CATALOGUE
HIGH FORCE TOOLS & EQUIPMENT

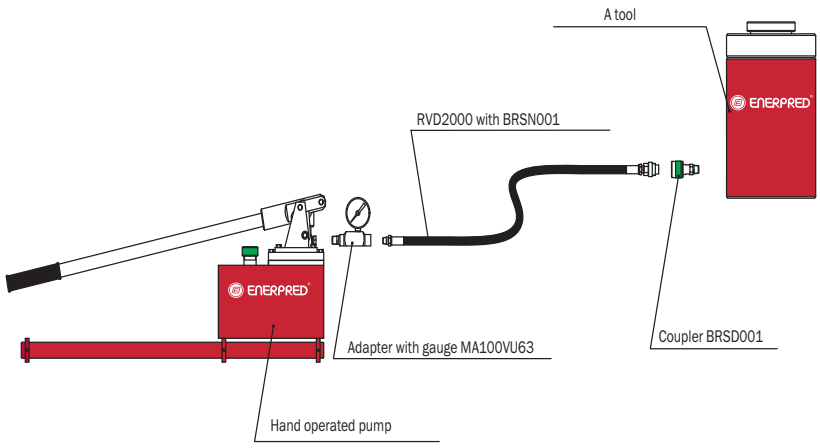
ENERPRED®

Certified ISO 9001:2008 by BVQI UKAS QUALITY MANAGEMENT

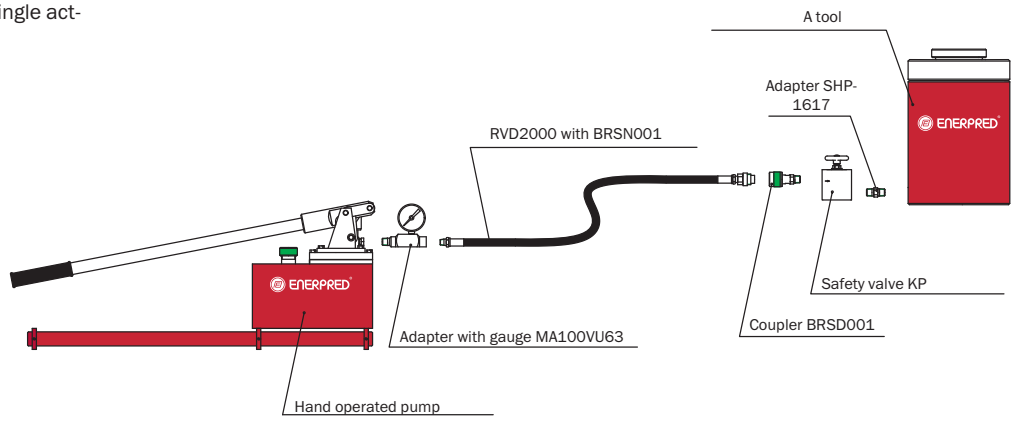
IT'S EASIER WITH US! • IT'S EASIER WITH US! • IT'S EASIER WITH US! • IT'S EASIER WITH US!

CONTENTS:

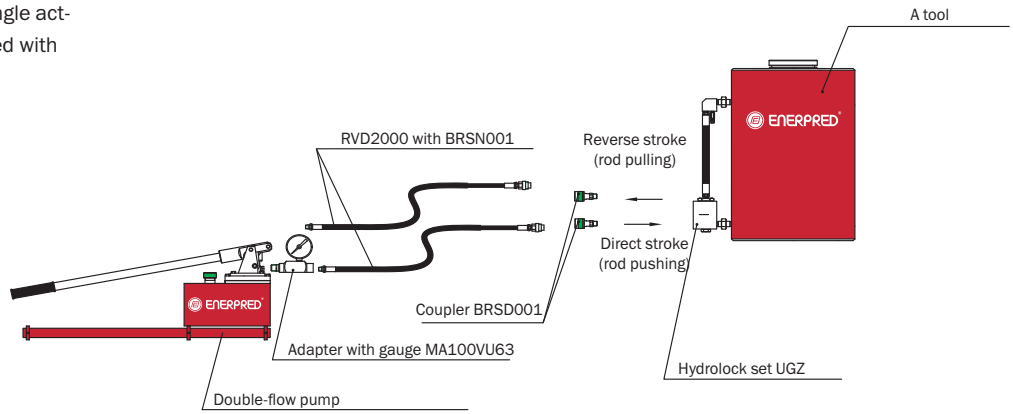
A set including a pump and single acting tool.



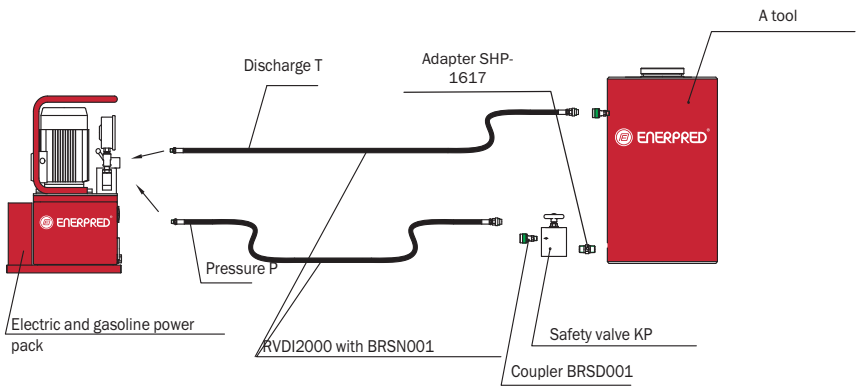
A set including a pump, single acting tool, and safety valve.

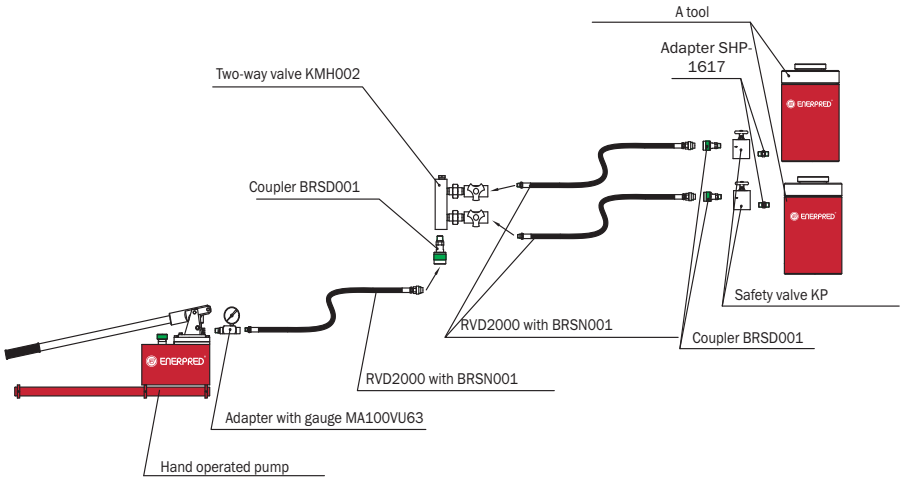


A set including a pump, single acting tool, and hydrolock used with hand operated pump.

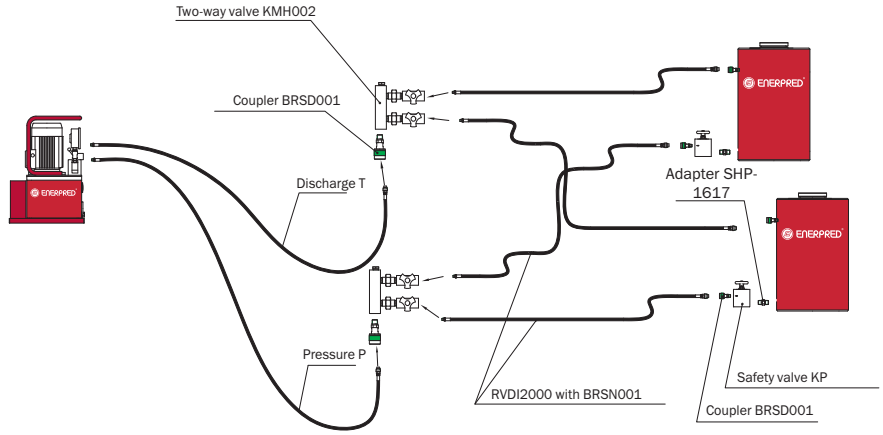


A set including a pump, double acting tool, and safety valve used with electric gasoline and air power pack

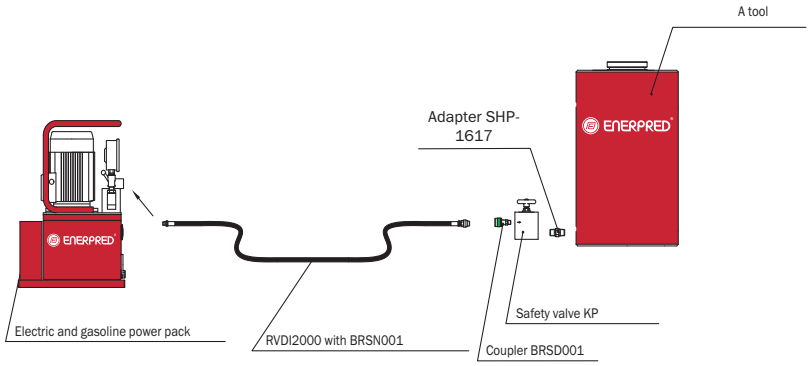




A set including a pump, double acting tools, and safety valve



A set including a pump, two double acting tools, and safety valve used with electric gasoline and air power pack



A set including a pump single acting, and safety valve used with electric gasoline and air power pack

Conventions:

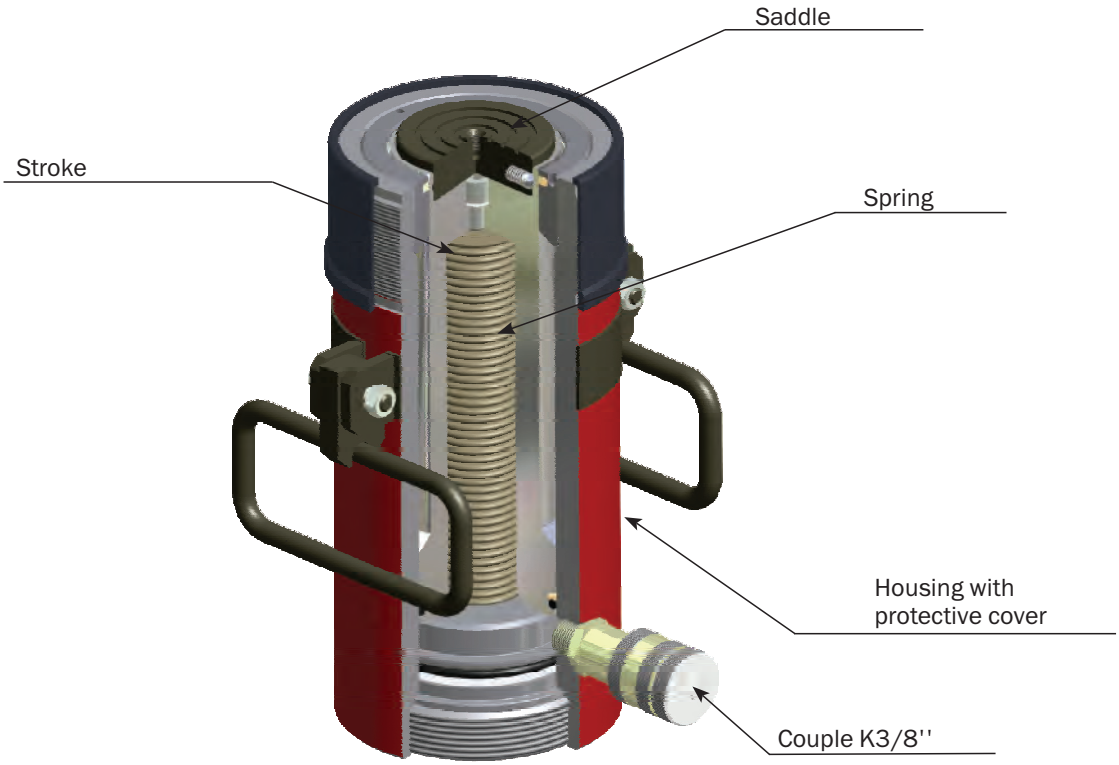
	A tool (cylinder, puller, pipe bender...)		Coupler
	Electric and gasoline power pack		Gauge
	Hand operated pump		Two-way valve
	High pressure hose		Safety valve

Cylinders

Equipment for lifting and moving is one of the top and the largest groups in the nomenclature of CJSC "TD "Enerpred ", it is presented by general purpose, load, pulling, wedge, low, etc. cylinders and cylinders, both with a spring or hydraulic return.

Cylinder is a special device, which is a portable lifting device designed for lifting, moving and fixing various heavy objects at a given height. In the pstrokeuct line of the company "Enerpred" there are cylinders for the work and operations of different levels of complexity, from lifting and replacing of small objects to positioning and fixing of large objects for a long time , tightening hull of vessels, balancing bridge openings, pushing the pipe through soil, complicated construction works etc.

Cylinders can be used alone or as part of other equipment and tools. Cylinder is the main power element of the most hydraulic tools and equipment. Experts of the company focus on quality and reliability of cylinders, continuous improvement of the product operational characteristics.



Housing

In the manufacture of cylinders both one-piece constructions and constructions to be screwed down are used. Cylinders with all-metal housing are machined from steel cylindrical forging of stainless steel followed by heat treatment. Cylinders from solid strokes can reduce the number of connections and seals, and thus enhance the functional reliability. In the manufacture of long cylinders the pipe that has a high quality and honed inner surface is used as housing.

“Enerpred” colors its products with powder coatings, followed by polymerization in a high temperature furnace, which ensures impressive appearance of the instrument and protects it from corrosion. Powder coating is not chipped.

In the manufacture of cylinder bore area of the trademark "Enerpred" a number of finishing operations are produced for high-end roughness that allows a seal to work for a longer time. Oxycarbonitration provides high hardness of both external and internal surfaces.

