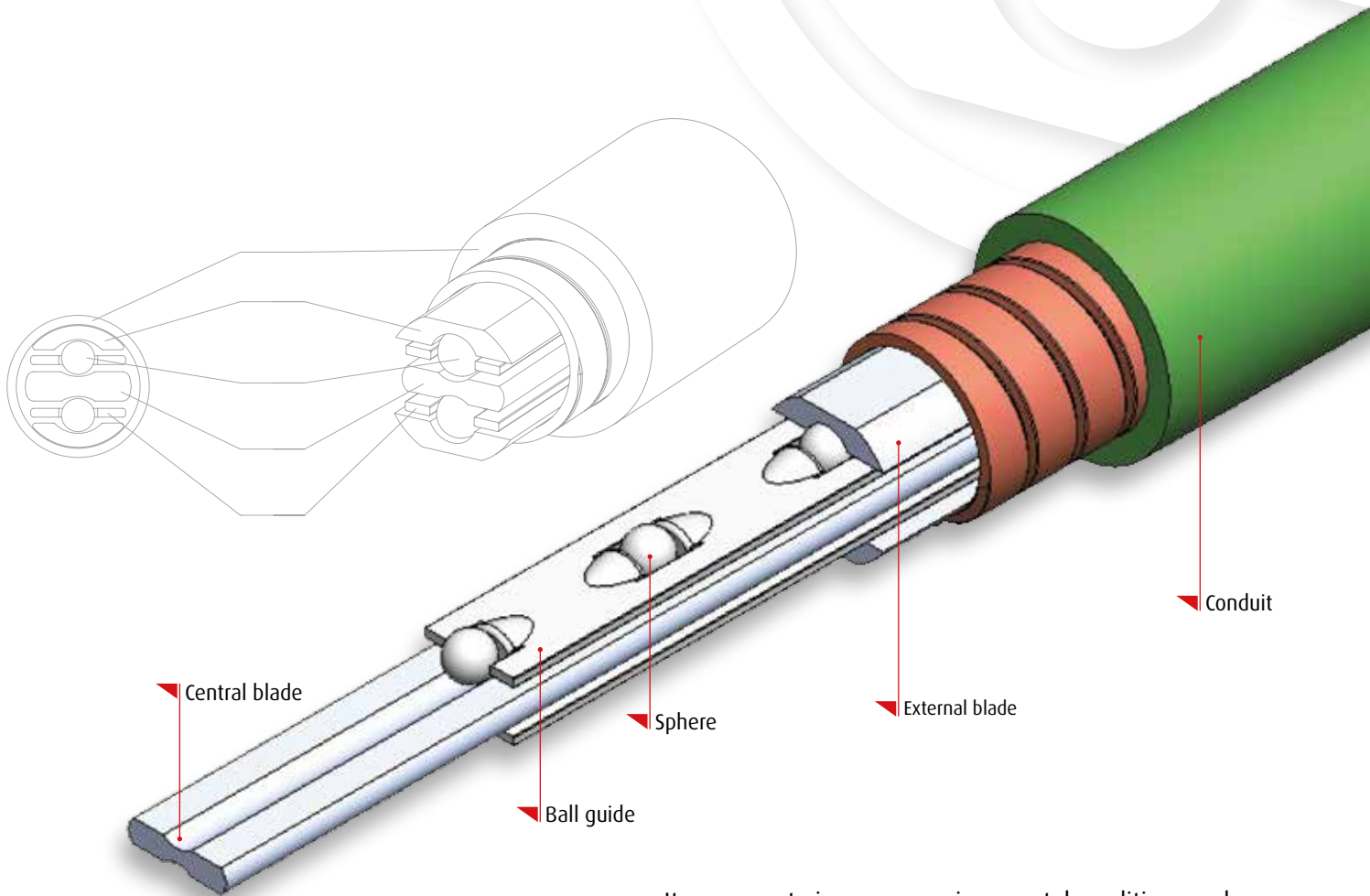


FLEXBALL CABLES

The Flexball cable, recognizable from the green colour of the plastic cover, is an extremely flexible and sliding cable. It has a very reliable and robust construction which guarantees very high performances. If mounted properly, it will last "for ever".



It's efficiency is highly better than any traditional push-pull cable. The Flexball cable maintains high mechanical efficiency and very low backlash which approaches to zero, even in complex routings and difficult installations. Flexball cable can be spatially laid on all the three dimensions with low bending radii and 97% efficiency, also under heavy loads.

It works reliably and without interruption, even at lengths over 60 meters. No maintenance or lubrication is necessary. It is indifferent to changes of temperature.

It can operate in severe environmental conditions such as moisture, condensation or icing, without impact on performance. For standard cables the working temperature is 108 °C but special cable versions can work up to 200 °C degrees.

