



△ Industria
Orthogonal model.

Strong points

- ▷ Many fixation possibilities (on trolley see p. 54).
- ▷ Upward position for the motor.

- ▷ Wire rope anti-escape system. Safety : reduce space between the tie rod and the drum.



△ The tie rods can be positioned according to the wire rope exit. Many wire rope exits possible.



△ Coaxial model INDUSTRIA.

Capacity from 1 to 10 t.

Compact electric winches originally designed to meet the needs of the industrial sector during lifting/pulling applications. Vertical fixation possible.

- ▷ FEM 1Am / 2m / 3m - Moderate, heavy or very heavy use according to model.
- ▷ Steel mechano-welded structure shot-blasted and painted.
- ▷ Planetary gear (reduced maintenance) in coaxial or orthogonal version.
- ▷ Asynchronous motor in horizontal position. IP 55 protection.
- ▷ Automatic lack of current brake.
- ▷ Single phase power 230V-50Hz or three phase 400V-50Hz (other tension on request) depending on model.
- ▷ Very low voltage control (BT) ensuring user protection against electrical risks : single speed models (BT) or speed variation model (VV). In addition to the advantages of very low voltage, the VV control allows variation of the winding speed, smooth starts and stops.
- ▷ Thermal circuit breaker.
- ▷ 3 buttons pendant control (Up - Down- Emergency Stop):
 - ▷ Removable (3 m long control cable) on BT models.
 - ▷ Not removable (3 m long control cable) on VV models.

Options ▷ Wire rope (m/l or kit) and hook (see p. 94-98).

- ▷ Limit switch.
- ▷ Electronic load limiter.
- ▷ Rope press roller.
- ▷ Rope slack switch.
- ▷ Bottom frame.
- ▷ Upward position for the motor.
- ▷ Radio control.
- ▷ Other options, on request (see p. 66-72).

Applications



△ Manipulation of a crinoline ladder.



△ Lifting of conveyor arm.



△ Hatches lifting.



△ Mooring of barges between them for river navigation...

See the following pages :

High lifting range p. 55

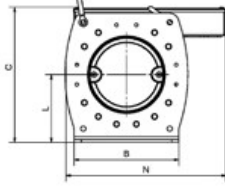




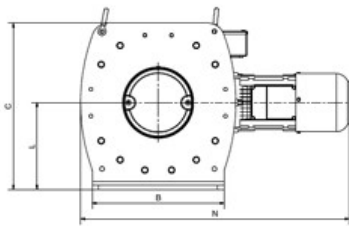
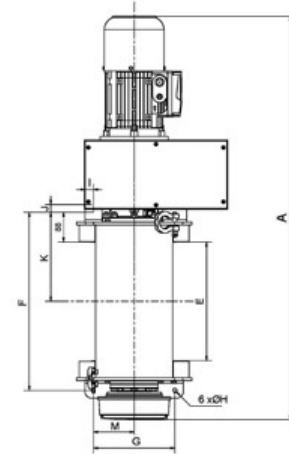
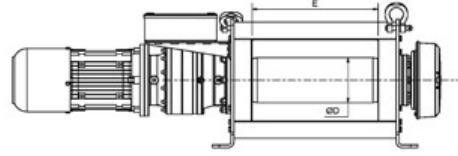
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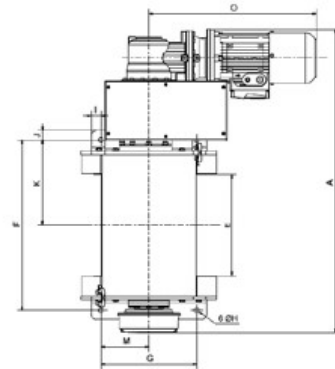
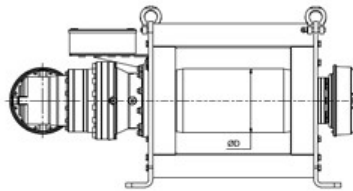
Dimensions



△ Coaxial model.



△ Orthogonal model.



