

SERIE CF

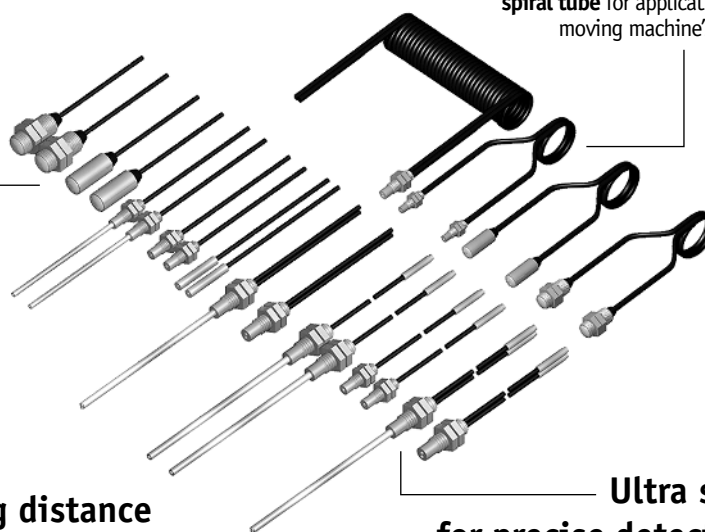


Plastic optical fibre for several applications

- ◆ Wide range of models:
Ultra slim for small object
Long distances
Spiral tube for handling
- ◆ Wide range of flexible fibre heads (with sleeve)
- ◆ Wide range of cutting fibre units
- ◆ IP67 protection degree
- ◆ FS1 and FX2 serie connectable

Spiral tube for handling

spiral tube for applications on moving machine's parts.



Long distance

free-cut for detection also on long distances

Ultra slim for precise detection

ultra slim fibres (Ø 0.5mm) for small objects detections.

ORDERING SYSTEM

	model ^{(1) (3)}	type	with FS1	with FX2	Ø fibre (core)	free-cut	fibre length ⁽²⁾	head shape (mm)
Ultra-slim	CF/CA2-**	diffuse reflection	15 mm	20 mm	0,5mm	no	0,5-1 m	M4
	CF/CA4-**	diffuse reflection	15 mm	20 mm	0,5mm	no	0,5-1 m	M4 with sleeve
	CF/RA4-**	through-beam	30 mm	60 mm	0,5mm	no	0,5-1 m	M4 with sleeve
	CF/RA7-**	through-beam	30 mm	60 mm	0,5mm	no	0,5-1 m	M3
Long Distances	CF/CB1-**	diffuse reflection	50 mm	65 mm	1mm	yes	1-2 m	M6
	CF/CB3-**	diffuse reflection	50 mm	65 mm	1mm	yes	1-2 m	M6 with sleeve
	CF/RB4-**	through-beam	120 mm	200 mm	1mm	yes	1-2 m	M4 with sleeve
	CF/RB6-**	through-beam	120 mm	200 mm	1mm	yes	1-2 m	M4
	CF/RB9-**	through-beam	1200 mm	2000 mm	1mm	yes	1-2 m	Ø6 with lens
Spiral tube	CF/RBA-**	through-beam	1200 mm	2000 mm	1mm	yes	1-2 m	M7 with lens
	CF/CC1-20	diffuse reflection	15 mm	35 mm	1mm	no	2 m	M6
	CF/RC6-20	through-beam	100 mm	160 mm	1mm	no	2 m	M4
	CF/RC9-20	through-beam	1000 mm	1500 mm	1mm	no	2 m	Ø6 with lens
	CF/RCA-20	through-beam	1000 mm	1500 mm	1mm	no	2 m	M7 with lens

(1) The last two bits of the code show the fiber length (in dm) - (2) Standard length. Special lengths are available on request.

(3) The following characteristic curves refer only to FX2 serie.

