

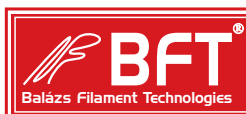
PA-MONOFILAMENTS

fishing line on bulk spool

**specification
2014 EUROPE**

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Made in EU



ISO 9001:2000 certified company. Member of the
European Fishing Tackle Trade Association since 1998.
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Introduction

Our PA-MONOFILAMENT product for fishing line application is a synthetic monofilament having the possible highest technical parameters. We are using exclusively polyamide copolymers as raw material originating from Germany and Japan.

The stable position of BFT Ltd. among the leader monofilament fishing line manufacturers in Europe is based on the several years experience, the continuous research and development further on the extraordinary exactitude experienced during the production.

The different types of fishing lines produced by BFT Ltd. cover all market requirements. You can select the color of the product from our Color Catalog but of course we can meet the individual requests as well. In case of an order there is no quantity limit, therefore we are ready to deliver small quantities as well.

The Polyamide Copolymer Monofilaments for fishing line application are composed from two main grades as follows:

PA-MONOFILAMENTS CoPA 60 series and CoPA 90 series.

The PA-MONOFILAMENTS belonging to all three series are made of polyamide 6/66 copolymer raw material.

The raw materials of series 60 and 90 different from each others and are purchased from different suppliers.

PA-MONOFILAMENTS categories

CoPA 61

CoPA 91

CoPA 91 M

Characteristics of PA-MONOFILAMENTS categories

Category	Characteristics	Applications
CoPA 61	Very good transparency and softness.	Fishing line in the medium category where high strength and softness required.
CoPA 91	Excellent transparency and medium softness. Excellent line strength. Low moisture absorption.	Fishing line in the top category where the excellent strength and medium softness are important.
CoPA 91 M	Excellent transparency and softness. Excellent line strength. Low moisture absorption.	Fishing line in the top category where the excellent strength and excellent softness are important.

Spin finish of PA-MONOFILAMENTS

If required we can treat the surface of monofilaments with different coatings (spin finish). These coatings modify some characteristics of the product in positive way.

Marking	Type	Characteristics
S	Silicone oil	The line is water-repellent, does not absorb moisture. Decreases the friction of the line and increases the abrasion resistance.
P	Softening oil	The coating penetrates into the structure of the line and increases its softness. Decreases the friction, increases the abrasion resistance.

Nomenclature of the PA-MONOFILAMENTS

- The first digit in the code indicates the manufacturer of the polyamide.

6
9

- The second digit indicates the type of polyamide 6/66 copolymer supplied by the same manufacturer and used at the processing.

- Additional markings:

M: contains softener additives
S: treated with silicone oil
P: treated with softening oil

Examples:

CoPA 91 MP

Monofilament, produced from polyamide 6/66 copolymer type 1 raw material which was supplied by a manufacturer having a code of 9, containing softener additives and treated with softening oil.

CoPA 61

Monofilament, produced from polyamide 6/66 copolymer type 1 raw material which was supplied by a manufacturer having a code of 6.