Models	INDUSTRIA										
	1T ortho.	2T ortho.	3T ortho.	4T ortho.	5T ortho.	6T ortho.	7T ortho.	8T ortho.	9T ortho.	10T ortho.	1T coaxial***
	05/10BT	05/09BT	03/06BT	02/05BT	03/07BT	02/06BT	02/06BT	02/05BT	02/05BT	03/05BT	05/10BT
A mm**	911	1050/1045	1065/1090	1169/1194	1194/1220	1224/1250	1241/1267	1241/1267	1288/1314	1288/1314	1159/1189
B mm	290	420	420	520	520	650	700	700	840	840	290
C mm	375	500	500	665	665	765	870	870	975	975	375
Ø D mm*	125	219.1 (267)	219.1 (267)	292 (355,6)	292 (355,6)	323.9 (406,4)	323.9 (457,2)	355.6 (457,2)	406.4 (495)	406.4 (495)	125
E mm**	350	350	350	350	350	350	350	350	350	350	350
F mm**	525	590	590	600	600	600	720	720	720	720	525
G mm	240	330	330	420	420	420	620	620	750	750	240
Ø H mm	12	16	16	22	22	22	30	30	32	32	12
N mm	716/748	823/902	823/902	905/984	954/1190	1013/1181	1103/1271	1133/1271	1176/1314	1176/1314	443

Models	INDUSTRIA										
	1T ortho.	2T ortho.	3T ortho.	4T ortho.	5T ortho.	6T ortho.	7T ortho.	8T ortho.	9T ortho.	10T ortho.	1T coaxial***
	05/10/28VV	05/09/23VV	03/06/15VV	02/05/12VV	03/07/17VV	02/06/14VV	02/06/15VV	02/05/13VV	02/05/13VV	03/05/10VV	05/10VV
A mm**	911/911/931	1050/1045 /1070	1065/1090 /1085	1169/1194 /1161	1194/1220 /1195	1224/1250 /1225	1241/1267 /1248	1241/1340 /1248	1288/1367 /1468	1288/1367 /1459	1159/1189
B mm	290	420	420	520	520	650	700	700	840	840	290
C mm	375	500	579/500	737/665	665	765	870	870	975	975	375
Ø D mm*	125	219.1 (267)	219.1 (267)	292 (355,6)	292 (355,6)	323.9 (406,4)	323.9 (457,2)	355.6 (457,2)	406.4 (495)	406.4 (495)	125
E mm**	350	350	350	350	350	350	350	350	350	350	350
F mm**	525	590	590	600	600	600	720	720	720	720	525
G mm	240	330	330	420	420	420	620	620	750	750	240
Ø H mm	12	16	16	22	22	22	30	30	32	32	12
N mm	716/748 /909	823/902 /1040	823/902 /1040	905/1052 /1157	1022/1122 /1296	1067/1220 /1355	1103/1271 /1540	1133/1271 /1540	1176/1314 /1590	1176/1314 /1590	443

* Data about INDUSTRIA - FEM/ISO 3m/M6 models in brackets. ** Long drum models : dimensions A, E and F + 250 mm.

***Dimensions of other coaxial models : on request.





Technical characteristics INDUSTRIA

FEM/ISO 1Am/M4 classification

Very low voltage control, 1 speed models (BT)

References	1T		2T		3T		4T		5T	
	05BT	10BT	05BT	09BT	03BT	06BT	02BT	05BT	03BT	07BT
Capacity top layer kg	1 000	1 000	2 000	2 000	3 000	3 000	4 000	4 000	5 000	5 000
Capacity 1st layer kg	1 255	1 255	2 420	2 420	3 765	3 765	4 985	4 985	6 230	6 230
Nb of layers	3	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	60 (-)	60 (-)	71 (120)	71 (120)	59 (102)	59 (102)	60 (105)	60 (105)	60 (105)	60 (105)
1st layer drum capacity m*	17 (-)	17 (-)	20 (35)	20 (35)	16 (28)	16 (28)	16 (29)	16 (29)	16 (29)	16 (29)
Wire rope Ø mm	8	8	11.5	11.5	14	14	18	18	18	18
Speed top layer m/min	5	10.5	5.5	9.5	3.5	5.5	2.5	4.5	3	7.5
Speed 1st layer m/min	4	8.5	4.5	8	2.5	4.5	2	3.5	2.5	6
Motor kW	1.1	2.2	2.2	4	2.2	4	2.2	4	3	9.2
Power	3 Ph - 400V		3 Ph - 400V		3 Ph - 400V		3 Ph - 400V		3 Ph - 400V	
Weight (without wire rope) kg	140	150	260	280	260	280	440	470	450	530