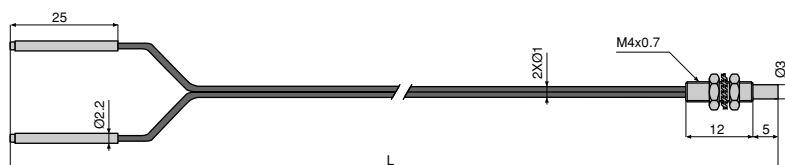
MODEL CF/CA2-**

diffuse reflection

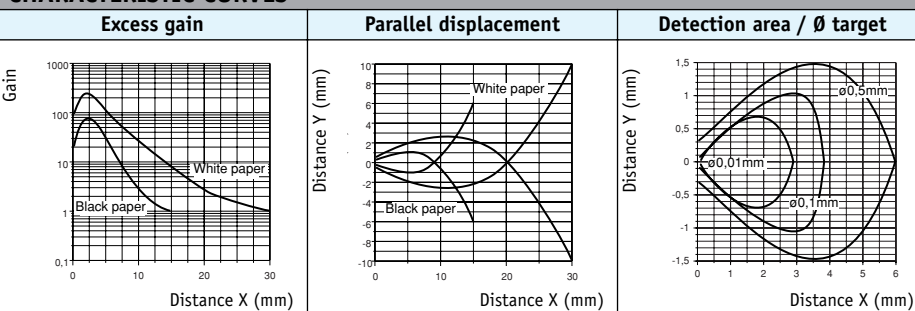


Optical fibre core Ø	0,5 mm
Distance (with FS1)	15 mm
Distance (with FX2)	20 mm
Fibre length (L)	0,5 - 1m
Free-cut	no
Head shape	M4
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

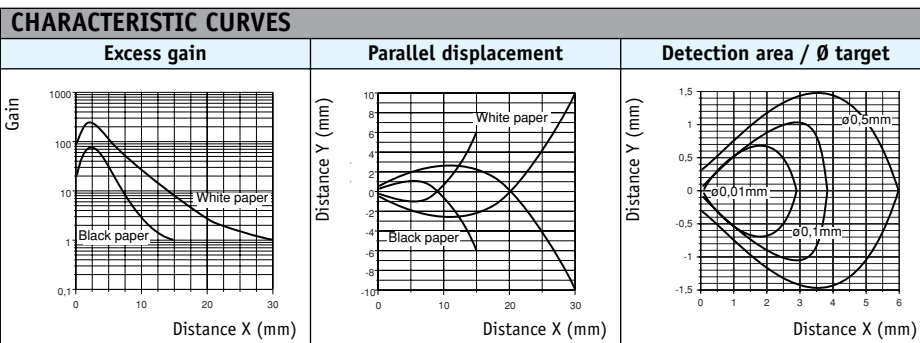
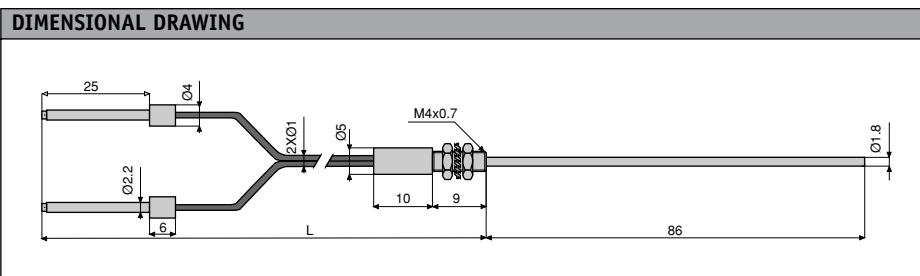
DIMENSIONAL DRAWING



