

## SIMBAL MV-FO PLUS

### Medium voltage reeling cable with fibre optic cores

#### Application

Flexible medium voltage reeling cable with reduced weight and dimensions, for high and extreme Mechanical stress, inc. torsional stress, deflection and high reeling speed. Other applications have to be agreed with Simbal otherwise warranty may become void.

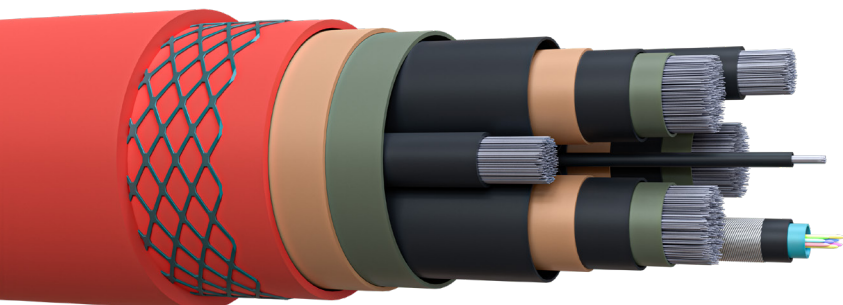
- Min. bedding radius: acc. to VDE 0298-3
- Max. current rating: acc. to VDE 0298-4

#### Construction and technical data

Standard:	VDE 0250-813 (with ref. to)
Conductor material:	tinned copper
Conductor construction:	Class 5 = flexible
Insulation:	HEPR
Electrical field control:	inner and outer semiconducting rubber layer
Central filler:	semiconductive compound on Kevlar® element
Core wrapping:	semiconductive tape
Arrangement of protective conductors:	split in the outer interstices
Material inner sheath:	rubber Gm1b
Torsion protection:	polyester braid
Torsion:	+/- 25 %/m
Sheathing material:	rubber (CR) 5GM5
Colour of outer sheath:	red
Flame-retardant:	VDE 0482-332-1-2/IEC 60332-1-2
UV-resistant:	yes
Oil-resistant:	EN 60811-404
Ozone-resistant:	yes
Max. temperature at conductor, °C:	90°C
Max. short circuit temperature at conductor, °C:	250°C
Permitted outer cable temperature, fixed °C:	-40 - + 80 deg °C
Permitted outer cable temperature, moving °C:	-30 - + 80 deg °C
Maximum tensile strength at the conductor:	30 N/mm <sup>2</sup>
Operating speed (monospiral one direction):	300 m/min.
Operating speed (monospiral two directions):	200 m/min.

## SIMBAL MV-FO PLUS

Medium voltage reeling cable with fibre optic cores



### SIMBAL MV-FO PLUS 3.6/6kV

Part N°	Size	R (Ohms/ km)	Dia (mm)	Fzp (N)	Fzd (N)	Cu (kg/km)	G (kg)
08047 3500 03 - FO	3X35 + 2X25/2 + 24 FO (9/125)	0.565	47.2	3000	4125	1248	3050
08047 3510 03 - FO	3X35 + 2X25/2 + 24 FO (50/125)	0.565	47.2	3000	4125	960	2560

### SIMBAL MV-FO PLUS 6/10kV

Part N°	Size	R (Ohms/ km)	Dia (mm)	Fzp (N)	Fzd (N)	Cu (kg/km)	G (kg)
08048 2500 03 FO	3X25 + 2X25/2 + 24 FO (9/125)	0.795	45.5	3000	4125	960	2560
08048 2510 03 FO	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	45.5	3000	4125	960	2400
08048 2520 03 FO	3X25 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	45.5	3000	4125	960	2560
08048 3500 03 FO	3X35 + 2X25/2 + 12 FO (9/125)	0.565	47.2	3000	4125	1248	3050
08048 3510 03 FO	3X35 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	47.2	3000	4125	1248	3050
08048 5000 03 FO	3X50 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.393	50.2	3600	5250	1680	3520
08048 7000 03 FO	3X70 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.277	54.2	5000	7500	2352	4700
08048 9500 03 FO	3X95 + 2X50/2 + 24 FO (50/125)	0.21	58.5	6500	8900	3216	5840
08048 9510 03 FO	3X95 + 2X50/2 + 24 FO (9/125)	0.21	59	6500	8900	3216	5840

## SIMBAL MV-FO PLUS

### Medium voltage reeling cable with fibre optic cores

#### SIMBAL MV-FO PLUS 8.7/15kV

Part N°	Size	R (Ohms/ km)	Dia (mm)	Fzp (N)	Fzd (N)	Cu (kg/km)	G (kg)
08049 2500 03 FO	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	47.5	3000	4125	960	2840
08049 2510 03 FO	3X25 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	47	3000	4125	960	2840
08049 3500 03 FO	3X35 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	50.1	3000	4125	1248	3250
08049 5000 03 FO	3X50 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.393	54	3600	5250	1680	3890
08049 7000 03 FO	3X70 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.277	58	5000	7500	2352	5100

#### SIMBAL MV-FO PLUS 12/20kV

Part N°	Size	R (Ohms/ km)	Dia (mm)	Fzp (N)	Fzd (N)	Cu (kg/km)	G (kg)
08059 2500 03 FO	3X25 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	61	3000	4125	960	3180
08059 2510 03 FO	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	51	3000	4125	960	3180
08059 3500 03 FO	3X35 + 2X25/2 + 24 FO (9/125)	0.565	54	3000	4125	1248	3800
08059 3510 03 FO	3X35 + 2X25/2 + 12 FO (62.5/125)	0.565	54.5	3000	4125	1248	3800
08059 3520 03 FO	3X35 + 2X25/2 + 24 FO (62.5/125)	0.565	54.5	3000	4125	1248	3800
08059 7000 03 FO	3X70 + 2X25/2 + 24 FO (62.5/125)	0.277	63	5000	7500	3072	5800

#### Table key

R1	Conductor Resistance
Dia	Outer diameter approx
Fzp	Tensile strength (fixed)
Fzd	Tensile Strength (dynamic)
Cu	Copper weight
G	Net weight per 1000m