Diameter - Specific length

Size	Specific length	Size	Specific length
Ø0,10mm	106 100 m/kg	Ø0,45mm	5 240 m/kg
Ø0,11mm	87 680 m/kg	Ø0,46mm	5 010 m/kg
Ø0,12mm	73 680 m/kg	Ø0,47mm	4 800 m/kg
Ø0,13mm	62 780 m/kg	Ø0,48mm	4 600 m/kg
Ø0,14mm	54 130 m/kg	Ø0,49mm	4 420 m/kg
Ø0,15mm	47 150 m/kg	Ø0,50mm	4 240 m/kg
Ø0,16mm	41 440 m/kg	Ø0,55mm	3 500 m/kg
Ø0,17mm	36 710 m/kg	Ø0,60mm	2 940 m/kg
Ø0,18mm	32 740 m/kg	Ø0,65mm	2 510 m/kg
Ø0,19mm	29 390 m/kg	Ø0,70mm	2 160 m/kg
Ø0,20mm	26 520 m/kg	Ø0,75mm	1 880 m/kg
Ø0,21mm	24 060 m/kg	Ø0,80mm	1 650 m/kg
Ø0,22mm	21 920 m/kg	Ø0,90mm	1 310 m/kg
Ø0,23mm	20 050 m/kg	Ø1,00mm	1 060 m/kg
Ø0,24mm	18 420 m/kg	Ø1,10mm	870 m/kg
Ø0,25mm	16 970 m/kg	Ø1,20mm	730 m/kg
Ø0,26mm	15 690 m/kg	Ø1,30mm	620 m/kg
Ø0,27mm	14 550 m/kg	Ø1,40mm	540 m/kg
Ø0,28mm	13 530 m/kg	Ø1,50mm	470 m/kg
Ø0,29mm	12 610 m/kg	Ø1,60mm	410 m/kg
Ø0,30mm	11 780 m/kg	Ø1,70mm	360 m/kg
Ø0,31mm	11 040 m/kg	Ø1,80mm	320 m/kg
Ø0,32mm	10 360 m/kg	Ø1,90mm	290 m/kg
Ø0,33mm	9 740 m/kg	Ø2,00mm	265 m/kg
Ø0,34mm	9 170 m/kg	Ø2,10mm	241 m/kg
Ø0,35mm	8 660 m/kg	Ø2,20mm	219 m/kg
Ø0,36mm	8 180 m/kg	Ø2,30mm	201 m/kg
Ø0,37mm	7 750 m/kg	Ø2,40mm	184 m/kg
Ø0,38mm	7 340 m/kg	Ø2,50mm	170 m/kg
Ø0,39mm	6 970 m/kg	Ø2,60mm	157 m/kg
Ø0,40mm	6 630 m/kg	Ø2,70mm	146 m/kg
Ø0,41mm	6 310 m/kg	Ø2,80mm	135 m/kg
Ø0,42mm	6 010 m/kg	Ø2,90mm	126 m/kg
Ø0,43mm	5 730 m/kg	Ø3,00mm	118 m/kg
Ø0,44mm	5 480 m/kg		

Parameters and tests

Linear strength and Knot strength

Tests were performed according to ISO Standard 2062:1993 which is accepted by EFTTA (European Fishing Tackle Trade Association). At the tests CRT (Constant Rate of Travel) WOLPERT testing machine was used. The sample with a grip to grip length of 500 mm was pulled at a constant speed of 500 mm/minute up to its brake. The load recorded at the moment it breaks is the tensile strength. In the case of the knot strength test the sample was pulled with a simple knot tied previously at the middle of the length.

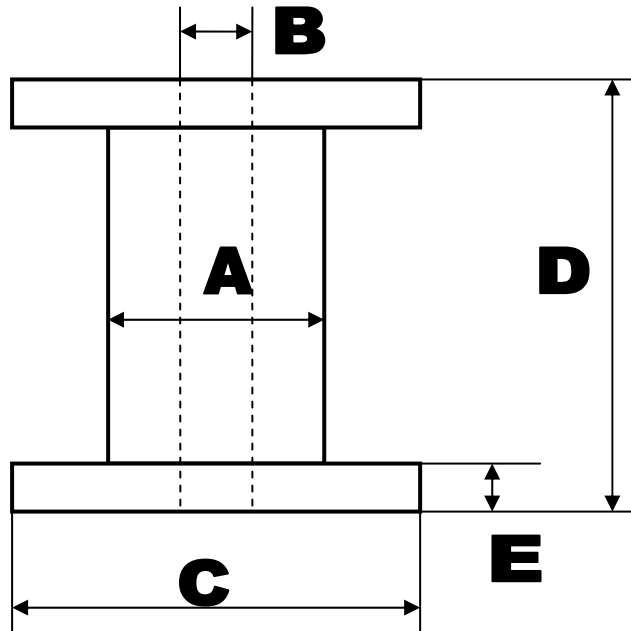
Data

The tables contain the data of most frequently used lines (main sizes).

