

250V FR-MPY, FR-MPYC, FR-MPYCY | Normal Type**250V FR-FA-MPY, FR-FA-MPYC, FR-FA-MPYCY | Flame Retardant Type****Flame retardant, Fire resistance****Construction Details**

- ① Conductor (Tinned annealed copper wire, stranded)
- ② MGT/EPR insulation (identified)
- ③ EPR insulation (identified)
- ④ Cabling (with filler)
- ⑤ Tape
- ⑥ PVC sheath : End of "-Y" type
- ⑦ Metal wire braid armour (GSW)
- ⑧ Paint : End of "-YC" type
- ⑨ PVC outer sheath : End of "-YCY" type

Standard Applied

- Design guideline : JIS C 3410 (2010)
- Material properties : JIS C 3410 Insulation, EPR
JIS C 3410 Sheath, PVC
- Flame retardant (FA- type only) : IEC 60332-3, Cat. 'A'
- Fire resistant : IEC 60331-1, 2

Identification of color

- Identification of insulated cores
- 2 Core and above : Numbering on white insulated core

No. of Cores	Conductor			Thickness of insulation	(FR)-(FA)-MPY		(FR)-(FA)-MPYC		(FR)-(FA)-MPYCY		Cable weight (approx.)		
					Unarmor		Armor		Armor with protective sheath				
	Nominal Sectional Area	No.& dia of Wire	Dia.		Thickness of sheath	Nominal dia. over sheath	Dia.of metal wire for braid	Nominal dia. over braid	Thickness of outer sheath	Nominal overall dia.			
EA	mm ²	EA/mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/km	kg/km	kg/km
2	1.0	7/0.43	1.29	0.6	1.1	10.9±0.5	0.3	12.2±0.5	0.9	14.2±0.6	120	210	265
4	1.0	7/0.43	1.29	0.6	1.2	12.8±0.6	0.3	14.1±0.6	1.0	16.3±0.7	185	290	360
7	1.0	7/0.43	1.29	0.6	1.3	15.4±0.7	0.3	16.7±0.7	1.0	18.9±0.8	285	410	490
12	1.0	7/0.43	1.29	0.6	1.5	20.5±0.9	0.3	21.8±0.9	1.1	24.2±1.0	485	650	765
19	1.0	7/0.43	1.29	0.6	1.6	24.2±1.0	0.3	25.5±1.0	1.2	28.1±1.1	705	900	1050
27	1.0	7/0.43	1.29	0.6	1.8	29.3±1.2	0.3	30.6±1.2	1.4	33.6±1.3	1010	1250	1450
37	1.0	7/0.43	1.29	0.6	2.0	33.1±1.4	0.4	34.9±1.4	1.5	38.3±1.5	1330	1700	1970
44	1.0	7/0.43	1.29	0.6	2.1	37.4±1.6	0.4	39.2±1.6	1.6	42.8±1.7	1630	2040	2360

250V FR-TTPY, FR-TTPYC, FR-TTPYCY | Normal Type**250V FR-FA-TTPY, FR-FA-TTPYC, FR-FA-TTPYCY | Flame Retardant Type****Flame retardant, Fire resistance****Construction Details**

- ① Conductor (Tinned annealed copper wire, stranded)
- ② MGT/EPR insulation (identified)
- ③ Twist (Pair, Triad, Quad)
- ④ Cabling (with filler)
- ⑤ Tape
- ⑥ PVC sheath : End of "-Y" type
- ⑦ Metal wire braid armour (GSW)
- ⑧ Paint : End of "-YC" type
- ⑨ PVC outer sheath : End of "-YCY" type

Standard Applied

- Design guideline : JIS C 3410 (2010)
- Material properties : JIS C 3410 Insulation, EPR
JIS C 3410 Sheath, PVC
- Flame retardant(FA- type only) : IEC 60332-3, Cat.'A'
- Fire resistant : IEC 60331-1, 2

Identification of color

- Insulation color : White
- A core : Black Numbering (1A,2A,...) - B core : Red Numbering (1B,2B,...)
- C core : Black Numbering (1C) - D core : Black Numbering (1D)

No. of Cores	Conductor			Thickness of insulation	[FR]-[FA]-TTPY		[FR]-[FA]-TTPYC		[FR]-[FA]-TTPYCY		Cable weight (approx.)		
					Unarmor		Armor		Armor with protective sheath				
	Nominal Sectional Area	No.& dia of Wire	Dia.		Thickness of sheath	Nominal dia. over sheath	Dia.of metal wire for braid	Nominal dia. over braid	Thickness of outer sheath	Nominal overall dia.	Unarmor	Armor	Armor with sheath
Pr	mm ²	EA/mm	mm	mm	mm	mm	mm	mm	mm	mm	kg/km	kg/km	kg/km
1	0.75	7/0.37	1.11	0.6	1.1	8.4±0.4	0.3	10.0±0.4	0.9	11.8±0.5	85	145	190
1Tr	0.75	7/0.37	1.11	0.6	1.1	9.1±0.4	0.3	10.7±0.4	0.9	12.5±0.5	110	175	220
1Qd	0.75	7/0.37	1.11	0.6	1.1	9.9±0.4	0.3	11.5±0.5	0.9	13.3±0.5	135	205	255
2	0.75	7/0.37	1.11	0.6	1.3	13.1±0.5	0.3	14.7±0.6	1.0	16.7±0.7	175	265	335
4	0.75	7/0.37	1.11	0.6	1.3	15.5±0.6	0.3	17.1±0.7	1.0	19.1±0.8	270	380	460
7	0.75	7/0.37	1.11	0.6	1.4	18.8±0.8	0.3	20.4±0.8	1.1	22.6±0.9	420	550	655
10	0.75	7/0.37	1.11	0.6	1.6	23.2±0.9	0.3	24.8±1.0	1.2	27.2±1.1	605	770	905
14	0.75	7/0.37	1.11	0.6	1.7	26.2±1.0	0.3	27.8±1.1	1.3	30.4±1.2	800	985	1150
19	0.75	7/0.37	1.11	0.6	1.9	30.4±1.2	0.4	32.4±1.3	1.4	35.2±1.4	1070	1355	1565
24	0.75	7/0.37	1.11	0.6	2.0	33.8±1.4	0.4	35.8±1.4	1.5	38.8±1.6	1325	1640	1890
30	0.75	7/0.37	1.11	0.6	2.1	37.5±1.5	0.4	39.5±1.6	1.6	42.7±1.7	1630	1980	2275
37	0.75	7/0.37	1.11	0.6	2.3	41.6±1.7	0.4	43.6±1.7	1.7	47.0±1.9	2000	2390	2735
48	0.75	7/0.37	1.11	0.6	2.5	47.1±1.9	0.4	49.1±2.0	1.8	52.7±2.1	2565	3005	3415