.744	0.802	.4850
2XOW-77	-06 UO	77	0.770	0.047	0.840	0.906	.6150

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

· TEL:886-2-2957-9823 · FAX:886-2-2957-9712
· <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

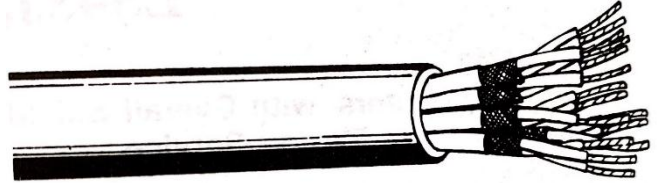
Type 3XSW, 3XSOW, 3XSWA

MIL-C-24640/18 (18 AWG)

Watertight, Shielded Triad

APPLICATIONS:

These cables are 45 ohm individually shielded multi triad constructions suitable for watertight (25 psi), non-flexing service. They are available both with and without armor and an overall shield. They may be used to provide shielded circuits for combat systems, interior communications, lighting, and power, where shielding of 400 Hz (e.g., synchro, pulse, scale voltage) is required. The overall shielding of Type 3XSOW conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded tinned copper.
 2. INSULATION: Extruded irradiation crosslinked polyalkene with irradiated Kynar® insulation jacket, (single conductors per MIL-W-81044/12)
 3. SHIELD: Three conductors twisted to form triad, shielded with braided tinned copper, plus a tape shield isolation.
 4. ASSEMBLY: The required number of triads cabled consecutively, (optional binder tape).
 5. OVERALL JACKET: Crosslinked polyolefin, surface marking.
- 3XSWA, same construction with braided aluminum armor.
3XSOW, same construction as 3XSW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/18	Number of Pairs	Overall Armor	Diameter Over Shield	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	
2XSW-3	-01 UN	3	NO	NO	0.041	0.472	0.508	.2020
2XSW-7	-02 UN	7	NO	NO	0.044	0.620	0.668	.3870
2XSW-10	-03 UN	10	NO	NO	0.047	0.803	0.865	.6130
2XSW-14	-04 AN	14	NO	NO	0.047	0.873	0.941	.7700
2XSWA-3	-01 AN	3	YES	NO	0.041	0.522	0.558	.2548
2XSWA-7	-02 AN	7	YES	NO	0.044	0.670	0.718	.4581
2XSWA-10	-03 AN	10	YES	NO	0.047	0.853	0.915	.7011
2XSWA-14	-01 UO	14	YES	NO	0.047	0.923	0.991	.8727
2XSOW-3	-01 UO	3	NO	0.398	0.044	0.519	0.559	.2710
2XSOW-7	-02 UO	7	NO	0.547	0.044	0.659	0.711	.4720
2XSOW-10	-03 UO	10	NO	0.721	0.047	0.835	0.901	.7020
2XSOW-14	-04 UO	14	NO	0.800	0.047	0.898	0.968	.8600
2XSOW-19	-05 UO	19	NO	0.909	0.050	1.010	1,090	1.127
2XSOW-24	-06 UO	24	NO	1.080	0.057	1.200	1.300	1.489

NOTE: Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

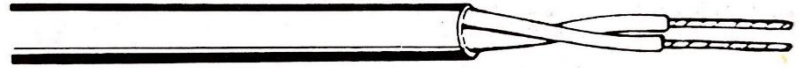
TYPE DXW, DXOW, DXWA

MIL-C-24640/19

Watertight, Circuit Integrity Power Cable

APPLICATIONS:

These two conductor power cables are suitable for watertight (25 psi), non-flexing service. They are available with or without armor or an overall shield. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require a special type of cable. These constructions meet the 1-hour flame circuit integrity requirement of this specification and the overall shielding of type DXOW conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with Polyimide coating.
3. ASSEMBLY: Two conductors twisted, optional binder tape.
4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
5. AMPACITY: calculated at 60Hz AC (rms) or DC for 75°C conductor temperature.
DXWA, same construction with braided aluminum armor.
DXOW, same construction as DXW with overall braided tinned copper shield.
DXOWA, same construction as DXW overall braided tinned copper shield and braided aluminum armor.