It can transfer linear movements with a stroke up to 300 mm. The ball-bearing principle enables a smooth movement, low play and delay-free transfer of loads which can reach 15000 N in push and 25000 N in pull operation mode.

CONSTRUCTION

Ball bearing controls have an inner blade which is held between two rows of ball bearings by two outer blades, and all is contained in a high strength outer casing.

Stainless steel inner components guarantee an optimal lifetime with high fatigue resistance in any working condition.

Terminal and end fittings can be made of steel, stainless steel or brass.

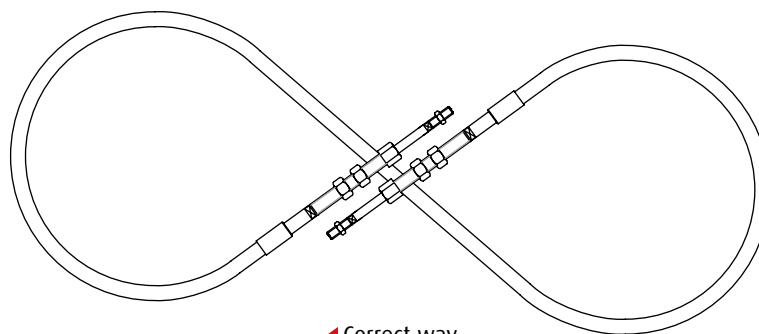
APPLICATION

Ball bearing controls are generally used in applications with long routings and high tension and compression.

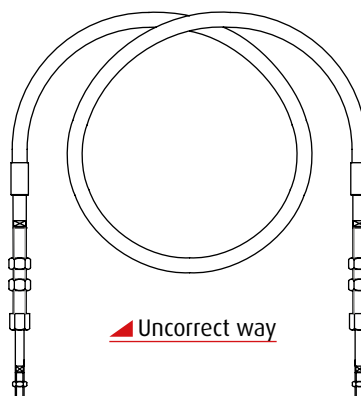
The **Flexball cable** is manufactured in lengths ready to install. It replaces complex solid rods, hydraulic, pneumatic or electric transfer devices.

HOW TO HANDLE AND STORE

The **Flexball cable** is delivered in a proper box and bent with an "8" shape to respect its minimum bending radius. Once received, it should be opened and stored as a straight line. If not possible, just leave it in the box like you have received it. Flexball cable must not be stored in circle, otherwise it can be seriously damaged.



