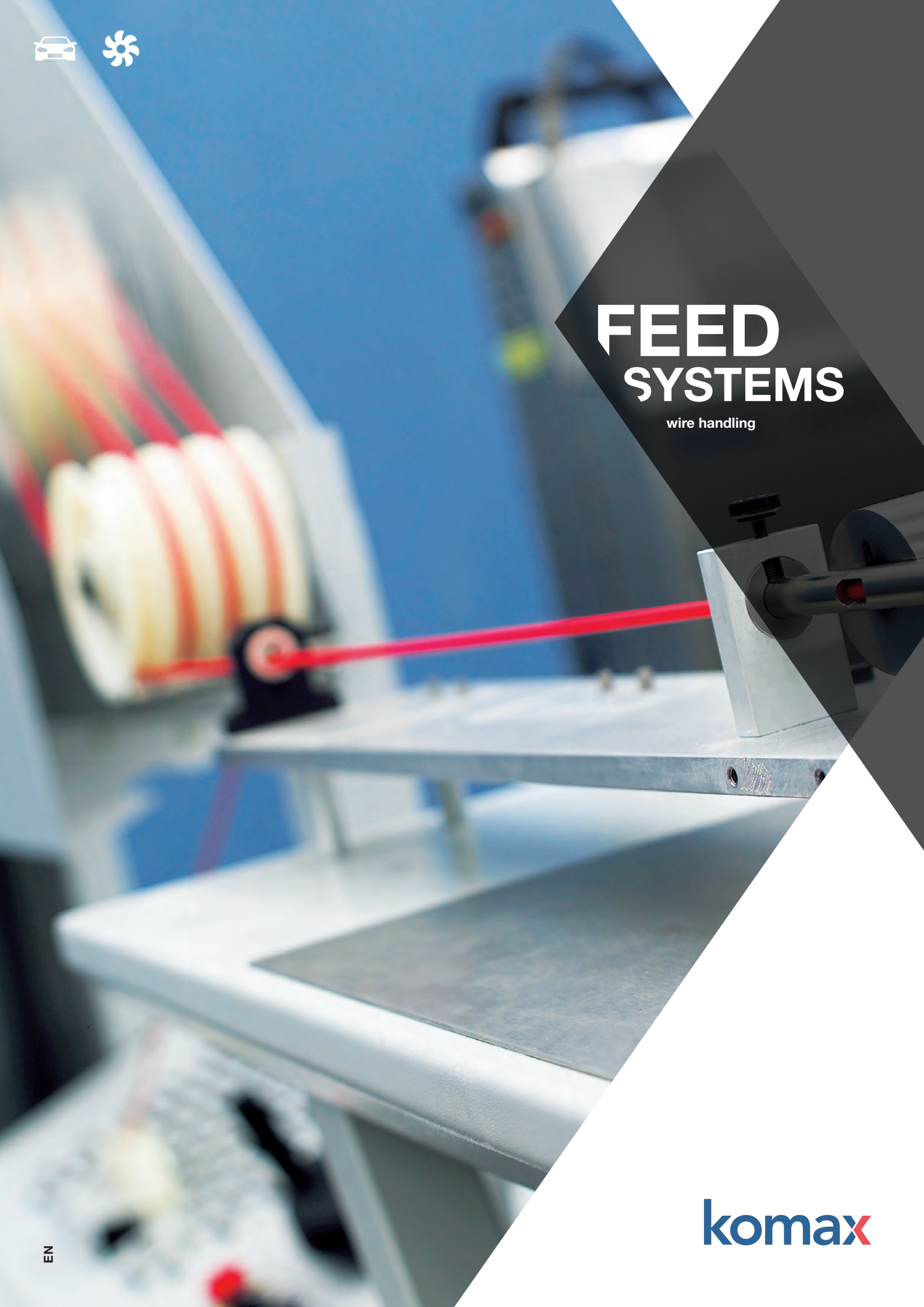


FEED SYSTEMS

wire handling

komax

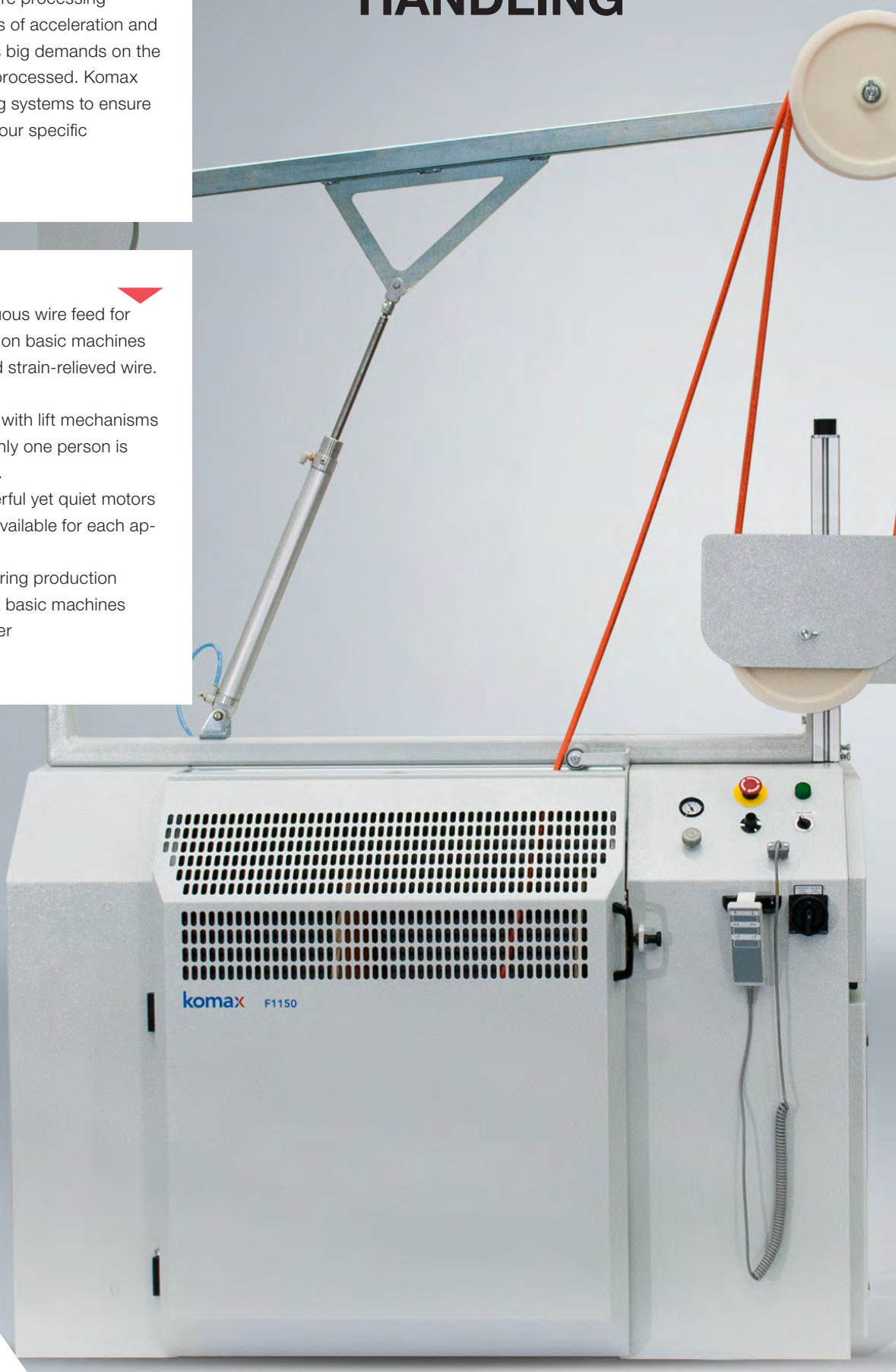
EN

FEED SYSTEMS

The latest generation of wire processing machines allows high rates of acceleration and speed. This feature places big demands on the feeding of the wire being processed. Komax has a range of wire feeding systems to ensure the optimum solution for your specific application.

EFFECTIVE HANDLING

- Fast, gentle, and continuous wire feed for high processing speeds on basic machines
- The basic machine is fed strain-relieved wire.
- Highly reliable
- The de-reelers are fitted with lift mechanisms for larger wire reels so only one person is needed to operate them.
- All de-reelers have powerful yet quiet motors
- Optimum solutions are available for each application.
- Requires no operator during production
- Full integration in Komax basic machines
- One system – one partner



This automatic, low tension wire feed system, F1150 enables the processing of both thin, flexible strands and thicker, tension-sensitive wires such as coaxial cables.

