



BRANDO®

PRODUCT CATALOGUE

Branecké železářny was founded by Carl Vaclav Dorasil and his partners. He was a man of many interests. He was an imperial counsel, a businessman and an industrial entrepreneur, a member of Silesian Landtag, the associate of the Silesian Regional Committee and the President of the Chamber of Commerce while pushing for the construction of water supply.

In 1895 he obtained honorary citizenship of the town of Opava. In 1867, his small hardware factory had 150 employees and changed its status to a public company owned by C.R.O. Schüller et al. from Opava.

After the sale of municipal land, the factory was expanded. Its enlargement resulted in increasing the number of jobs. At the end of 1869, it was transformed to a joint stock company Branecká továrna na drát, plechové zboží a hřebíky based in Opava, substantially widening its range of products.

In 1910 Branecké železářny had four hundred employees, and four years later they already employed seven hundred workers and five hundred eighty farm workers.

In 1927 it was taken over by the American company YALE and Town Manufacturing Co., Stamford and started mass production of various types of locks, hydraulic door closers, rack jacks and other technologically advanced products. Between 1939 and 1945, the production program has to be tailored to the needs of the German army.

In 1951, the production of manual hoists was started, which still stays unchanged as one of the main export products with its quality known worldwide.

The new company Branecké železářny, n. p., Branka u Opavy was established by nationalization in 1946.

In 1988, BRANO - Branecké železářny a strojírny, a state-owned enterprise based in Hradec nad Moravicí, was founded. In 1992 the company was incorporated in the Commercial Register as BRANO, a.s., with its headquarters in Hradec nad Moravicí.

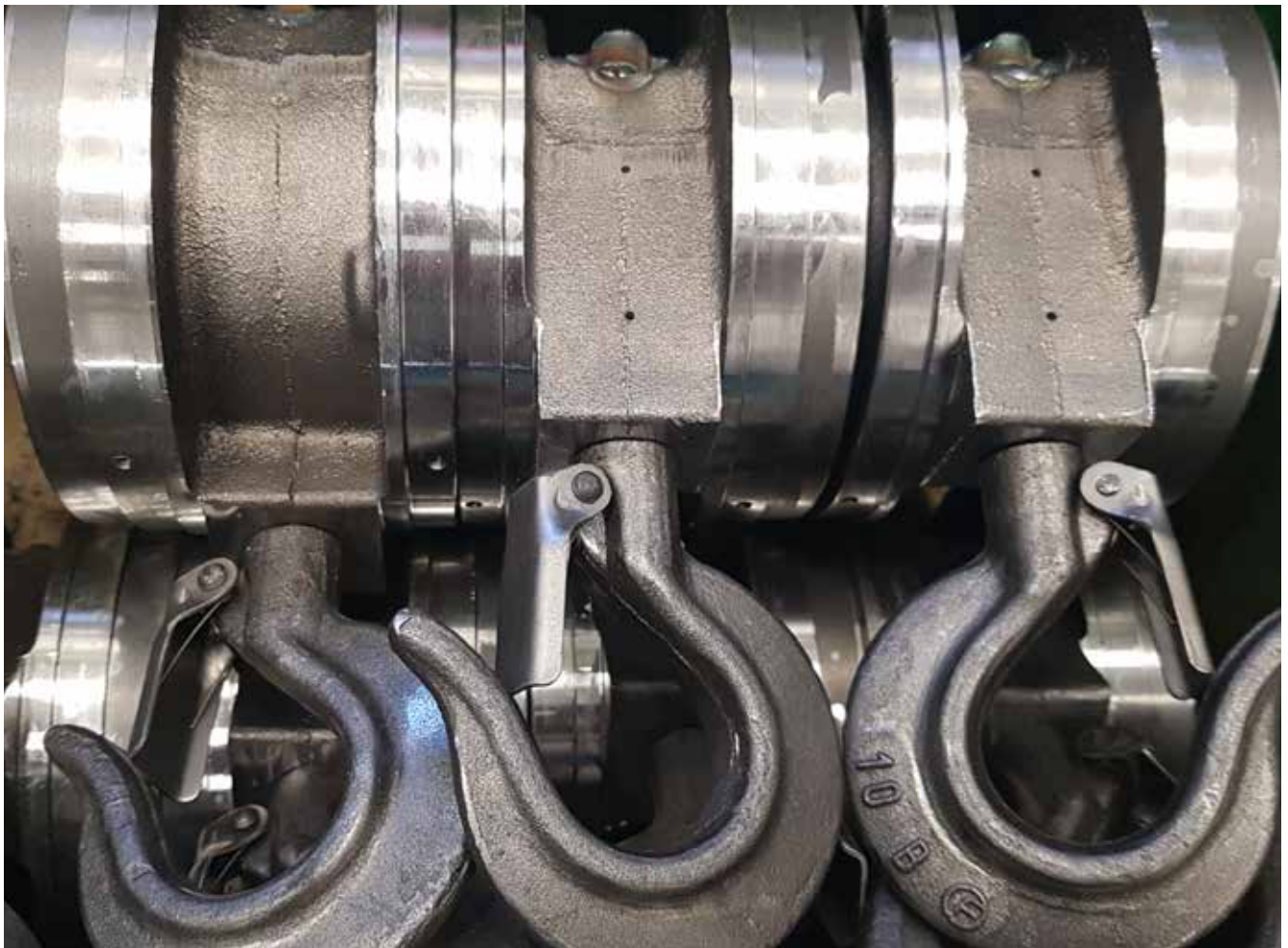
BRANO has created the immortal Czech slogan “Brano zavírá samo“ (literally “Brano closes automatically”) which has become embedded in the subconscious of the society and is itself an unquestionable catchphrase of the company.

Zdroj: Opavský deník



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RACK JACK – STANDARD

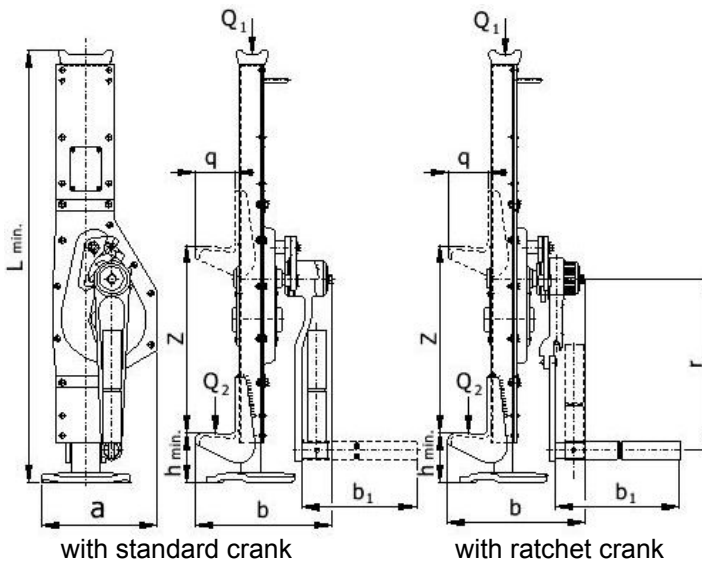
Use:

- for lifting and manipulation with all kinds of load
- for assembly work of all kind especially in construction works
- also in variant for use in explosive environment (“NEXP”)

Characteristics:

- robust, simple and ‘indestructible’ construction
- lifting using the head or side brace
- reliably holding the load in any position using the lock in the crank
- acceptable actuating force in the crank
- increased operating comfort in the version with the ratchet handle (“RK”) and ratchet-crank lever (“RKP”)
- low maintenance requirements
- meets requireme

1) – Handle in position “crank” 2) – Handle in position “lever”



Type	Lifting capacity (t)		Operating force on crank (N)	Main dimensions (mm)								Weight (kg)	
	Q1	Q2		a	b	b1	q	h min.	L min.	r	Z		
15-00	2,5	1,75	380	175	210	200	60	75	735	250	345	14,7	
15-00-RK					230								15,5
15-00-RKP					240								16,3
15-00	5	3,5	550	200	240	200	70	85	765	300	360	22,3	
15-00-RK					250								22,8
15-00-RKP					295								23,4
15-01	10	7	540	245	295	200	80	90	795	300	345	38,6	
15-01-RK					305								39,1
15-01-RKP					370								39,7
15-01	16	11	730	280	315	280	77	160	900	400	320	65	
15-01-RK					370								65
15-01-RKP					370								65
Z23	20	14	800	325	330	280	77	150	960	400	300	90	

RACK JACK WITH ADJUSTABLE SUPPORT

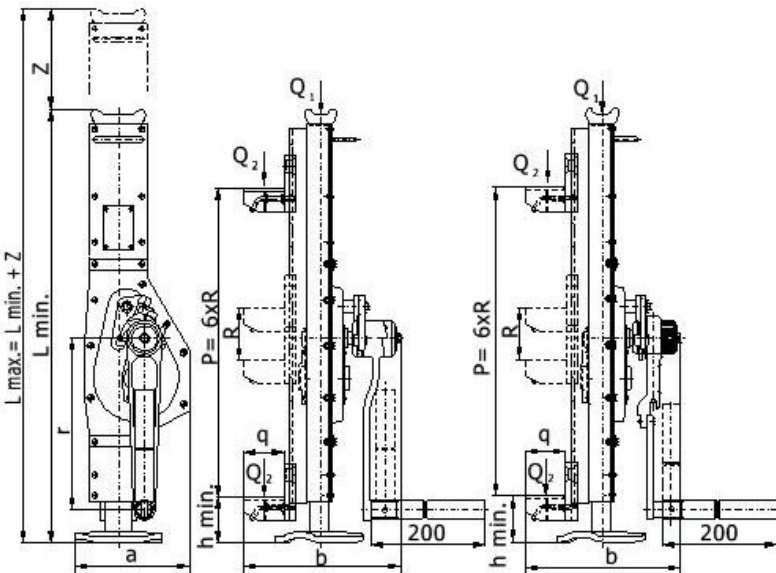
Use:

- for lifting and manipulation with all kinds of load
- for assembly work of all kind especially in construction works
- also in variant for use in explosive environment (“NEXP”)

Characteristics:

- robust, simple and ‘indestructible’ construction
- lifting by head or adjustable side support
- the adjustable support allows optimal use of rack bar lift
- the option of setting 7 positions of the side support
- reliably holds the load in any position using the lock in the crank
- acceptable actuating force in the crank
- increased operating comfort in the version with the ratchet handle (“RK”) and ratchet-crank lever (“RKP”)
- low maintenance requirements
- meets requirements of CSN EN 1494

1) – Handle in position “crank” 2) – Handle in position “lever”



Type	Lifting capacity (t)		Operating force on crank (N)	Main dimensions (mm)								Weight (kg)	
	Q1	Q2		a	b	q	h min.	L min.	r	P	R		Z
15-00-VK	2,5	1,75	380	175	250	60	75	735	250	540	90	345	16,4
15-00-VK-RK					265								17,2
15-00-VK-RKP					285								18
15-00-VK	5	3,5	550	200	275	70	80	765	300	540	90	360	24,4
15-00-VK-RK					250								24,9
15-00-VK-RKP					285								25,5
15-01-VK	10	7	540	245	325	80	140	795	300	600	100	345	41,1
15-01-VK-RK					315								41,7
15-01-VK-RKP					335								42,3

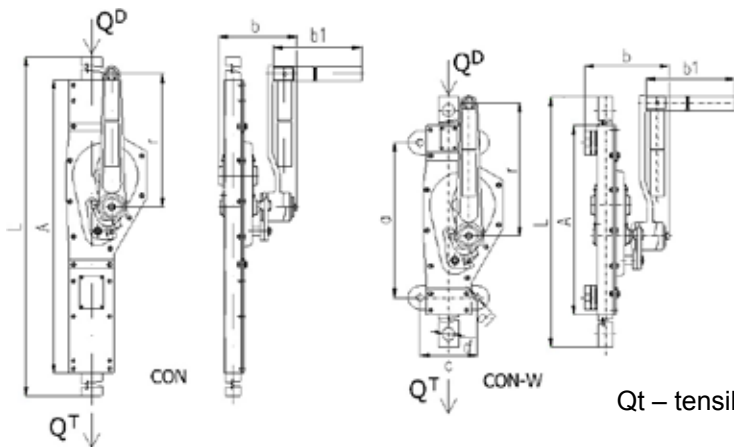
CONTAINER RACK JACK

Use:

- for installation into machine systems for the purpose of lifting mobile structure components
- examples of use – for lifting container lids and roofs, manipulating water gates of reservoirs, lifting screens or stop-logs in waste water treatment plants, cable car tension stations
- many other applications for manual lifting and lowering of load
- also in variant for use in explosive environment (“NEXP”)
- lifting up to 3 meter

Characteristics:

- robust, simple and ‘indestructible’ construction
- the basic version (“CON”) enables flexible adaptation of the jack for installation into a structure
- the „wall’ version (“CON-W”) is prepared for installation using built-in brackets and apertures at the ends of the rack
- will reliably hold the load in any position using the lock in the crank
- acceptable operating force in the crank



Type	Lifting capacity (t)	Operating force on crank (N)	Main dimensions (mm)									Lift	Weight (kg)
			L	A	a	b	b1	c	d	d1	r		
15-00-CON-W	2,5	380	660									345	12,8
			970	360	320	180	200	80	25	13	250	580	15,2
			1200										850
15-00-CON-W	5	550	690									360	22,1
			970	427	350	190	200	80	30	13	300	605	25,6
			1200										850
15-01-CON-W	10	540	690									345	35
			970	580	490	225	200	80	30	13	300	615	40
			1200										825
15-00-CON	2,5	380	660									345	11,4
			970	655	-	-	200	-	-	-	250	680	13,8
			1200										850
15-00-CON	5	550	690									360	19
			970	662	-	-	200	-	-	-	300	680	22,5
			1200										850
15-01-CON	10	540	690									345	33
			970	670	-	-	200	-	-	-	300	615	38
			1200										825

RAIL RACK JACK

Use:

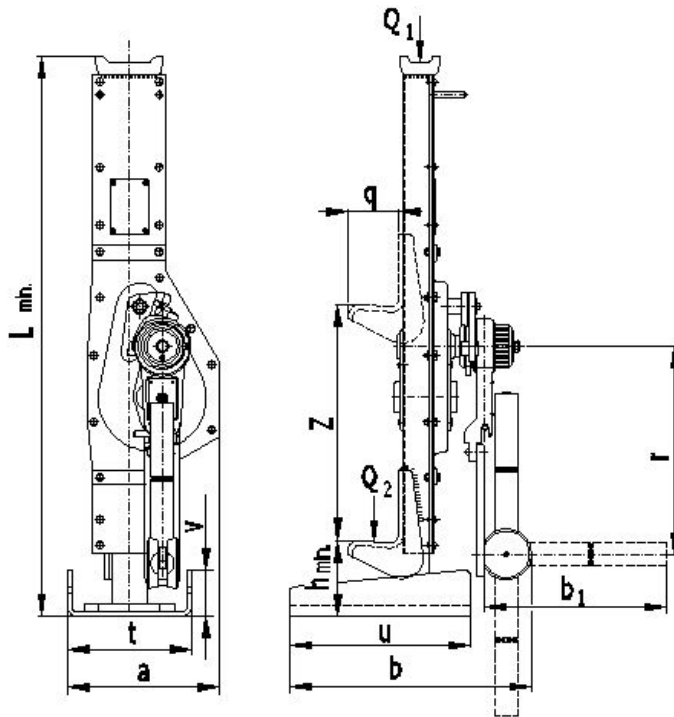
- specifically shaped foot allows use of the rack jack for minor repairs of railway tracks
- for heavy lifting and manipulation of various loads

Characteristics:

- robust, simple and 'indestructible' construction
- specifically shaped foot allows to fix the jack between tracks and sleepers safely and easily
- size and the U shape of foot ensure the stability of jack on rough surface
- thanks to stability the rails are lifter simply and safely
- foot of the jack can be customized to the customer's needs
- rack jack of Brano is standardly equipped with ratchet crank-lever ("RKP")
- it is possible to use different type of cranks (3 variants)

1) Handle in position "crank"

2) Handle in position "lever"



Type	Lifting capacity (t)		Operating force on crank (N)	Main dimensions (mm)											Weight (kg)
	Q1	Q2		a	t	u	v	b _{max}	b ₁	q	h _{min}	L _{min}	r	Z	
15-00-GHW	2,5	1,75	380 1) 230 2)	215	160	250	64	315	200	55	75	735	275	345	21
15-00-GHW	5	3,5	550 1) 330 2)	240	160	250	64	335	200	70	85	765	275	360	24
15-01-GHW	10	7	540 1) 320 2)	255	190	280	50	365	200	80	90	795	300	345	40
15-01-GHW	16	11,2	730 1) 440 2)	291	190	280	50	420	280	90	160	900	300	320	68

Working temperature range -20° → +50°

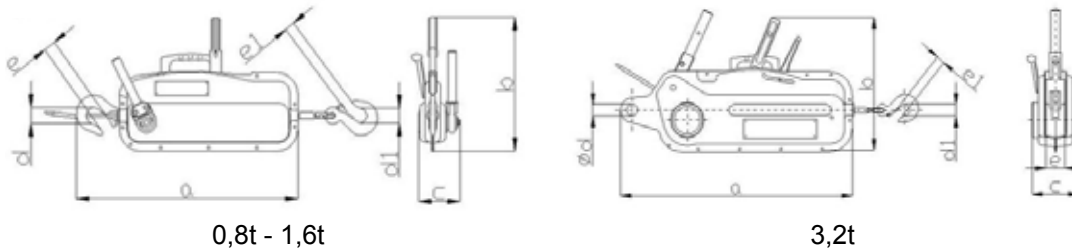
ROPE HOIST

Use:

- wide range of use particularly in construction, agriculture, forestry, transport, etc.
- for lifting and towing loads in all directions
- for extricating items, demolishing buildings
- for putting up posts, installing electrical wiring, tensioning in cable car stations
- in logging
- for installation and manipulation works of all types
- also in variant for use in explosive environment ("NEXP")

Characteristics:

- simple construction, portable
- the option of manipulating loads at various distances

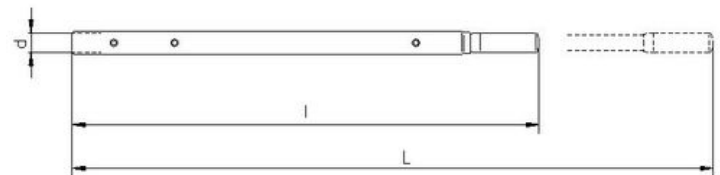


Type	Lifting capacity (t)	Lifting 1) speed (m/min)	Operating force on lever (N)	Main dimensions (mm)							Weight (kg)
				a	b max	c	d	d1	e	e1	
30-10	0,8	2	250	535	300	125	36	32	23,5	23,5	11,1
30-00	1,6	2	450	630	360	155	43	46	32,5	32,5	19,2
30-11	3,2	0,45 0,84	380 (B) 750 (A)	680	410	140	28	64	47	45,5	33,5

1) Calculated on presumption 35 swings by lever per minute
 2) A – higher lifting speed B – lower lifting speed
 Hoist of lifting capacity 3,2t has hinge pin instead of hook

HAND LEVER

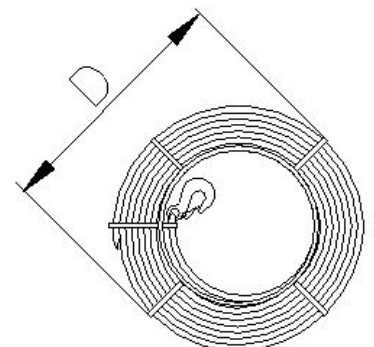
Lifting capacity (t)	Main dimensions (mm)			Weight (kg)
	d	l in inserted position	L	
0,8	22	650	1100	2
1,6	29	730	1220	2,8
3,2				



ROPE WITH CARTRIDGE

Lifting capacity (t)	Ø of rope (mm)	Rope length (mm)	D (mm)	Weight* (kg)
	Specification of rope according to EN 12385-4			
0,8	Ø 8 6×19 SFC 1770 BsZ	10, 20, 30, 40	345	5,9
1,6	Ø 11 6×19 SFC 1770 BsZ	10, 20, 30, 40	420	12
3,2	Ø 16 6×27 WSC 1770 BsZ	10, 20, 30, 40	520	25

* Weight applies to rope of length 20m



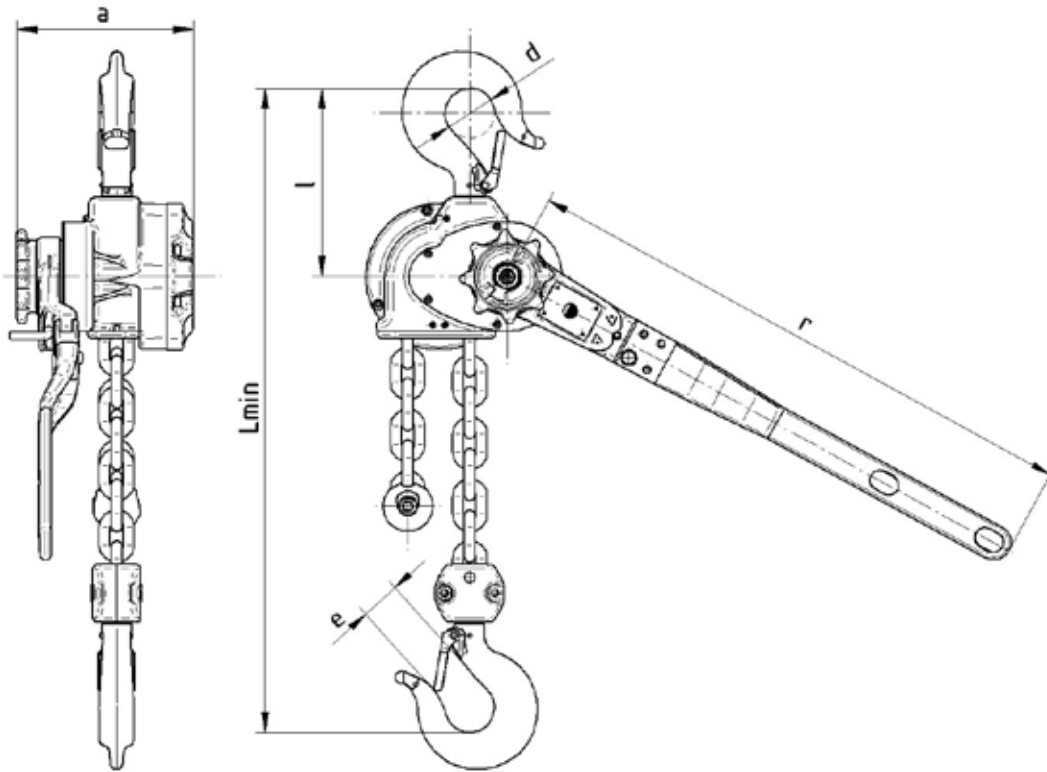
RZC RATCHET HOIST

Use:

- wide range of use particularly in construction and in mining and anywhere where loads must be manipulated
- for lifting and towing loads
- for tensioning fences, extricating work, pulling out posts
- as a lifting device for suspended mine railway
- for installation and manipulation work of various types
- suitable for heavy duty use – in mines, smelting works, etc.
- can also be used in environments with a risk of explosion (“NEXP”)

Characteristics:

- simple, robust construction, portable
- withstands rough use
- equipped with a safety device against overloading
- simple operation
- minimum maintenance requirements



Type	Lifting capacity (t)	Number of load chain falls	Loading chain	Operating force (N)	Lifting * speed (m/min)	Main dimensions (mm)						Weight (kg)	Weight increase per 1m of lift (kg)
						a	d	e min	l	L min	r		
RZC	0,8	1	Ø 5 x 15	400	1,27	145	36	23,5	145	327	560	8,4	0,55
	1,6	1	Ø 9 x 27	370	0,52	165	43	29,5	160	380	560	16	1,84
	3,2	1	Ø 11 x 31	400	0,37	173	50	35,5	223	417	560	21	2,73
	5	2	Ø 11 x 31	300	0,18	173	56	42	242	630	560	34	5,46
	6,3	2	Ø 11 x 31	400	0,18	173	63	48	265	650	560	40	5,46
	7,5	2	Ø 11 x 31	480	0,18	173	56	43	386	880	560	53	5,46

* Calculated on presumption of 48 swings by hand lever per minute.
(1 swing = movement by hand lever from one extreme position to another and back)

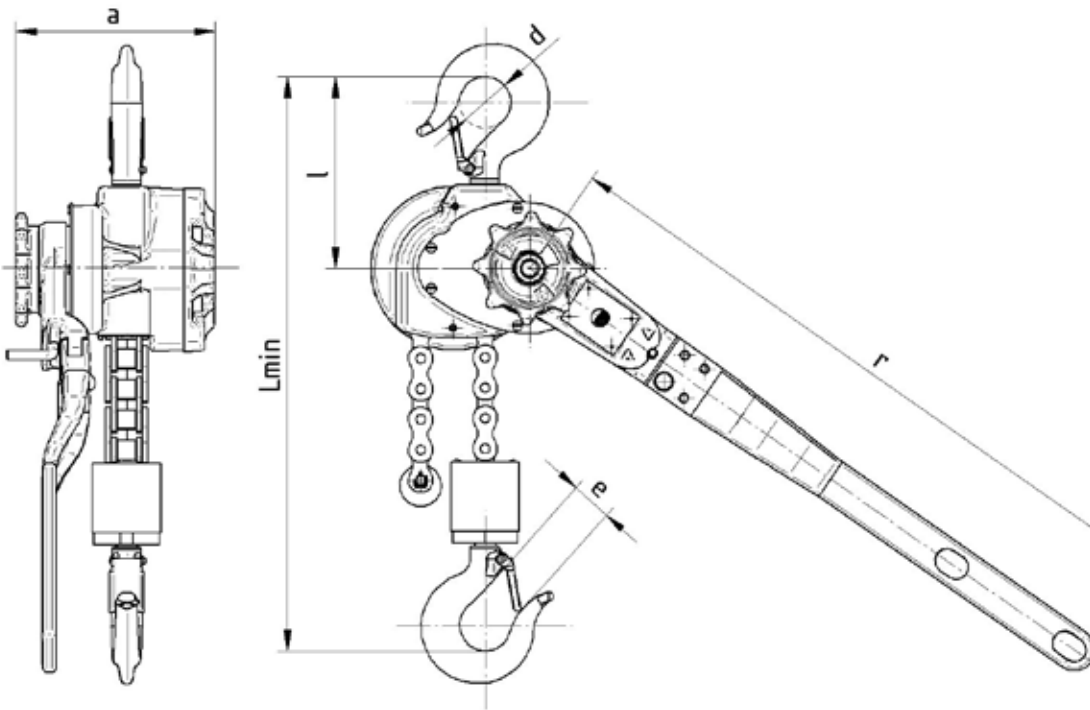
RZV RATCHET HOIST

Use:

- wide range of use particularly in construction and mining and anywhere where loads must be manipulated
- for lifting and towing loads
- for tensioning fences, extricating work, pulling out posts in mines
- as a lifting device for suspended mine tracks
- for installation and manipulation work of various types
- suitable for heavy duty use – in mines, smelting works etc.
- can also be used in environments with a risk of explosion ("NEXP")

Characteristics:

- simple, robust construction, portable
- withstanding rough use
- equipped with a safety device against overloading
- simple operation



Type	Lifting capacity (t)	Number of load chain falls	Operating force (N)	Lifting * speed (m/min)	Main dimensions (mm)						Weight (kg)	Weight increase per 1m of lift (kg)
					a	d	e min	l	L min	r		
RZV	0,8	1	400	1,27	145	36	23,5	145	327	560	9,5	1,5
	1,6	1	370	0,52	165	43	29,5	160	395	560	17	2,7
	3,2	2	370	0,26	165	50	35,5	223	500	560	24,5	5,4
	5	3	440	0,22	160	56	39,5	213	555	560	41	8,1
	6,3	4	430	0,17	160	63	48	260	640	560	46	10,8