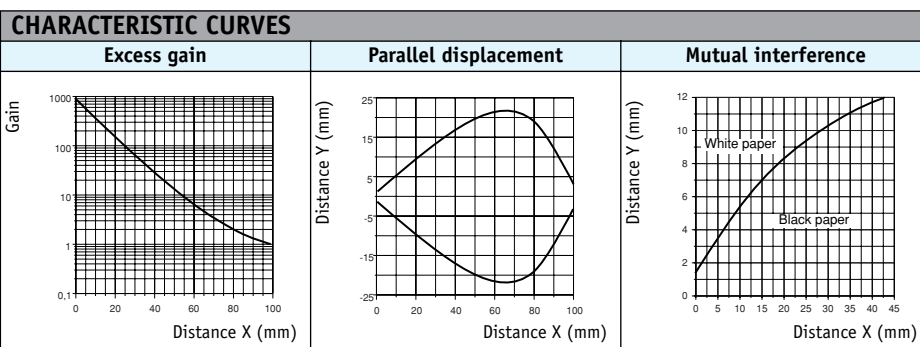
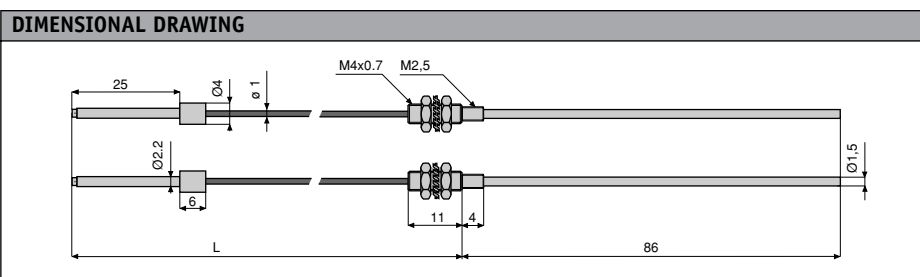
CHARACTERISTIC CURVES



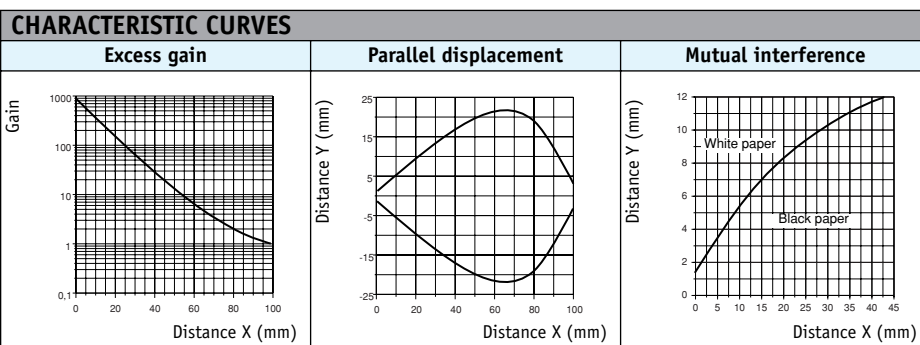
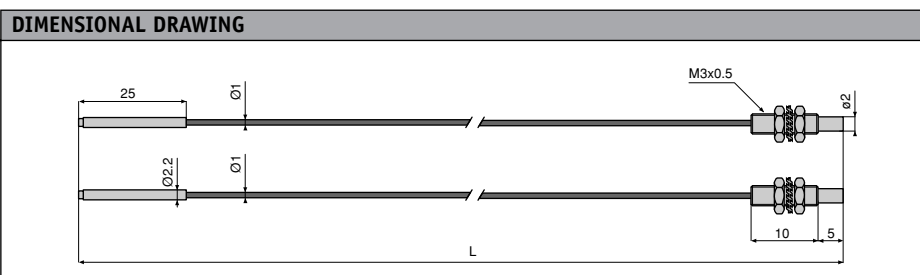
MODEL	CF/CA4-**
diffuse reflection with sleeve	
	
Optical fibre core Ø	0,5 mm
Distance (with FS1)	15 mm
Distance (with FX2)	20 mm
Fibre length (L)	0,5 - 1 m
Free-cut	no
Head shape	M4 with sleeve
Protection degree	IEC IP67
Temperature range	-40°....+55°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

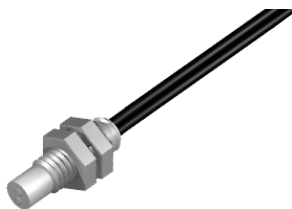


MODEL	CF/RA4-**
through-beam with sleeve	
	
Optical fibre core Ø	0,5 mm
Distance (with FS1)	30 mm
Distance (with FX2)	60 mm
Fibre length (L)	0,5 - 1 m
Free-cut	no
Head shape	M4 with sleeve
Protection degree	IEC IP67
Temperature range	-40°....+55°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