Seals

Seals must ensure leak tightness under high pressure and load limits, while not hindering the stroke retraction, abrasion resistance and heat resistance, especially in the continental climate of Russia. “Enerpred” uses high-strength combined seals of composite materials (carbon-filled fluoroplastic) that meet the above requirements, increase service life by an average of 40-50%, up to 15,000 cycles. For operation at high temperatures, seals of heat-resistant rubber are made on the product.

Spring

The quality of the spring determines the performance of the cylinder, as rapid retraction of the stroke to the starting position is very important in the operation process. Resource and spring power are characterized by the number of turns, fitting in the cylinder volume, cross-section and the material from which it is made. “Enerpred” uses springs with rectangular section, custom-made and designed for 10,000 cycles. Such design allows putting more turns, which reduces the size of the cylinder and using the combined spring system (spring-in-spring), which increases the speed and force of the stroke retraction.

Pressure

High pressure ensures better volume and weight characteristics, but the ultra-high pressure requires incredibly high resisting characteristics of materials. “Enerpred” uses a formula of 700-800 Bar, which is the standard for international peers.

Compatibility

Compatibility is possible at the same working pressure and match of thread under the coupling, which allows the consumer to complete systems of tools from different vendors. “Enerpred” manufactures tools fully compatible with the world's leading tools manufacturers with screw thread of all connections K3/8''.

Oxycarbonitration

Liquid oxycarbonitration is a kind of chemical and thermal processing, which provides:

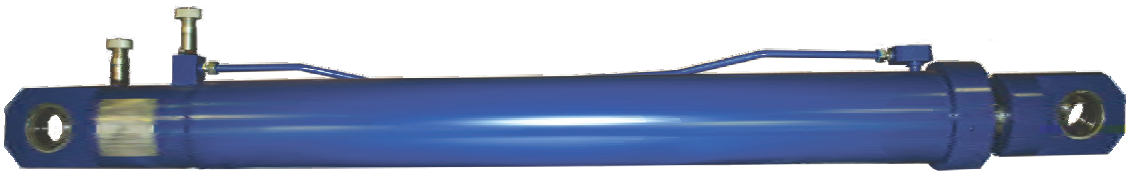
— Increase of the surface hardness by 2-5 times;
— Increase of the wear resistance by 2-10 times;
— Increase of the fatigue limit by 30-80%;
— Increase of the corrosion resistance by 50-200 times;
— Reduction of the friction factor by 1.5-2 times;
— Exclusion of scoring and tongs in friction pairs.

Special hydraulic cylinders

The company “Enerpred” receives the orders for special hydraulic cylinders production, used as hydraulic power components of industrial machinery and equipment.

In the manufacture of cylinder bore area of “Enerpred” brand, a number of finishing operations are produced for high-end roughness that allows a seal to work for longer time. In composite constructions the pipe that has a high quality and honed inner surface is used.

Irrespective of construction, all cylinders have high resistance and reliability.

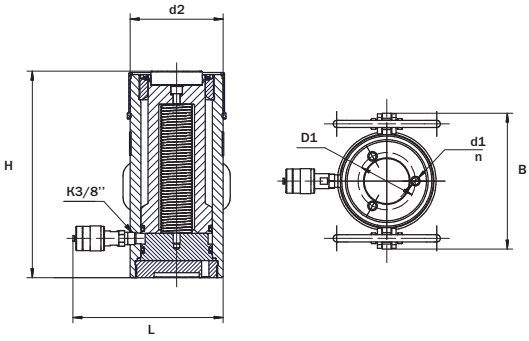


Single-acting general purpose cylinders

Series DU...P...
Load capacity — 5-200 ton
Pressure — 700 Bar
Spring stroke retraction

— Designed for lifting and moving weights, complex constructions and repairs;
— Threaded holes on the bottom and thread on the housing provide
wide use as load-bearing elements in the presses, benders, pullers, etc.;
— Wear-resistant housing coating, applied by powder technique, protects against corrosion and external influences;
— Powerful spring for quick stroke retraction;
— Ability to work in any position.

Models: DU15P250, DU50P150, DU35P50, DU10P100



Cylinders with the capacity over 50 ton are recommended to be equipped with the safety valve.
Cylinders with the capacity over 50 ton are recommended to be equipped with float supports.

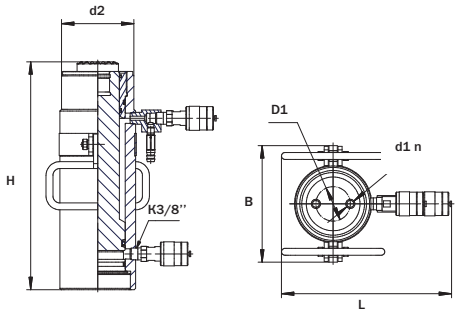
Models	Capacity, ton	Stroke,mm	Oil working capacity, cm^3	Mounting			Exterior thread d2, mm	Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm				
DU5P50	5,6	50	40	—	—	—	M42x1 5	42x122x126	1,4	PD5
DU5P100		100	80	—	—	—	M42x1,5	42x122x176	1,7	PD5
DU5P150		150	120	—	—	—	M42x1,5	42x122x258	2,4	PD5
DU10P50	11,3	50	80	M8	2	42	M60x2	60x140x136	2	PD10
DU10P100		100	160	M8	2	42	M60x2	60x140x186	3,6	PD10
DU10P150		150	240	M8	2	42	M60x2	60x140x236	4,4	PD10
DU10P200		200	318	M8	2	42	M60x2	60x140x314	5,8	PD10
DU15P250	14,1	250	490	M10	2	38	M70x2	70x150x372	9,2	PD 15
DU20P50	22,2	50	156	M10	2	45	M82x2	83x163x198	7,4	PD35P
DU20P100		100	312	M10	2	45	M82x2	83x163x248	9	PD35
DU20P150		150	468	M10	2	45	M82x2	83x163x298	11	PD35
DU20P200		200	623	M10	2	45	M82x2	83x163x348	12	PD35
DU20P250		250	779	—	—	—	M82x2	95x174x359	13,1	PD35
DU20P300		300	935	M10	2	45	M82x2	83x163x448	15	PD35
DU20P360		360	1122	M10	2	45	M82x2	83x163x508	17	PD35
DU35P50	35,8	50	252	M12	2	50	M105x2	110x190x198	12	PD35
DU35P100		100	503	M12	2	50	M105x2	170x210x248	16	PD35
DU35P150		150	754	M12	2	50	M105x2	170x210x298	19	PD35
DU35P200		200	1005	M12	2	50	M105x2	170x210x348	21,3	PD35
DU35P250		250	1256	M12	2	50	M105x2	170x210x398	24	PD35
DU35P300		300	1508	M12	2	50	M105x2	170x210x448	27	PD35
DU50P50	56	50	392	M12	3	80	M130x2	130x210x189	17	PD100
DU50P100		100	785	M12	3	80	M130x2	190x220x245	22,6	PD100
DU50P150		150	1177	M12	3	80	M130x2	190x220x289	26	PD100
DU50P200		200	1570	M12	3	80	M130x2	190x220x339	29,2	PD100
DU50P250		250	1964	M12	3	80	M130x2	190x220x389	31	PD100
DU50P300		300	2356	M12	3	80	M130x2	190x220x439	37	PD100
DU100P50	109,8	50	770	M16	4	110	M175x3	240x260x228	40,6	PD100
DU100P100		100	1540	M16	4	110	M175x3	240x260x278	47,3	PD100
DU100P150		150	2309	M16	4	110	M175x3	240x260x328	53,9	PD100
DU100P200		200	3079	M16	4	110	M175x3	240x260x385	63,7	PD100
DU100P250		250	3848	M16	4	110	M175x3	240x260x435	70,7	PD100
DU100P300		300	4618	M16	4	110	M175x3	240x260x485	77,7	PD100
DU150P50	162	50	1135	M12	3	110	M210x3	270x289x183	45	PD200
DU150P100		100	2270	M12	3	110	M210x3	270x289x233	53,5	PD200
DU150P150		150	3405	M12	3	110	M210x3	270x289x283	63.2	PD200
DU150P200		200	4540	M12	3	110	M210x3	270x289x355	83	PD200
DU150P250		250	5675	M12	3	110	M210x3	270x289x405	85	PD200
DU150P300		300	6809	M12	3	110	M210x3	270x289x455	98	PD200
DU200P50	202	50	1570	M16	4	160	M240x3	323x325x283	95	PD200
DU200P100		100	3142	M16	4	160	M240x3	323x325x333	108	PD200
DU200P150		150	4712	M16	4	160	M240x3	323x325x383	121	PD200
DU200P200		200	6283	M16	4	160	M240x3	323x325x433	134	PD200
DU200P250		250	7854	M16	4	160	M240x3	323x325x483	147	PD200
DU200P300		300	9425	M16	4	160	M240x3	323x325x533	160	PD200

Double-acting general purpose cylinders

Series DU…G…
Load capacity — 10-200 ton
Pressure — 700 Bar
Hydraulic stroke retraction

— Effective in horizontal movement of objects, the hydraulic stroke retraction ensures quick preparation of the cylinder for the next cycle;
— Wear-resistant housing coating, applied by powder technique to protect against corrosion and external influences;
— Ability to work in any position
— Threaded holes on the bottom and thread on the housing provide wide use as load-bearing elements in the equipment performing cyclic operation.
— Models of these series are equipped with a safety valve which protects cylinder end from overload.

Models: DU35G150, DU100G150, DU50G150



Models	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Mounting			Exterior thread d2, mm	Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm				
DU10G100	11,3	100	80	M8	2	42	M60x2	60x144x285	6	PD5
DU10G150		150	120	M8	2	42	M60x2	60x144x335	6,8	PD5
DU10G200		200	158	M8	2	42	M60x2	60x144x385	7,6	PD5
DU10G250		250	200	M8	2	42	M60x2	60x144x435	8,3	PD10
DU20G100	22,2	100	151	M10	2	45	M82x2	83x200x274	11	PD10
DU20G150		150	294	M10	2	45	M82x2	83x200x326	12,6	PD20
DU20G200		200	393	M10	2	45	M82x2	83x200x376	14,3	PD20
DU20G250		250	379	M10	2	45	M82x2	83x200x426	16	PD20
DU20G300		300	456	M10	2	45	M82x2	83x200x476	17,6	PD20
DU20G500		500	980	M10	2	45	M82x2	83x200x676	24,3	PD20
DU50G100	56	100	502	M12	3	80	M130x2	190x257x263	27	PD100
DU50G150		150	754	M12	3	80	M130x2	190x257x313	30,4	PD100
DU50G200		200	1006	M12	3	80	M130x2	190x257x363	34,5	PD100
DU50G250		250	1256	M12	3	80	M130x2	190x257x413	38,8	PD100
DU50G300		300	1507	M12	3	80	M130x2	190x257x463	43	PD100
DU50G500		500	2513	M12	3	80	M130x2	240x298x663	59	PD100
DU100G100	109,8	100	950	M16	4	110	M175x3	240x298x325	59,6	PD100
DU100G150		150	1426	M16	4	110	M175x3	240x298x375	67,2	PD100
DU100G200		200	1807	M16	4	110	M175x3	240x298x408	72	PD100
DU100G250		250	2373	M16	4	110	M175x3	240x298x448	80	PD100
DU100G300		300	2850	M16	4	110	M175x3	240x298x508	87,3	PD100
DU100G500		500	4747	M16	4	110	M175x3	240x298x705	117	PD100
DU150G100	162	100	1767	M12	3	110	M210x3	270x328x260	67	PD200
DU150G150		150	2651	M12	3	110	M210x3	270x328x310	78	PD200
DU150G200		200	3535	M12	3	110	M210x3	270x326x360	90	PD200
DU150G250		250	4418	M12	3	110	M210x3	270x328x410	102	PD200
DU150G300		300	5302	M12	3	110	M210x3	270x328x460	113	PD200
DU150G500		500	8836	M12	3	110	M210x3	270x328x710	165	PD200
DU200G100	202	100	2011	M16	4	160	M242x3	321x362x335	112	PD200
DU200G150		150	3016	M16	4	160	M242x3	321x362x385	126	PD200
DU200G200		200	4021	M16	4	160	M242x3	321x362x435	140	PD200
DU200G250		250	5026	M16	4	160	M242x3	321x362x485	154	PD200
DU200G300		300	6032	M16	4	160	M270x3	321x362x535	168	PD200
DU200G500		500	10053	M16	4	160	M270x3	351x390x764	282	PD200

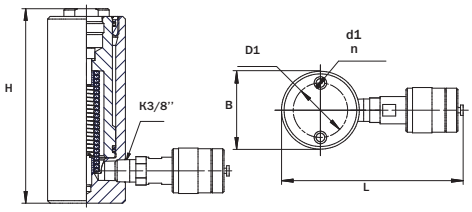
Pumps selection table p.65
Cylinders accessories p.18
Hydraulic accessories p.80
Hydraulic systems. Set-up schemes p.4

Single-acting load-lifting cylinders

Series DG…P…
Load capacity — 10-400 ton
Pressure — 700/800 Bar
Spring stroke retraction

Models: DG10P200, DG30P200, DG100P50

— Designed for lifting and handling weights during assembly, dismantling and repair works;
— High-impact support of hardened steel, set on the stroke, protects it from damage;
— Ribbed surface of the support prevents weight from sliding;
— Wear-resistant housing coating, applied by powder technique to protect against corrosion and external influences;
— Powerful spring for quick stroke retraction;
— Ability to work in any position;
— Cylinders with the capacity over 300 tons are equipped with tilt saddles.