	<i>Type CoPA 61</i>				<i>Type CoPA 91</i>				<i>Type CoPA 91M</i>			
Size	Linear test (kg)	Linear test (LB)	Knotted test (%)	Elongation (%)	Linear test (kg)	Linear test (LB)	Knotted test (%)	Elongation (%)	Linear test (kg)	Linear test (LB)	Knotted test (%)	Elongation (%)
Ø0,10mm	1,05	2,31	80 ± 3%	25 ± 3%	1,08	2,38	80 ± 3%	25 ± 3%	1,08	2,38	82 ± 3%	27 ± 3%
Ø0,12mm	1,40	3,09	80 ± 3%	25 ± 3%	1,44	3,18	80 ± 3%	25 ± 3%	1,44	3,18	82 ± 3%	27 ± 3%
Ø0,14mm	1,90	4,19	80 ± 3%	25 ± 3%	1,96	4,31	80 ± 3%	25 ± 3%	1,96	4,31	82 ± 3%	27 ± 3%
Ø0,16mm	2,20	4,85	80 ± 3%	25 ± 3%	2,27	5,00	80 ± 3%	25 ± 3%	2,27	5,00	82 ± 3%	27 ± 3%
Ø0,18mm	2,75	6,06	80 ± 3%	25 ± 3%	2,83	6,24	80 ± 3%	25 ± 3%	2,83	6,24	82 ± 3%	27 ± 3%
Ø0,20mm	3,35	7,39	80 ± 3%	25 ± 3%	3,45	7,61	80 ± 3%	25 ± 3%	3,45	7,61	82 ± 3%	27 ± 3%
Ø0,22mm	3,95	8,71	80 ± 3%	25 ± 3%	4,07	8,97	80 ± 3%	25 ± 3%	4,07	8,97	82 ± 3%	27 ± 3%
Ø0,23mm	4,25	9,37	80 ± 3%	25 ± 3%	4,38	9,65	80 ± 3%	25 ± 3%	4,38	9,65	82 ± 3%	27 ± 3%
Ø0,24mm	4,60	10,14	80 ± 3%	25 ± 3%	4,74	10,45	80 ± 3%	25 ± 3%	4,74	10,45	82 ± 3%	27 ± 3%
Ø0,25mm	5,00	11,02	80 ± 3%	25 ± 3%	5,15	11,35	80 ± 3%	25 ± 3%	5,15	11,35	82 ± 3%	27 ± 3%
Ø0,26mm	5,35	11,79	80 ± 3%	25 ± 3%	5,51	12,15	80 ± 3%	25 ± 3%	5,51	12,15	82 ± 3%	27 ± 3%
Ø0,28mm	6,15	13,56	80 ± 3%	25 ± 3%	6,33	13,97	80 ± 3%	25 ± 3%	6,33	13,97	82 ± 3%	27 ± 3%
Ø0,30mm	7,00	15,43	80 ± 3%	25 ± 3%	7,21	15,90	80 ± 3%	25 ± 3%	7,21	15,90	82 ± 3%	27 ± 3%
Ø0,32mm	7,70	16,98	80 ± 3%	25 ± 3%	7,93	17,48	80 ± 3%	25 ± 3%	7,93	17,48	82 ± 3%	27 ± 3%
Ø0,33mm	8,10	17,86	75 ± 3%	25 ± 3%	8,34	18,39	75 ± 3%	25 ± 3%	8,34	18,39	77 ± 3%	27 ± 3%
Ø0,35mm	9,05	19,95	75 ± 3%	25 ± 3%	9,32	20,55	75 ± 3%	25 ± 3%	9,32	20,55	77 ± 3%	27 ± 3%
Ø0,37mm	10,05	22,16	75 ± 3%	27 ± 3%	10,35	22,82	75 ± 3%	27 ± 3%	10,35	22,82	77 ± 3%	30 ± 3%
Ø0,40mm	11,45	25,24	75 ± 3%	27 ± 3%	11,79	26,00	75 ± 3%	27 ± 3%	11,79	26,00	77 ± 3%	30 ± 3%
Ø0,45mm	14,35	31,64	75 ± 3%	27 ± 3%	14,78	32,59	75 ± 3%	27 ± 3%	14,78	32,59	77 ± 3%	30 ± 3%
Ø0,50mm	17,40	38,36	75 ± 3%	27 ± 3%	17,92	39,51	75 ± 3%	27 ± 3%	17,92	39,51	77 ± 3%	30 ± 3%
Ø0,55mm	20,50	45,19	75 ± 3%	27 ± 3%	21,12	46,55	75 ± 3%	27 ± 3%	21,12	46,55	77 ± 3%	30 ± 3%
Ø0,60mm	24,30	53,57	75 ± 3%	27 ± 3%	25,03	55,18	75 ± 3%	27 ± 3%	25,03	55,18	77 ± 3%	30 ± 3%
Ø0,65mm	28,30	62,39	65 ± 3%	27 ± 3%	29,15	64,26	65 ± 3%	27 ± 3%	29,15	64,26	67 ± 3%	30 ± 3%