References	6T		7T		8T		9T		10T	
	02BT	06BT	02BT	06BT	02BT	05BT	02BT	05BT	03BT	05BT
Capacity top layer kg	6 000	6 000	7 000	7 000	8 000	8 000	9 000	9 000	10 000	10 000
Capacity 1st layer kg	7 480	7 480	8 725	8 725	9 975	9 975	11 120	11 120	12 355	12 355
Nb of layers	3	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	60 (104)	60 (104)	60 (104)	60 (104)	60 (104)	60 (104)	62 (107)	62 (107)	62 (107)	62 (107)
1st layer drum capacity m*	16 (29)	16 (29)	15 (28)	15 (28)	15 (28)	15 (28)	16 (29)	16 (29)	16 (29)	16 (29)
Wire rope Ø mm	20	20	22	22	22	22	24	24	24	24
Speed top layer m/min	2	6	2	5.5	2.5	5	2	4.5	2	4.5
Speed 1st layer m/min	1.5	5	1.5	4.5	2	4	1.5	4	2	3.5
Motor kW	3	9.2	3	9.2	4	9.2	4	9.2	5.5	9.2
Power	3 Ph - 400V		3 Ph - 400V		3 Ph - 400V		3 Ph - 400V		3 Ph - 400V	
Weight (without wire rope) kg	580	660	840	910	850	910	1160	1230	1180	1230

△ * Data for long drum models in brackets.
The wire rope diameter corresponds to the capacity on the top layer with a safety coefficient of (about) 5 when lifting with non-rotating wire rope.

(1) Model with 3 m away control box.* Data for long drum models in brackets.
The wire rope diameter corresponds to the capacity on the top layer with a safety coefficient of (about) 5 when lifting with non-rotating wire rope.



Technical characteristics INDUSTRIA

FEM/ISO 1Am/M4 classification

Very low voltage control, speed variation models (VV)

References	1T			2T			3T		
	05VV	10VV	28VV ⁽¹⁾	05VV	09VV	23VV ⁽¹⁾	03VV	06VV	15VV ⁽¹⁾
Capacity top layer kg	1 000	1 000	1 000	2 000	2 000	2 000	3 000	3 000	3 000
Capacity 1st layer kg	1 255	1 255	1 255	2 420	2 420	2 420	3 765	3 765	3 765
Nb of layers	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	60 (-)	60 (-)	60 (-)	71 (120)	71 (120)	71 (120)	59 (102)	59 (102)	59 (102)
1st layer drum capacity m*	17 (-)	17 (-)	17 (-)	20 (35)	20 (35)	20 (35)	16 (28)	16 (28)	16 (28)
Wire rope Ø mm	8	8	8	11.5	11.5	11.5	14	14	14
Speed top layer m/min	0.5-5	1-10.5	2-28	0.5-5.5	0.9-9.5	2-23	0.3-3.5	0.5-5.5	1-15
Speed 1st layer m/min	0.4-4	0.8-8.5	2.3-23	0.4-4.5	0.8-8	1.9-19	0.2-2.5	0.4-4.5	1.2-12
Motor kW	1.1	2.2	5.5	2.2	4	9.2	2.2	4	9.2
Power	1 Ph - 230V 3 Ph-400V		3 Ph 400V	1 Ph - 230V 3 Ph-400V		3 Ph - 400V		1 Ph - 230V 3 Ph-400V	
Weight (without wire rope) kg	150	155	210	270	300	360	270	300	360

References	4T			5T			6T			
	02VV	05VV	12VV ⁽¹⁾	03VV	07VV	17VV ⁽¹⁾	02VV	06VV	14VV ⁽¹⁾	
Capacity top layer kg	4 000	4 000	4 000	5 000	5 000	5 000	6 000	6 000	6 000	
Capacity 1st layer kg	4 985	4 985	4 985	6 230	6 230	6 230	7 480	7 480	7 480	
Nb of layers	3	3	3	3	3	3	3	3	3	
Maxi. Drum capacity m*	60 (105)	60 (105)	60 (105)	60 (105)	60 (105)	60 (105)	60 (104)	60 (104)	60 (104)	
1st layer drum capacity m*	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)	
Wire rope Ø mm	18	18	18	18	18	18	20	20	20	
Speed top layer m/min	0.2-2.5	0.4-4.5	1-12	0.3-3	0.7-7.5	1-17	0.2-2	0.6-6	1-14	
Speed 1st layer m/min	0.2-2	0.3-3.5	1-10	0.2-2.5	0.6-6	1.4-14	0.1-1.5	0.5-5	1.1-11	
Motor kW	2.2		4	9.2	3	9.2	15	3	9.2	
Power	1 Ph-230V / 3 Ph-400V		3 Ph - 400V		3 Ph - 400V			3 Ph - 400V		
Weight (without wire rope) kg	450		500	550	480	540	615	610	670	