Aluminium load-lifting cylinders p. 14

Load-lifting cylinders of “RiKline” p. 86

Models	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Mounting			Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm			
DG10P50	11,3	50	80	M8	2	42	60x140x136	2	PD10
DG10P100		100	160	M8	2	42	60x140x186	3,6	PD10
DG10P150		150	240	M8	2	42	60x140x236	4,4	PD10
DG10P200		200	318	M8	2	35	60x139x297	5,7	PD10
DG20P50	22,2	50	156	M10	2	45	83x163x198	7,4	PD35
DG20P100		100	312	M10	2	45	83x163x248	9	PD35
DG20P150		150	466	M10	2	45	83x163x298	10,6	PD35
DG20P200		200	624	M10	2	45	83x163x348	12	PD35
DG20P250		250	779	M10	2	45	83x163x398	13,7	PD35
DG20P300		300	935	M10	2	45	83x163x448	15,3	PD35
DG20P360		360	1122	M10	2	45	83x163x508	17,2	PD35
DG35P50	35,8	50	252	M12	2	50	110x190x198	12	PD35
DG35P100		100	503	M12	2	50	170x210x248	16	PD35
DG35P150		150	754	M12	2	50	170x210x298	19	PD35
DG35P200		200	1005	M12	2	50	170x210x347	21,5	PD35
DG35P250		250	1257	M12	2	50	170x210x398	24	PD35
DG35P300		300	1508	M12	2	50	170x210x448	27	PD35
DG50P40S	50	40	315	M10	2	80	130x209x108	9,9	PD100
DG50P50		50	393	M10	2	80	130x209x110	9,8	stroke saddle
DG50P100		100	785	M12	3	80	190x220x245	22,4	PD100
DG50P150		150	1177	M12	3	80	190x220x289	25	PD100
DG50P200		200	1570	M12	3	80	190x220x340	29,7	PD100
DG50P250		250	1964	M12	3	80	190x220x389	33,4	PD100
DG50P300		300	2356	M12	3	80	190x220x439	37	PD100
DG100P50	109,8	50	770	M16	4	110	240x260x228	40,3	PD100
DG100P100		100	1540	M16	4	110	240x260x278	47,1	PD100
DG100P150		150	2309	M16	4	110	240x260x328	53,7	PD100
DG100P200		200	3079	M16	4	110	240x260x385	63,6	PD100
DG100P250		250	3848	M16	4	110	240x260x435	70,2	PD100
DG100P300		300	4618	M16	4	110	240x260x485	77	PD100
DG150P50	162	50	1135	M12	3	110	270x289x183	45	PD200
DG150P100		100	2270	M12	3	110	270x289x233	53,5	PD200
DG150P150		150	3405	M12	3	110	270x289x283	63.2	PD200
DG150P200		200	4540	M12	3	110	270x289x355	73	PD200
DG150P250		250	5675	M12	3	110	270x289x405	85	PD200
DG150P300		300	6809	M12	3	110	270x289x455	98	PD200
DG200P50	202	50	1570	M16	4	160	323x325x283	96	PD200
DG200P100		100	3142	M16	4	160	323x325x333	109	PD200
DG200P150		150	4712	M16	4	160	323x325x383	122	PD200
DG200P200		200	6283	M16	4	160	323x325x433	135	PD200
DG200P250		250	7854	M16	4	160	323x325x483	148	PD200
DG200P300		300	9425	M16	4	160	323x325x533	161	PD200
DG300P50	297	50	2077	—	—	—	388x390x289	160	PPD400
DG300P100		100	4155	—	—	—	388x390x339	180	PPD400
DG300P150		150	6232	—	—	—	388x390x394	191	PPD400
DG300P200		200	8310	M16	2	120	388x390x444	213	PPD400
DG300P250		250	10387	—	—	—	388x390x489	250	PPD400
DG300P300		300	12464	—	—	—	388x390x539	285	PPD400
DG400P50*	400	50	2454	—	—	—	408x409x294	180	PPD400
DG400P100*		100	4909	—	—	—	408x409x344	200	PPD400
DG400P150*		150	7363	—	—	—	408x410x394	221	PPD400
DG400P200*		200	9819	—	—	—	408x409x444	246	PPD400
DG400P250*		250	12272	—	—	—	408x410x490	269	PPD400
DG400P300*		300	14726	—	—	—	408x409x544	305	PPD400

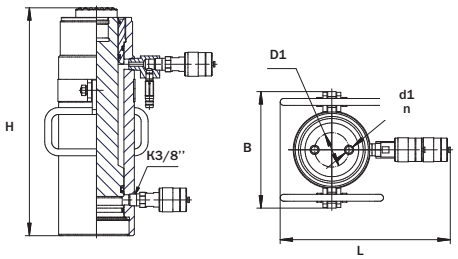
* — nominal pressure 800 Bar

Double-acting load-lifting cylinders

Series DG...G...
Capacity - 50-600 ton
Pressure — 700/800 Bar
Hydraulic stroke retraction

— Due to reliable design and high capacity they are ideal for responsible works;
— High-impact saddle of hardened steel, set on the stroke, protects it from damage;
— Ribbed surface of the saddle prevents weight from sliding;
— Wear-resistant housing coating, applied by powder technique to protect against corrosion and external influences;
— Hydraulic stroke retraction ensures quick preparation of the cylinder for the next cycle;
— Ability to work in any position;
— Cylinders with the capacity over 300 tons are equipped with tilt saddles.

Models: DG500G250, DG50G100



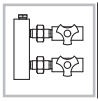
Models	Capacity, ton	Stroke, mm	Oil working capacity, cm³	Mounting			Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm			
DG50G100	56	100	502	M12	3	80	190x257x263	26,1	PD100
DG50G150		150	754	M12	3	80	190x257x313	30,4	PD100
DG50G200		200	1006	M12	3	80	190x257x363	34,5	PD100
DG50G250		250	1256	M12	3	80	190x257x413	38,7	PD100
DG50G300		300	1507	M12	3	80	190x257x463	43	PD100
DG100G100	109,8	100	950	M16	4	110	240x298x325	59,5	PD100
DG100G150		150	1426	M16	4	110	240x298x375	67,2	PD100
DG100G200		200	1901	M16	4	110	240x298x425	74,8	PD100
DG100 G250		250	2376	M16	4	110	240x298x475	82,5	PD100
DG100 G300		300	2851	M16	4	110	240x298x525	90,2	PD100
DG150G100	162	100	1767	M12	3	110	270x328x260	67	PD200
DG150G150		150	2651	M12	3	110	270x328x310	78	PD200
DG150G200		200	3535	M12	3	110	270x326x360	90	PD200
DG150G250		250	4418	M12	3	110	270x328x410	102	PD200
DG150G300		300	5302	M12	3	110	270x328x460	113	PD200
DG200G100	202	100	2011	M16	4	160	323x362x335	113	PD200
DG200G150		150	3016	M16	4	160	323x362x385	127	PD200
DG200G200		200	4021	M16	4	160	323x362x435	141	PD200
DG200G250		250	5026	M16	4	160	323x362x485	155	PD200
DG200G300		300	6032	M16	4	160	323x362x535	169	PD200
DG300G100	300	100	3142	M20	4	180	403x442x330	180	PPD400
DG300G150		150	4710	M20	4	180	403x442x385	213	PPD400
DG300G200		200	6283	M20	4	180	403x442x430	336	PPD400
DG300G250		250	7855	M20	4	180	403x442x480	260	PPD400
DG300G300		300	9425	M20	4	180	403x442x530	284	PPD400
DG400G100*	400	100	3799	M16	3	200	418x455x380	244	PPD400
DG400G150*		150	4712	M16	2	200	408x447x540	231	PPD400
DG400G200*		200	7602	M16	3	200	418x455x480	307	PPD400
DG400G250*		250	7950	—	—	—	408x447x400	298	PPD400
DG400G300*		300	11402	M16	3	200	418x455x580	369	PPD400
DG400G400		400	15203	M16	3	200	418x455x680	432	PPD400
DG500G100	504	100	6977	M16	3	200	408x447x410	228	PPD400
DG500G150		150	10476	M16	3	200	408x447x460	252	PPD400
DG500G200		200	13974	M16	3	200	408x447x510	276	PPD400
DG500G250		250	17974	M16	3	200	408x447x560	300	PPD400
DG500G300		300	21189	M16	3	200	408x447x610	323	PPD400
DG600G100*	588	100	4475	—	—	—	433x435x465	329	PPD400
DG600G150*		150	6732	—	—	—	433x435x515	352	PPD400
DG600G200*		200	8988	—	—	—	433x435x565	375	PPD400
DG600G250*		250	18039	—	—	—	433x435x615	398	PPD400
DG600G300*		300	21636	M16	3	200	408x447x610	323	PPD400

* — nominal pressure 800 Bar

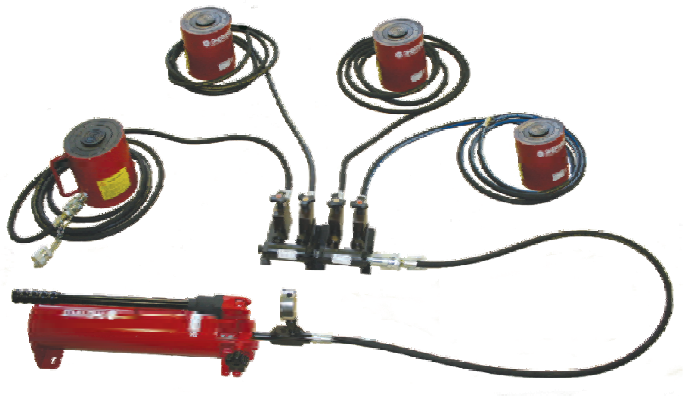

Pumps selection table p.65


Cylinders accessories p.18


Hydraulic accessories p.80


Hydraulic systems. Set-up schemes p.4

System for power transformer winding prepressing



The system is intended for preliminary pressing of power transformer winding during repair work. The system complies with the requirements and instructions for repair of transformers.

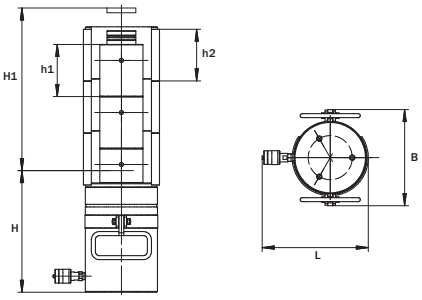
The system includes:
— cylinder DG 50P40S - 4 pcs.
— hose RVD2000 - 1 pc.
— hoses RVD4000 - 4 pcs.
— pump NRG-7035 - 1 pc.
— multiport plug valve KMH4 - 1 pc.
— coupler BRSD001 - 1 pc.
— gauge MA100VU63 - 1 pc.

Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Mounting			Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm			
DG50P40S	56	40	315	M10	2	80	130x209x108	9,9	PD100

Cylinders of stage hoisting

Series DS...P...
Capacity — 100-200 ton
Pressure — 700 Bar
Spring stroke retraction

The unique system allows to raise weight to the height and fix it in the up position for a long time;



Models: stands, cylinder DG200P150, holders

Model	Capacity, ton	Height H1, min, mm	Lift Height H1, mm	Height H max, mm	Number of holders and stands	Height h2, mm/ weight of holders, kg	Height h1, mm/ weight of stands, kg	Dimensions (BxLxH), mm	Weight, kg	Cylinder used	Saddle
DS100P515	109,8	298	505	803	3 и 3	135/7	91/6,1-1pcs; 135/9,2-2pcs;	240x260x298	92	DU100P150	PPD 100
DS200P510	202	369	510	879	7 и 6	65/5,9	95/17-1pcs; 65/12-4pcs; 55/6,9-1pcs;	320x322x369	220	DG200P150	PPD 200

Stage hoisting system operation sequence

Operation concept

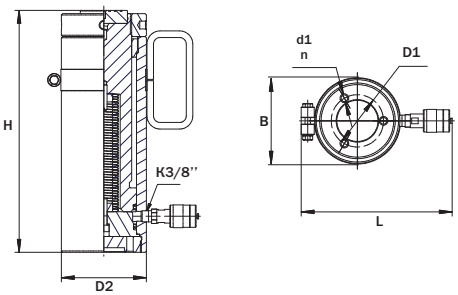
1. Lift the weight by length of stroke action and set the holder on the cylinder housing;
2. Gently release the pressure, lower the weight on the holder;
3. Set the stand on the stroke, repeat the lift;
4. Set the second holder on the first one, etc.

Lock-nut load-lifting cylinders

Series DG…P…G
Capacity — 50-500 ton
Pressure — 700/800 Bar
Spring stroke retraction

Models: DG100P150G, DG100P150G, DG50P200G

— You can combine the power of hydraulic lifting with a secure mechanical system of weight support;
— Safety nut allows you to fix the weight in the up position for a long time, ensuring a safe operation with the raised weight;
— High-impact saddle of hardened steel, set on the stroke, protects it from damage;
— Ribbed surface of the saddle prevents weight from sliding;
— Wear-resistant housing coating, applied by powder technique, protects against corrosion and external influences;
—Cylinders with the capacity over 200 ton are equipped with tilt saddles.



Aluminium load-lifting cylinders p.14
At half the weight with the same load capacity

Model	Capacity, ton	Stroke, mm	Oil working capacity, cm³	Mounting			D2, mm	Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm				
DG50P150G	56	150	1177	M12	3	80	130	190x211x320	29	PD100
DG50P200G		200	1570	M12	3	80	130	130x231x370	33	PD100
DG50P250G		250	1964	M12	3	80	130	190x211x420	36,4	PD100
DG50P300G		300	2356	M12	3	80	130	190x211x470	40	PD100
DG100P150G	109,8	150	2409	M16	4	110	170	240x260x380	66,6	PD100
DG100P200G		200	3079	M16	4	110	170	240x260x435	75,3	PD100
DG100P250G		250	3848	M16	4	110	170	240x260x485	82,9	PD100
DG100P300G		300	4618	M16	4	110	170	240x260x535	90,6	PD100
DG150P150G	162	150	3405	M12	3	110	210	270x289x390	89	PD150
DG150P200G		200	4540	M12	3	110	210	270x289x440	99	PD150
DG150P250G		250	5672	M12	3	110	210	270x289x490	109	PD150
DG150P300G		300	6809	M12	3	110	210	270x289x540	120	PD150
DG200P150G	202	150	4712	M16	4	160	245	323x325x432	140	PPD200
DG200P200G		200	6283	M16	4	160	245	323x325x482	155	PPD200
DG200P250G		250	7854	M16	4	160	245	323x325x532	170	PPD200
DG200P300G		300	9425	M16	4	160	245	325x325x582	185	PPD200
DG300P200G	300	200	8310	M20	4	180	320	398x400x494	261	PPD400
DG300P250G		250	10387	M20	4	180	320	398x400x544	285	PPD400
DG300P300G		300	12465	—	—	—	310	388x390x600	292	PPD400
DG400P150G*	400	150	7363	—	—	—	330	408x410x450	260	PPD400
DG400P200G*		200	9818	—	—	—	330	408x410x500	285	PPD400
DG400P250G*		250	12272	—	—	—	330	408x410x550	317	PPD400
DG400P300G*		300	14720	—	—	—	330	408x410x600	344	PPD400
DG500P150G	504	150	10810	—	—	—	380	458x460x515	384	PPD400
DG500P200G		200	14137	—	—	—	380	458x460x565	410	PPD400
DG500P250G		250	17900	—	—	—	380	458x460x615	443	PPD400
DG500P300G		300	21206	—	—	—	380	458x460x665	447	PPD400

* — operates at nominal pressure 800 Bar

Cylinders with the capacity over 50 ton are recommended to be equipped with the safety valve.
Cylinders with the capacity over 50 ton are recommended to be equipped with float supports.