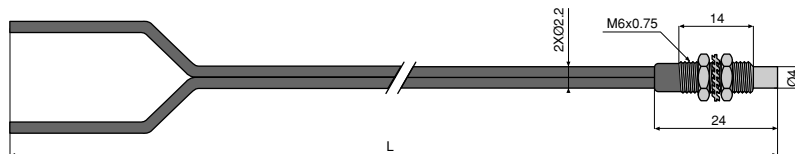
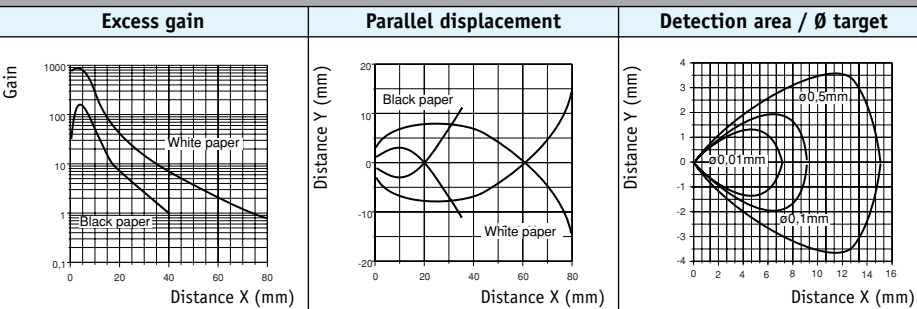


MODEL	CF/RA7-**
through-beam	
	
Optical fibre core Ø	0,5 mm
Distance (with FS1)	30 mm
Distance (with FX2)	60 mm
Fibre length (L)	0,5 - 1 m
Free-cut	no
Head shape	M3
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

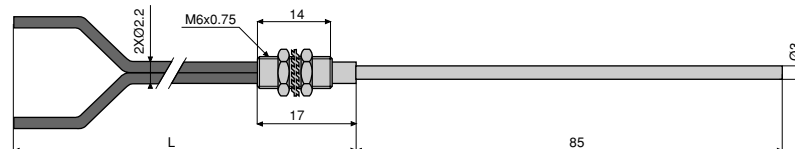
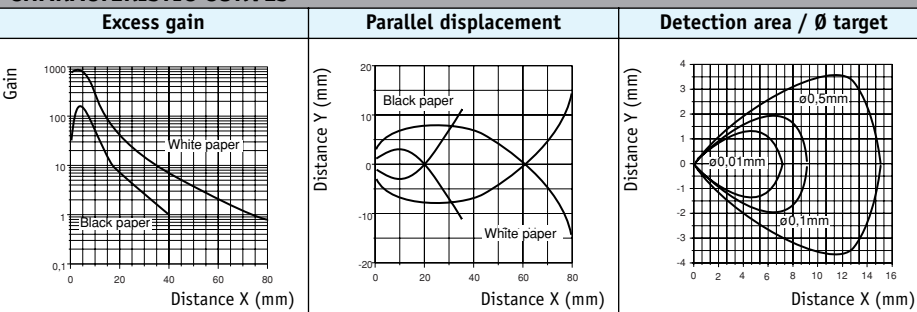
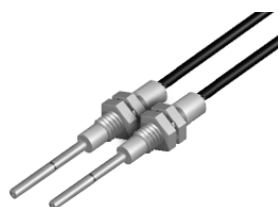