Correct way

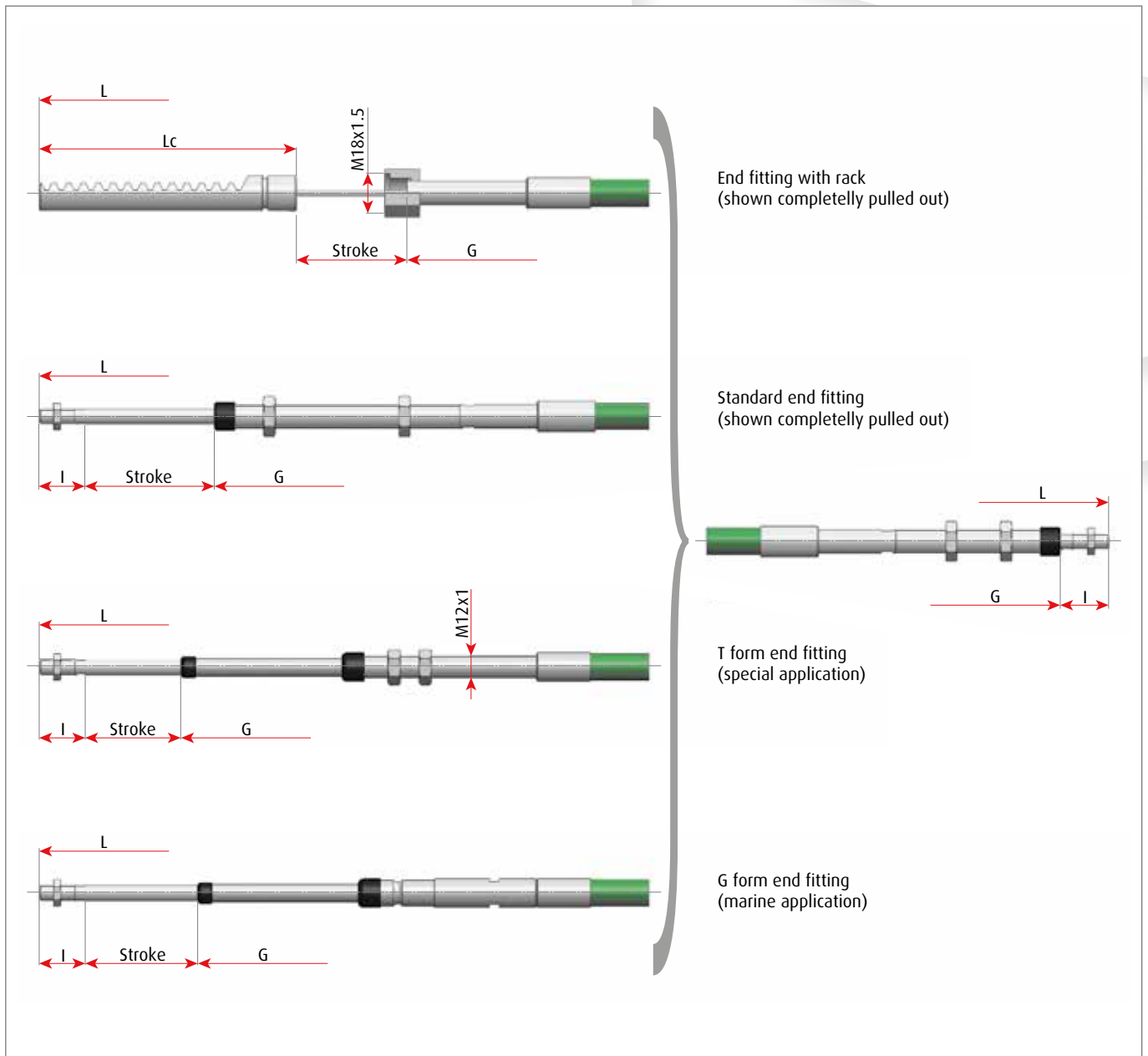


Uncorrect way

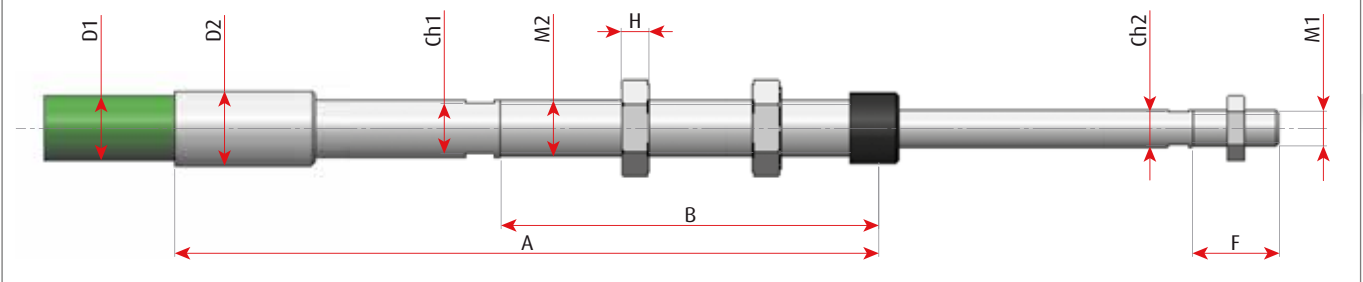
PRODUCT RANGE

The **Flexball cable** is available in different sizes, from type 55 which has a conduit diameter of 9.5 mm, to type 160 that has a conduit diameter of 24.3 mm.

The **Flexball cables** are available with several types of end fittings to fit the different application requirements.



STANDARD FLEXBALL END FITTING DIMENSIONS



Cable type	Stroke	A	B	F	H	I	Ch1	Ch2	D1		D2		M1	M2	LC	Rack module (mm)	Push load (N)	Pull load (N)	Bending radius (mm)	Weight per meter (gr)	E _c
									AN*	ACP*	AN	ACP									
55	50	130	55	20	5	26	8	5	9.5	12	12	14	M6x1(M5x0.8)	M10x1	126	1.5	300	800	100	245	0.3
	70	145	70																		
	100	175	100																		
70	50	142	55	30	8	37	11	6	11	12.8	13	15	M7x1(M6x1)	M12x1	126	1.5	1550	2800	120	320	0.18
	70	157	70																		
	100	187	100																		
	150	237	150																		
	200	292	170																		
95	50	163	70	30	8	37	14	9	14.3	16.5	16	19	M10x1.5	M16x1.5	126	1.5	2700	5000	140	518	0.15
	70	183	90																		
	100	213	120																		
	150	263	170																		
	200	313	220																		
125	50	195	70	35	9	45	17	11	17	21	20	24	M12x1.5	M18x1.5	-	1.5	5300	10000	200	827	0.05
	70	215	90																		
	100	245	120																		
	150	295	170																		
	200	345	210																		
160	50	240	100	35	10	45	21	13	24.3	28	-	-	M14x1.5	M22x1.5	-	-	6500	15000	250	1280	0.03
	70	260	120																		
	100	290	150																		
	150	340	200																		
	200	390	250																		
	250	440	300																		
	300	490	350																		

Notes:

- AN: standard cable coating
- ACP: reinforced cable coating
- Cable's elongation (mm): Cable's length (m) x Applied Load (N) x E_c x 0.01

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