Anhui Feichun Special Cable Co., Ltd.

- zihao.yang@feichuncables.com
- www.reelingcable.com
- www.feichuncables.com

TECHNICAL SPECIFICATION DOCUMENT

CABLE FV SERIES 450/750V

CABLE FV 4G1.5C 450/750V

Order No: 0325-4G1,5#

CABLE FV 4G2.5C 450/750V

Order No: 0325-4G2,5#

CABLE FV 4G6 450/750V

Order No: 0325-4G6#

PRODUCT OVERVIEW

The CABLE FV series represents a comprehensive range of flat power cables engineered for 450/750V applications requiring superior performance in demanding industrial environments. These cables feature a flat geometry design optimized for space-efficient installations while maintaining excellent electrical and mechanical properties. The series is particularly suited for applications where conventional round cables would be impractical due to space constraints or specific installation requirements.

FEATURED PRODUCT SPECIFICATIONS

PRODUCT MODEL	ORDER NUMBER	GEOMETRY D × B (MM)	COPPER WEIGHT (KG/KM)	TOTAL WEIGHT (KG/KM)	TENSILE LOAD (N)
CABLE FV 4G1.5C	0325-4G1,5#	5.6 × 15.1	58	150	90
CABLE FV 4G2.5C	0325-4G2,5#	6.0 × 18.5	96	210	150
CABLE FV 4G6	0325-4G6#	8.0 × 23.0	230	390	360

CABLE CONSTRUCTION

CONDUCTOR

- Bare electrolytic copper construction
- Flexible stranded design, Category 5
- DIN VDE 0295 compliant
- Superior conductivity and flexibility

INSULATION

- Polyvinylchloride (PVC) base material
- High dielectric strength
- Temperature resistant formulation

- Long-term aging stability

SHIELDING (WHERE APPLICABLE)

- Copper yarn screening
- Approximately 75% coverage
- Tin-plated braided copper wires
- Enhanced EMC performance

OUTER SHEATH

- Polyvinylchloride (PVC) outer jacket
- Black color (RAL 9005)
- UV and weather resistant
- Oil and chemical resistant

COMPREHENSIVE TECHNICAL PARAMETERS

ELECTRICAL PARAMETERS	
Rated Voltage Uo/U	300/500V | 450/750V
Max AC Operating Voltage	318/550V | 476/825V
Max DC Operating Voltage	413/825V | 619/1238V
AC Test Voltage	2kV | 2.5kV
Ampacity	Per DIN VDE 0298-4

THERMAL PARAMETERS	
Ambient Temp - Flexing	-20°C to +60°C
Ambient Temp - Fixed	-30°C to +70°C
Max Operating Temp	70°C
Short-Circuit Temp	150°C

MECHANICAL PARAMETERS	
Min Bending Radius (d<8mm)	3 × d
Min Bending Radius (8-12mm)	4 × d
Min Bending Radius (d>12mm)	5 × d
Tensile Load Capacity	15 N/mm²

CHEMICAL PROPERTIES	
LBS-Free/Silicone-Free	Yes
Flame Retardant	Per DIN VDE 0482-265-2-1
Ozone Resistant	Yes
UV Resistant	Yes
Oil Resistant	Yes
Halogen Free	No

COMPLETE FV SERIES PRODUCT RANGE

CABLE TYPE	CONFIGURATION	ORDER NUMBER	GEOMETRY D × B (MM)	CU WEIGHT (KG/KM)	WEIGHT (KG/KM)	TENSILE LOAD (N)
Control Cable FV | 0.45/0.75 kV						
Control	16G1	0331-16G1#	8.4 × 25.6	154	400	240
Control	24G1	0330-24G1#	4.8 × 68.1	231	600	360
Control	**4G1.5**	**0325-4G1,5#**	**5.6 × 15.1**	**58**	**150**	**90**

CABLE TYPE	CONFIGURATION	ORDER NUMBER	GEOMETRY D × B (MM)	CU WEIGHT (KG/KM)	WEIGHT (KG/KM)	TENSILE LOAD (N)
Control	5G1.5	0325-5G1,5#	5.6 × 19.0	72	180	110
Control	8G1.5	0325-8G1,5#	5.6 × 29.0	115	300	180
Control	12G1.5	0325-12G1,5#	5.6 × 41.4	173	420	270
Control	24G1.5	0325-24G1,5#	5.6 × 83.0	346	790	540
Control	**4G2.5**	**0325-4G2,5#**	**6.0 × 18.5**	**96**	**210**	**150**
Control	5G2.5	0325-5G2,5#	6.0 × 23.2	120	260	180
Control	24G2.5	0325-24G2,5#	6.0 × 94.0	576	1160	900
Power Cable FV | 0.45/0.75 kV						
Power	4G4	0325-4G4#	7.0 × 21.3	154	300	240
Power	**4G6**	**0325-4G6#**	**8.0 × 23.0**	**230**	**390**	**360**
Power	4G10	0325-4G10#	10.5 × 29.0	384	620	600
Power	4G16	0325-4G16#	11.0 × 37.0	614	990	960
Power	4G25	0326-4G25#	13.5 × 46.0	960	1550	1500
Power	4G35	0325-4G35#	14.8 × 51.0	1344	2030	2100
Power	4G50	0325-4G50#	17.0 × 57.0	1920	2650	3000
Power	4G70	0325-4G70#	18.5 × 64.0	2700	3650	4200
Power	4G95	0325-4G95#	21.0 × 74.0	3650	4550	5700

APPLICATIONS

- ✓ Industrial power distribution in space-constrained environments
- ✓ Control and automation systems requiring flat cable solutions
- ✓ Machine tools and manufacturing equipment installations
- ✓ Building automation and HVAC control systems
- ✓ Mobile and flexible installations requiring reliable performance

DIN VDE 0281

German Standard

DIN VDE 0250

Adapted Standard

DIN VDE 0295

Conductor Class 5

H05VVH6-F

Harmonized Cable

H07VVH6-F

Harmonized Cable

DIN VDE 0482

Fire Performance

⚠ **Design Codes and Standards:** The FV series cables comply with harmonized standards H05VVH6-F (300/500V) and H07VVH6-F (450/750V). Conductor coding follows DIN VDE 0293 part 308 with colored cores up to 5 conductors and black cores with white numbers for 6 or more conductors. Installation should be performed by qualified personnel according to local electrical codes and DIN VDE 0298 specifications. Ampacity calculations should follow DIN VDE 0298 part 4 guidelines.

FEICHUN SPECIAL CABLES

Website Address www.reelingcable.com www.feichuncables.com
Whatsapp Account + 86 13855123218
Email Address Zihao.yang@feichuncables.com & Ziyu.huang@feichuncables.com