* Calculated on presumption of 48 swings by hand lever per minute.
(1 swing = movement by hand lever from one extreme position to another and back)

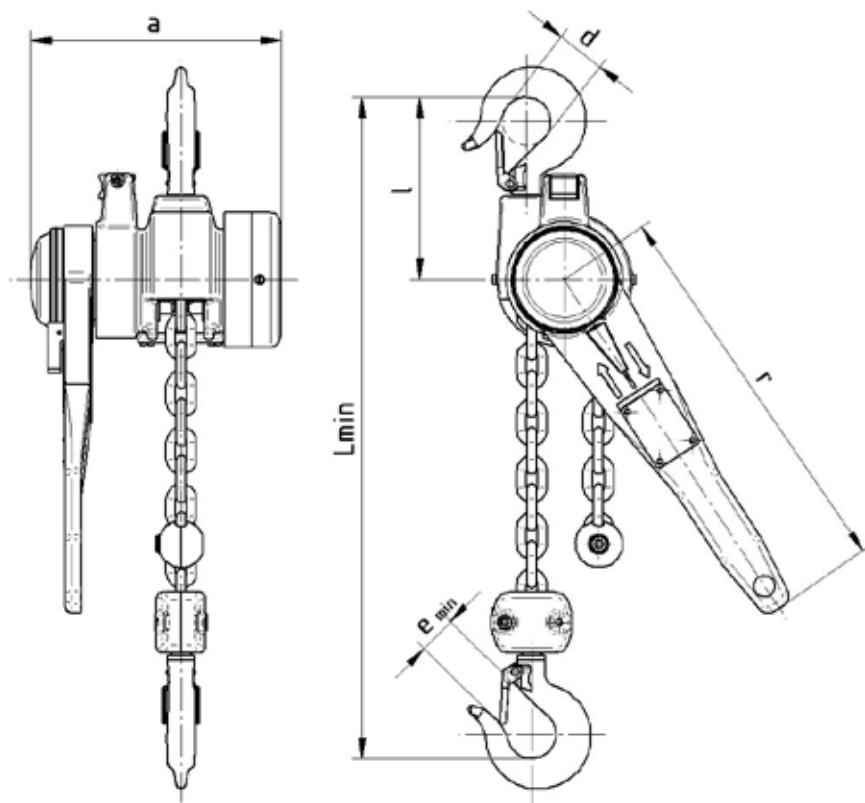
Z310 RATCHET HOIST

Use:

- wide range of use when lifting and manipulating loads
- for lifting and towing loads
- for tensioning work
- for installation and manipulation work of various types
- especially suitable for 'lighter' workshop jobs
- can also be used in environments with a risk of explosion ("NEXP")

Characteristics:

- simple, light construction, portable
- minimum actuating force
- simple operation
- low maintenance requirements



Type	Lifting capacity (t)	Number of load chain falls	Loading chain	Operating force (N)	Lifting* speed (m/min)	Main dimensions (mm)						Weight (kg)
						a	d	e (min)	l	L (min)	r	
Z310	0,5	1	Ø 5 x 15	120	0,3	166	30	18,5	120	235	290	7,6
Z310-1	1	1	Ø 7 x 21	180	0,33	190	36	23,5	135	300	380	10,5
Z310	1,6	1	Ø 9 x 27	300	0,4	187	43	29,5	175	420	380	14,4
	3,2	2	Ø 9 x 27	350	0,2	187	50	35,5	220	500	380	22,5
	5	3	Ø 9 x 27	400	0,13	187	56	39,5	230	700	380	33

* calculated on presumption of 48 swings by hand lever per minute.
(1 swing = movement by hand lever from one extreme position to another and back)

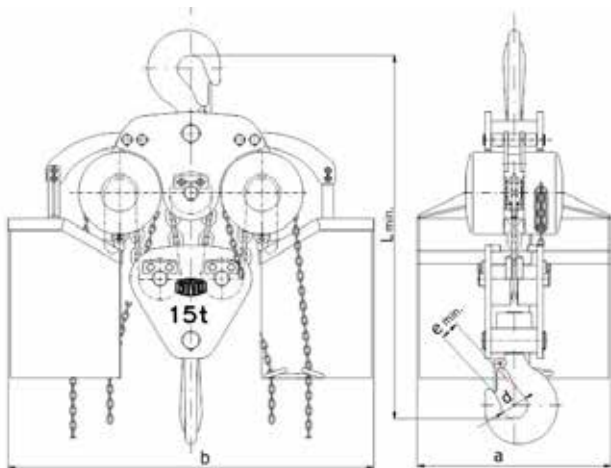
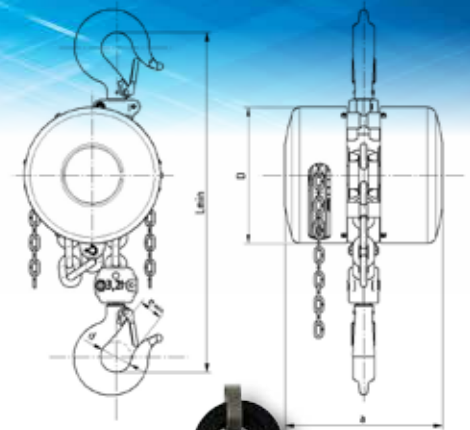
CHAIN BLOCK

Use:

- as any other fixed hoists for lifting and lowering of loads
- especially suitable where the lifting device is not used frequently
- for occasional use
- in places without the power source
- as service hoist for assembly and maintenance work in technological equipment of all kinds
- also in variant for explosion hazard environment (" NEXP")

Characteristics:

- robust, heavy-duty and purposeful construction
- simple operation
- low maintenance requirements



Type	Lifting capacity (t)	Number of load chain falls	Loading chain	Hand chain	Operating force (N)	Lifting* speed (m/min)	Main dimensions (mm)					Weight (kg)
							a	d	D	e (min)	L (min)	
Z100	0,25	1	Ø 3,1 x 9,3	Ø 3 x 14,3	270	2	120	30	80	18,5	255	4,4
	0,5		Ø 5 x 15		300	1,1	165	30	115	18,5	250	8,5
	1		Ø 7 x 21		350	0,7	180	36	136	23,5	330	14,1
	1,6		Ø 9 x 27		320	0,36	220	43	198	29,5	410	24
	3,2	2	Ø 11 x 31	Ø 4 x 20	400	0,29	254	220	50	35,5	510	37,4
	5				400	0,145			56	39,5	655	52,3
	7,5				480	0,15			56	43	875	70
	10				400	0,1			63	47	1000	85

* calculated on presumption of winding off 30m of the hand chain per minute

Type	Lifting capacity (t)	Number of load chain falls	Loading chain	Hand chain	Lifting force on one of the chain blocks (N)	Lifting* speed (m/min)	Main dimensions (mm)					Weight without the chain (kg)	Weight increase per 1m of lift (kg)
							a	d	d	e (min)	L (min)		
Z100	15	4	Ø11x31	Ø4x20	480	0,3	510	1000	71	50	980	220	13
	20	6			400	0,2	510	1150	80	62	1100	250	19,2

* Calculated on presumption of winding off 30m of the hand chain per minute

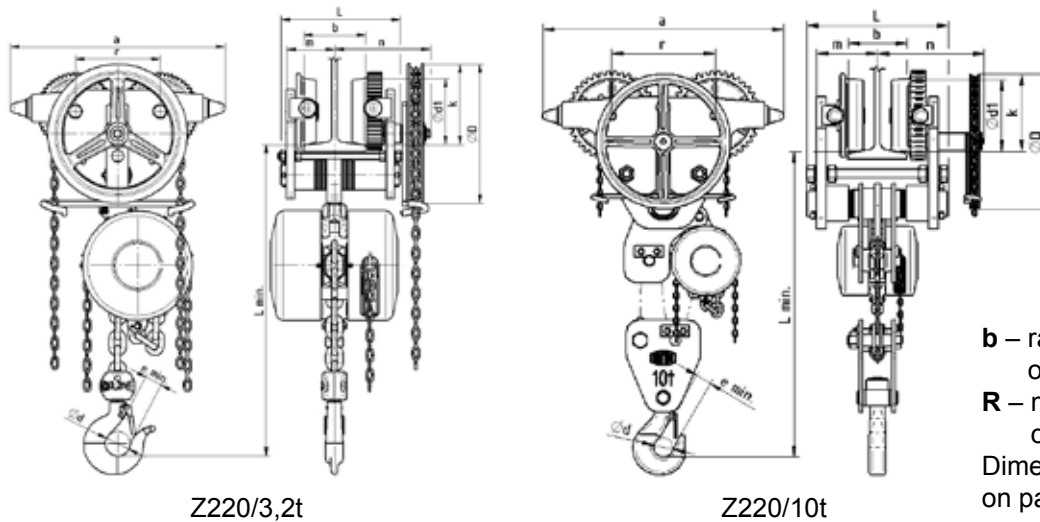
TRAVELLING CHAIN BLOCK

Use:

- as a standard manually controlled crane for lifting and moving loads in the area of the crane track
- particularly useful for use wherever the lifting device is not used intensively
- for occasional use
- as service hoist for assembly and maintenance work in technological equipment of all kinds
- in places without a power source
- can also be used in environments with a risk of explosion ("NEXP")

Characteristics:

- simple construction, the trolley easily adapts to the width of the crane track
- simple operation
- low maintenance requirements



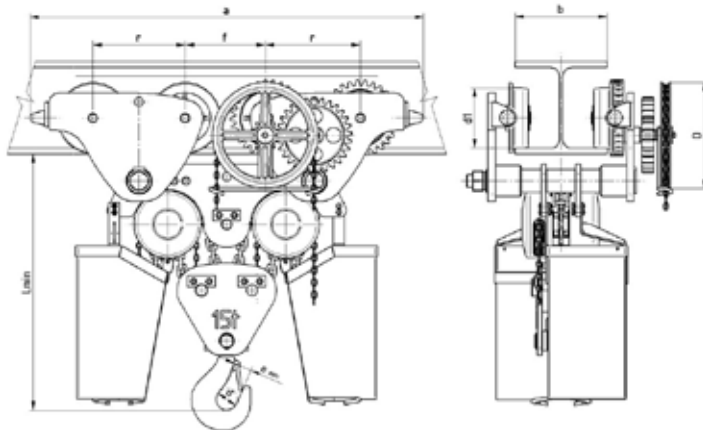
b – range of flange width of a girder
R – minimal curvature radius of trolley track
 Dimension of **L**, **m**, **n** are available on page 12

Type	Lifting capacity (t)	Main dimensions (mm)								I – beam	
		a	d	d1	D	emin	Lmin	r	k	b	R
Z220-A	0,5 t	245	30	55	109	18,5	290	87	95	58-113	1000
Z220-B	not suitable for profile HEM									58-226	
Z220-C										125-300	
Z220-A	1 t	245	36	55	109	23,5	340	87	95	58-113	1000
Z220-B	not suitable for profile HEM									58-226	
Z220-C										125-300	
Z220-A	1,6 t	350	43	100	230	29,5	457	140	136	58-113	1700
Z220-B										58-226	
Z220-C										137-300	
Z220-A	3,2 t	435	50	133	280	35,5	575	170	162	82-125	2500
Z220-B										82-226	
Z220-C										160-300	
Z220-A	5 t	505	56	148	345	39,5	660	218	227	90-137	2800
Z220-B										90-226	
Z220C										170-300	
Z220	7,5 t	685	56	196	345	43	875	300	222	125-185 (I)	5000
Z220-C										146-300	
Z220	10 t	765	63	228	428	47	920	328	256	125-185 (I)	9000
Z220-C										180-300	

Type	Lifting capacity (t)	Number of load chain falls	Load chain	Operating force for travel ** (N)	Operating force for lift (N)	Lifting speed * (m/min)	Travel speed * (m/min)	Weight (kg)
Z220-A	0,5	1	Ø5×15	250	300	1,1	4,8	16,9
Z220-B								18,6
Z220-C								19,6
Z220-A	1	1	Ø7×21	250	350	0,7	4,8	22,4
Z220-B								24,1
Z220-C								25,1
Z220-A	1,6	1	Ø9×27	150	320	0,36	2,25	44,4
Z220-B								46,2
Z220-C								47,4
Z220-A	3,2	1	Ø11×31	280	400	0,29	2,3	73,1
Z220-B								74,9
Z220-C								76,6
Z220-A	5	2	Ø11×31	350	400	0,15	1,8	105,5
Z220-B								107,5
Z220-C								110,8
Z220	7,5	2	Ø11×31	500	480	0,15	5,97	207,2
Z220-C								211,2
Z220	10	3	Ø11×31	500	390	0,1	7,3	264,5
Z220-C								272

* Calculated on presumption of unwinding 30 m of hand chain per minute.

** At trolleys with lifting capacities 3,2 – 10t it is necessary when loading with loads approaching nominal lifting capacity to ensure the operation by two persons



b – width of beam's flange sets the customer, when placing the order for travelling chain block

Type	Lifting capacity (t)	Main dimensions (mm)							
		a	d	d1	D	r	f	emin	Lmin
Z220	15	1290	71	196	345	300	270	50	780
	20	1500	80	237	428	328	380	62	720

Type	Lifting capacity (t)	Number of load chain falls	Loading chain	Operating force for travel (N)	Operating force for lift (N)	Lifting speed * (m/min)	Lift max. ** (m)	Weight without chain (kg)	Weight increase per 1m of lift (kg)
Z220	15	4	Ø11×31	500	480	0,15	12	285	13
	20	6			400	0,1	8	345	19,2

* calculated on presumption of unwinding 30 m of hand chain per minute on each chain block.