MODEL CF/CB1-**
diffuse reflection


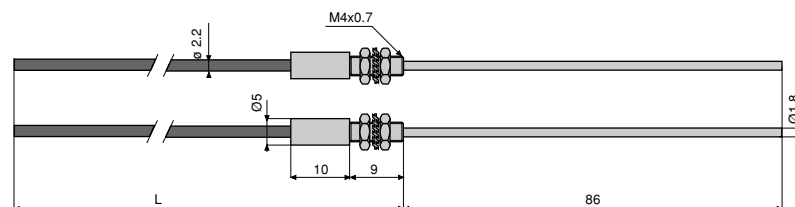
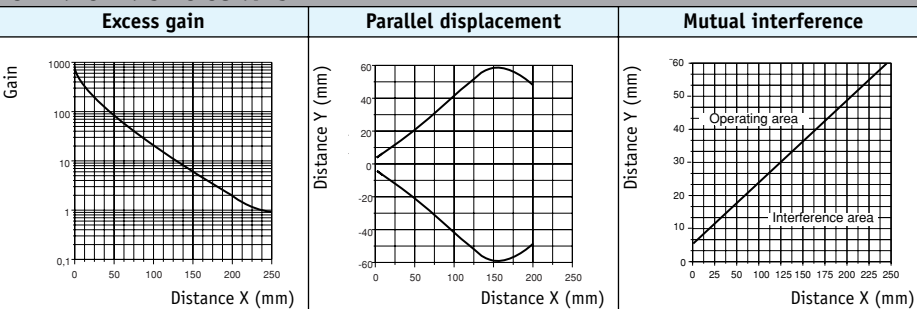
Optical fibre core Ø	1 mm
Distance (with FS1)	50 mm
Distance (with FX2)	65 mm
Fibre length (L)	1 - 2 m
Free-cut	yes
Head shape	M6
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

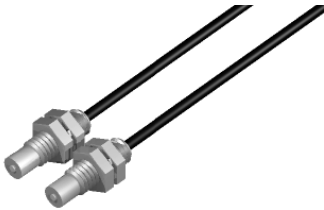
DIMENSIONAL DRAWING

CHARACTERISTIC CURVES

MODEL CF/CB3-**
diffuse reflection with sleeve

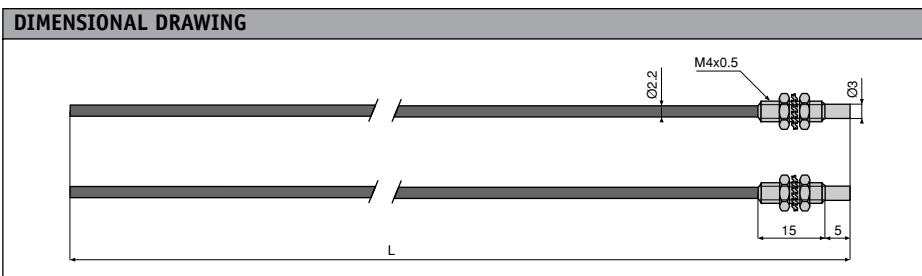

Optical fibre core Ø	1 mm
Distance (with FS1)	50 mm
Distance (with FX2)	65 mm
Fibre length (L)	1 - 2 m
Free-cut	yes
Head shape	M6 with sleeve
Protection degree	IEC IP67
Temperature range	-40°....+55°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

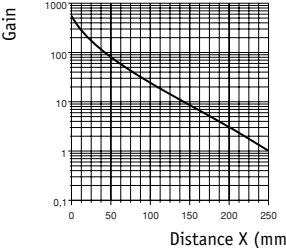
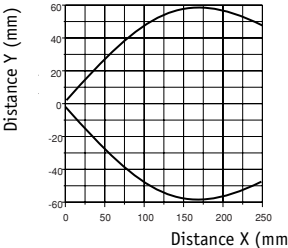
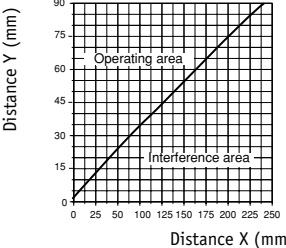
DIMENSIONAL DRAWING

CHARACTERISTIC CURVES

MODEL CF/RB4-**
through-beam with sleeve


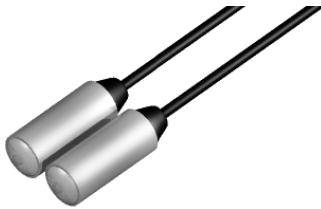
Optical fibre core Ø	1 mm
Distance (with FS1)	120 mm
Distance (with FX2)	200 mm
Fibre length (L)	1 - 2 m
Free-cut	yes
Head shape	M4 with sleeve
Protection degree	IEC IP67
Temperature range	-40°....+55°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

