



Offshore and  
Onshore RIG  
Cables

# IEEE 1580 Type P MOR® Polyrad® XT-125, Unarmored



**Flexible Variable Frequency Drive Power  
Unarmored**  
2 kV/1000 V



## Product Construction:

### 1. Conductor:

- 8 AWG thru 777 kcmil soft annealed tinned copper flexible strand

### 2. Insulation:

- Polyrad® XT-125 Irradiated Cross-linked Polyolefin (XLPO)
- Color Code: All black with printed numbers

### 3. Ground:

- 3 split green insulated flexible tinned copper conductors sized to UL 1277

### 4. Shield:

- Overall tinned copper braid with aluminum/polyester tape – 100% coverage for enhanced shield effectiveness required by VFD applications

### 5. Sheath:

- Mud Oil-Resistant, Black Irradiated Cross-linked Chlorinated Polyethylene (XL-CPE)

### 6. Print: (Including but not limited to)

- MOR® POLYRAD® XT-125 VFD (UL) E85994 BR782 110C 3C XXAWG+3GRNDS SHIELDED TC-ER RHW -- (CSA) LL 9755 SPEC 245/1309 FT4 -40C SR 2000 V RW90 XLPE TC (ETL) US 109229 IEEE 1580 -- IEC 1 KV 60332.3A DAY/MONTH/YEAR SEQUENTIAL MARK

### 7. Options:

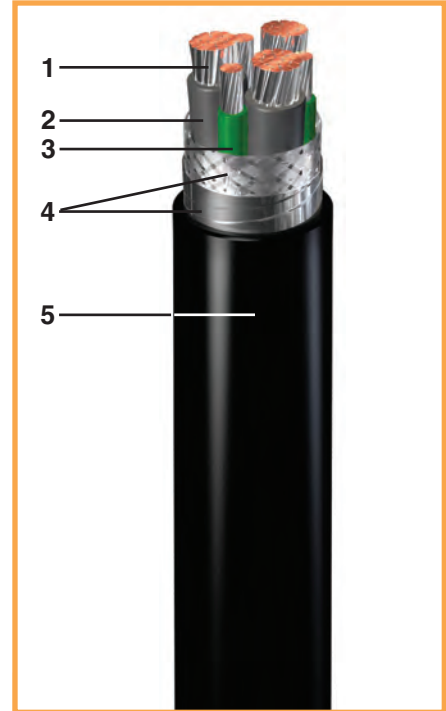
- Overall braid wire armor
- Larger sized insulated ground wires
- Uninsulated ground wires

## Applications:

- AC motor variable frequency drives
- Offshore oil and gas drilling platforms, MODUs, ships and FPSOs
- Land-based oil and gas drilling rigs
- Suitable for use in Class I, Division 2 and Zone 2 environments when installed in accordance with API-RP14F or NEC Article 501

## Features:

- Meets NEK 606 mud oil resistance requirements with ester-based muds
- Meets UL 2225 crush and impact requirements of Type MC-HL cables
- Permitted for exposed run "ER" (open wiring) use in accordance with NEC
- Flexible stranding to facilitate ease of cable installation and termination
- Temperature rated @ 125°C for long life, higher ampacities and protection from thermal overloads
- Meets cold bend test at -55°C
- Meets cold impact test at -40°C



## Compliances:

### Industry:

- API-RP14F
- CSA C22.2 No. 38 Type RW90
- CSA C22.2 No. 230 Type TC
- CSA C22.2 No. 245 Type X110
- IEEE 1580-2010 Type P
- IEC 60092-350
- Mud oil-resistant
- UL 1309 Type X110
- UL Listed 110°C Marine Shipboard Cable

### Flame Test:

- IEEE 1202
- IEC 60332-3-22 Cat. A (supersedes IEC 60332-3A)
- CSA C22.2 No. 0.3 FT4



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CATALOG NUMBER	# OF CORES	COND. (AWG) SIZE	GROUNDING COND. SIZE (AWG)	NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT		AMPACITIES <sup>1</sup> 45°C AMBIENT-SINGLE BANKED			
				INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km	95°C	100°C	110°C	125°C
381780IG	3	8	3 x #14	0.935	23.75	225	335	589	876	50	52	56	63
381790IG	3	6	3 x #12	1.030	26.16	341	507	762	1134	67	70	75	91
380560IG	3	4	3 x #12	1.115	28.32	513	763	1007	1498	87	92	99	126
381800IG	3	2	3 x #10	1.235	31.37	778	1158	1384	2059	116	122	131	161
381810IG	3	1	3 x #10	1.415	35.94	1020	1518	1830	2723	137	143	153	202
359630IG	3	1/0	3 x #10	1.530	38.86	1245	1853	2160	3214	157	164	176	229
359640IG	3	2/0	3 x #10	1.625	41.28	1479	2201	2473	3680	180	188	201	254
359650IG	3	3/0	3 x #8	1.865	47.37	2076	3089	3369	5013	209	218	233	313
359660IG	3	4/0	3 x #8	1.925	48.90	2306	3431	3658	5443	242	252	270	354
359670IG	3	262	3 x #6	2.075	52.71	2864	4262	4454	6628	283	294	310	395
359680IG	3	313	3 x #6	2.190	55.63	3267	4861	6004	8934	309	321	345	442
386670IG	3	373	3 x #6	2.330	59.18	3815	5677	5708	8494	361	375	406	492
365690IG	3	444	3 x #6	2.440	61.98	4518	6723	6440	9583	396	411	445	608
381680IG	3	535	3 x #6	2.700	68.58	5377	8001	7712	11475	448	465	511	608
387920IG	3	646	3 x #4	2.945	74.80	6414	9544	9197	13685	492	510	525	678
14446.037000IG <sup>2</sup>	3	777	3 x #4	3.145	79.88	7642	11371	10723	15956	552	573	640	750

Note: Dimensions and weights are nominal; subject to industry tolerances.

<sup>1</sup>Reference Ampacity section.

<sup>2</sup>Thermoset CPE jacket (XL-CPE) not tested to NEK 606 Mud Oil Resistance.