NEC Number Type and Size	Military Part Number M24640/19	Overall Shield Diameter	Overall Armor	Cond. Size & Stranding	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity at 60Hz 40°C	Approx. Weight Lbs./Ft
		IN			IN	IN	IN	Amps	
DXW-3	-01 UN	No	No	16 AWG (7/24)	0.034	0.239	0.257	13	.0475
DXW-4	-02 UN	No	No	14 AWG (7/22)	0.034	0.281	0.303	22	.0677
DXWA-3	-01 AN	No	Yes	16 AWG (7/24)	0.034	0.289	0.307	13	.0665
DXWA-4	-02 AN	No	Yes	14 AWG (7/22)	0.034	0.331	0.353	22	.0887
DXOW-3	-01 UO	0.201	No	16 AWG (7/24)	0.034	0.294	0.316	13	.0881
DXOW-4	-02 UO	0.237	No	14 AWG (7/22)	0.034	0.328	0.354	22	.1120
DXOWA-3	-01 AO	0.201	Yes	16 AWG (7/24)	0.034	0.295	0.319	13	.0892
DXOWA-4	-02 AO	0.237	Yes	14 AWG (7/22)	0.034	0.330	0.355	22	.1140

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE TXW, TXWA, TXOW

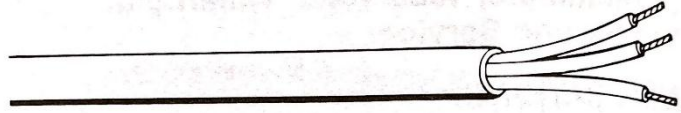
MIL-C-24640/20

Watertight, Circuit Integrity

Power Cable

APPLICATIONS:

These three conductor power cables are suitable for watertight (25 psi), non-flexing service. They are available with or without armor or an overall shield. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require special type of cable. These constructions meet the 1-hour flame circuit integrity requirement of this specification and the overall shielding of type TXOW conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
 2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with Polyimide coating.
 3. ASSEMBLY: Three conductors cabled.
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: calculated at 60Hz AC (rms) or DC for 75°C conductor temperature.
- TXWA, same construction with braided aluminum armor.
TXOW, same construction as TXW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/20	Overall Shield	Overall Armor	Cond. Size & Stranding	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity at 60Hz 40°C	Approx. Weight Lbs./Ft
					IN	IN	IN	Amps	
TXW-3	-01 UN	No	No	16 AWG (7/24)	0.034	0.246	0.266	11	.057
TXW-4	-02 UN	No	No	14 AWG (7/22)	0.038	0.314	0.314	18	.0870
TXWA-3	-01 AN	No	Yes	16 AWG (7/24)	0.034	0.316	0.316	11	.0843
TXWA-4	-02 AN	No	Yes	14 AWG (7/22)	0.038	0.342	0.364	18	.1253
TXOW-3	-01 UO	Yes	No	16 AWG (7/24)	0.030	0.305	0.329	11	.1000
TXOW-4	-02 UO	Yes	No	14 AWG (7/22)	0.038	0.343	0.369	18.	.1300

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE FXW, FXWA, FXOW

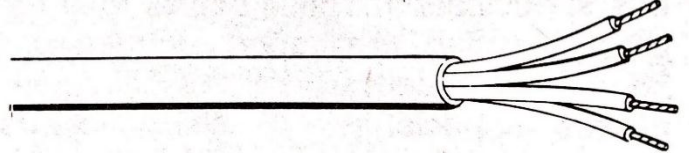
MIL-C-24640/21

Watertight, Circuit Integrity

Power Cable

APPLICATIONS:

These four conductor power cables are suitable for watertight (25 psi), non-flexing service. They are available with or without armor or an overall shield. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require a special type of cable. These constructions meet the 1-hour flame circuit integrity requirement of this specification and the overall shielding of type FXOW conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
 2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with polyimide coating.
 3. ASSEMBLY: Four conductors cabled, optional binder tape.
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: calculated at 60Hz AC (rms) or DC for 75°C conductor temperature.
- FXWA, same construction with braided aluminum armor.
 FXOW, same construction as FXW with overall braided tinned copper shield