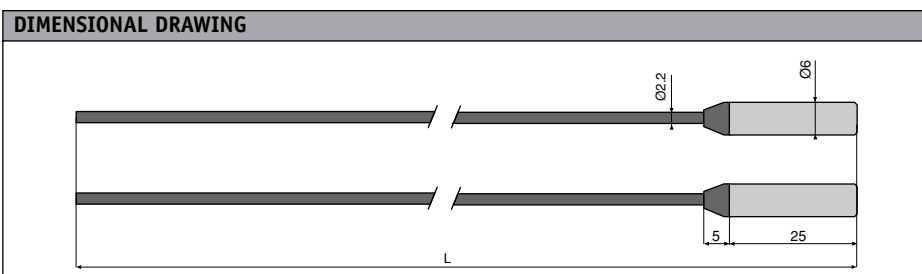
DIMENSIONAL DRAWING

CHARACTERISTIC CURVES


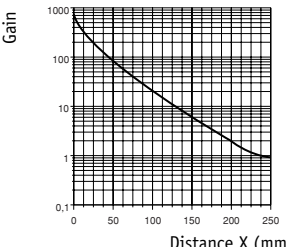
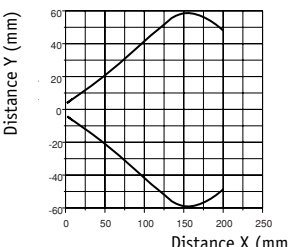
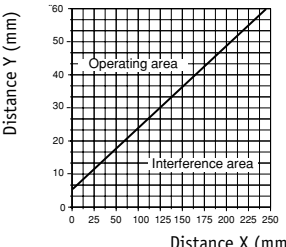
MODEL	CF/RB6-**
through-beam	
	
Optical fibre core Ø	1 mm
Distance (with FS1)	120 mm
Distance (with FX2)	200 mm
Fibre length (L)	1 - 2 m
Free-cut	yes
Head shape	M4
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

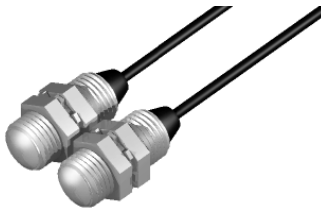


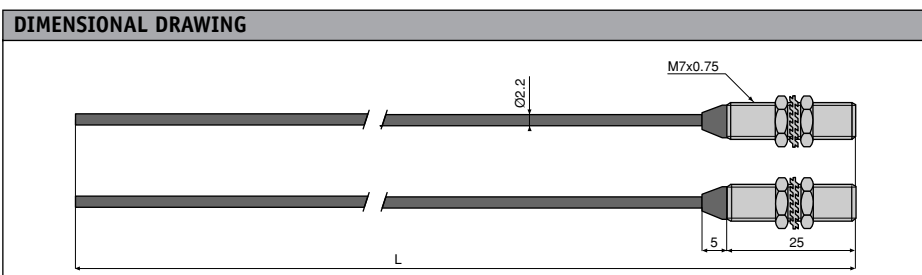
CHARACTERISTIC CURVES		
Excess gain	Parallel displacement	Mutual interference
		

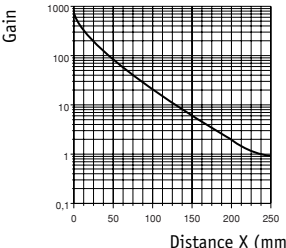
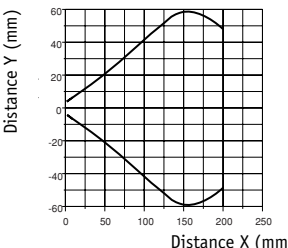
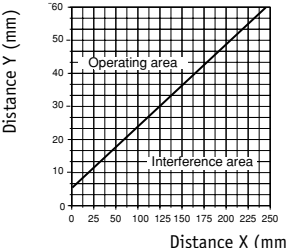
MODEL	CF/RB9-**
through-beam with lenses	
	