Ø0,70mm	32,50	71,65	65 ± 3%	30 ± 3%	33,48	73,80	65 ± 3%	30 ± 3%	33,48	73,80	67 ± 3%	32 ± 3%
Ø0,80mm	41,50	91,49	65 ± 3%	30 ± 3%	42,75	94,24	65 ± 3%	30 ± 3%	42,75	94,24	67 ± 3%	32 ± 3%
Ø0,90mm	49,00	108,03	65 ± 3%	30 ± 3%	50,47	111,27	65 ± 3%	30 ± 3%	50,47	111,27	67 ± 3%	32 ± 3%
Ø1,00mm	57,50	126,77	65 ± 3%	30 ± 3%	59,23	130,57	65 ± 3%	30 ± 3%	59,23	130,57	67 ± 3%	32 ± 3%
Ø1,10mm	68,50	151,02	65 ± 3%	30 ± 3%	70,56	155,55	65 ± 3%	30 ± 3%	70,56	155,55	67 ± 3%	32 ± 3%
Ø1,20mm	79,50	175,27	65 ± 3%	30 ± 3%	81,89	180,53	65 ± 3%	30 ± 3%	81,89	180,53	67 ± 3%	32 ± 3%
Ø1,30mm	90,50	199,52	60 ± 3%	35 ± 3%	93,22	205,50	60 ± 3%	35 ± 3%	93,22	205,50	62 ± 3%	37 ± 3%
Ø1,40mm	104,50	230,38	60 ± 3%	35 ± 3%	107,64	237,30	60 ± 3%	35 ± 3%	107,64	237,30	62 ± 3%	37 ± 3%
Ø1,50mm	119,00	262,35	60 ± 3%	35 ± 3%	122,57	270,22	60 ± 3%	35 ± 3%	122,57	270,22	62 ± 3%	37 ± 3%
Ø1,60mm	134,50	296,52	55 ± 3%	35 ± 3%	138,54	305,42	55 ± 3%	35 ± 3%	138,54	305,42	57 ± 3%	37 ± 3%
Ø1,70mm	150,50	331,80	55 ± 3%	35 ± 3%	155,02	341,75	55 ± 3%	35 ± 3%	155,02	341,75	57 ± 3%	37 ± 3%
Ø1,80mm	169,00	372,58	55 ± 3%	40 ± 3%	174,07	383,76	55 ± 3%	40 ± 3%	174,07	383,76	57 ± 3%	42 ± 3%
Ø1,90mm	187,00	412,27	55 ± 3%	40 ± 3%	192,61	424,63	55 ± 3%	40 ± 3%	192,61	424,63	57 ± 3%	42 ± 3%
Ø2,00mm	205,00	451,95	55 ± 3%	40 ± 3%	211,15	465,51	55 ± 3%	40 ± 3%	211,15	465,51	57 ± 3%	42 ± 3%

Dimensions of the bulk spools

The PA-MONOFILAMENTS product are delivered on plastic spools having dimensions as indicated below. The size of the spool selected from the three types depends on the diameter of the line and quantity ordered by the customer.



A: Diameter of the spool
B: Diameter of the hole

C: Diameter of the flange
D: Height of the spool

E: Height of the flange

Dimension	DIN 160 spool capacity maximum 1kg*	DIN 200 spool capacity maximum 2kg*	DIN 250 spool capacity maximum 3kg*
	(mm)	(mm)	(mm)
A	100	122	158
B	23	23	23
C	160	200	250
D	160	200	200
E	15	20	20

The maximum capacities of the plastic spools are 1 kg, 2 kg and 3 kg. The quantity of the line wound on the spool depends on the diameter and quantity ordered by the customer. In order to avoid unexpected damage of the spool it may happen that in case of small diameters you will find just 0,3 – 0,4 kg PA-MONOFILAMENTS product on the bulk spool (e.g. at diameter 0,12 mm there is just 0,3 – 0,4 kg product on a DIN 200 bulk spool)