NEC Number Type and Size	Military Part Number M24640/21	Overall Shield	Overall Armor	Cond. Size & Stranding	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity at 60Hz 40°C	Approx. Weight Lbs./Ft
					IN	IN	IN	Amps	
FXW-3	-01 UN	No	No	16 AWG (7/24)	0.034	0.266	0.286	11	.0694
FXW-4	-02 UN	No	No	14 AWG (7/22)	0.038	0.315	0.339	18	.1020
FXWA-3	-01 AN	No	Yes	16 AWG (7/24)	0.034	0.316	0.336	11	.0949
FXWA-4	-02 AN	No	Yes	14 AWG (7/22)	0.038	0.365	0.389	18	.1277
FXOW-3	-01 UO	Yes	No	16 AWG (7/24)	0.034	0.324	0.350	11	.1060
FXOW-4	-02 UO	Yes	No	14 AWG (7/22)	0.038	0.366	0.394	18.	.1460

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
 NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
 • <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE 7XW, 7XWA

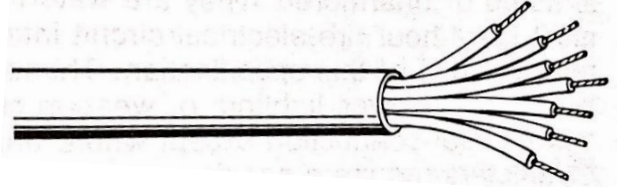
MIL-C-24640/22

Watertight, Circuit Integrity

Power Cable

APPLICATIONS:

These seven conductor power cables are suitable for watertight (25 psi), non-flexing service. They are available both with or without armor or an overall shield. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require a special type of cable. These constructions meet the 1-hour flame circuit integrity requirement of this specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
 2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with Polyimide coating.
 3. ASSEMBLY: Seven conductors cabled (optional binder tape).
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
 5. AMPACITY: calculated at 60HZ AC (rms) or DC for 75°C conductor temperature.
- 7XWA, same construction with overall braided aluminum armor

NEC Number Type and Size	Military Part Number M24640/22	Overall Armor	Conductor Size & Stranding	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity at 60Hz 40°C	Approx. Weight Lbs./Ft
				IN	IN	IN	Amps Ind/Avg.*	
7XW-3	-01 UN	No	16 AWG (7/24)	0.038	0.315	0.339	15/11*	.1050
7XW-4	-02 UN	No	14 AWG (7/22)	0.041	0.374	0.404	26/14	.1550
7XWA-3	-01 AN	Yes	16 AWG (7/22)	0.038	0.365	0.389	15/111	.1383
7XWA-4	-02 AN	Yes	14 AWG (7/22)	0.041	0.424	0.454	26/14	.2081

*Ind/Avg indicates the maximum current per conductor (Ind), and the maximum current (Avg) per conductor when all conductors in the cable are listed.

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>

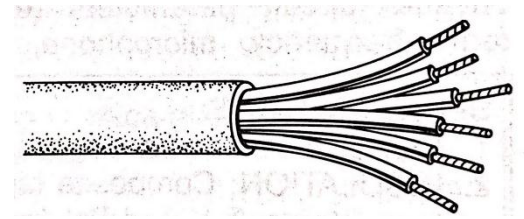
MIL-C-24640 (LIGHTWEIGHT)

TYPE MXCW, MXCOW, MXCWA

MIL-C-24640/23 (18 AWG)
Watertight, Circuit Integrity
Control Cable

APPLICATIONS:

These multi conductor control cables are suitable for watertight (25 psi), non-flexing service. They are available both with or without armor or an overall shield. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require a special type of cable. These constructions meet the 1-hour flame circuit integrity requirement of this specification and the overall shielding of type MXCOW conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
 2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with Polyimide coating.
 3. ASSEMBLY: The required number of conductors cabled consecutively, (optional binder tape).
 4. OVERALL JACKET: Crosslinked polyolefin, surface marking
 5. AMPACITY: calculated at 60HZ AC (rms) or DC for 75°C conductor temperature.
- MXCWA, same construction with braided aluminum armor.
 MXCOW, same construction as MXCW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/23	Number of Cond.	Overall Armor	Overall Shield Diameter	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity at 60Hz 40°C	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	Amps Ind/Avg.*	
MXCW-7	-01 UN	7	No	No	0.038	0.295	0.319	.0870	12/8
MXCW-10	-02 UN	10	No	No	0.041	0.375	0.405	.1360	12/8
MXCW-14	-03 UN	14	No	No	0.041	0.402	0.434	.1660	12/8
MXCW-19	-04 UN	19	No	No	0.401	0.440	0.474	.2088	12/8
MXCW-24	-05 UN	24	No	No	0.044	0.520	0.560	.2810	12/6
MXCW-30	-06 UN	30	No	No	0.044	0.547	0.589	.3250	12/6
MXCW-37	-07 UN	37	No	No	0.044	0.584	0.630	.3840	12/6
MXCW-44	-08 UN	44	No	No	0.044	0.565	0.708	.4720	12/5
MXCW-61	-09 UN	61	No	No	0.047	0.729	0.785	.6120	12/4.5

*Ind/Avg indicates the maximum current per conductor (Ind), and the maximum current (Avg) per conductor when all conductors in the cable are used.

