

# RAYCHEM MINING COUPLERS

## RELIABLE, RUGGEDIZED, EASY TO INSTALL SOLUTIONS (8KV AND 15KV)

### KEY FEATURES

- Range-taking Removable and Reusable Shearbolt Stems, Free from Dangerous Lead Soldering
- Range-taking Expanded EPDM Cable Entry Seal Provides Additional Cutback Allowance
- High Strength and Impact Resistant Individually Replaceable Insulators
- Front Serviceable and Replaceable Contacts
- Integral Phase to Phase Fault Barriers
- Easier, Faster, Safer Installation and Retrofit
- Coupler Junction Box, Skids and Full Line of Flexible Cable Accessories also Available

TE Connectivity's (TE) innovative Raychem mining couplers are designed to reduce installation time, provide safer operations, and resist damage from wear and tear.

The couplers feature range-taking mechanical shearbolt connectors with two stem sizes for use on conductors from #6 to 500 MCM. The connector shear heads insure that the correct torque is applied to each bolt for optimal contact force. Raychem couplers include a unique cable-entry using range-taking pre-stretched EPDM seals to fit 1.5"-3.5" OD cables. The coupler's sealing collar also makes installation easier, providing 4" of additional cable cutback allowance when required for phase crossing.

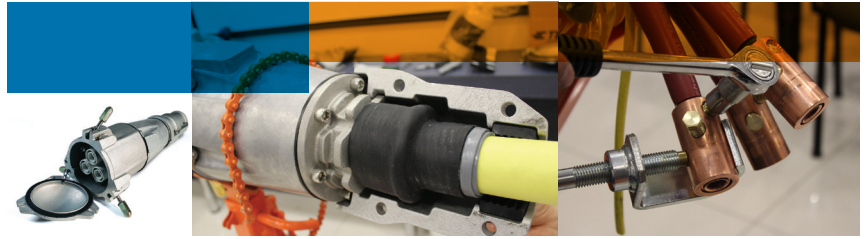
Internal phase to phase ground barriers serve to avoid high energy phase to phase faults and deliver enhanced electrical performance powered by Raychem HVT-Z terminations and Guroflex cold pour resin. The couplers are also compatible with other products in the industry, making them flexible and interchangeable.

Overall, the Raychem mining coupler is a robust and dependable performer in even the harshest applications.

**Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.**

# Raychem Mining Couplers Selection Code

Electrical Performance	8kV	15kV
Rated current (A)*	400	500
AC, 60Hz, 1 min	26	34
DC, 15 min	34	53
PD (< 3pC) at kVrms	5	11
BIL (kVcr)	75	95
Short circuit current (kA) for 0.17s	40	40
Short time current (kA) for 3s	10	10



Mechanical Performance	8kV	15kV
Weight	36 lbs	40 lbs
Length	24 in	27 in
Enclosure degree of protection	IP68H	IP68H
Cable range (AWG -MCM)**	#6 - 500	#6 - 500
Ambient temperature °C	-40 to +45	-40 to +45
Tension (lbs)	1300	1300
Cantilever (ft-lbs)	1200	1200
Torsion (ft-lbs)	100	100

### Note 1: Standard Couplers Configuration

- **Contact Structure:** **8 kV: 3 Power, 1 Pilot, 2 Ground** **15 kV: 3 Power, 1 Pilot, 1 Ground**
- Individually replaceable UHMW high impact resistant Insulators
- Standard Color is Bare Aluminium without powder coating
- Marine grade corrosion resistant aluminium alloy
- All couplers and junction boxes are supplied with protective cover with attachment chain and provision for padlocking two mated couplers and/or cover
- Entrance Fitting: IP 68H cable entry seal and strain relief (only for cable mounted couplers)
- Phase connection designed with shearbolt connection stems
- Phase to Phase fault barriers: **8 kV Couplers:** with Front shielding and Back phase barrier  
**15 kV Couplers:** Front grounded Pin& Back phase barrier
- Ready to use with Closing Tool bracket
- Consult us for other possible contact configurations or if other options are required which are not listed

\*Rated current is at max cable size  
Refer to TE Test Reports EDR5587, EDR5588  
\*\*Cable OD range 38.4 mm (1.51 in) - 89.9 mm (3.54 in)

## HOW TO ORDER

Box 1-7f	1	2	3	-	4	5	6	-	7a	7b	7c	7d	7e	7f
Example	C	P	15	-	M	A	12	-	RD					

Mount		Housing Type		Voltage & Current Rating		Contacts		Shear Bolt Conductor	
Code		Code		kV/Amp	Code	Code		Range	Code
Cable	C	Plug	P	5-8 / 400	58	Male	M	#6-4/0 AWG	A
Equipment	E	Receptacle	R	15 / 500	15	Female	F	250 - 500 MCM	B

Cable Overall Diameter (OD) (leave blank for Equip. mount)		
mm	inches	Code
38.4-41.2	1.51-1.62	10
41.2-44.5	1.63-1.75	11
44.5-47.5	1.76-1.87	12
47.5-50.5	1.88-2.00	13
50.8-53.6	2.01-2.12	14
53.6-57.1	2.13-2.25	15
57.4-60.2	2.26-2.37	16
60.2-63.5	2.38-2.50	17
63.8-66.8	2.51-2.62	18
66.8-69.9	2.63-2.75	19
69.9-72.9	2.76-2.87	20
72.9-76.2	2.88-3.00	21
76.2-79.2	3.01-3.12	22
79.2-82.6	3.13-3.25	23
82.6-85.6	3.26-3.37	24
85.6-89.9	3.38-3.54	25

Option (leave blank if no options are required) See Note 1 before adding options			
Powder Coating	Code	Contacts	Code
Black	BK	ONE ADDITIONAL PILOT	P1
Brown	BR	TWO ADDITIONAL PILOT - No ground	P2
Red	RD	ONE ADDITIONAL GROUND	G1
Orange	OR	TWO ADDITIONAL GROUND - No Pilot	G2
Yellow	YL		
Green	GR		
Blue	BL		
Violet	VT		
Gray	GY		
White	WH		

Mounting & Fittings	Code
LEG MOUNT (Three mounting feet for cable coupler)	M1
ELBOW ADAPTER (45° Equipment MTG)	M2
FIBER OPTIC BREAK OUT PROVISION (Cable MOUNT only)	FO
KEY INTERLOCK PROVISION	KI
TECK CABLE ENTRANCE FITTING (Specify size and type)	E1
CONDUIT ENTRANCE FITTING (Specify size and type)	E2
S.W.A CABLE ENTRANCE FITTING (Specify size and type)	E3

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