The rise of the phone tower and its holding when replacing the insulator

Cylinders accessories p.18
Hydraulic systems. Set-up schemes p.4
Pumps selection table p.65
Hydraulic accessories p.80

Aluminium load-lifting cylinders

Series DGA...P...
Capacity — 20-200 ton
Pressure — 700 Bar

Model: DGA30P100

— Spring stroke retraction hydraulic aluminum single-acting cylinders;
— Have a light weight, twice lighter than analogous steel cylinders;
— Corrosion resistant construction, stroke and housing with wear-resistant hard coating;
— Have removable steel saddles and plates that protect the stroke and the base from damage after contact with solid surfaces;
— The handle for easy carrying is set on models from 50 ton and above;
— Quick disconnect couple set on a cylinder is included.

Model	Capacity, ton	Stroke, mm	Oil working capacity, cm³	Cylinder height, mm	Outside diameter, mm	Weight, kg
DGA20P50	20	50	141	152	98	3
DGA20P100		100	282	202	98	4
DGA20P150		150	423	252	98	5
DGA30P50	32	50	220	148	110	5
DGA30P100		100	442	198	110	6
DGA30P150		150	662	248	110	7
DGA50P50	56	50	393	150	140	7
DGA50P100		100	785	200	140	9
DGA50P150		150	1175	250	140	10
DGA100P50	110	50	770	173	195	15
DGA100P100		100	1542	223	195	19
DGA100P150		150	2308	273	195	22
DGA150P50	153	50	1068	205	238	29
DGA150P100		100	2137	255	238	33
DGA150P150		150	3205	305	238	38
DGA200P50	202	50	1417	291	270	45
DGA200P100		100	2834	341	270	51
DGA200P150		150	4251	391	270	57

Aluminium lock-nut load-lifting cylinders

Series DGA...P...G
Capacity — 30-120 ton
Pressure — 700 Bar

Model: DGA30P150G

— Spring stroke retraction hydraulic aluminum single-acting cylinders;
— Lock nut set on the stroke for fixing put forward cylinder in any position prevents any descending;
— Have a light weight, 2 times lighter than analogous steel cylinders;
— Corrosion resistant construction, stroke and housing with wear-resistant hard coating;
— Have removable steel saddles and plates that protect the stroke and the base from damage after contact with solid surfaces;
— All models have handles for easy carrying;

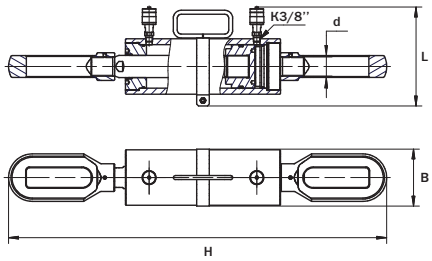
Model	Capacity, ton	Stroke, mm	Oil working capacity,cm³	Cylinder height, mm	Outside diametr, mm	Weight, kg
DGA30P50G	32	50	221	182	110	6
DGA30P100G		100	442	232	110	7
DGA30P150G		150	662	282	110	8
DGA30P200G		200	283	332	110	10
DGA50P50G	51	50	393	200	140	11
DGA50P100G		100	785	250	140	13
DGA50P150G		150	1178	300	140	15
DGA50P200G		200	1570	350	140	16
DGA100P50G	102	50	715	229	195	24
DGA100P100G		100	1431	279	195	27
DGA100P150G		150	2146	329	195	31
DGA100P200G		200	2861	379	195	35
DGA150P50G	153	50	1069	264	238	41
DGA150P100G		100	2137	314	238	45
DGA150P150G		150	3206	364	238	50
DGA150P200G		200	4274	414	238	54
DGA200P50G	202	50	1417	297	270	53
DGA200P100G		100	2834	347	270	59
DGA200P150G		150	4251	397	270	66
DGA200P200G		200	5668	447	270	72

Pulling cylinders

Capacity — 8-50 ton
Pressure — 700 Bar
Series DO…P…
Spring stroke retraction
Series DO…G…
Hydraulic stroke retraction

Models: DO50G150, DO8P150

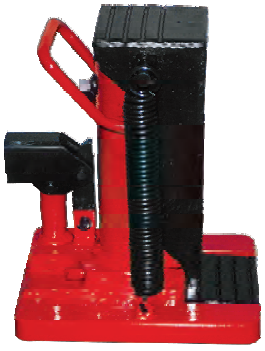
— Designed to create pulling force when performing repair, installation, assembly works and weights replacement;
— Optimum for hull of vessels tightening, steel frameworks for further fastening and welding;
— Ability to work in any position.



	Model	Capacity, ton	Stroke, mm	Oil working capacity, cm³	Thread d, mm	Dimensions (BxLxH), mm	Weight, kg
Single-acting	DO8P150	8,2	150	175	M30x2	70x150x728	13,2
	DO10P150	10,9	150	230	M42x2	83x181x762	16
	DO10P200		200	305	M42x2	83x181x860	20
	DO10P250		250	382	M42x2	85x163x960	23,7
	DO30P150	33,8	150	710	M48x3	212x332x856	43
	DO30P200		200	950	M48X3	212x332x920	45,5
	DO50P150	50,3	150	1056	M48x3	221x342x883	48
	DO50P200		200	1408	M48x3	221x342x933	50,3
Double-acting	DO30G150	30,2	150	121	M30x2	159x203x788	28
	DO30G200		200	161	M30x2	114x212x838	29
	DO30G250		250	201	M30x2	114x212x888	32
	DO30G600		600	482	M48x3	210x276x1385	80
	DO50G150	50,3	150	326	M48x3	144x250x905	50
	DO50G200		200	440	M48x3	144x250x955	54
	DO50G250		250	615	M48x3	144x250x1005	59
	DO50G500		500	1182	M48x3	144x250x1255	73

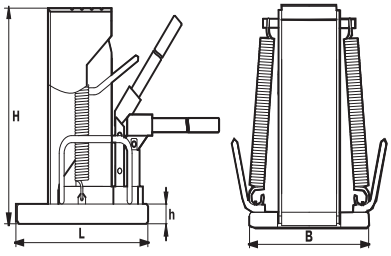
Low pickup self-contained jacks

Series DA…P…K
Capacity — 2,5-30 ton
Spring stroke retraction



Model: DA5P120K

Designed for lifting, positioning of equipment, heavy steel frameworks, supporting heavy-loaded frames and other weights, as well as for repair, installation, dismantling, assembly, transport and storage operations, etc.;
— Rotating pump knob allows you to work in a confined space;
— The minimum height of the pickup is 19 mm;
— Built-in pump with detachable handle provides portability and ease of use;
— Lift height on the leg is not more than 60 mm.



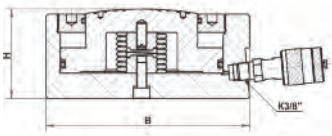
Model	Capacity on ssddle/leg, ton	Stroke, mm	Picup height, mm	Dimensions (BxLxH), mm	Weight, kg
DA5P120K	5/2,5	120	14	170x230x237	11
DA10P150K	10/5	150	22	188x260x286	19,1
DA20P160K	20/10	160	28	242x280x327	33,6
DA30P160K	30/15	160	32	273x308x352	51,2

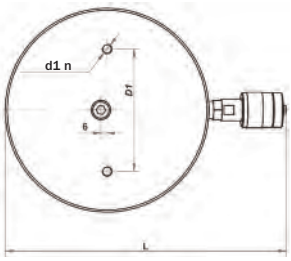
Low height cylinders

Capacity — 5-400 ton
Pressure — 700/800 Bar
Series DN…M…
Gravitation stroke retraction
Series DN…P…
Spring stroke retraction

— Low height of cylinders lets you use them in a confined space while installing and gauging of heavy equipment, for leveling bridge spans, etc.;
- Wear-resistant housing coating, applied by powder technique to protect against corrosion and external influences;
— Upon request we produce cylinders with load capacity up to 600 ton.

Models: DN100P15, DN50P15, DN5M15, DN35M15, DN20M15





Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Mounting			Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, мм	n, pcs	D1, мм			
DN5M15	5,6	15	12	—	—	—	42x136x52	1,11	Stroke saddle
DN10M15	11,3	15	24	—	—	—	60x149x57	1,86	Stroke saddle
DN20M15	22,2	15	47	—	—	—	80x178x60	3,3	Stroke saddle
DN35M15	35,8	15	75	—	—	—	100x192x66	5	Stroke saddle
DN50П15	56	15	118	M10	2	80	137x215x70	7,4	Stroke saddle
DN100P15	109,8	15	231	M10	2	120	180x256x79	14	Stroke saddle
DN140P15	143,5	15	302	M10	2	120	200x276x88	19	Stroke saddle
DN400P15*	400	15	736	—	—	—	408x410x192	113	Tilt saddle

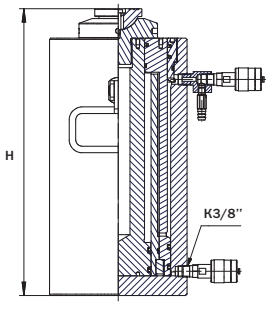
* — operation pressure 800 Bar

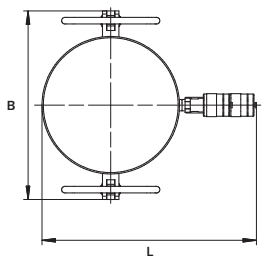
Telescopic cylinders

Series DT…G…
Capacity — 143/56 ton
Pressure — 700 Bar
Hydraulic stroke retraction

— Indispensable for lifting loads at high altitudes;
— Provides greater lifting height with a relatively small size;
— Safety valve in the stroke end protects the cylinder from the excess pressure if not to include couple.

Model: DT60G500





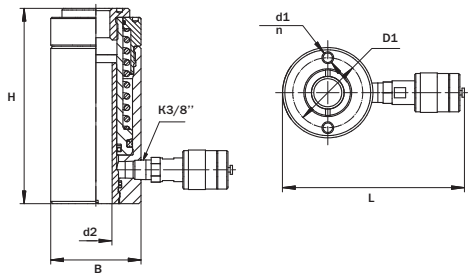
Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Saddle
DT60G500	143/56	240/260	5508	288x327x438	97,8	PPD

Hollow plunger cylinders

Capacity — 15-100 ton
Pressure — 700 Bar
Series DP…P…
Spring stroke retraction
Series DP…G…
Hydraulic stroke retraction

Designed for lifting and handling weights, and hollow plunger makes them suitable for pressing and removing parts installed with interference on long shafts, tendon cylindering, ropes tension, etc. Can be effective when working with horizontal objects moving.

Model: DP50P75, DP100P75, DP30P63



	Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Mounting			Stroke hole d2, mm	Dimensions (BxLxH), mm	Weight, kg	Saddle
					d1, mm	n, pcs	D1, mm				
Single-acting	DP15P50	15,7	50	112	M10	2	62	29	80x161x173	5,7	flat saddle*
	DP15P100		100	224	M10	2	62	29	80x161x229	6,3	flat saddle*
	DP20P50	21,3	50	150	M10	2	65	27	98x178x162	7,8	flat saddle with hole D28
	DP30P63	31,4	63	172	M10	2	85	33	162x207x178	11,7	flat saddle with hole D34
	DP50P75	58,5	75	615	M12	2	120	54	218x238x235	27,9	flat saddle with hole D55
	DP100P75	105,9	75	1113	M12	2	145	80	275x295x235	49,0	flat saddle with hole D80
Double-acting	DP10G150	8,96	150	133	—	—	—	20	70x187x308	8,5	flat saddle with hole D22
	DP10G250		250	220	—	—	—	20	70x187x408	10,9	flat saddle with hole D22
	DP30G150	31,4	150	351	M10	2	85	33	176x250x278	19,1	flat saddle with hole D34
	DP30G250		250	584	M10	2	85	33	176x250x378	25	flat saddle with hole D34
	DP50G150	56,9	150	554	M12	2	120	54	218x276x310	37,2	flat saddle with hole D55
	DP50G250		250	1089	M12	2	120	54	218x276x410	48	flat saddle with hole D55
	DP100G150	105,9	150	1131	M12	2	150	80	275x333x335	71	flat saddle with hole D80
	DP100G250		250	1885	M12	2	150	80	275x333x435	90	flat saddle with hole D80

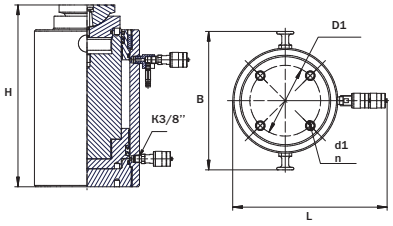
* — 3 variants of saddle: without hole, with hole D28 or M27x1,5

Power cylinders

Series CS…G…
Capacity — 10-200 ton
Pressure — 700 Bar
Hydraulic stroke retraction

Models in this series are designed for assembly, dismantling, repair and other types of work in different industrial branches.
— Can be applied effectively when working with horizontal objects moving when the hydraulic stroke retraction ensures quick preparation of the cylinder for the next cycle.
— Elastic multi-lip seals and secure spacers allow the cylinder to work with significant radial loads on the stroke