Optical fibre core Ø	1 mm
Distance (with FS1)	1200 mm
Distance (with FX2)	2000 mm
Fibre length (L)	1 - 2 m
Free-cut	yes
Head shape	Ø6 with lens
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none



CHARACTERISTIC CURVES		
Excess gain	Parallel displacement	Mutual interference
		

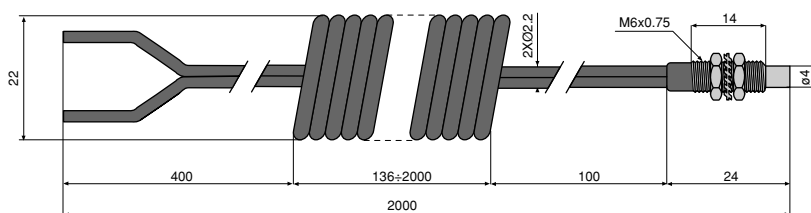
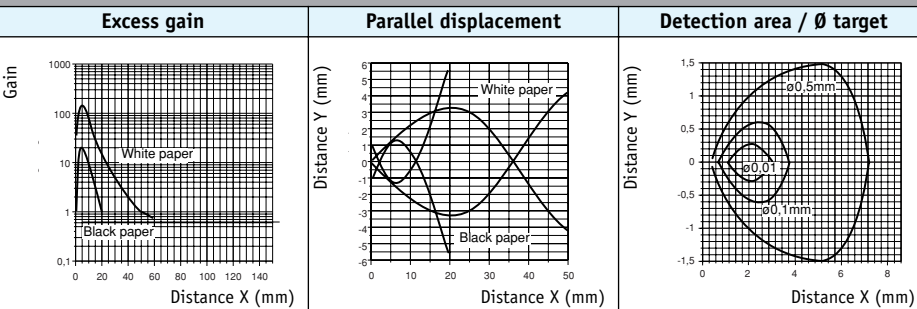
MODEL	CF/RBA-**
through-beam with lenses	
	
Optical fibre core Ø	1 mm
Distance (with FS1)	1200 mm
Distance (with FX2)	2000 mm
Fibre length (L)	1 - 2 m
Free-cut	yes
Head shape	M7 with lens
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	ST 28



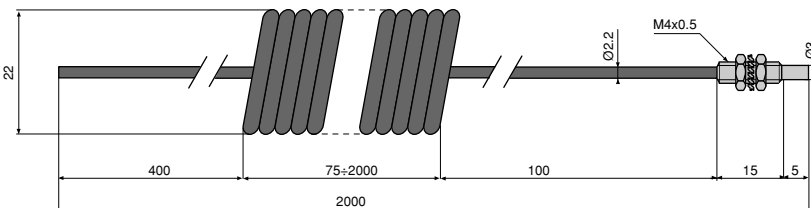
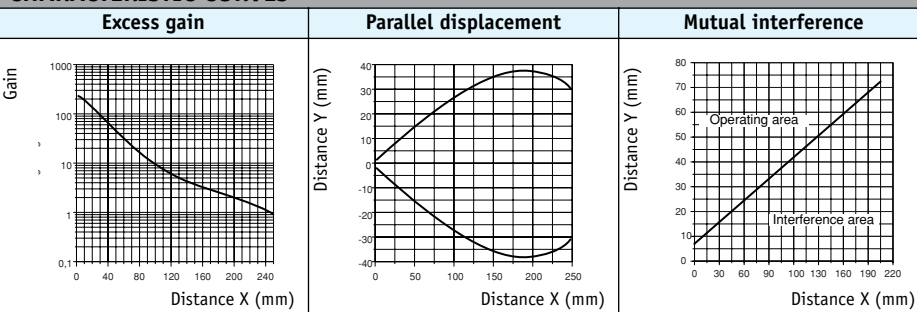
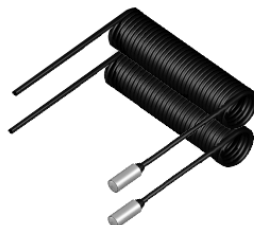
CHARACTERISTIC CURVES		
Excess gain	Parallel displacement	Mutual interference
		