F1150

The F1150 feeder is the latest motorized feed system in the Komax series for automatic and low-strain processing of cable reels weighing up to 300 kg. Thanks to its robust design and powerful drive, this feeder gently and effortlessly processes wires in a reliable process, be they thin flexible stranded wires or thicker cables sensitive to tensile strain, such as coaxial cables. The system is available in two versions to accommodate wires with two different outside diameters: 18 mm and 35 mm.

With its highly compatible control system, the F1150 can be integrated seamlessly into a complete wire processing line and greatly contributes to high production output. The setup time is reduced to a minimum thanks to the ingenious setup system that has axes motorized in all directions and that is controlled from a manual remote control.

ads 123

Capable of handling reels weighing up to 600kg, this wire delivery system from the ads series (advanced delivery system) is the ultimate in heavy-duty feed systems.

The reel clamping system and the lifting device are both motor-driven. The most varied storage systems up to 5.2 meters in size, are available with this flexible system. The drive is rated for top output and operates with absolutely minimal vibration and noise. Various setup functions make wire clamping as easy as can be.

Thin, flexible stranded wires and cable as well as conductors up to 35 mm in diameter can run at high rates of speed and acceleration. A roller rotating with the unit immediately detects any problems occurring in the de-reeling of the wire.

ads 119

The Komax ads 119 wire delivery system is ideal for de-reeling medium-heavy reels weighing up to 100 kg. The reel-clamping system is combined with a simple lifting mechanism that allows heavy wire reels to be changed effortlessly. Convenient setup functions like slow advance and reverse travel further simplify rapid reel changes. The powerful motor operates extremely quietly and smoothly.

01
ads 123 wire delivery system
02
ads 119 with piggyback option
03
ads 119 active wire delivery system

01

02

03

ads 112 – Wire pull machine with regulating arm

ads 115

The ads 115 wire delivery system is a compact table model ideal for flexible use in tandem with Komax automatic cut-and-strip machines.

The de-reeling speed is controlled continuously and adapts to wire requirements.

The direction of rotation can be changed if need be. This feature enables cables to be reeled off or rewound. This model accommodates reels up to 400 mm in diameter, loose coils and flat cable rolls.

ads 112

The ads 112 wire pull machine is the perfect choice for the optimum feeding of wires from reels, Conipacks or drums. Wire is transported by two synchronous toothed belts. Wires ranging from fine to coarse are fed powerfully yet gently to the processing stations, as are non-round wires Changeovers are quick and easy.

For twisted or rigid wires, an ideal supplement to the wire pull machine is a DHS 1000 D optical wire-sag control unit. The DHS sensors continuously record the wire sage and adjust the advance speeds accordingly.

Komax 106

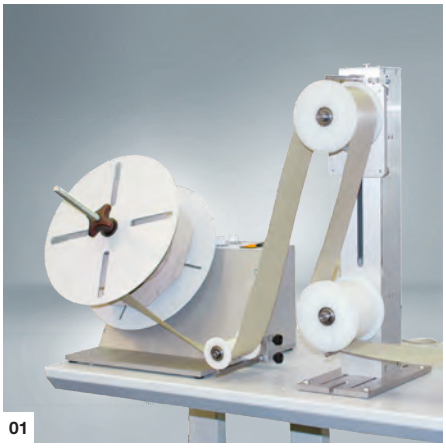
The Komax 106 is an active feeding system. It can feed from loose coils, wire drums, Conipacks or central wire storage systems. A control algorithm with an automatic learning mode allows the wire processing machine to run at high capacity while the wire bundle is de-reeled at a reduced rate of acceleration and a constant speed. This ensures that feeding is carried out in a gentle, reliable process.

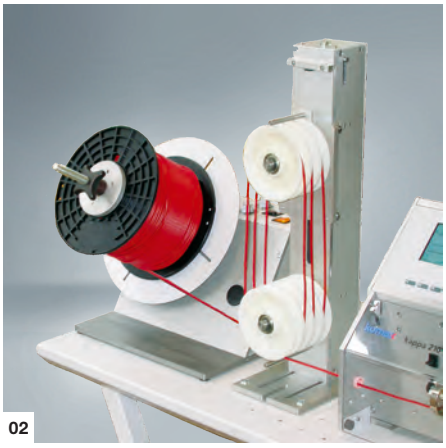
Besides wire-end and knot detection, the feed system also has a function for setting a pull-force limit. The Komax 106 is compatible with all automatic processing machines.