Модели: CS20G250G3, CS15G500, CS100G160



Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Mounting			Dimensions (BxLxH), mm	Weight, kg	Saddle
				d1, mm	n, pcs	D1, mm			
CS10G500	11,3	500	628	M10	2	28	100x219x683	14,8	PD10
CS15G500	14,1	500	628	M10	2	38	110x249x686	19	PD10
CS20G250GZ*	20	250	300	—	—	—	124x151x543/ 713	20,3	flat grooved saddle 2 pcs+2 links
CS100G160	109,8	160	1256	M16	4	110	286x298x415	56,3	PPD100
CS100G250		250	1963	M16	4	110	286x298x505	67,3	PPD100
CS100G320		320	2512	M16	4	110	286x298x575	75,6	PPD100
CS100G400		400	3142	M16	4	110	286x298x655	85,1	PPD100
CS100G500		500	3925	M16	4	110	286x298x755	97	PPD100
CS100G630		630	4945	M16	4	110	286x298x885	112,5	PPD100
CS100G800		800	6280	M16	4	110	286x298x1055	132,7	PPD100
CS100G1000		1000	7900	M16	4	110	278x316x1324	169	PPD100
CS200G160	200	160	3217	M20	4	165	323x381x424	152	PPD200
CS200G250		250	5027	M20	4	165	323x381x514	185	PPD200
CS200G320		320	6431	M20	4	165	348x381x584	210	PPD200
CS200G400		400	8046	M20	4	165	348x381x664	239	PPD200
CS200G500		500	10055	M20	4	165	348x381x764	275	PPD200
CS200G630		630	12665	M20	4	165	348x381x894	322	PPD200
CS200G800		800	16082	M20	4	165	348x381x1064	383	PPD200
CS200G1000		1000	20110	M20	4	165	348x381x1264	456	PPD200
CS200G1250		1250	25130	M20	4	165	348x381x1514	546	PPD200

* — power cylinder with built-in hydraulic lock

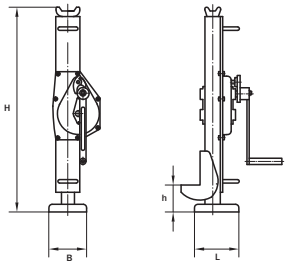
Cylinders with the capacity over 50 ton are recommended to be equipped with the safety valve.
Cylinders with the capacity over 50 ton are recommended to be equipped with tilt saddles.

Mechanical steel jacks

Series DR...
Capacity — 3-20 ton

Model: DR-10, DR-16

Designed for lifting loads during installation and gauging of heavy equipment, machinery, maintenance and repair of vehicles, etc. Mechanical principle of operation and the ratchet provide full autonomy and safety at work, fixing of weight during and after lifting. The weight can be lifted by upper support having a ribbed surface, or by low pickup, allowing lifting weight, even if only a small space is available. Ratchet gears are protected from dirt and water by steel casing.



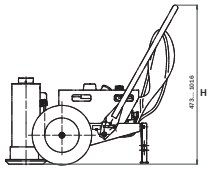
Model	Capacity on saddlet/leg, ton	Pickup height, mm	Lift height, mm	Dimensions (BxLxH), mm	Weight, kg
DR-3	3/2,1	60	355	130x138x720	20
DR-5	5/3,5	80	345	140x170x740	28
DR-10	10/7	85	390	190x250x800	46
DR-16	16/11,2	160	320	195x225x900	65
DR-20	20/14	100	340	240x260x860	95

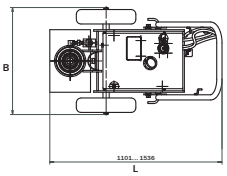
Trolley load-lifting jacks

Series DA..G...
Capacity — 109,8 ton
Pressure — 700 Bar

Model: DA100G280-550TE

Designed for easy and safe lifting, lowering of weights up to 100 tonnes during the assembly, dismantling, complex construction works and repair of mining and heavy equipment.
— For convenience and portability pump was placed at the very trolley of the trolley jack;
— Construction of trolley jack is covered with rigid metallic casing;
- The trolley is equipped with pneumatic wheels, which makes the design more mobile;
— Accesible handle for the operator, with three adjustable positions;
— For safety and ease of use, the construction is designed so that the jack platform disconnects from the trolley, which makes it possible to work in tight conditions, the trolley does not exceed the cylinder size in height; Upon request company "Enerpred" is ready to produce cylinders with any characteristics.





Model	Capacity, ton	Stroke, mm	Screw pitch, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Pump
DA100G280-550TE	109,8	280	150	2200	684x1101x1016	310	Electric built-in pump (380 V)

Safety valve

Model: KP

Safety valve (hydraulic lock with manual control) is designed to hold the load by hydraulic cylinder, automatically locks the cylinder working cavity after the loading, causing the hydraulic cylinder be under load for a long time without inadvertent movement.

Model	Ultimate current of resistance, Nm	Connection threads	Dimensions (BxLxH), mm	Weight, kg
KP	1,3	K3/8''	50x73x114	1,0

Hydraulic lock

Model: GZ

Hydraulic lock with hydraulic control is designed to hold the load by hydraulic cylinder, automatically locks the cylinder working cavity after the loading, causing the hydraulic cylinder be under load for a long time without inadvertent movement. Hydraulic lock is a safety device and must be installed on all cylinders, which are held under load for a long time, in case of damage to the high pressure hoses. Can be applied only to double-acting hydraulic cylinders. Opening is performed automatically by retraction space hydraulic fluid control signal.

Model	Opening pressure, Bar, max	Connection threads	Dimensions (BxLxH), mm	Weight, kg
GZ	60	K3/8''	50x78x122	3,1

Saddles

Flat saddle

Saddles are set on the cylinder stroke, protecting it from damage.

Grooved saddle

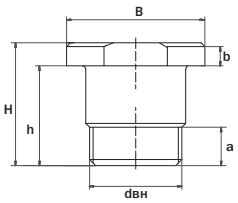
Grooved saddles prevent weight from sliding.

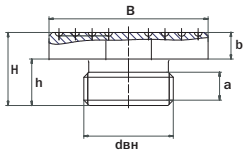
Serrated saddle

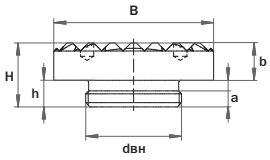
The surface of a serrated saddle prevents weight from sliding.

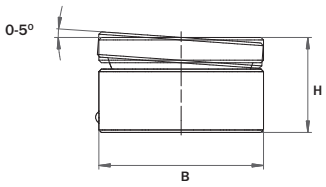
Tilt saddle

Tilt saddles are designed to reduce radial loads on the cylinder stroke at its eccentric loading. Set on the outer end of the stroke and attached by ball detent.





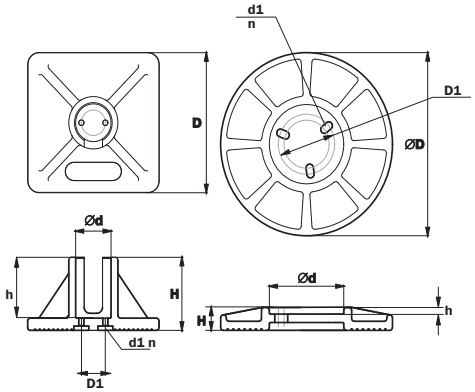




Model	Capacity, ton	Stroke d out. for saddle, mm	Stroke h for saddle, mm	a, thread, mm	b, mm	Dimensions (BxLxH), mm	Weight, kg
Flat saddle							
PD5	5,6	M16x1,5	10	6	6	22x25x16	0,035
Pd10	11,3/14,1	M27x2	14	10	6	30x35x20	0,1
Pd15	14,1	M24x1,5	26	10	6	32x36x32	0,147
Grooved saddle							
Pd20	22,2	M27x2	14	10	8	46x48x22	0,166
Pd100	56/80,8/109,8	72	15	—	—	72x72x20	0,623
Pd200	162/202	130	20	—	—	130x130x25	2,5
Serrated saddle							
Pd35	22,2/35,8	M36x1,5	10	6	14	60x60x24	0,345
Tilt saddle							
PDD20	22,2	M27x2	16	12	22	44x44x38	0,313
PDD35	35,8	M36x1,5	16	12	25	60x60x41	0,65
PDD100	109,8	72	15	—	—	72x72x40	1,2
PDD200	162/202	130	20	—	—	130x130x75	7,4
PDD400	300/400/504/603	160	60	—	—	160x160x90	14

Base plates

Designed to create a solid base surface and to provide steadiness of the cylinder at its operation.



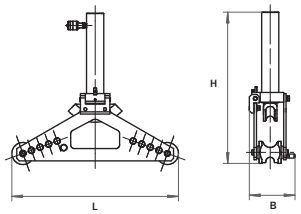
Model	Capacity, ton	Diameter, d, mm	Mounting			h, mm	Dimensions (BxLxH), mm	Weight, kg
			d1, mm	holes n, pcs.	D1, mm			
OPD10	11,3	62	9	2	42	100	230x230x120	11,3
OPD15	14,1	72	9	2	38	100	230x230x120	11,4
OPD20	22,2	85	11	2	45	100	Д250x120	11,4
OPD35	35,8	112	13	2	50	11	Д305x38	11
OPD50	56	132	13	3	70/100	11	Д305x38	11

Hydraulic frame-closed pipe benders

Series TG...
Bending capacity — 11-14 ton
Diameter of bending pipes— 8-50 mm
Pressure — 700 Bar

Designed for bending water and gas pipes in a cold condition.
— Lightweight and compact design in aluminum alloy allows for on-site installation of piping and plumbing systems;
— Minimal time of preparation of benders to work;
— Maximum bending - 90^0;
— Complete with the set of punches to the appropriate range of bend radius;
— To control the accuracy of bending are equipped with angle indicator.

Model: TG1550



Model	Diameter of pipe/bend radius, mm	Thickness of pipe, mm	Pipe wall thickness, mm	Dimensions (BxLxH), mm	Weight*, kg	Recommended pump
TG1032	8/60, 10/70, 15/90, 20/100, 25/135, 32/170	11,3	2,00-4,00	158x530x394	17	NRG-7010
TG1550	15/90, 20/100, 25/135, 32/170, 40/205, 50/240	14,1	2,35-4,50	170x680x621	33,3	NRG-7010

* — weight including the set of punches

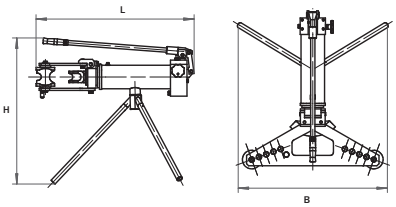
Hydraulic frame-closed pipe benders with built-in pump

Series TG...R...
Bending capacity — 10 ton
Diameter of bending pipes — 10-50 mm

— Equipped with built-in pumps with manual transmission, enabling operation in the absence of power supply;
— Complete with the set of punches to the appropriate range of bend radius;
— The angle of the bend – 90^0.

Model: TG1R1450

Model: TG1R1050



Model	Diameter of pipe/bend radius, mm	Bending capacity, t	Thickness of pipe, mm	Dimensions (BxLxH), mm	Weight*, kg
TG1R1050	15/90, 20/100, 25/135, 32/170, 40/205, 50/240	10,2	2,35-4,5	730x750x820	63
TG1R1450	10/70, 15/90, 20/100, 25/135, 32/170, 40/205, 50/240	10,2	2,00-4,5	730x841x830	106,8

* — weight including the set of punches

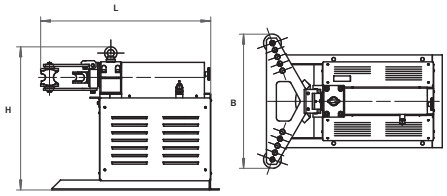
Power frame-closed pipe benders

Series TG...E...
Bending capacity — 10-20 ton
Diameter of bending pipes — 10-100 mm

Designed for bending water and gas pipes in a cold condition.
— Model TG1E1880 has fixing holes in the base for reliable stationary mounting on a foundation. Bender has an internal motor pump with supply voltage 380V.
Equipped with a thermal switch, which helps prevent damage from overheating.
Comes with the set of punches to the appropriate range of bend radius;
— The angle of the bend - 90°

Model: TG1E1050

Model: TG1E1880



Model	Diameter of pipe/bend radius, mm	Bending capacity, t	Thickness of pipe, mm	Dimensions (BxLxH), mm	Weight*, kg
TG1E1050	15/90, 20/100, 25/135, 32/170, 40/205, 50/240	10,2	2,35-4,50	730x742x780	104
TG1E1880	10/70, 15/90, 20/100, 25/135, 32/170, 40/205, 50/240, 65/320, 80/425, 100/650	20,4	2,00-5,00	1000x955x726	210
TG1E20100	10/70, 15/90, 20/100, 25/135, 32/170, 40/205, 50/240, 65/320, 80/425, 100/650	20,4	2,00-5,00	720x860x830	201

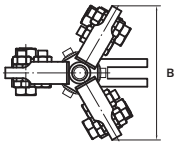
* — weight including the set of punches

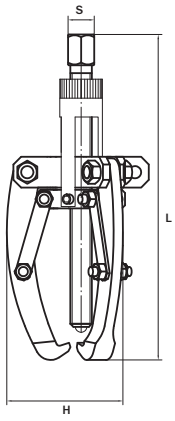
Manual pullers

Series SV. . .
Capacity — 1,3-10 ton
Spread range — 30-320 mm

Model: SV5, SV2

Designed for efficient removal of parts, set with tension when required little effort;
— 2 variants of assembly: 2-jaws to work in a confined space, 3-jaws - for secure grip;
— Centering mechanism provides simplicity and ease of use, eliminating distortions and slipping of grips off removable parts.