MODEL **CF/CC1-****
diffuse reflection

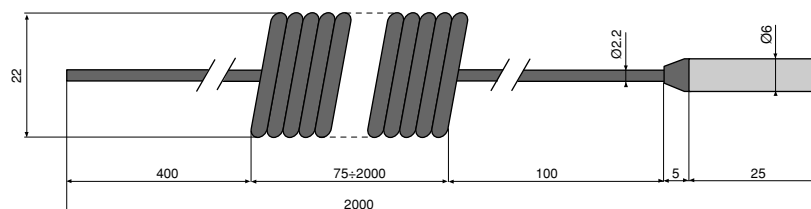
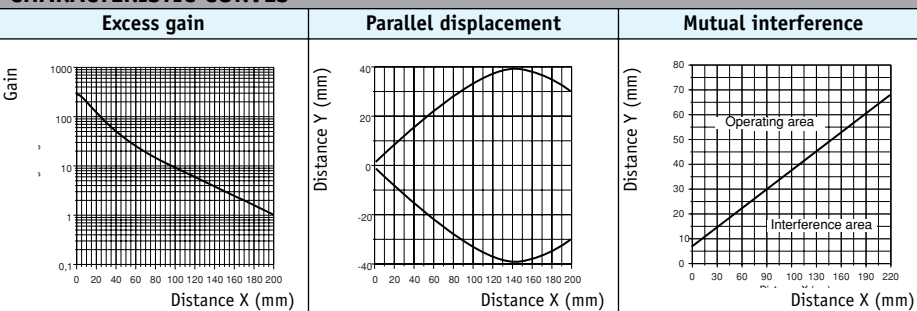

Optical fibre core Ø	1 mm spiral tube
Distance (with FS1)	15 mm
Distance (with FX2)	35 mm
Fibre length (L)	2 m
Free-cut	no
Head shape	M6
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

DIMENSIONAL DRAWING

CHARACTERISTIC CURVES

MODEL **CF/RC6-****
through-beam

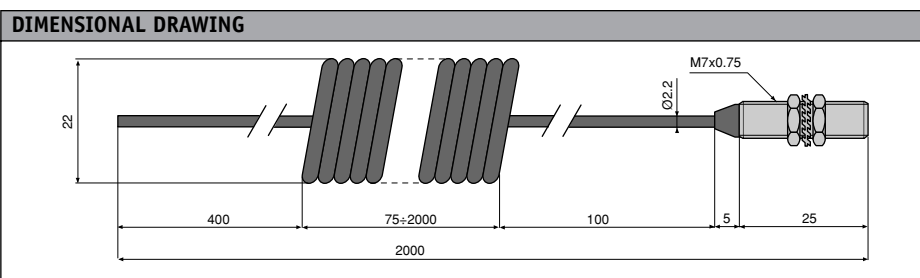

Optical fibre core Ø	1 mm spiral tube
Distance (with FS1)	100 mm
Distance (with FX2)	160 mm
Fibre length (L)	2 m
Free-cut	no
Head shape	M4
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

DIMENSIONAL DRAWING

CHARACTERISTIC CURVES

MODEL **CF/RC9-****
through-beam with lenses


Optical fibre core Ø	1 mm spiral tube
Distance (with FS1)	1000 mm
Distance (with FX2)	1500 mm
Fibre length (L)	2 m
Free-cut	no
Head shape	Ø6 with lens
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	none

DIMENSIONAL DRAWING

CHARACTERISTIC CURVES


MODEL	CF/RCA-**
through-beam with lenses	
	
Optical fibre core Ø	1 mm spiral tube
Distance (with FS1)	1000 mm
Distance (with FX2)	1500 mm
Fibre length (L)	2 m
Free-cut	no
Head shape	M7 with lens
Protection degree	IEC IP67
Temperature range	-40°....+70°C
Optical fibre materials	PE, PMMA
Head materials	nickel-plated brass
Accessories available	ST 28



CHARACTERISTIC CURVES		
Excess gain	Parallel displacement	Mutual interference