References	7T			8T			9T			10T		
	02VV	06VV	15VV ⁽¹⁾	02VV	05VV	13VV ⁽¹⁾	02VV	05VV	13VV ⁽¹⁾	03VV	05VV	10VV ⁽¹⁾
Capacity top layer kg	7 000	7 000	7 000	8 000	8 000	8 000	9 000	9 000	9 000	10 000	10 000	10 000
Capacity 1st layer kg	8 725	8 725	8 725	9 975	9 975	9 975	11 120	11 120	11 120	12 355	12 355	12 355
Nb of layers	3	3	3	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	60 (104)	60 (104)	60 (104)	60 (104)	60 (104)	60 (104)	62 (107)	62 (107)	62 (107)	62 (107)	62 (107)	62 (107)
1st layer drum capacity m*	15 (28)	15 (28)	15 (28)	15 (28)	15 (28)	15 (28)	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)	16 (29)
Wire rope Ø mm	22	22	22	22	22	22	24	24	24	24	24	24
Speed top layer m/min	0.2-2	0.5-5.5	1-15	0.2-2.5	0.5-5	1-13	0.2-2	0.4-4.5	1-13	0.2-2.5	0.4-4.5	1-10
Speed 1st layer m/min	0.1-1.5	0.4-4.5	1.2-12	0.2-2	0.4-4	1-10	0.1-1.5	0.4-4	1.1-11	0.2-2	0.3-3.5	0.8-8
Motor kW	3	9.2	22	4	9.2	22	4	9.2	22	5.5	9.2	22
Power	3 Ph - 400V			3 Ph - 400V			3 Ph - 400V			3 Ph - 400V		
Weight (without wire rope) kg	870	920	1085	880	920	1085	1190	1250	1415	1210	1250	1415



Technical characteristics INDUSTRIA

FEM/ISO 3m/M6 classification

Very low voltage control, 1 speed models (BT)

References	2T		3T		4T		5T		6T	
	05BT	09BT	03BT	06BT	02BT	05BT	03BT	07BT	02BT	06BT
Capacity top layer kg	2 000	2 000	3 000	3 000	4 000	4 000	5 000	5 000	6 000	6 000
Capacity 1st layer kg	2 750	2 750	4 352	4 352	4 880	4 880	6 250	6 250	6 970	6 970
Nb of layers	3	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	74 (128)	74 (128)	69 (120)	69 (120)	70 (124)	70 (124)	70 (124)	70 (124)	72 (126)	72 (126)
1st layer drum capacity m*	20 (13)	20 (13)	19 (34)	19 (34)	19 (35)	19 (35)	19 (35)	19 (35)	19 (35)	19 (35)
Wire rope Ø mm	13	13	14	14	18	18	18	18	20	20
Speed top layer m/min	5	9.5	3.5	5	2.5	4.5	3	7.5	2	6
Speed 1st layer m/min	4	8	2.5	4	2	3.5	2.5	6	1.5	5
Motor kW	2.2	4	2.2	4	2.2	4	3	9.2	3	9.2
Power	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V
Weight (without wire rope) kg	275	295	275	295	465	495	475	560	610	695

References	7T		8T		9T		10T	
	02BT	06BT	02BT	05BT	02BT	05BT	03BT	05BT
Capacity top layer kg	7 000	7 000	8 000	8 000	9 000	9 000	10 000	10 000
Capacity 1st layer kg	9 279	9 279	10 981	10 981	11 830	11 830	13 968	13 968
Nb of layers	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	73 (128)	73 (128)	72 (119)	72 (119)	72 (127)	72 (127)	67 (118)	67 (118)
1st layer drum capacity m*	19 (36)	19 (36)	17 (32)	17 (32)	18 (35)	18 (35)	17 (32)	17 (32)
Wire rope Ø mm	22	22	24	24	24	24	26	26
Speed top layer m/min	2	5.5	2.5	5	2	4	2.5	4
Speed 1st layer m/min	1.5	4.5	2	4	1.5	3.5	2	3
Motor kW	3	9.2	4	9.2	4	9.2	5.5	9.2
Power	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V	3 Ph 400V
Weight (without wire rope) kg	885	960	895	960	1 220	1 295	1 240	1 295

△ * Data for long drum models in brackets.
The wire rope diameter corresponds to the capacity on the top layer with a safety coefficient of (about) 5 when lifting with non-rotating wire rope.

(1) Model with 3 m away control box. * Data for long drum models in brackets. ▷
The wire rope diameter corresponds to the capacity on the top layer with a safety coefficient of (about) 5 when lifting with non-rotating wire rope.