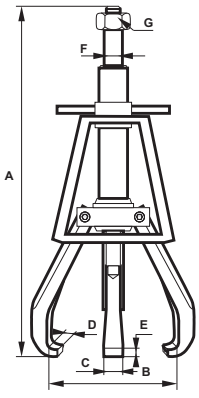
Model	Capacity, ton	Number of jaws	Spread range, mm	Max Reach, mm	Dimensions (BxLxH), mm	Weight, kg
SV2	1,3/2	2/3	30...90	70	80x240x80	1,5
SV5	3,3/5	2/3	45...220	130	150x350x140	4,5
SV10	6,6/10	2/3	60...320	170	210x475x205	9,4

Manual pullers “POSILOCK”

Series SV. . .
Capacity — 1-40 ton
Spread range — 6-635 mm

— Effectively dismantling the parts installed with an interference fit;
— Made of high quality hardened steel;
— Safety cage forwards jaws and provides quick installation, the hard grip and increased safety by preventing slipping of legs off removable parts.

Model: SV102



Model	Capacity, ton	Number of jaws	Spread range, mm	Max reach, mm	Dimensions, mm						Weight, kg
					A	C	D	E	F	G	
SV102	1	3	6-82	57	138...184	6	3	3	8	-	0,3
SV103	2	3	6-114	76	178...237	8	4	3	10	-	0,6
SV104	5	3	13-127	102	259...337	16	4	4	14	19	1,86
SV106	10	3	13-178	152	327...456	19	5	6	17	19	3,6
SV108	17	3	19-305	203	422...562	22	8	7	20	25	6,4
SV110	20	3	25-381	246	498...661	25	8	9	20	25	7,3
SV113	30	3	64-457	305	671...902	32	8	13	30	32	20
SV116	40	3	76-635	356	813...1058	38	13	16	31	32	31

POSI LOCK™

Trolley Hydraulic pullers “POSILOCK”

Series PH…
Capacity — 100-200 ton
Single-acting and Double-acting

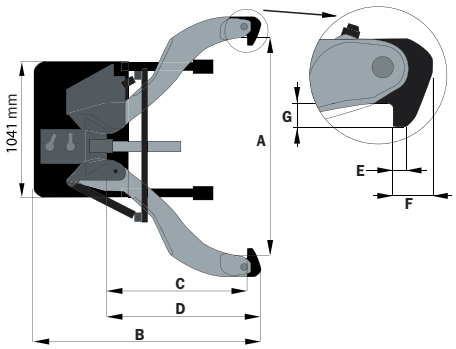
Model: PH-123T

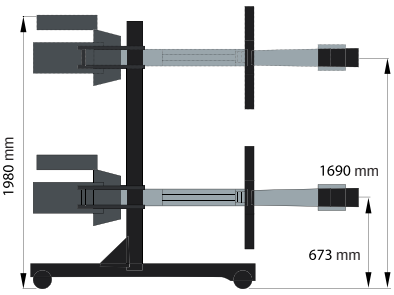
— Trolley 100-ton and 200-ton hydraulic pullers PosiLock provide maximum traction in the works related to the dismantling of large gears, pulleys, wheels, hubs, and other details;
— Removable trolley with hydraulic drive, on which there set pullers, makes it more secure to raise them to a height of 1,52 m by hydraulic control jaws.
— Puller can be used in both horizontal and vertical hanging;
— Equipped with adjustable jaw tips, jaw guides;
— Models PH-123T and PH-123TDA have two variants of assembly: 2-and 3-jaws
— Upon request it is possible to deliver special interchangeable tips (tips HT-1180 are included by default in all models (Fig.))

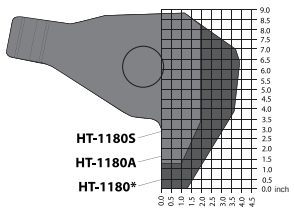
	Model	Capacity, ton	Number of jaws	Spread (A), mm	Overall length, mm	Reach (C), mm	Jaw length (D), mm	Tip dimensions, mm			Weight, kg	Recommended pump
								E	F	G		
Single-acting	PH-102T	100	2	191-1778	1956	1270	1346	32	89	89	771	NEE-1,6I10T(F)1
	PH-100T		3	191-1778	1956	1270	1346	32	89	89	885	NEE-1,6I10T(F)1
	PH-123T		2/3	191-1778	1956	1270	1346	32	89	89	907	NEE-1,6I10T(F)1
	PH-102TV*		2	191-1778	1956	1270	1346	32	89	89	816	NEE-1,6I10T(F)1
Double-acting	PH-102TDA	100	2	191-1778	1956	1270	1346	32	89	89	816	NEE-1,6I10T(F)1
	PH-100TDA		3	191-1778	1956	1270	1346	32	89	89	930	NEE-1,6I10T(F)1
	PH-123TDA		2/3	191-1778	1956	1270	1346	32	89	89	953	NEE-1,6I10T(F)1
	PH-102DATV*		2	191-1778	1956	1270	1346	32	89	89	816	NEE-1,6I10T(F)1
	PH-200T	200	4	203-1778	1994	1219	1346	32	89	89	1882	NEE-1,6I20T(F)1

* Vertical

100-ton pullers

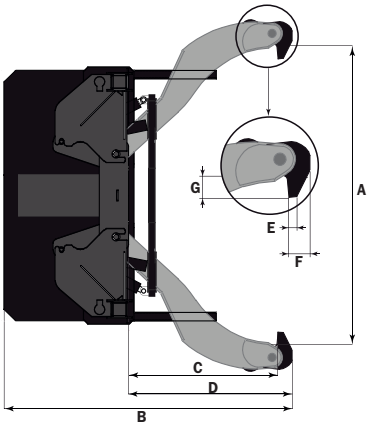


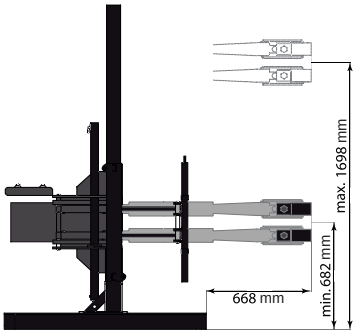




All jaws are 76 mm thick

200-ton pullers





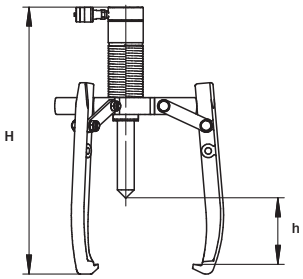
Model :PH-200T

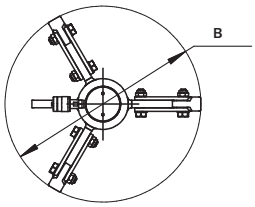
Hydraulic pullers

Series SG...
Capacity — 5-56 ton
Spread range — 30-600 mm
Pressure — 700 Bar

Model: SG6

— Pullers are designed to dismantle parts of equipment with an interference fit, and are a means of mechanization for different kinds of repair work;
— There are two variants of assembly: 2 jaws to work in a confined space, and 3 jaws for a more secure grip of the parts;
— Complete with tips that let you work with shafts with different shapes of centre holes;
— Two holes on the cross, which allow for changing the depth and diameter of the puller grip;
— To compensate for the distance between the stroke and a part cylinder can be moved along the axis.





Model	Capacity, ton	Number of jaws	Spread range, mm	Max Reach, mm	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SG6	6	3; 2	30-200	210	100	227x424	6,3	NRG-7010
SG8	8	3; 2	30-250	215	100	297x451	9,3	NRG-7010
SG12	12	3; 2	40-300	249	100	344x523	12,5	NRG-7010
SG20	20	3; 2	40-360	340	100	415x641	25,9	NRG-7010
SG30	30	3; 2	43-440	340	85	473x644	41,7	NRG-7010
SG335	35	3; 2	150-500	555	150	539x877	75	NRG-7010
SG335U	35	3; 2	500-890	744	150	1037x1061	157	NRG-7010
SG356	56	3; 2	300-600	543	150	587x875	106	NRG-7020

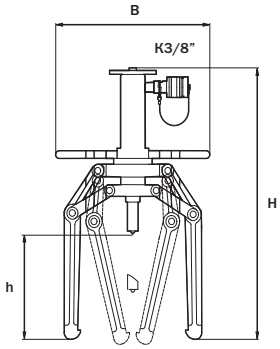
Hydraulic pullers with centering of the grip mechanism

Series SG...
Capacity — 5-100 ton
Spread range — 20-600 mm
Pressure — 700 Bar

Model: SG315

— Self-centering design of the puller jaws provides fixed position of the grips in the entire zone of removal;

— Model SG315 has the ability to grip for internal and external circuit of a part;



Model	Capacity, ton	Number of jaws	Spread range, mm	Max Reach, mm	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SG305	5	3; 2	20-180	167	100	263x412	5,6	NRG-7010
SG315	15	3; 2	35-380	245	250	335x700	21,3	NRG-7010
SG320	20	3	56-450	302	360	330x874	36	NRG-7020
SG3100	100	3	300-600	595	150	640x1424	263	NRG-7035
SG3100-1	100	3	150-600	1250	150	652x2068	352	NRG-7035

Hydraulic puller with built-in pump

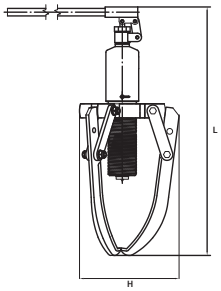
Series SGA. . .
Capacity — 6-30 ton
Spread range — 40-550 mm

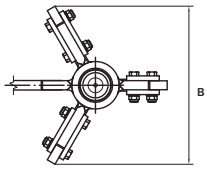
Model: GSA8

Model: SGA6 in the case

Model: Protection net

— Ideal for removing set with tension sleeves, bearings, sprockets, gears and pulleys;
— Built-in pump with a removable telescoping handle, rotating at 360^0, allows you to quickly and efficiently complete the work on the dismantling of parts;
— Corrosion protection of parts;
— Built-in pressure relief valve protects the puller from overload;
— Pullers are available in convenient and durable plastic cases;
— Includes protection net.





Pullers wits built-in pump “Rikline” p.87

Model	Capacity, ton	Number of jaws	Spread range, mm	Max reach, mm	Stroke, mm	Dimensions (BxLxH), mm	Weight*, kg
SGA 6	6/4	3/2	40-330	205	65	150x455x150	6,14
SGA 8	8/5	3/2	50-350	220	80	170x480x175	7,7
SGA 12	12/8	3/2	60-375	265	80	190x525x196	9,82
SGA 20	20/13	3/2	70-520	275	85	250x560x280	22,8
SGA 30	30/20	3/2	80-550	260	85	300x560x330	32,3

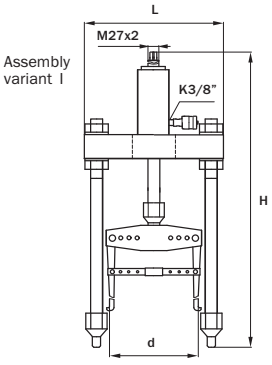
* — weight of 3-jaw puller without the case

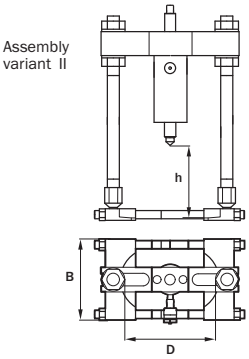
Universal pullers

Series SGU. . .
Capacity — 10-35 ton
Spread range — 70-260 mm
Pressure — 700/220 Bar

Model: SGU15

— Two variants assembly - for removing parts with a collar and with internal jaw of details which were set in the hole;
— To control the pressure at work with internal jaw, it is recommended to equip the puller with pressure gauge;





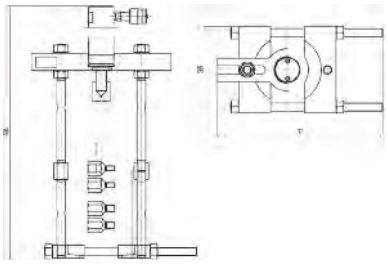
Model	Assembly variant	Capacity, ton	Pressure, Bar	Reach h, mm	Inner diameter d, mm	Outer diameter D, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SGU15	I	5	220	212	75-230	75-230	166x350x900	36	NRG-7010
	II	15,7	700	30-300	—	70-260	205x360x805		

Hydraulic bearing pullers

Series SGH. . .
Capacity — 10-35 ton
Spread range — 35 - 420 mm

Model: SGH10

Designed for removing gears, bearings, sprockets, couplings, impellers, pulleys and other components, which were set with interference, which can be damaged when removing with the conventional pullers;
— Construction of the bearing provides a secure grip in the case where the shape of the part does not allow using a conventional puller;
— Provides the pulling to the inner ring of the bearing - the load is transmitted through the rolling elements, which minimizes the risk of damage to the bearing;
— Pullers include a single-acting cylinder with spring stroke retraction, which can be removed and used separately.



Model	Capacity, ton	Reach h, mm	Spread range of released, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SGH10	11,3	176, 376	35-280	205x391x684	20	NRG-7010
SGH35	35,8	30, 280, 530	80-420	340x664x1025	90	NRG-7020

Hydraulic bearing pullers with built-in pump

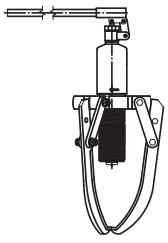
Series SGHA. . .
Capacity — 6-12 ton
Spread range — up to 375 mm

Model: SGHA8 in the case

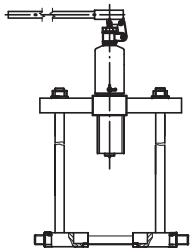
Model: SGHA8 assembled

— Built-in pump with a removable telescoping handle, rotating at 360°, allows you to quickly and efficiently complete the work on the dismantling of parts;
— Corrosion protection of parts;
— Integrated pressure relief valve protects the puller from overload;
— Construction of the bearing provides a secure grip in the case where the shape of the part does not allow using a conventional puller;
— Pullers are available in convenient and durable plastic cases;
— Includes protection net;
— There are puller sets both with the bearing and with the jaws.