** Lift according to order. Lifts longer then stated in the table must be consulted with the producer.

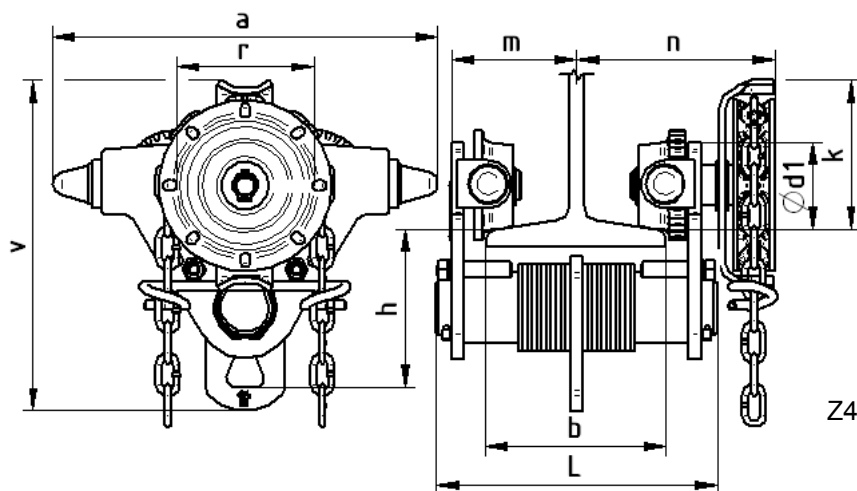
SINGLE BEAM TROLLEY

Use:

- as manually controlled trolleys for suspending BRANO hoists or hoists of other brands of the corresponding loading capacity
- for moving loads within the area of the crane track
- as part of the service hoists for installation and maintenance work in technological facilities of all types
- can also be used in environments with a risk of explosion ("NEXP")

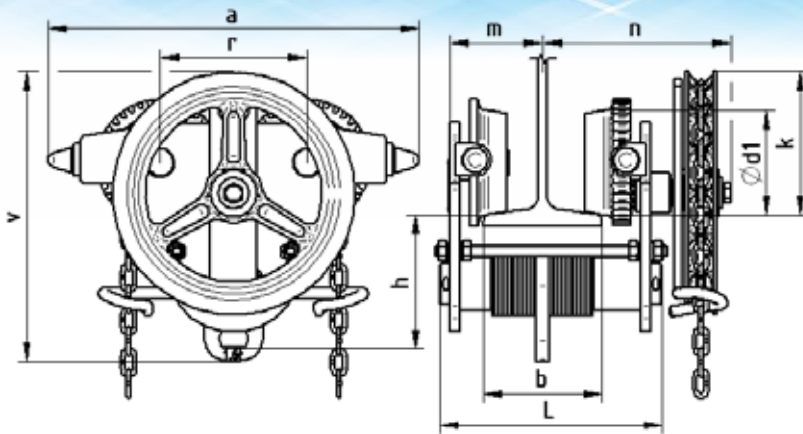
Characteristics:

- simple construction, with trolley adapting easily to the width of the crane track
- simple operation
- low maintenance requirements

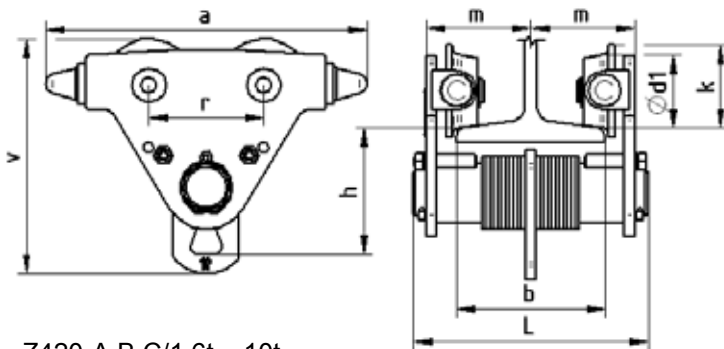


Z420-A, B, C/1t

Type	Lifting capacity (t)	Main dimensions (mm)									Beam (I, IPE, HEA, HEB, HEM)	
		a	h	L	v	d1	r	k	m	n	b	R
Z420-A	1 not suitable for profile HEM	245	100	178	209	55	87	95	52-80	99-126	50-113	1000
Z420-B				286					52-134	99-180	50-226	
Z420-C				372					90-177	136-223	125-300	
Z420R-A	1,6	245	100	178	177	55	87	63	52-80	–	50-113	1000
Z420R-B				286					52-134	–	50-226	
Z420-A	3,2	350	121,5	212	269	100	140	136	80-91	168-175	58-113	1700
Z420-B				324					80-145	168-230	58-226	
Z420-C				396					129-181	214-266	137-300	
Z420-A	5	435	134	239	309	133	170	162	86-97	178-189	82-125	2500
Z420-B				340					86-146	178-238	82-226	
Z420-C				414					113-183	205-275	160-300	
Z420-A	7,5	505	149	275	391	148	218	227	101-116	199-214	90-137	2800
Z420-B				364					101-162	199-260	90-226	
Z420-C				436					133-198	231-296	170-300	
Z420	10	685	248	415	432,5	196	300	222	150-186	294-330	125-185 (I)	5000
Z420-C				518					161-238	301-382	146-300 (I)	
Z420	10	765	278	448	503,5	228	328	256	160-193	306-339	125-185 (I)	9000
Z420-C				552					185-245	331-391	180-300 (I)	



Z420R-A,B/1t



Z420-A,B,C/1,6t – 10t

b – range of flange width of a girder
R – minimal curvature radius of trolley track

Type	Lifting capacity (t)	Operating force for travel ** (N)	Travel speed * (m/min)	Weight (kg)
Z420-A	1	250	4,8	8,7
Z420-B				10,4
Z420-C				11,4
Z420R-A	1,6	–	–	6,4
Z420R-B		–	–	78
Z420-A	3,2	150	2,25	21
Z420-B				22,8
Z420-C				24
Z420-A	5	280	2,3	35,9
Z420-B				37,8
Z420-C				39,5
Z420-A	7,5	350	1,8	52,9
Z420-B				54,7
Z420-C				58
Z420	10	500	5,97	124,2
Z420-C				128,2
Z420	10	500	7,3	179,5
Z420-C				187

* Calculated on presumption of unwinding 30 m of hand chain per minute

** At trolleys with lifting capacities 3,2 – 10t it is necessary when loading with loads approaching nominal lifting capacity to ensure the operation by two persons

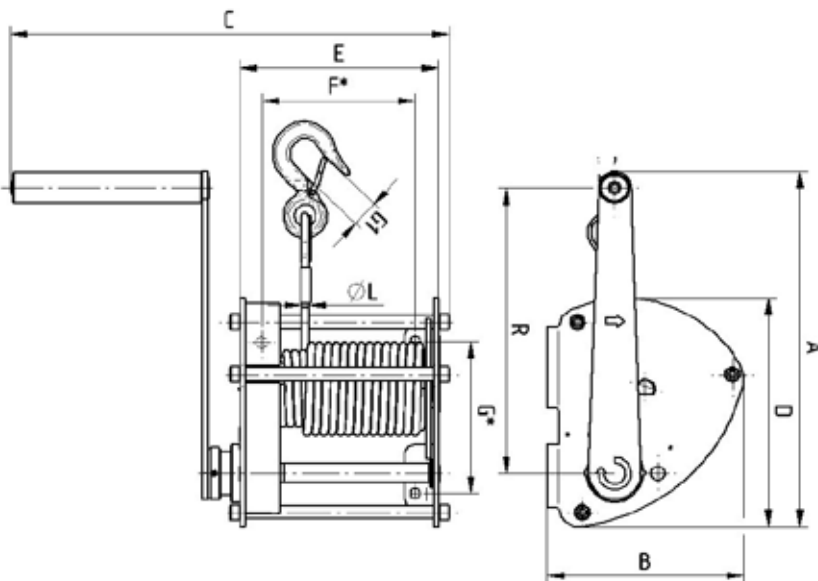
WIRE ROPE WINCH

Use:

- for manual lifting and towing of loads
- as a service hoist for installation and maintenance work in technological facilities of all types
- for loading passenger vehicles or boats onto trailers
- for manipulation activities on small boats (hoisting the sails, etc.)
- can also be used in environments with a risk of explosion ("NEXP")

Characteristics:

- simple and light construction
- simple operation
- anti-corrosion surface treatment by galvanization
- ready for installation to a structure
- low maintenance requirements



Type	Lifting capacity (t)	Main dimensions (mm)										Technical parameters				
		A	B	C	D	E	F*	G*	G1	L	R	Rope (mm)	Lift (m)	Gear ratio	Operating force on crank max. (N)	Weight of winch with the rope (kg)
LN	0,5t	264	167	344	193	186	144	115	19	5	200	Ø5	10	1:08	250	9,5
	1t	373	207	460	240	209	160	160	19	8	300	Ø8	10	1:06	320	15,2

* hole distances for anchoring of the rope winch
 Ø of anchorage holes – LN/0,5t – 9mm, LN/1t – 11mm

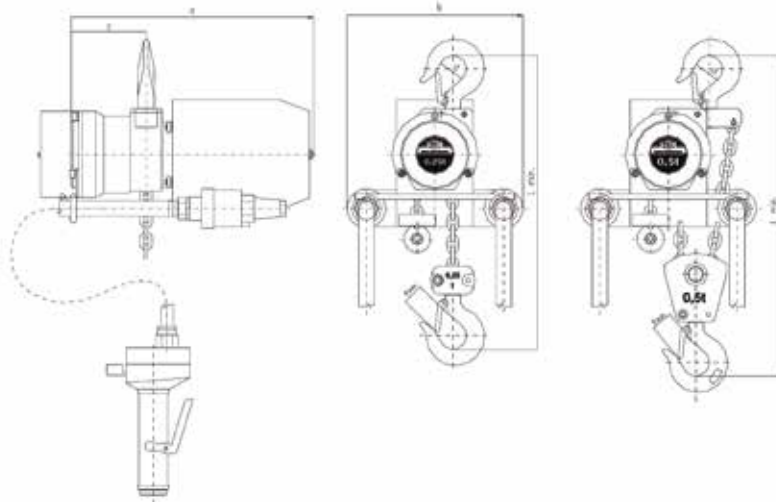
PNEUMATIC CHAIN BLOCK

Use:

- as a standard stable hoist for lifting and lowering loads
- in places where a source of compressed air is available
- as a service hoist for installation and maintenance work in technological facilities of all types
- particularly suitable in areas with a risk of explosion or dust, where it is not possible to use hoists with electric drive (paint shops, gasworks, deep mines, chemical operations, etc.) – the version bearing the marking „NEXP“
- standard manufactured load-carrying capacity is 250 kg, or 500kg, greater load-carrying capacity per query

Characteristics:

- simple and light construction
- simple operation
- low maintenance requirements



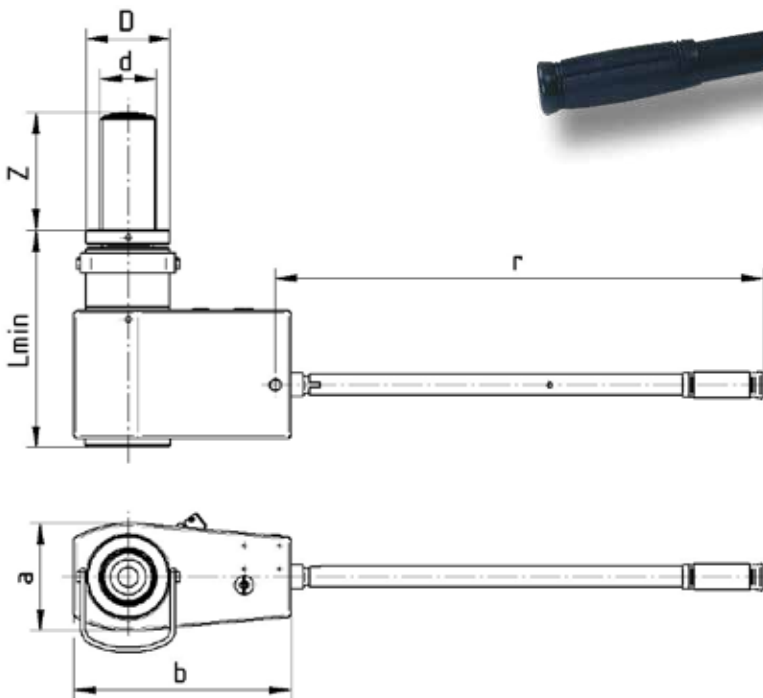
HYDRAULIC JACK

Use:

- serving as a mobile jack for lifting and manipulating loads of great weight (up to 100t) of various types
- for installation works of all types particularly in constructions (bridge building, steel structures, etc.)
- can also be used in environments with a risk of explosion (“NEXP”)

Characteristics:

- robust and simple construction
- reliably holds the load in any position
- minimum actuating force on the hand lever
- low maintenance requirements



Type	Lifting capacity (t)	Main dimensions (mm)						Weight (kg)	Lift (Z) (mm)	Capacity of tank (l)	Operating force (N)
		a	b	d	D	L min	r				
Z320	25	135	271	70	105	280	600	25	145	1	310
	50	180	316	100	145	290	600	48	145	2	310
	100	250	381	140	210	325	800	95	145	4	310

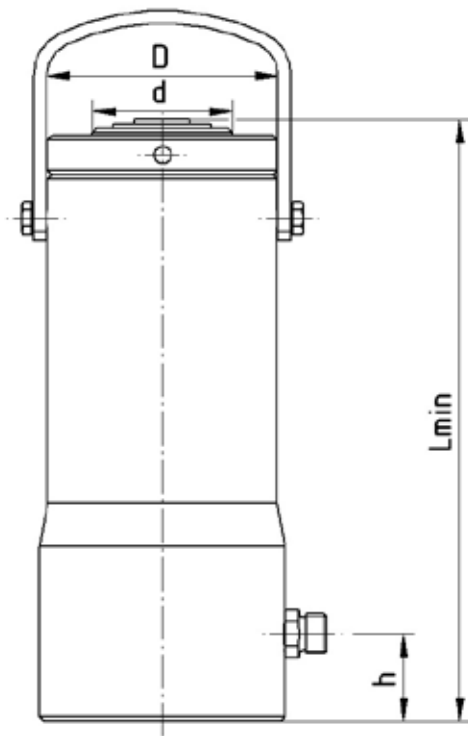
HYDRAULIC CYLINDER JACK

Use:

- serving as a mobile jack for lifting, expanding and manipulating loads of great weight (up to 200t) of various types
- independent manual pump serves as the source of pressure energy
- for installation works of all types particularly in constructions (bridge building, steel structures, etc.)
- particularly suitable for use in small spaces
- can also be used in environments with a risk of explosion ("NEXP")

Characteristics:

- robust, simple construction
- reliably holds a load in any position
- low maintenance requirements



Type	Lifting capacity (t)	Main dimensions (mm)				Technical parameters				
		L min	d	D min	h	Lift (mm)	Operating pressure (MPa)	Stroke volume (l)	Connecting screw-coupling (mm)	Weight (kg)
Z321	25	283	70	105	40	145	65	0,56	M18 x 1,5	20
	50	290	100	150	37			1,4		40
	100	328	140	210	52			2,23		87
	200	370	200	300	55			4,55		190

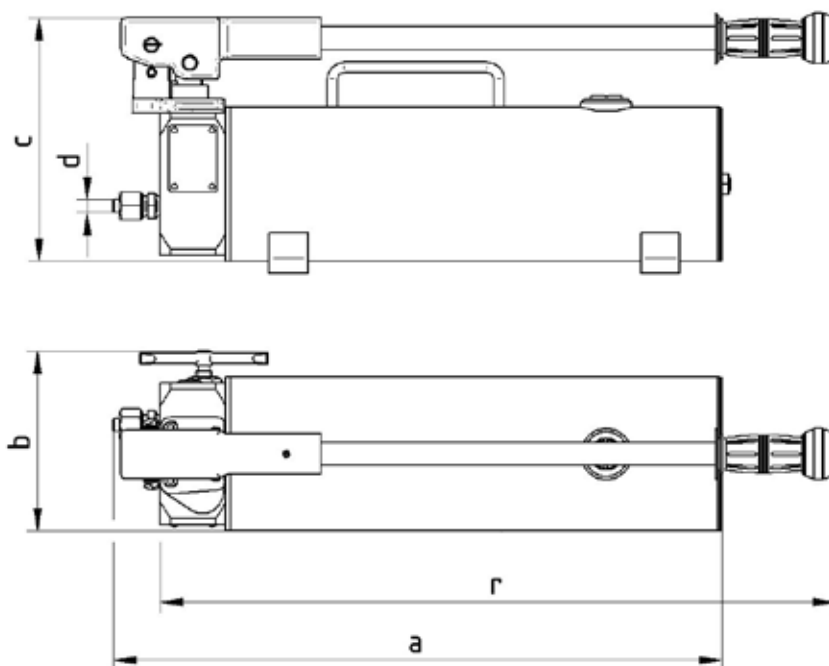
HYDRAULIC PUMP

Use:

- serving as the source of pressure energy chiefly for hydraulic cylinder jacks BRANO Z321
- can also be used as the source of pressure energy for other purposes

Characteristics:

- simple construction
- protected against overburdening by a safety valve
- low maintenance requirements



Type	Capacity of tank (l)	Main dimensions (mm)					Technical parameters			
		a	b	c	d	r	Operating pressure max. (MPa)	Operating force (N)	Number of outlets (ks)	Weight (kg)
HP03L	3	556	160	194	M18x1.5	535	65	370	1	15
HP05L	5	726							2	19
HP07L	7	926							2	21

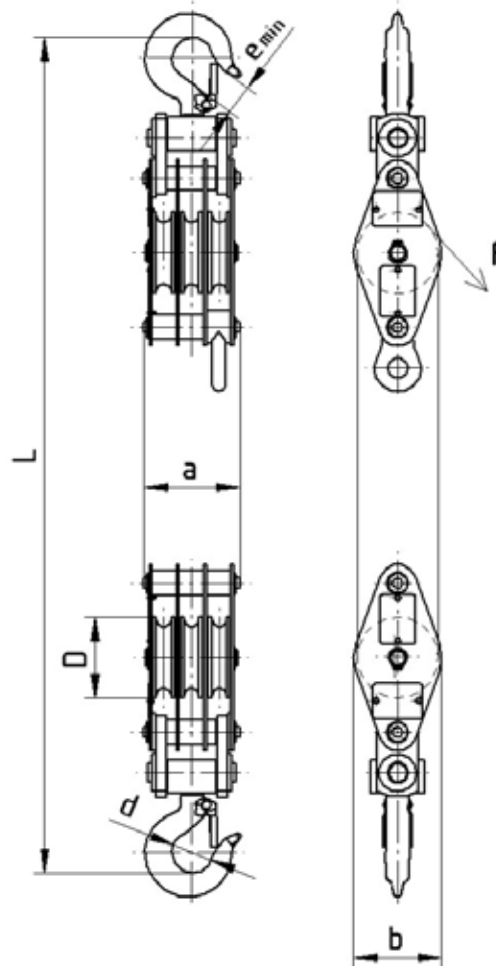
STANDARD PULLEY BLOCK

Use:

- as a portable tool in assembly, repair and other operations
- for lifting and towing loads in any direction by manually pulling on the rope, but usually using an engine driven windlass
- K10 – K12 types of standard pulley blocks are intended for textile rope, the K15 type for steel rope

Characteristics:

- robust and simple construction
- low maintenance requirements



Type	Lifting capacity (t)	Main dimensions (mm)						Technical parameters				
		a	b	d	D	e _{min}	L _{min}	Rope	Number of pulleys in pulley block*	Ø of rope max.	Operating force F (N)	Weight** (kg)
K10	0,5	72	145	30	125	18,5	730	textile	1	25	2660	14
K11	1	115	145	36	125	23,5	930		2	25	2760	19
	2	125	200	50	180	35,5	1215		2	26	5670	30
K12	0,3	75	65	30	60	18,5	570	3	10	575	3,5	
K15	1	80	200	36	180	23,5	1175	steel	1	12,5	5620	20
	2	100	250	50	230	35,5	1215		1	12,5	11260	43
	4	115	300	56	280	39,5	1410		1	20	22400	54
	6	145	350	63	325	50	1770		1	20	33730	104

* Each product always has two pulley blocks, top and bottom. ** Weight of the whole product, top and bottom pulley blocks (no rope).

BRICKLAYER'S PULLEY

Use:

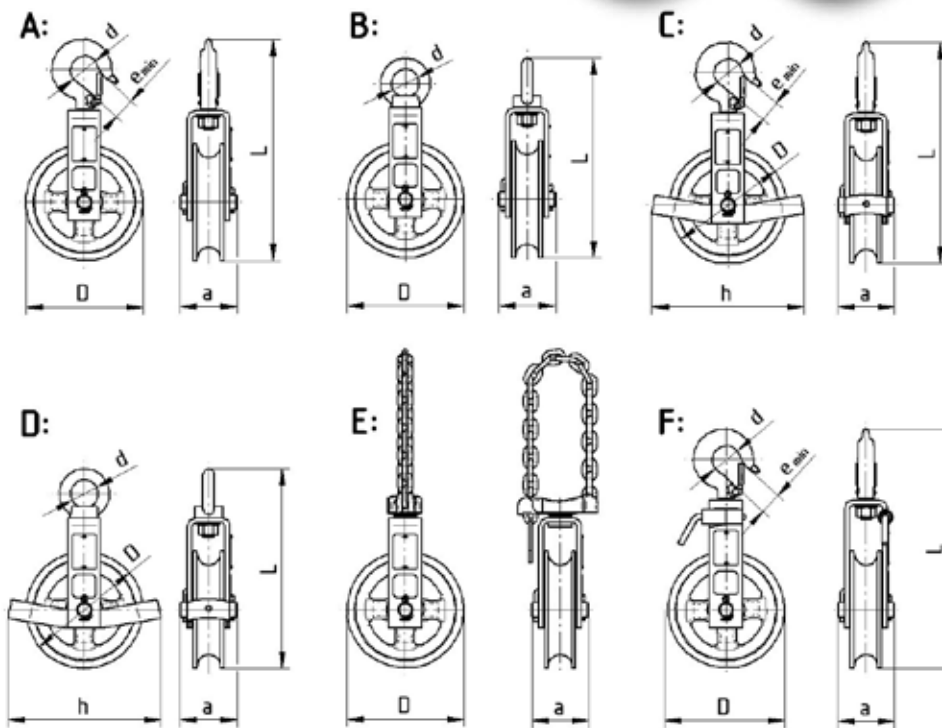
- serving as portable tool for installation and bricklaying work when lifting and towing loads by manual force

Characteristics:

- simple construction in five versions for various types of suspension
- low maintenance requirements

Pulleys of all versions include a rope with a hook of Z500L type, which is not included in the scope of delivery and is required to order separately.

The rope Z500L has \varnothing 11mm, the basic length of the rope is 20 m. Alternatively, another polyamide or hemp rope may be used with up to \varnothing 16mm.



Type	Lifting capacity (kg)	a	d	D	e min	h	L	Weight of pulley (kg)
A – with hook, without cover	500	61	30	125	20	–	240	1,6
B – with hook, without cover		61	28	125	–	–	233	1,7
C – with hook, with cover		61	30	125	20	165	240	1,8
D – with hook, with cover		61	28	125	–	165	233	1,9
E – with chain, without cover		61	–	125	–	–	–	2,3
F – with hook, without cover		61	30	125	20	–	256	1,7

CONTAINER PEDESTAL SYSTEM – ARMY PROGRAM

PEDESTAL SYSTEM

The container pedestal system is a solution developed primarily for leveling containers equipped with ISO corner blocks.

Use:

- The adjustable pedestals enable leveling a container placed on a rough terrain.
- The pedestals are height-adjustable in a range from 150 to 250 mm.
- They are to be placed under all four bottom corner blocks.
- The load of the container pedestal must not exceed the specified allowed bearing capacity.

Technical information:

- maximum load 6 tons
- weight 15 kg
- dimensions – minimum (LxWxH) 200x200x150
- dimensions – maximum (LxWxH) 200x200x250



The container pedestal system is protected by a patent and a utility design.

The design of the container pedestal system meets requirements specified by the Directive of the European Parliament and of the Council 2006/42/ES as amended by the Czech technical regulations – the Regulation of the Government n. 176/2008 Sb. as amended, and meets requirements of the harmonized Czech technical standards ČSN EN ISO 12100.

The product can be supplied in any color on the basis of customer order.

The adjustable container pedestal (CM-CCR 150) and the fixing container pedestal (CM-CCF 100)

The fixing pedestal is only intended to support the adjustable pedestal if it is necessary to underlay the container up to a height higher than the range of the adjustable pedestal (250mm)

Type	Lifting capacity (t)	Main dimensions (mm)									Weight (kg)
	Q	A min	A max	A1	B	C	D	E	F	G	
CM-CCR 150/x	6	150	250	132	200	200	25	27	62	30	17,2
CM-CCF 100/x	6	–	100	106	200	200	25	27	–	–	8,6
operating temperature range -30°C až +55°C											

Note: x – color design of the base system

Connecting screw (CM-VR)

The connecting screw is designed for the connection of the container pedestals in the case the containers are placed side by side. This ensures constant distances between containers.

Type	Lifting capacity (t)	Main dimensions (mm)				Dead-weight (kg)
	Q	L	L1	D	D1	
CM-VR 100/x	–	100	140	24	37	0,6
CM-VR 390/x	–	390	430	24	37	1,6
operating temperature range -30°C až +55°C						

Note: x – color design of the base system

RACK JACK

Use:

- robust and durable construction
- acceptable actuating force in the crank
- reliably holds the load in any position using the lock in the crank
- low maintenance requirements
- RPK contains overload protection
- standard production load-carrying capacities are 5 t or 10 t