Technical characteristics INDUSTRIA

FEM/ISO 3m/M6 classification

Very low voltage control, speed variation models (VV)

References	2T			3T			4T		
	05VV	09VV	23VV ⁽¹⁾	03VV	06VV	15VV ⁽¹⁾	02VV	05VV	12VV ⁽¹⁾
Capacity top layer kg	2 000	2 000	2 000	3 000	3 000	3 000	4 000	4 000	4 000
Capacity 1st layer kg	2 750	2 750	2 750	4 352	4 352	4 352	4 880	4 880	4 880
Nb of layers	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	74 (128)	74 (128)	74 (128)	69 (120)	69 (120)	69 (120)	70 (124)	70 (124)	70 (124)
1st layer drum capacity m*	20 (13)	20 (13)	20 (13)	19 (34)	19 (34)	19 (34)	19 (35)	19 (35)	19 (35)
Wire rope Ø mm	13	13	13	14	14	14	18	18	18
Speed top layer m/min	0.5-5	0.9-9.5	2.2-22	0.3-3.5	0.5-5	1.4-14	0.2-2.5	0.4-4.5	1-12
Speed 1st layer m/min	0.4-4	0.8-8	1.8-18	0.2-2.5	0.4-4	1.2-12	0.2-2	0.3-3.5	1-10
Motor kW	2.2	4	9.2	2.2	4	9.2	2.2	4	9.2
Power	1 Ph - 230V 3 Ph - 400V	3 Ph - 400V		1 Ph - 230V 3 Ph - 400V	3 Ph - 400V		1 Ph - 230V 3 Ph - 400V	3 Ph - 400V	
Weight (without wire rope) kg	285	315	380	285	315	380	475	525	580

References	5T			6T			7T		
	03VV	07VV	17VV ⁽¹⁾	02VV	06VV	14VV ⁽¹⁾	02VV	06VV	15VV ⁽¹⁾
Capacity top layer kg	5 000	5 000	5 000	6 000	6 000	6 000	7 000	7 000	7 000
Capacity 1st layer kg	6 250	6 250	6 250	6 970	6 970	6 970	9 279	9 279	9 279
Nb of layers	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	70 (124)	70 (124)	70 (124)	72 (126)	72 (126)	72 (126)	73 (128)	73 (128)	73 (128)
1st layer drum capacity m*	19 (35)	19 (35)	19 (35)	19 (35)	19 (35)	19 (35)	19 (36)	19 (36)	19 (36)
Wire rope Ø mm	18	18	18	20	20	20	22	22	22
Speed top layer m/min	0.3-3	0.7-7.5	1.5-15.5	0.2-2	0.6-6	1-14	0.2-2	0.5-5.5	1.5-15
Speed 1st layer m/min	0.2-2.5	0.6-6	1.3-13	0.1-1.5	0.5-5	1.2-12	0.1-1.5	0.4-4.5	1.3-13
Motor kW	3	9.2	15	3	9.2	15	3	9.2	22
Power	3 Ph - 400V			3 Ph - 400V			3 Ph - 400V		
Weight (without wire rope) kg	505	570	650	645	705	785	915	970	1140

References	8T			9T			INDUSTRIA 10T		
	02VV	05VV	13VV ⁽¹⁾	02VV	05VV	13VV ⁽¹⁾	03VV	05VV	10VV ⁽¹⁾
Capacity top layer kg	8 000	8 000	8 000	9 000	9 000	9 000	10 000	10 000	10 000
Capacity 1st layer kg	10 981	10 981	10 981	11 830	11 830	11 830	13 968	13 968	13 968
Nb of layers	3	3	3	3	3	3	3	3	3
Maxi. Drum capacity m*	72 (119)	72 (119)	72 (119)	72 (127)	72 (127)	72 (127)	67 (118)	67 (118)	67 (118)
1st layer drum capacity m*	17 (32)	17 (32)	17 (32)	18 (35)	18 (35)	18 (35)	17 (32)	17 (32)	17 (32)
Wire rope Ø mm	24	24	24	24	24	24	26	26	26
Speed top layer m/min	0.2-2.5	0.5-5	1.2-12	0.2-2	0.4-4	1.2-12	0.2-2.5	0.4-4	1-10.5
Speed 1st layer m/min	0.2-2	0.4-4	1-10	0.1-1.5	0.3-3.5	1-10	0.2-2	0.3-3	0.8-8.5
Motor kW	4	9.2	22	4	9.2	22	5.5	9.2	22
Power	3 Ph - 400V			3 Ph - 400V			3 Ph - 400V		
Weight (without wire rope) kg	925	970	1140	1250	1315	1490	1275	1315	1490