Assembly variant with the jaws



Assembly variant with the bearing



Model	Capacity, ton	Spread, mm	Reach, mm	Stroke, mm	Weight, kg
SGHA6	6	330/140	205/240	65	17,1
SGHA8	8	350/140	220/250	80	19,2
SGHA12	12	375/160	265/280	80	33,5

Hydraulic presses

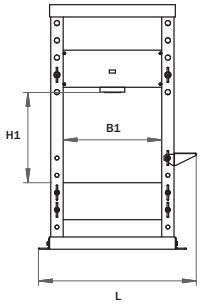
Series PSM. ., PPK. . .
Capacity — 10-200 ton
Stroke — 150-300 mm
Pressure — 700 Bar

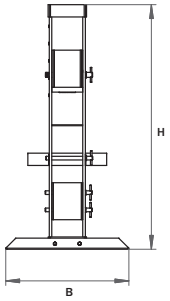
— Designed for mounting and removing, straightening and bending parts and other kinds of work;
— To work with small and medium-sized parts presses of series PSM are used, the models of the series PPK are used when working with large parts;
— Hydraulic stroke retraction on the models of the series PPK ... G can speed up the work;
— The horizontal movement of the table PPK200 provides the convenience of working with large parts.

Model: PPK200

Model: PPK100Г150

Model: PSM15





Pumps p. 66

High pressure hoses p. 85

Pressure gauges p. 81

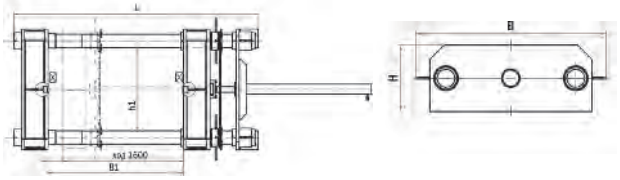
Model	Capacity, ton	Stroke, mm	Workspace size, mm (B1xH1)	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
PSM10	10	150	358x398	220x422x733	49	NRG-7010
PSM15	15	250	360x420	200x472x882	69,2	NRG-7010
PPK50	56	150	800x1290	1000x1280x1985	358	NRG-7020
PPK50G150	56	150	1295x800	1200x1000x1985	386	NRG-7080R, NER..., NEE...
PPK100G150	100	150	1000x1132	500x1286x2101	706	NRG-7080R, NER..., NEE...
PPK100G300	100	300	1000x1130	500x1286x2235	775	NRG-7080R, NER..., NEE...
PPK200	200	300	1200x1200	2070x2100x3230	2360	NER..., NEE...

Hydraulic presses (horizontal)

Series PG...
Capacity — 300 ton
Pressure — 147 Bar

— Designed for mounting and dismantling, removing and pressing, straightening and bending parts and other types of work in different industry branches;
— Can be used to test the valves of big diameters;
- Installing PG300 is intended for perception of thrust capacitys up to 300 tonnes between fixed cross arm and movable cross arm when performing technological operations. Has two power bars, held on fixed supports (cross arms). Movable cross arm is moved by hydraulic cylinder back and forth along the power strokes. Speed - 300 mm/min.
In the extended position, the cross arm is fixed with two nuts for subsequent perception of thrust capacitys.

Model: PG300



Model	Capacity, ton	Cross arm movement, mm	Workspace size, mm (B1xH1)	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
PG300	300	1600	1800x1100	1880x4750x650	4400	NEE-2,8I40T1

Hydraulic crimping presses

Series PN..., PNA...
Capacity — 7-100 ton
Crimping range — 16-700 mm^2

Presses are designed for end bits, sleeves, and various tension, connecting, tap-off and flat clamps during installation of wires and cables of transmission lines and outdoor switchgears.
— Models PNA are self-contained and have built-in pump;
— Models PN are designed to operate from an external source of pressure (700 Bar);
— Presses PN50M, PN100 are equipped with a safety valve that protects against overloads.

Model: PN100, PN50M

Model: PNA12300

Model	Capacity, ton	Crimping range, mm^2	Crimping type	Hexagon dies, mm	Round dies, mm		Stroke, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
					Aluminium muffs (series A)	Steel muffs (series B)					
PNA07120	7	16-120		—	—	—	25	100	90x650x145	7,6	built-in
PN07120	7	16-120		—	—	—	25	100	70x250x90	3,2	NRG-7004A
PNA12300	12	16-300		—	—	—	25	150	106x650x176	8,8	built-in
PN12300	12	16-300		—	—	—	25	150	73x260x100	3,9	NRG-7004A
PN50M*	56	16-500		13,8-50	18-56	15-31,5	35	275	161x264x349	18,9	NRG-7020R HER-1,6I10T1 NBR-1,0I4-1
PN100*	100	50-700		13,8-65	18-67	15-66	30	462	180x305x330	34,7	

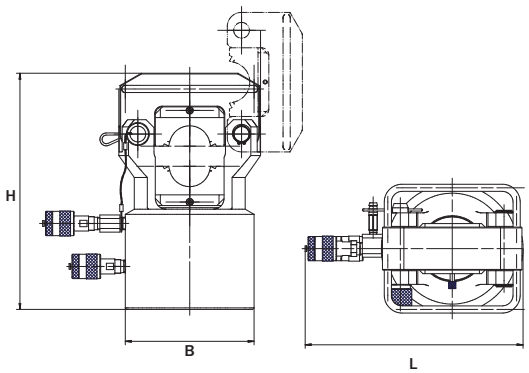
* — double-acting presses

Crimping type	Die model	Press
S	MSHSPN50M, where S – up to 50 mm	PN50M
	MSHSPN100, where S - up to 65 mm	PN100
D	ADPN50M, where D - up to o 56 mm	PN50M
	SDPN50M, where D - up to 31,5 mm	
	ADPN100, where D - up to 67 mm	PN100
	SDPN100, where D - up to 66 mm	

Dies for crimping table selection

Letters in the dies no:
A – for crimping of aluminium lugs and muffs
C – for crimping steel muffs
MSH – hexagon die for crimping aluminum, copper and steel muffs

In photo PN100 in operation



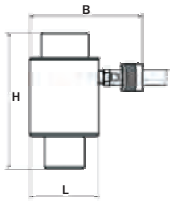
Hydraulic Knockout Punch

Series PPL...
Capacity — 10 ton
Pressure — 700 Bar

Model: PPL15

Hydraulic knockout punch are designed for punching holes in sheet material with a diameter up to 115.5 mm with maximum accuracy. Hole punching takes minimal time. To bypass the traction stud you must first drill a hole.

The set includes a high-pressure hose 1 meter and manual pump - 0.4 liter.



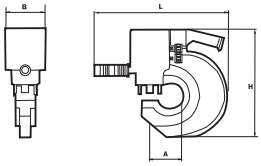
Model	Capacity, ton	Punching Dia, mm	Punching Thickness, mm	Weight, kg	Recommended pump
PPL10	10	21,8; 27,6; 34,1; 42,7; 48,7; 60,5	3,2	14	NRG-7004A
PPL15	10	21,8; 27,6; 34,1; 42,7; 48,7; 60,5; 76,1; 88,9; 115,5	3.2	22	NRG-7004A

Hydraulic Punch

Series PP...
Capacity — 32-85 ton
Punching Diameter — 10,5-32 mm

Model: PP2416

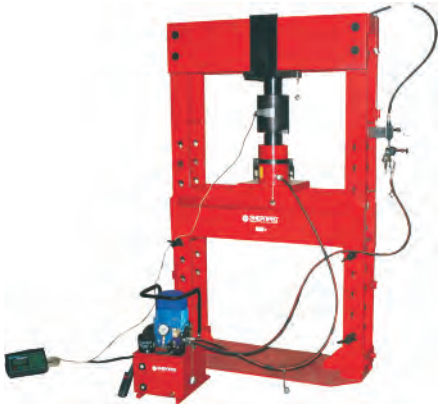
— Designed to punch holes in the corners and channels with maximum accuracy;
— Allows you to significantly reduce the time of receipt of the hole compared to drilling.
— Time of punching a hole is 6 seconds;
— Open work area provides for easy installation and removal of workpieces;
— Double-acting hydraulic cylinder used in the design provides rapid performance of the cycle starting from hole punching to the punch return back to the starting position.



Model	Capacity, ton	Punching diameter, mm	Punching Thickness, mm	Max. Center Depth, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
PP 2410	32	10,5; 13,5; 17,5; 20,5	10	70	95x210x356	13	NEE-0,8G10T1
PP2416-07	47	18; 20; 22; 24	16	70	113x429x330	21	
PP2416-11	47	18; 20; 22; 24	16	110	113x429x330	28	
PP 2420	60	18; 20; 22; 24	20	110	155x467x378	34	
PP3222	85	26; 28; 30; 32	22	110	158x409x590	34	

Cylinder test stand

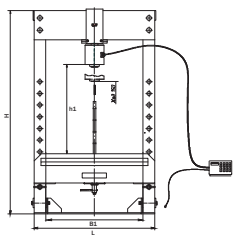
Series SDI. . .
Capacity — 100 ton



Model: SDI100

The stand is designed to test the cylinders with Capacity up to 100 ton and determine the exact capacity developed by the cylinder under test. Also the stand can be used as press;

— When tested in static press hydraulic cylinder creates a load on the test cylinder that is perceived by the integrated strain sensor and displays the values of load on the controller;
— When tested in the dynamics the test cylinder transfers the load to the load through the strain sensor to the press hydraulic cylinder, which while moving drains fluid through the adjustment and safety valve, allowing the load to be perceived by the strain sensor in dynamics and displayed on the controller.

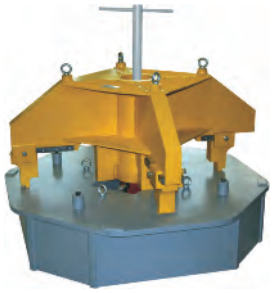


Model	Capacity, ton	Workspace size, mm (B1xh1)	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SDI 100	109,8	1000x890	495x1291x2085	745	NEE-1,6I10T(F)1

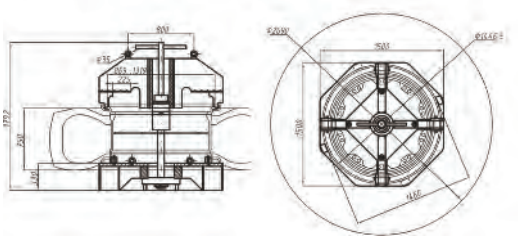
Press for mounting and dismounting of dump truck wheels KOMATSU-HD785

Series PRK...
Capacity — 100 ton
Stroke — 100-150 mm
Pressure — 700 Bar

Designed for mounting and dismounting of dump truck wheels KOMATSU-HD785.



Model: PRK 100



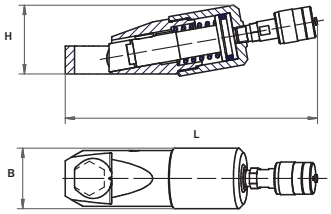
Model	Capacity, ton	Stroke, mm	Ambient temperature range, °C	Dimensions (BxLxH), mm	Weight, kg
PRK100	100	150	от -30 до +40	1500x1500x1792	1850

Hydraulic nut splitters

Series G...
Capacity — 10-35 ton
Nut range — 19-60 mm

— Nut splitters ensure easy and safe removal of damaged or corroded nuts (one nut removal takes 2 minutes);
— They do not damage the surface of the threaded bolt or stud;
— Cylinder placed at an angle towards the work surface gives the opportunity to work with nuts, located not only on the flanges, but also nuts, located at a distance from the edge of a flat surface;
— Reliable design and ease of use.

Model: G2432, G1924, G2432, G3241, G4150, G5060

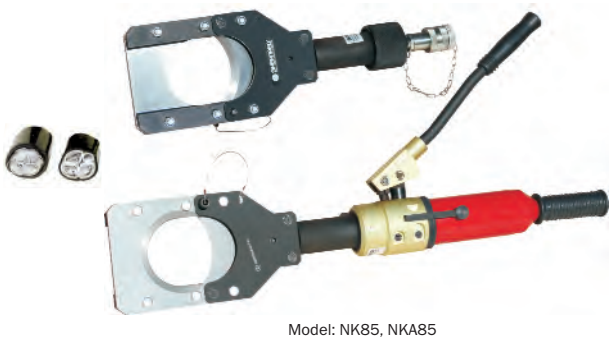


Model	Capacity, ton	Nuts		Stroke, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
		Nut range, mm	Range of threads				
G1924	10	19...24	M12...M16	15	55x247x68	2,5	NRG-7004A
G2432	14	24...32	M16...M24	22	65x271x76	3,5	NRG-7004A
G3241	20	32...41	M22...M27	23	80x300x90	5,1	NRG-7004A
G4150	23	41...50	M27...M36	23	85x309x92	5,3	NRG-7004A
G5060	35	50...60	M36...M42	27	102x343x113	9,3	NRG-7004A

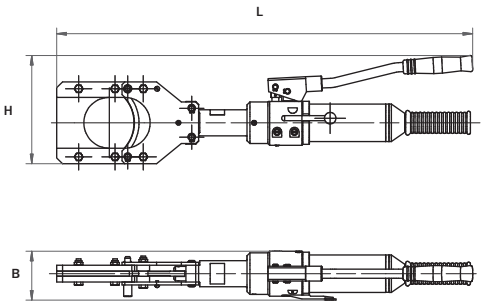
Hydraulic cable cutters

Series NK..., NKA...
Capacity — 3 ton
Overcut cable diameter — 85 mm

The optimal choice for cutting of cable with aluminum and copper conductors, including armored and stranded wires of the same material, except cable and wire with steel core;
— Hinged bracket allows you to easily place the cable in the cutting zone;
— Model NKA85 is able to rotate the operating head to 360°.



Model: NK85, NKA85

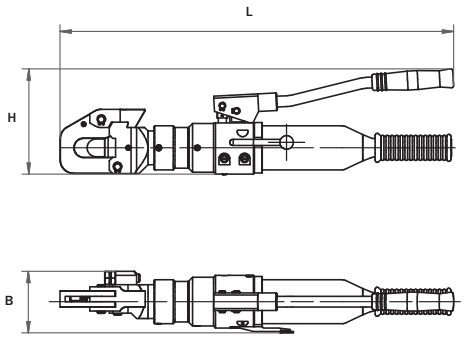


Model	Capacity, ton	Overcut cable diameter, mm	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
NK85	3	85	90	70x464x142	6,2	NGR-7010
NKA85	3	85	90	85x717x188	8,5	Built-in

Hydraulic general purpose cutters

Series NU..., NUA...
Capacity — 5-35 ton
Overcut diameter — 38 mm

Designed to cut a wide range of materials: bars with square, round and hexagonal sections, fittings, aluminum and copper wire.
— Hinged bracket allows you to easily place the cable in the cutting zone;
— Models with built-in pumps have the ability to rotate the operating head to 360 ° which allows operation in the most remote places.
— Cutters NUA28A are designed to cut more durable material, with a hardness of up to 309 units Brinell and ultimate stress limit of up to 109 kg/mm^2.