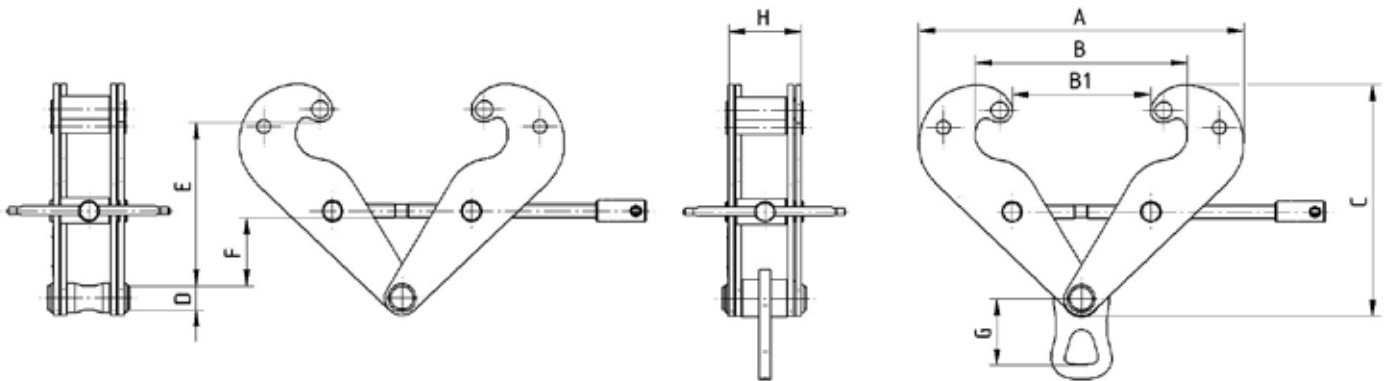
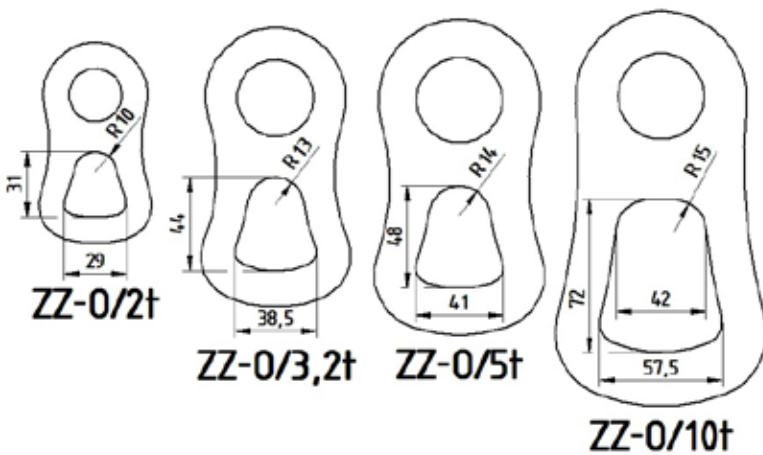
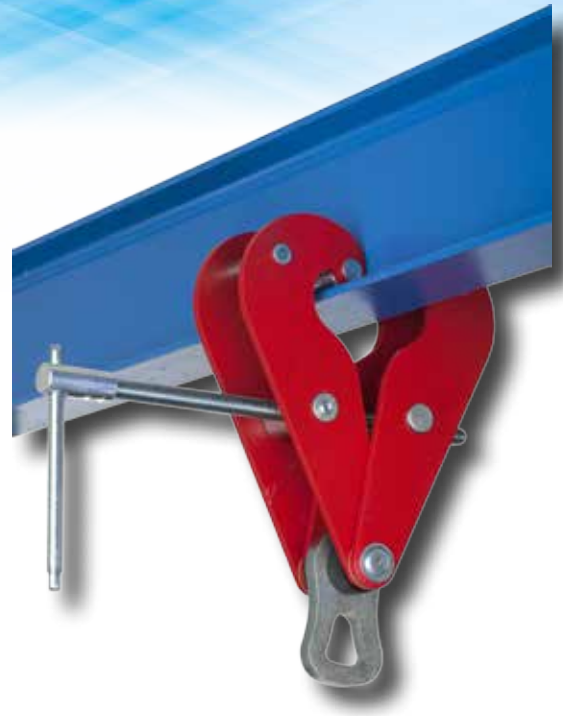
GIRDER CLAMPS

Use:

- as an accessory tool for manual hoists made by the BRANO company, possibly also for hoists of other brands
- serving as simple and rapid suspension of manual hoists on beams or posts of the "I" profile
- suitable as portable tool during installation, repair or other types of work

Characteristics:

- simple and rapid installation to a structure
- low maintenance requirements



Type	Lifting capacity (t)	Main dimensions (mm)									Weight (kg)	
		A max.	B max.	B1 max.	C max.	D	E min. max.	F min.	G	H max.	with cross beam (ZZ)	with eye (ZZ-o)
ZZ	2	360	270	220	220	20	108155	35	57,5	61	2,9	3,1
	3,2	415	300	235	285	34	145190	55	81	85	6,5	7
	5	415	300	235	285	38	142187	52	88	93	8,4	9
	10	415	300	235	285	-	-	-	120	109	-	15,5

B – width of I girder flange

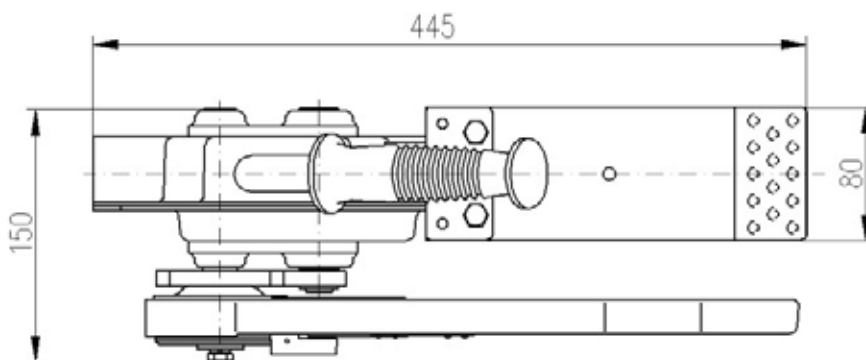
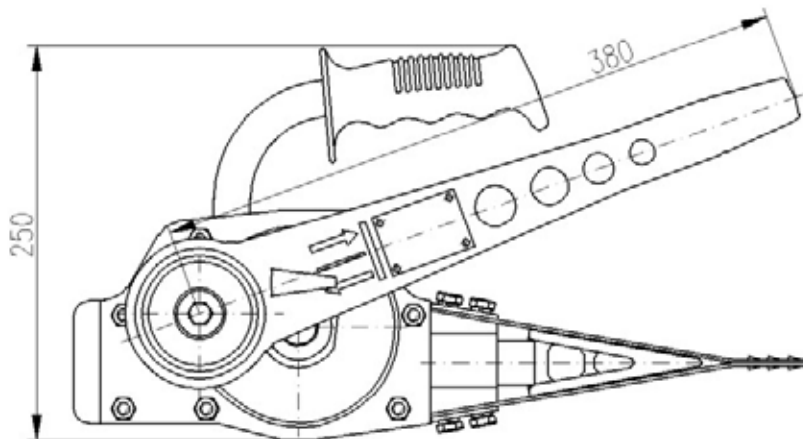
MECHANICAL WEDGE

Use:

- helpful for logging
- making the tree cutting easier
- channeling the fall of the tree
- enables round timber to be hewed

Characteristics:

- robust construction
- simple control by means of a hand lever
- low maintenance requirements
- environmentally friendly



Type	Operating force (N)	Max. perpendicular com	Weight (kg)
MK4	350	60	10

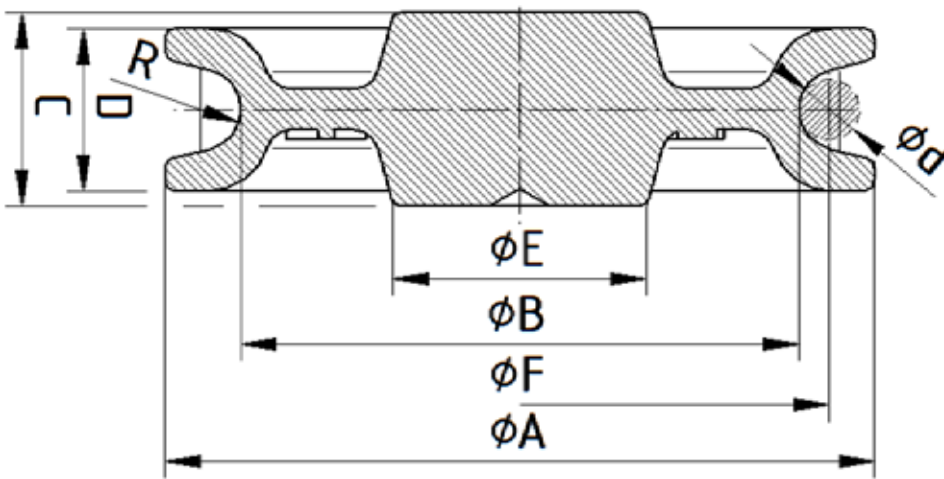
CAST PULLEY

Use:

- semi-finished product for manufacturing of pulleys for various types of use
- for example for fitness equipment, suspension devices, as a support for movement and change of direction of wires and for many other applications
- pulleys have a cast dimple for drilling the central hole
- the central hole for rotation of the pulley is made by the customer according to their own needs

Recommended rope diameter $\varnothing d$ in accordance with ČSN 271820:

- $\varnothing d_{max} = R / (0.53 \div 0.56)$
- $\varnothing d = F / (14 * \div 26 **)$
For leveling pulleys
** For guiding pulleys



Size – \varnothing pulley (mm)	30	40	50	60	70	80	90	100	120
Dimension A (mm)	30	40	50	60	70	80	90	100	120
Dimension B (mm)	20	30	36	45	55	61	71	81	98
Dimension C (mm)	11	12	17	18	19	23	24	26	28
Dimension D (mm)	11	12	16	16	16	20	20	22	26
Dimension E (mm)	13	15	15	26	25	28	30	35	35
Dimension R (mm)	2,5	3	4	4	4	5	5	6	8
Weight (kg)	0,05	0,07	0,1	0,17	0,23	0,34	0,5	0,7	0,85

DOOR CLOSERS

Basic information:

Your doors may open to the left or right hand. How can you tell?

- Left hand doors (LH) open towards the observer and the door hinges are visible to the left.
- Right hand doors (RH) open towards the observer and the door hinges are visible on the right.
- All BRANO door closers can be used for both versions. The installation instructions describe simple manipulation for installation on left and right hand doors. The instructions are attached to every door closer.
- If you have insufficient space in the direction the door opens, the closer can also be installed 'upside down'. All the door closer functions are maintained (note that this does not apply to R12 and R12A types)
- When installing the closer onto exterior doors, we recommend that, the door closer is installed on the inside of the door if possible. This protects the closer from the weather, temperature changes, theft, ...

Selection of a suitable type of closer:

- The type of door closer is determined according to the design of the closer, the design of the door, the color of the door and the options for attaching the closer.
- We recommend the individual types according to the following table:

Closer type	Door type	Comment
R12, R12A	Classic, historical, warehouse and industrial doors, older types of elevator doors	Easier to open in the initial phase (small children, elderly people)
K204, K214	Classic and office doors and doors into office buildings	Easier to open in the initial phase (small children, elderly people)
P100, D80V, Bxx	Modern doors, plastic doors, modern types of elevator doors, modern buildings	Supplementary function: so-called pram phase (the door closer has a delay function so as to enable slower persons to pass through (people in wheelchairs, prams,...))

Selection of the correct size of door closer:

- If you know the weight of the door, you select the closer according to the following table.
- If you do not know the weight of the door, you can estimate it according to the door width. Again you use the following table. The values apply to standard doors (wooden doors with single glass pane, not fire doors). In this case we recommend that you use door closers for the weight of one level higher.

Size according to EN 1154	Door weight (kg)	Door width (cm)	Size according to EN 1154	Door weight (kg)	Door width (cm)	Type	Door weight (kg)	Door width (cm)
1	Do 25	70	3	40-65	100	B87	25-45	85
2	20-38	80	4	55-85	105	B88	40-65	95
3	30-60	90	5	80-150	120	B89	60-85	110
4	42-70	105	6	100-140	150			
K204, K214, R12, R12A			D80V				7-89	

HYDRAULIC DOOR CLOSER

R12, R12A

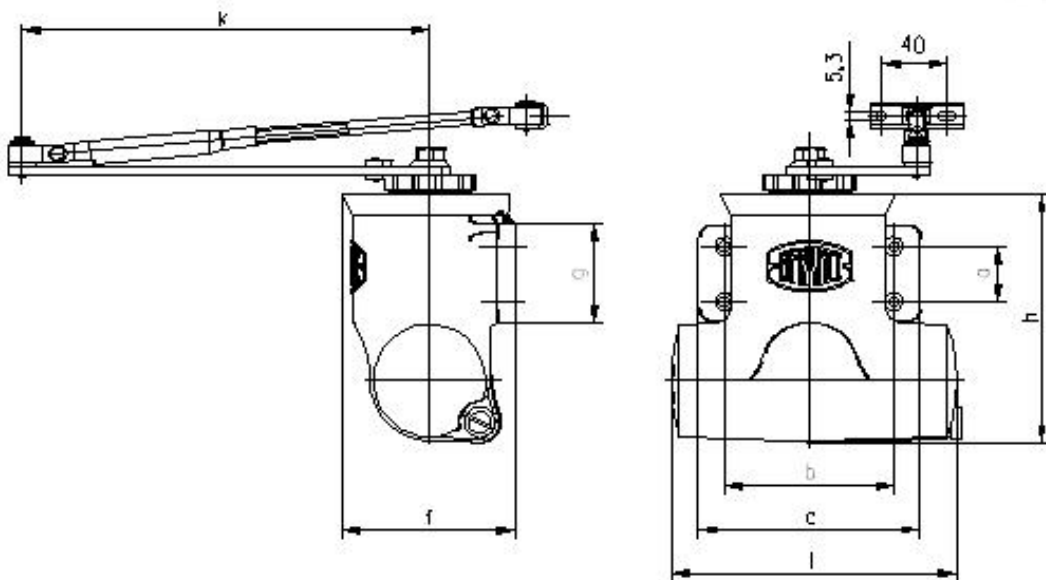
The Brano R12 and R12A door closers are flagship products in the Brano range. Many people know it intimately from residential and panel buildings, hostels, shops and wherever it is necessary to close after opening the access door.

Characteristics:

- Hydraulic overhead door closer
- **Use:** for installation on left and right door leaf. It can be installed upside down.
- **Max. door dimensions and weight:** maximum recommended width 105 cm, weight up to 80 kg
- Suitable also for outdoor use - Brano R12 and R12A closers are filled with oil of high thermostability. Therefore, in the temperature range between -20°C and +40°C, the closer is almost maintenance-free and reduces the need for customization cap in different seasons. The actual adjustment is a simple operation, simply of turning the adjusting screw.
- **Colors:** silver, gold

Technical information:

- Body width: 123 - 172 mm
- Nib width: 96 - 135 mm
- Distance between mounting screws: 70 - 98 mm
- Body height: 73 - 100 mm



Type	Size according to EN 1154	Door weight (kg)	Door width (cm)	a	g	b	c	f	h	k	l	Weight (kg)
R12/11	1	Max.25	70	19	39	70	96	73	100	185	123	2,46
R12A/12	2	20-38	80	21	45	77	112	77	115	195	133	3,07
R12A/13	3	30-60	90	28	50	86	122	85	127	225	150	3,95
R12A/14	4	42-80	105	32	55	98	135	100	143	243	172	5,58

HYDRAULIC DOOR CLOSER

K204

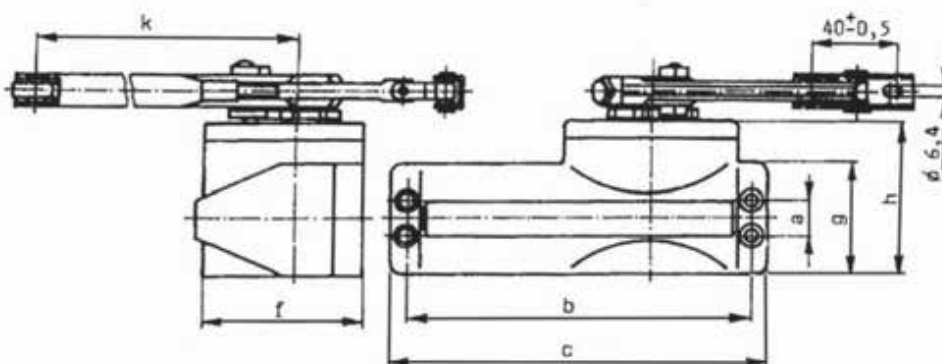
Brano K204 has been a classic and proven hydraulic door closer for years. It is used to regulate door closing. The most common use can be found in residential and panel buildings and wherever it is necessary to close the access door.