Komax 104

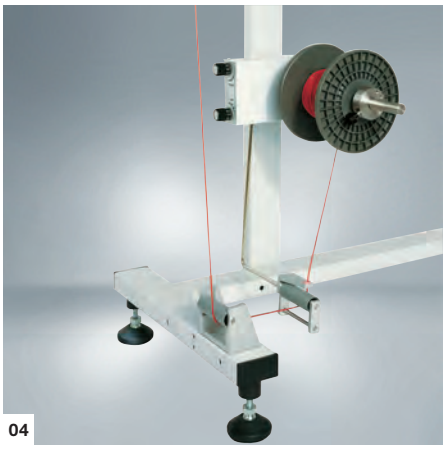
The Komax 104 is designed for use as a passive roller support for small wire reels. The de-reeler is equipped with a finely adjustable rope brake and can accommodate wire reels with an outside diameter of up to 500 mm.

01
ads 115 with flat cable
02
ads 115 with wire reel
03
Komax 106 – active feeding system
04
Komax 104 – passive de-reeler
05
Komax 104 – passive de-reeler on Gamma


01


02

03


04

05

Technical data

		ads 123	F1150	ads 119	ads 115	ads 112	Komax 106	Komax 104
Wire reel	Maximum diameter [mm(in.)]	1000	800	600	400[1]	–	–	500
	Maximum width [mm(in.)]	750	650	500	250	–	–	270
	Maximum weight [kg(lb.)]	600	300	100	20	100	–	25
	Minimum core diameter [mm(in.)]	20	26	20	14	–	–	20
Wire data strand / round cable	Diameter up to [mm(in.)]	35	18/35	15	6	28	4	15
	Wire cross section [mm^2] (AWG)	95	95	35	4	120	4	6
Wire data for loose coils	Minimum inside diameter [mm(in.)]	–	–	–	130[3]	–	–	–
	Minimum outside diameter [mm(in.)]	–	–	–	300	–	<650	–
Wire data for flat cable	Maximum of width [mm(in.)]	–	–	–	82	28	–	82
De-reeling data	Maximum rotational speed [RPM]	160	285	400	500	–	–	–
	Maximum wire speed [m/s(ft./s)]	2.8[2]	3.5[2]	4.2[2]	3[2]	2.7[2]	6[2]	passiv
	Maximum pull force [kg(lb.)]	–	–	–	–	20–25	–	–
	Storage capacity [m(ft.)]	5.2[4]	6[4]	4[4]	3.2	0.8	6.5	0.5
Power	Voltage [V]	3×400	3×400	115/230	115/230	115/230	115/230	–
	Frequency [Hz]	50/60	50	50/60	50/60	50/60	50/60	–
	Power [kW]	3	2.2	1.5	0.25	0.75	0.3	–
	Pneumatic pressure [bar(psi)]	4–6	6	4–6	–	1.5	–	–
Dimensions	Height of wire outlet [mm(in.)]	950–1200	860–1050	1050–1170	41–89	1090	1170	–
	Width×height×depth [mm(in.)]	2900×2490×1410	1500×1100×1000	1050×1970×750	400×350×330	600×490×400	1060×1285×465	260×470×460
	Weight [kg(lb.)]	780	460	225	25	55	46	5.1
Special features	Changeable direction of rotation	–	–	–	•	–	–	–
	Output for feedback	•	•	•	•	•	•	•

[1] Narrow flat cable rolls up to 600 mm/ [2] Cable- and reel-specific/ [3] Smaller loose coils on request/ [4] Depends on storage version

ads 123 with optional Storage-Arm-Down and Down-Plus

ads 112 – wire pull machine with DHS1000D wire sage control unit on a Kappa 350

Komax – leading the field now and in the future

As a pioneer and market leader in automated wire processing, Komax provides its customers with innovative solutions. Komax manufactures series and customer-specific machinery, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent software and networking solutions complete the portfolio, and ensure safe, flexible, and efficient production.
Komax is a globally active Swiss company with highly qualified employees and development and production facilities on several continents. It provides local support to customers worldwide through its unique sales and service network and offers services that help them get the most out of their investments.

Komax AG
Industriestrasse 6
6036 Dierikon, Switzerland
Phone +41 41 455 04 55
sales.din@komaxgroup.com

komax
komaxgroup.com

PRO Feed Systems V9 12-2022
Subject to change