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986. Diameters and weights may vary between manufacturers.



佳昭企業有限公司
 NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
 • <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE MXCW, MXCOW, MXCWA

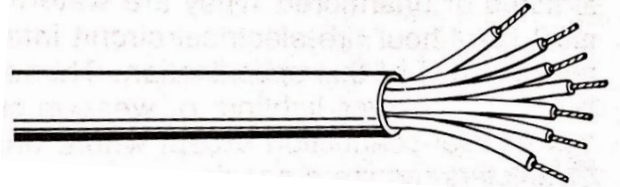
MIL-C-24640/23 (18 AWG)(continued)

Watertight, Circuit Integrity

Control Cable

APPLICATIONS:

These multi conductor control cables are suitable for watertight (25 psi), non-flexing service. They are available both with or without armor or an overall shield. They may be used for power or control applications except where unusual circuit parameters (e.g., audio or radio frequency, microphone, synchro, etc.) require a special type of cable. These constructions meet the 1-hour flame circuit integrity requirement of this specification and the overall shielding of type MXCOW conforms to the surface transfer impedance and EMP response requirements of the specification.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with Polyimide coating.
3. ASSEMBLY: The required number of conductors cabled consecutively, (optional binder tape).
4. OVERALL JACKET: Crosslinked polyolefin, surface marking.
5. AMPACITY: calculated at 60Hz AC (rms) or DC for 75°C conductor temperature.
MXCWA, same construction with braided aluminum armor.
MXCOW, same construction as MXCW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/23	Number of Cond.	Overall Armor	Overall Shield Diameter	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Max. Cond. Ampacity at 60Hz 40°C	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	Amps Ind/Avg.*	
MXCWA-7	-01 AN	7	Yes	No	0.038	0.345	0.369	.1100	12/8*
MXCWA-10	-02 AN	10	Yes	No	0.041	0.425	0.455	.1772	12/8
MXCWA-14	-03 AN	14	Yes	No	0.041	0.452	0.485	.2158	12/6
MXCWA-19	-04 AN	19	Yes	No	0.041	0.490	0.524	.2644	12/6
MXCWA-24	-05 AN	24	Yes	No	0.044	0.570	0.610	.3370	12/6
MXCWA-30	-06 AN	30	Yes	No	0.044	0.597	0.639	.3853	12/6
MXCWA-37	-07 AN	37	Yes	No	0.044	0.634	0.680	.4529	12/6
MXCWA-44	-08 AN	44	Yes	No	0.044	0.706	0.758	.5477	12/5
MXCWA-61	-09 AN	61	Yes	No	0.047	0.779	0.835	.5640	12/4.5
MXCOW-7	-01 UO	7	No	0.226	0.038	0.340	0.366	.1340	12/8
MXCOW-10	-02 UO	10	No	0.297	0.041	0.415	0.447	.1840	12/8
MXCOW-14	-03 UO	14	No	0.325	0.041	0.440	0.474	.2190	12/8
MXCOW-19	-04 UO	19	No	0.370	0.041	0.477	0.515	.2670	12/8
MXCOW-24	-05 UO	24	No	0.441	0.044	0.557	0.601	.3500	12/6
MXCOW-30	-06 UO	30	No	0.469	0.044	0.584	0.630	.3990	12/6
MXCOW-37	-07 UO	37	No	0.514	0.044	0.622	0.670	.4660	12/6
MXCOW-44	-08 UO	44	No	0.585	0.047	0.697	0.751	.5530	12/5
MXCOW-61	-09 UO	61	No	0.652	0.047	0.757	0.817	.6940	12/4.5

*Ind/Avg indicates the maximum current per conductor (Ind), and the maximum current (Avg) per conductor when all conductors in the cable are used.

NOTE: Conductor temperature not specified in MIL-HDBIC-XXX, cable comparison handbook Electric Shipboard Cable, 1986.

Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

· TEL:886-2-2957-9823 · FAX:886-2-2957-9712
· <http://www.nearson.com.tw>

MIL-C-24640 (LIGHTWEIGHT)

TYPE TTXW, TTOW, TTXWA

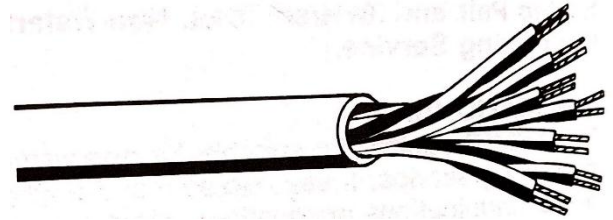
MIL-C-24640/24

Watertight Circuit Integrity (22 AWG)

Twisted Pair

APPLICATIONS:

These unshielded multi pair constructions are suitable for watertight, non-flexing service. They may be supplied either armored or unarmored. They may be used to interconnect audio, telephone, call bell, announcing, and alarm systems. They may also be used for other interior communication and weapon control systems provided the ampere rating of the cable and voltage drop for the system are not exceeded.



SPECIFICATIONS:

1. CONDUCTOR: Stranded bare copper.
 2. INSULATION: Composite tape wrapped insulation consisting of mica-glass, Polyimide tape (Kapton®), and Polyimide-FEP tape with Polyimide coating.
 3. PAIR: Two conductors twisted to form pair.
 4. ASSEMBLY: The required number of pairs cabled consecutively, (optional binder tape).
 5. OVERALL JACKET: Crosslinked polyolefin, surface marking.
- TTXWA, same construction with braided aluminium armor.
TTXOW, same construction as TTXW with overall braided tinned copper shield.

NEC Number Type and Size	Military Part Number M24640/24	Number of Pairs	Overall Armor	Overall Shield Diameter	Minimum Jacket Thickness	Minimum Cable Diameter	Maximum Cable Diameter	Approx. Weight Lbs./Ft
				IN	IN	IN	IN	
TTXW-1-1/2	-01 UN	1-1/2	No	No	0.028	0.181	0.195	.0256
TTXW-3	-02 UN	3	No	No	0.038	0.285	0.307	.0577
TTXW-5	-03 UN	5	No	No	0.038	0.331	0.357	.0769
TTXW-10	-04 UN	10	No	No	0.041	0.456	0.492	.1530
TTXW-15	-05 UN	15	No	No	0.044	0.527	0.569	.2030
TTXW-20	-06 UN	20	No	No	0.044	0.577	0.621	.2510
TTXW-30	-07 UN	30	No	No	0.044	0.684	0.738	.3510
TTXW-40	-08 UN	40	No	No	0.047	0.790	0.852	.4760
TTXWA-1-1/2	-01 AN	1-1/2	Yes	No	0.028	0.231	0.245	.0406
TTXWA-3	-02 AN	3	Yes	No	0.038	0.335	0.357	.0797
TTXWA-5	-03 AN	5	Yes	No	0.038	0.381	0.407	.1073
TTXWA-10	-04 AN	10	Yes	No	0.041	0.506	0.542	.1943
TTXWA-15	-05 AN	15	Yes	No	0.044	0.577	0.619	.2416
TTXWA-20	-06 AN	20	Yes	No	0.044	0.627	0.671	.2962
TTXWA-30	-07 AN	30	Yes	No	0.044	0.734	0.788	.4072
TTXWA-40	-08 AN	40	Yes	No	0.047	0.840	0.902	.5426
TTXOW-1-1/2	-01 UO	1-1/2	No	0.127	0.031	0.253	0.273	.0386
TTXOW-3	-02 UO	3	No	0.216	0.038	0.333	0.359	.0804
TTXOW-5	-03 UO	5	No	0.263	0.038	0.376	0.406	.1060
TTXOW-15	-04 UO	15	No	0.449	0.044	0.556	0.600	.2610
TTXOW-20	-05 UO	20	No	0.510	0.044	0.614	0.662	.3280
TTXOW-30	-06 UO	30	No	0.610	0.047	0.717	0.772	.4510
TTXOW-40	-07 UO	40	No	0.720	0.047	0.823	0.887	.5890

Diameters and weights may vary between manufacturers.



佳昭企業有限公司
NEARSON ENTERPRISE CORP.

• TEL:886-2-2957-9823 • FAX:886-2-2957-9712
• <http://www.nearson.com.tw>