Characteristics:

- Hydraulic overhead door closer
- **Use:** for installation on left and right door leaf. It can be installed upside down.
- **Max. door dimensions and weight:** maximum recommended width 105 cm, weight up to 70 kg
- Suitable for outdoor use - Brano K204 closers are filled with oil of high thermostability. Therefore, in the temperature range between -20°C and +40°C, the closer is almost maintenance-free and reduces the need for customization cap in different seasons. The actual adjustment is a simple operation, simply of turning the adjusting screw.
- **Color:** silver

Technical information:

- Dimensions:
- Dimensions of the closer according to the selected size:
 - Length: 173 - 178 mm
 - Body height: 73-77 mm
 - Depth: 79 - 85.5 mm
- You can change the closing speed, including the final soft closing.
- Opening angle max. 130°



Type	Size according to EN 1154	Door weight (kg)	Door width (cm)	a	b	c	f	g	h	k	Weight (kg)
K204/11	1	Max.25	70	16	158	173	79	54	73	185	2,39
K204/12	2	20-38	80	16	158	173	79	54	73	185	2,45
K204/13	3	30-60	90	16	163	178	85,5	61	77	215	2,7
K204/14	4	42-70	105	16	163	178	85,5	61	77	215	2,75

HYDRAULIC DOOR CLOSER

K214

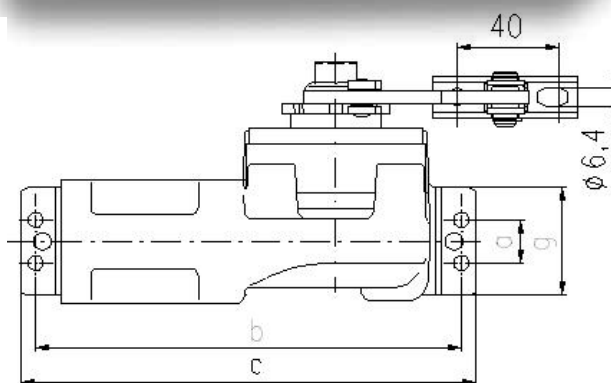
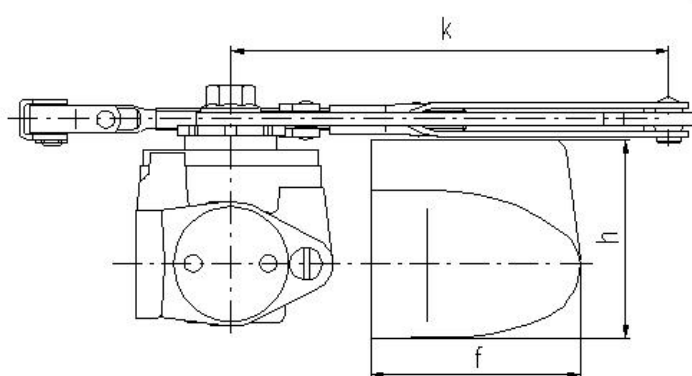
The K214 is the latest generation of Brano hydraulic door closers. We have improved the design and added new colors. The Brano K214 closer provides a simple and reliable door closing solution. This is a basic security element of property protection.

Characteristics:

- Hydraulic overhead door closer
- **Use:** for installation on left and right door leaf.
- **Max. door dimensions and weight:** maximum recommended width 105 cm, weight up to 70 kg
- Suitable for outdoor use - Brano K204 closers are filled with oil of high thermostability. Therefore, in the temperature range between -20°C and + 40°C, the closer is almost maintenance-free and reduces the need for customization cap in different seasons. The actual adjustment is a simple operation, simply of turning the adjusting screw.
- **Color:** silver, gold

Technical information:

- Dimensions of the closer according to the selected size:
- Dimensions:
 - Length: 169 – 173 mm
 - Body height: 74-76 mm
 - Depth: 78 – 85.5 mm
- You can change the closing speed, including the final soft closing.
- Opening angle max. 130°



Type	Size according to EN 1154	Door weight (kg)	Door width (cm)	a	b	c	f	g	h	k	Weight (kg)
K214/11	1	Max.25	70	16	158	169	78	40	73,5	185	2,34
K214/12	2	20-38	80	16	158	169	78	40	73,5	185	2,4
K214/13	3	30-60	90	16	163	173	85,5	40	76	215	2,52
K214/14	4	42-70	105	16	163	173	85,5	40	76	215	2,59

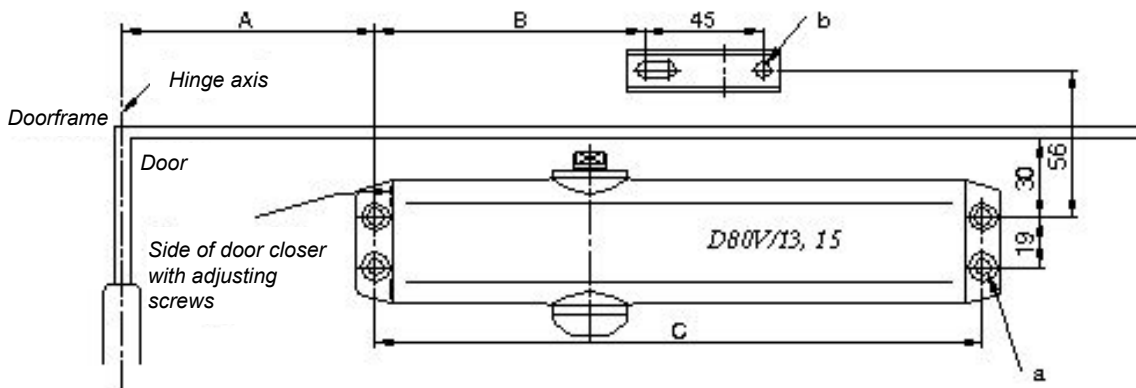
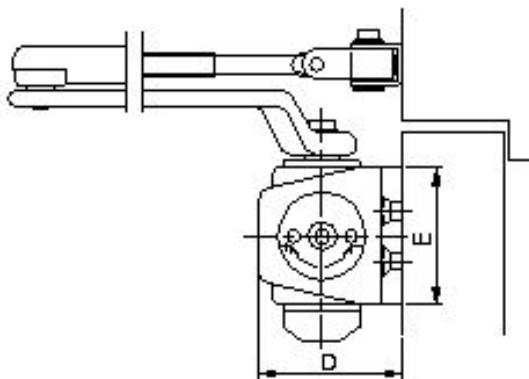
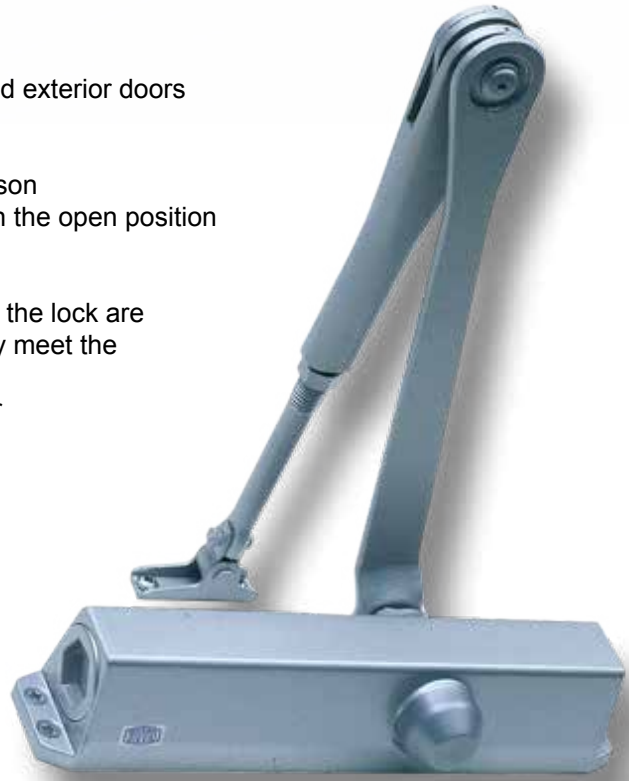
PINION DOOR CLOSER

D80V

Variant of pinion door closer Brano D80V.

Characteristics:

- Attractive design suitable for use in interior and exterior doors
- For use on wooden, metal and plastic doors
- Can be installed on both sides
- Constant closing speed regardless of the season
- In the version with the lock, the door is fixed in the open position
- Type D80V/13 are usable for sizes 2-4
- Type D80V/15 are usable for sizes 3-6
- Both size variants in the basic version without the lock are available with fire resistance declaration. They meet the classification C5 according to EN 14600
- Both size variants are in silver and white color



Standard type	Type with door stopper	Size according to EN 1154	Door weight (kg)	Door width (mm)	A	B	C	D	E	a	b
D80V/13	D80V/13-S	2	< 40	< 850	97	103	232	49	49	6,5	6
		3	< 60	< 950							
		4	< 80	< 1100							
D80V/15	D80V/15-S	3	< 60	< 950	55	155	268	55	52	6,5	6
		4	< 80	< 1100							
		5	< 100	< 1250	90	120					
		6	< 120	< 1400							

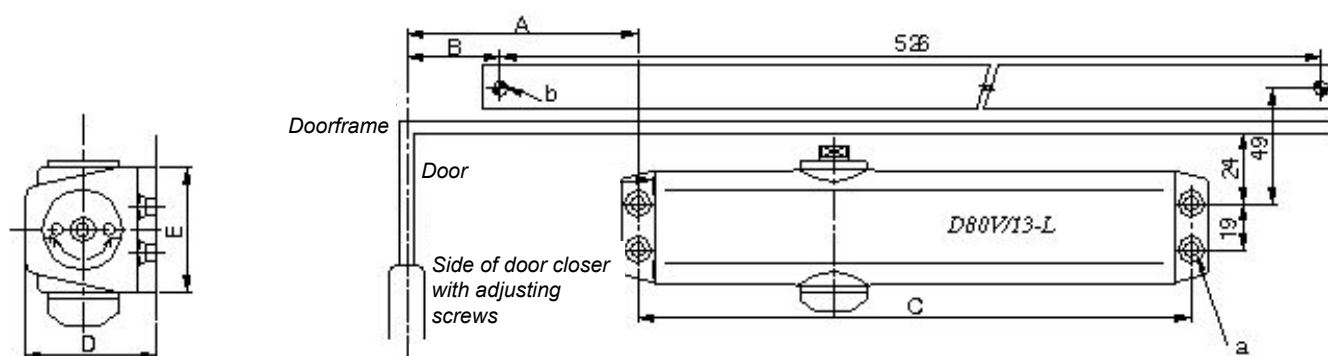
PINION DOOR CLOSER

D80V-L

Pinion door closers D80V-L – sliding arm.

Characteristics:

- Attractive design suitable for use in interior and exterior doors
- For use on wooden, metal and plastic doors
- Can be installed on both sides
- Constant closing speed regardless of season - eliminates the specifics of hydraulic door closers
- In the arm there is an integrated lock that fixes the door in the open position and can also act as a door stop
- Door closer lock can be adjusted to any angle of door opening at any time, to change or completely reset by using tools
- Type D80V/13-L usable for sizes 2-3
- Type D80V/15-L usable for sizes 3-5
- Both size variants are in silver and white color



Standard type	Size according to EN 1154	Door weight (kg)	Door width (mm)	A	B	C	D	E	a	b
D80V/13-L	2	< 40	< 850	118	60	232	49	49	6,5	5,5
	3	< 60	< 950							
D80V/15-L	3	< 60	< 950	108	60	268	55	52	6,5	5,5
	4	< 80	< 1100							
	5	< 100	< 1250							

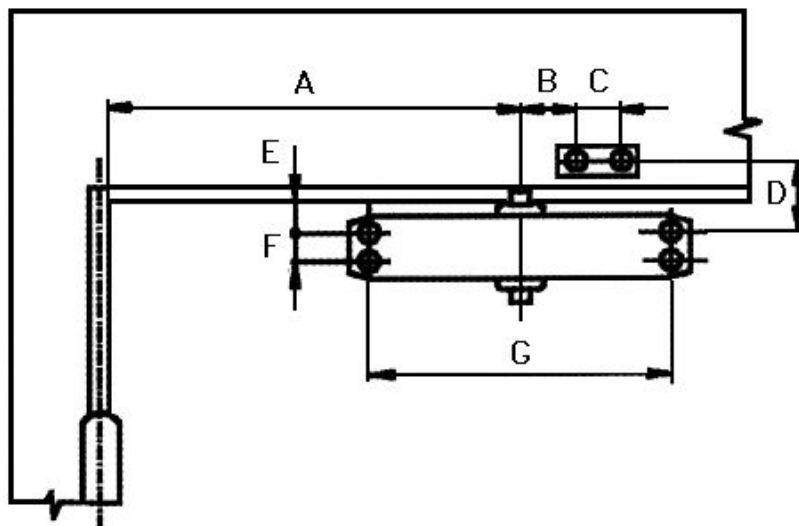
PINION DOOR CLOSER 700

Characteristics:

- Regulation of door latching and closing phase
- Assembly possible for both right and left door
- 'Reversed' assembly possible
- Suitable for both exterior and interior use
- White and silver variants



Type	Size	A	B	C	D	E	F	G
		mm						
7001	2	130	60	40	46,5	26,5	19	162
7002	3	210	60	40	47	27	19	188
7003	4	210	60	40	47	27	19	188
7004	5	240	73	45	69	38	19	230



Type	Size	Door weight (kg)	Door width (mm)	Opening angle	Working temperature
7001	2	25-65	90-100	144°	min. - 30 °C, max. + 40 °C
7002	3	45-75	110	144°	min. - 30 °C, max. + 40 °C
7003	4	65-90	110	144°	min. - 30 °C, max. + 40 °C
7004	5	80-105	110	144°	min. - 30 °C, max. + 40 °C

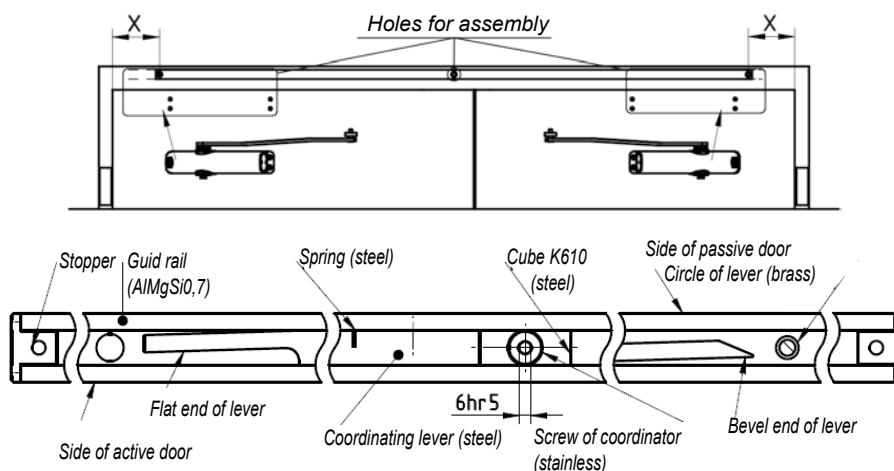
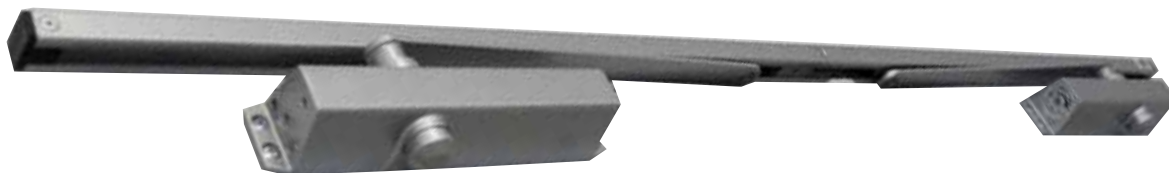
SLIDING ARM COORDINATOR K610

Characteristics:

- used for coordinated closing of double leaf doors
- attractive design with minimum installation dimensions
- simple installation – installation instructions on YouTube
- suitable for use on interior and exterior doors
- including D80V-L door closer of 13 or 15 size variant (depending on door parameters)
- in two colors: white and silver
- weather and temperature resistant
- can be supplied with a lock that keeps the door open
- minimum door width 2 x 70 cm and maximum 2 x 1250 cm with weight 100 kg
- option of custom-made production for atypical door wings
- the product is available with the certificates for assembly on fire resistant doors



Product has certificate for mounting on fire doors



Indicative table for assigning the size of the coordination bar and door closers to the door:

Width doorframe	Door weight	Closer size	Rail length	Fire door	Type
1412 (1400-1500)	max.20	1 (11)	1270	NE	D80V/13-L
1612 (1600-1700)	20-40	2 (12)	1470	NE	D80V/13-L
1812 (1800-1900)	40-60	3 (13)	1670	ANO	D80V/13-L D80V/15-L
2012 (2000-2100)	60-80	4 (14)	1870	ANO	D80V/15-L
2212 (2200-2300)	80-100	5 (15)	2070	ANO	D80V/15-L

FLOOR DOOR CLOSER P221

Use:

- The closer is intended for use in areas with a temperate climate. It works reliably in temperatures from -20°C to +40°C
 - for swinging doors
 - for doors with a door stop, left and right hand
 - for metal, all-glass or wooden doors.

When ordering, you must state what type of door the closer is intended for !!!!!

Types of floor door close:

- P221D – floor door closer for doors with a stop
- P221DS – floor door closer for doors with a stop and a lock
- P221S – floor door closer for swinging doors
- P221SS – floor closer for swinging doors with a lock

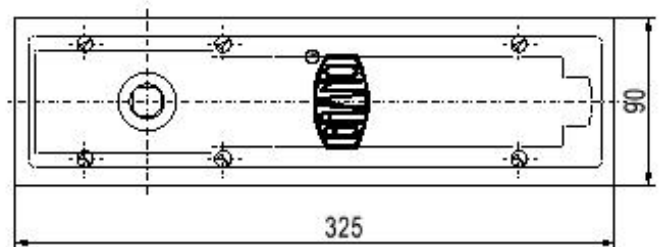
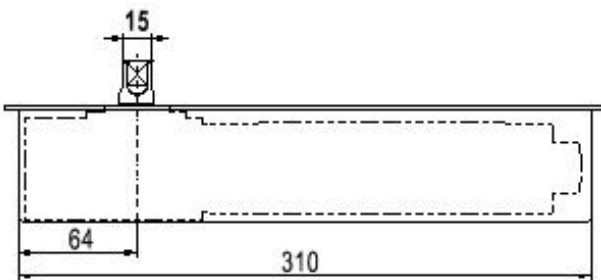
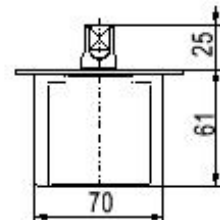
Locks of BRANO door closers enable fixing of the doors in an open position of over 90° to both sides. This lock can be removed at the customer's request, and the doors can then be opened up to 150° to both sides. The metal casing is made of stainless steel.

Characteristics:

- by default, the maximum door weight is 60 kg
- if using on heavier doors, a consultation with the manufacturer is necessary
- The production of the floor door closers was taken over from the company Zukov, so this product can replace some of the types of floor door closers formerly manufactured by Zukov.

Installation and maintenance of the door closer:

- The floor door closer can be installed rotated 90° to the door axis. It does not require cleaning or lubrication.



Type	P221	P221 with lock
Max. door weight	60 kg	60 kg
Max. door width	95 cm	95 cm
Angle of opening	150°	150°
Arrestment	95°	95°
Weight	4,95 kg	4,95 kg

DOOR HOLDER

K501

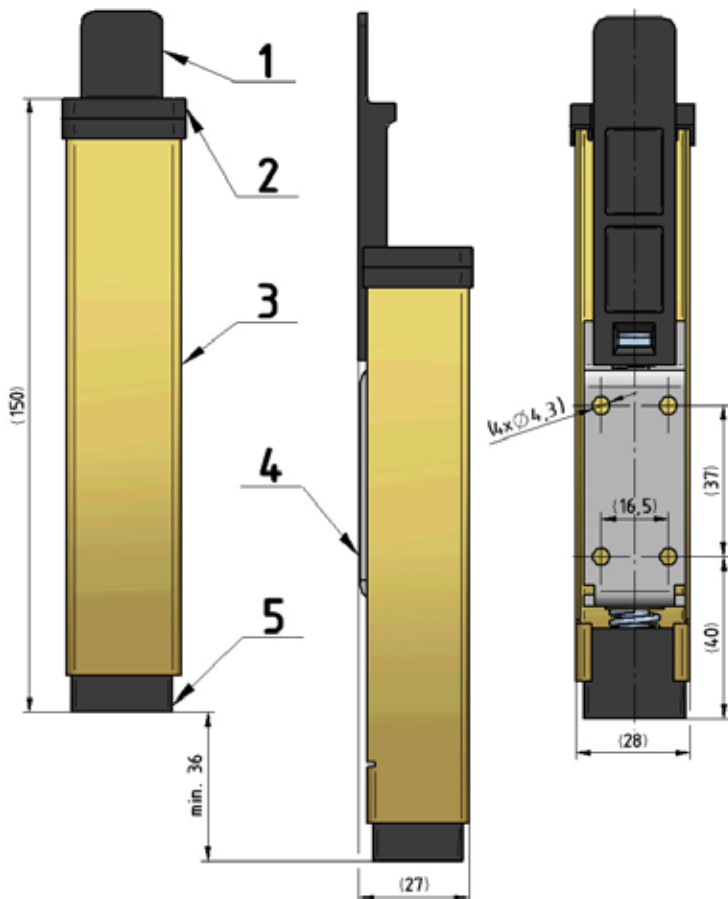
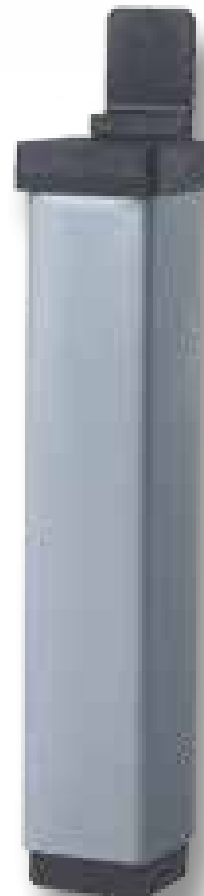
A mechanical door holder with the advantage of locking and unlocking at any door opening angle, without installation tools necessary. Simple installation regardless of the door closer used.

Characteristics:

- Body dimensions: 149x32x27
- Movement in the "y" axis (lift): max. 40mm
- Colors: white, brown, silver and gold
- Weight: 0.21kg

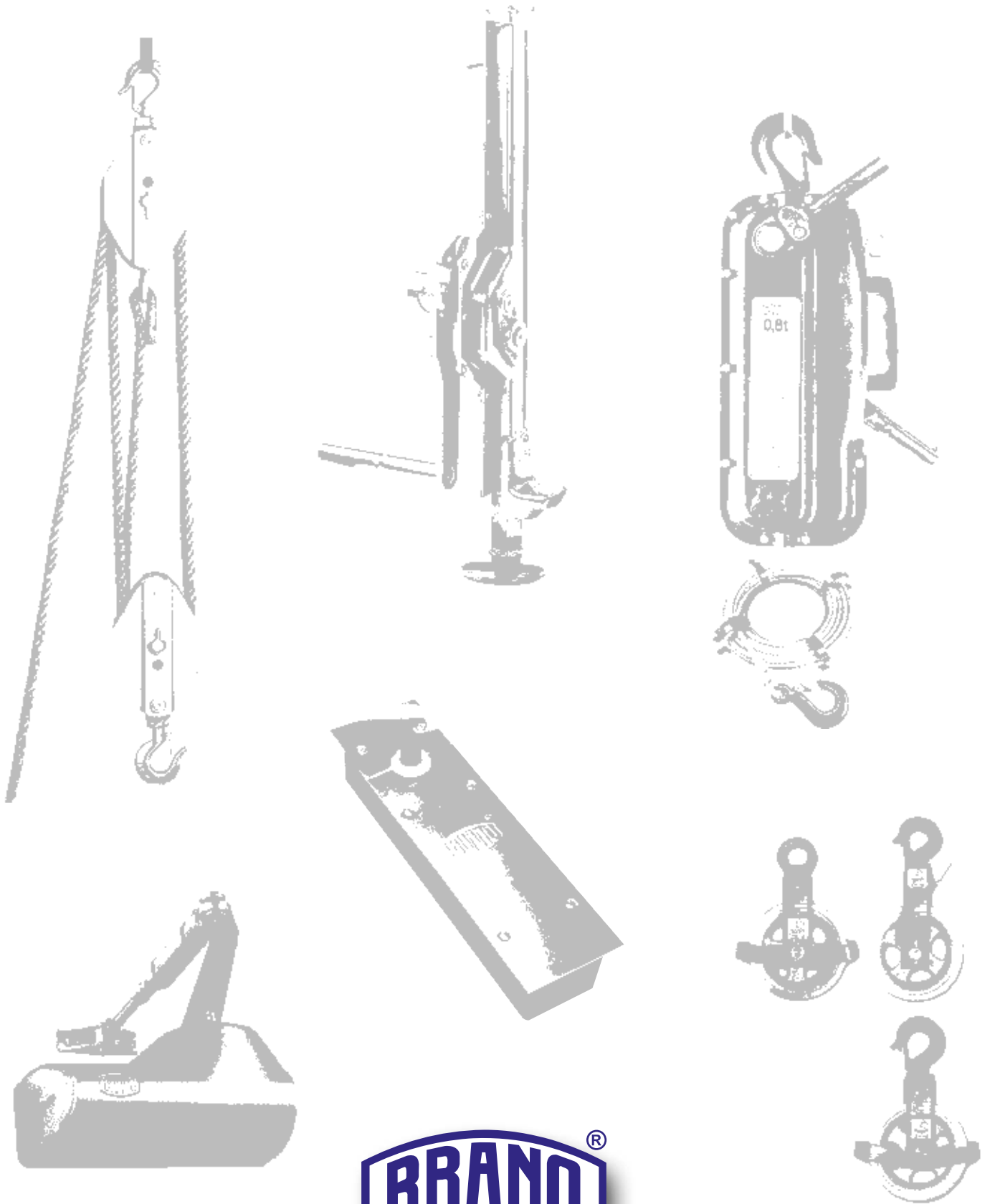
Use:

- Securing of the door wing is performed by pressing the head which results in the protrusion of the jammer. This is then secured in any position by the internal mechanism of the door. By pressing the button, the jammer spring returns to the default position
- The door holder must reliably lock the door leaf against closing under a 50N pressure acting in the closing direction of the door leaf



- 1 – Button
- 2 – Head
- 3 – Cover
- 4 – Body
- 5 – Bumper





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