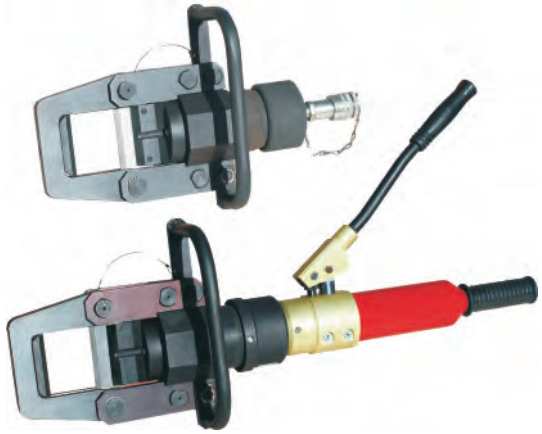


Model: NUA16, NU16, NUA28A, NU20

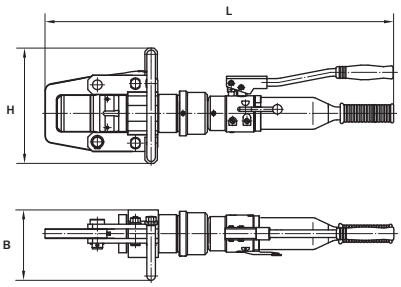
Model	Capacity, ton	Overcut diameter, mm		Capacity on the handle, kgf	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
		Steel	Aluminium/Copper				
NU16	5	16	25/22	—	77,5x282x95	4	NRG-7004A
NU20	10	20	30	—	65x348x94,5	6,2	NRG-7004A
NU28	22	28	38	—	104x332x133	8,3	NRG-7020
NU28A	35	28	28	—	139x460x176	19,8	NRG-7010, NEE-0,8G10T1...
NUA16	5	16	25/22	20	91x582x156	7	built-in
NUA28	22	28	38	20	110x634x172	11,4	built-in
NUA28A	35	28	28	20	139x717x176	22,1	built-in

Hydraulic rope cutter

Series RT..., RTA...
Capacity — 22 ton
Overcut diameter — 50 mm



Designed for cutting steel ropes, hoses, with a maximum diameter of 50 mm and can be used during construction, installation and other types of work.
— Hinged bracket allows you to easily place the cable in the cutting zone;
— Spring stroke retraction to the starting position. Use of the product for cutting electric wires and cables under voltage is not allowed.



Model: RT50, RTA50

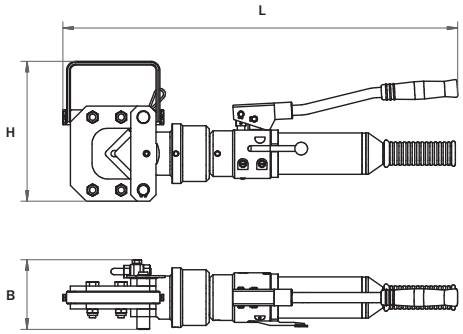
Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Overcut diameter, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
RT50	22	55	172	50	148x422x260	12,8	NRG-7010
RTA50	22	55	172	50	176x724x260	13,5	built-in

Corner cutters

Series NP..., NPA...
Capacity — 17,2-22,3 ton
Max. corner size — 75x75x7 mm

Model: NP50, NPA50

Cutters are designed for cutting rolled equilateral and nonequilateral angle steel during construction, installation, dismantling, repair and other work;
— Guillotine operating principle enables high-quality and clean cut;
— Hinged bracket allows you to easily place the cable in the cutting zone.



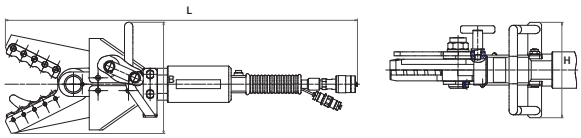
Model	Capacity, ton	Max. corner sizes, mm	Blade movement, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
NP50	22,3	50x50x6	25	110x308x221	8,7	NRG-7004A
NPA50	22,3	50x50x6	25	110x623x221	12	built-in
NPA75	17,2	75x75x7	65	181x767x221	15	built-in

Pipes and steel sheets cutters

Series NRT...
Capacity — 20,2 ton
Overcut pipe — 70 mm
Cut length — 110 mm

Model: NRT70

Cutters are designed for cutting pipes with wall thickness up to 3 mm and sheets of 5 mm thick and of no more than150 mm wide.



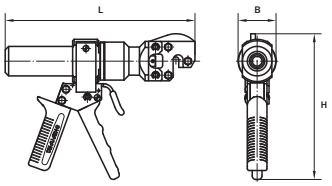
Model	Capacity, ton	Oil working capacity, cm^3	Overcut pipe diameter, mm	Cutting length, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
NRT70	20,2	152	70	110	194x661x226	12	NRG-7010

Hydraulic pistol cutters

Series NA...
Capacity – 2 ton

Model: NA16, NA8

— Cutters effectively cut steel bars up to 8 mm, aluminum and copper wire with a diameter of 14 mm. High density construction of the model NA16 allows cutting trolley wires with a diameter of 16 mm.
— Can be used to remove the rope locking and seal devices of cars and containers. Cutters are indispensable when working in tight and fire dangerous spaces.
— The models have the ability to rotate the operating head to 360 ° which allows operation in the most remote places.



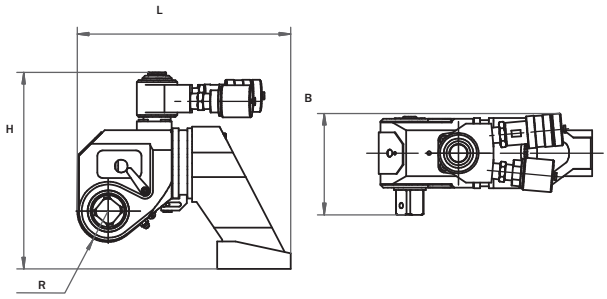
Model	Capacity, ton	Overcut diameter, mm			Capacity on the handle, kgf	Dimensions (BxLxH), mm	Weight, kg
		Steel	Aluminium/copper	Copper-clad steel conductor			
NA8	2	8	8	—	17	54x267x196	2,0
NA16	2	8	8/14	16	17	54x287x215	2,25

Hydraulic torque wrenches

Series GG...
Max. torque — 600 kgm
Bolt sizes — 22-150 mm

Model: GG400, GG1600T

Designed for screwing and unscrewing nuts, bolts and other fasteners. Quick change of square drive position provides change of the direction of rotation (screwing, unscrewing). The design of lightweight high-strength alloys ensures high power density. Mount support arm in the model GG400 rotating to 360°, allows quick and easy selecting of any position of the reference surface. Various sizes of coupling wrench heads. Jointed radiaxial working fluid intake lets you target high-pressure hose in the desired direction. When working with the NEA pump type (with built-in timing relay) the torque wrench may work automatically.



Electric torque wrenches JUWEL p.34
Pneumatic torque wrenches JUWEL p.35

Model GG400: number of positions of the support arm setting - 32

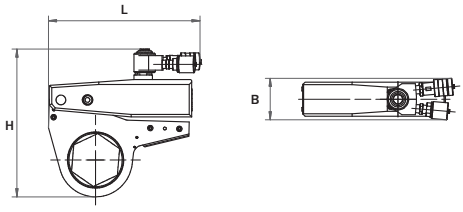
Model	Torque, max, kgm	Square drive, inch	Socket size, mm	R, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
GG400	386	1	22-110	32	107x233x214	6,2	NEA
GG800T	827	1½ (1,5)	32-150	40	137x361x189	11,2	NEA
GG1100T	1158	1½ (1,5)	32-150	45	137x405x196	13,5	NEA
GG1600T	1602	1½ (1,5)	32-150	48	168x421x201	15,2	NEA
GG2000T	2024	2	32-150	50	162x429x216	17,5	NEA
GG2800T	2868	2	65-145	55	197x404x305	25,3	NEA
GG6000T	6000	2½ (2,5)	65-145	71	232x514x305	49	NEA

Hydraulic cassette torque wrenches

Series GKG...
Max. torque — 2420 kgm
Bolt sizes — 65-130 mm

Model: GKG500

Used when working in a confined space (flanged connections), when a stud or bolt is significantly above the nut. Cassettes can be easily installed and removed without the use of special tools. Upon request they are completed with a set of interchangeable heads according to the range of bolt sizes. Jointed radiaxial working fluid intake lets you target high-pressure hose in the desired direction regardless of the pump position. When working with the NEA pumping station type (with built-in timing relay) the torque wrench may work automatically.



Model	Torque, max, kgm	Hexagon cassette sizes, mm	Socket size, mm	Cassette radius R, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
GKG500	500	65	60-27	60	87x250x246	6,7	NEA
		80	75-55	72	87x250x254	8,6	NEA
GKG1000	1000	95	90-36	76	87x314x303	13,6	NEA
		100	95-20	82,5	87x314x310	14,3	NEA
GKG1500	1500	120	110-55	102	87x355x358	21	NEA
GKG1800	1000	85	80-65	84	87x383x352	24,3	NEA
	1500	105	100-80	94	87x383x362	24,5	NEA
	1830	130	120-100	106	87x383x374	24,9	NEA
GKG2400	1000	85	80-65	84	87x383x352	24,3	NEA
	1500	105	100-80	94	87x383x362	24,5	NEA
	2420	130	120-100	106	87x383x374	24,9	NEA

Torque wrensh model	Cassette model	Sockets
GKG500	SB6541, 65 mm	GS6527, 27 mm
		GS6530, 30 mm
		GS6532, 32 mm
		GS6536, 36 mm
		GS6541, 41 mm
		GS6546, 46 mm
		GS6550, 50 mm
		GS6555, 55 mm
		GS6560, 60 mm
	SB8055, 80 mm	GS8055, 55 mm
		GS8060, 60 mm
		GS8065, 65 mm
		GS8070, 70 mm
		GS8075, 75 mm
GKG1000	SB9560, 95 mm	GS9536, 36 mm
		GS9541, 41 mm
		GS9546, 46 mm
		GS9550, 50 mm
		GS9555, 55 mm
		GS9560, 60 mm
		GS9565, 65 mm
		GS9570, 70 mm
		GS9575, 75 mm
		GS9580, 80 mm
		GS9585, 85 mm
		GS9590, 90 mm
	SB1001000, 100 mm	GS201000, 20 mm
		GS361000, 36 mm
		GS411000, 41 mm
		GS461000, 46 mm
		GS501000, 50 mm
		GS551000, 55 mm
		GS601000, 60 mm
		GS651000, 65 mm
		GS701000, 70 mm
		GS751000, 75 mm
		GS801000, 80 mm
		GS851000, 85 mm
		GS901000, 90 mm
		GS951000, 95 mm

Torque wrench model	Cassette model	Sockets
GKG1500	SB1201500, 120 mm	GS120751500, 75 mm
		GS120801500, 80 mm
		GS120851500, 85 mm
		GS120901500, 90 mm
		GS120951500, 95 mm
		GS1201051500, 105 mm
GKG1800	SB851800, 85 mm	GS85651800, 65 mm
		GS85701800, 70 mm
		GS85751800, 75 mm
		GS85801800, 80 mm
	SB1051800, 105 mm	GS105801800, 80 mm
		GS105851800, 85 mm
		GS105901800, 90 mm
		GS105951800, 95 mm
		GS1051001800, 100 mm
	SB1301800, 130 mm	GS130751800, 75 MM
		GS1301001800, 100 mm
		GS1301051800, 105 MM
		GS1301101800, 110 mm
		GS1301151800, 115 mm
		GS1301201800, 120 mm
GKG2400	SB852400, 85 mm	GS85652400, 65 mm
		GS85702400, 70 mm
		GS85752400, 75 mm
		GS85802400, 80 mm
	SB1052400, 105 mm	GS105802400, 80 mm
		GS105852400, 85 mm
		GS105902400, 90 mm
		GS105952400, 95 mm
		GS1051002400, 100 mm
	SB1302400, 130 mm	GS1301002400, 100 mm
		GS1301102400, 110 mm
		GS1301152400, 115 mm
		GS1301202400, 120 mm

Model: Cassette (series SB) with socket (series GS)

Electric torque wrenches JUWEL

Series TES..., TEWS...
Straight and angled
Torque — 150-12000 Nm

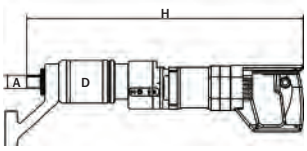
Designed to tighten nuts and bolts. Comfortable and lightweight electric torque wrenches JUWEL have high productivity and precision torque, making this an indispensable tool in repair and installation work.

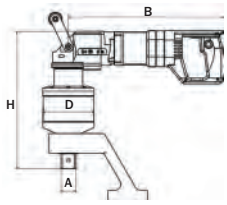
— Angled form of electric torque wrenches of the series TEWS ... is very useful when working in confined spaces or when the bolting is located in remote places;
— Operate with the electrical supply of 220 volts - no need to acquire and use the pumping station and high pressure hoses;
— Accuracy of torque - + / -3.5%;
— All wrenches are equipped with speed control. Speed modes are easily switched from one to another;
— High impact support arm has a coherent and durable design and can be rotated by 360°;
— Safety clutch, preventing overload, protects operating mechanisms;

Models: TES-104, TEWS-604

The package includes:

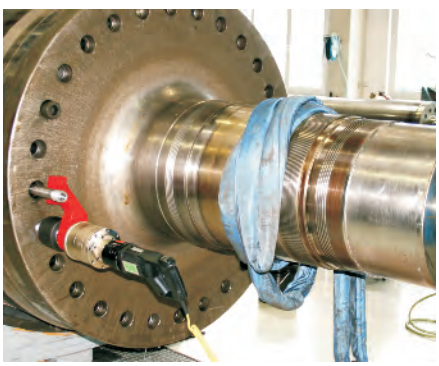
— Support arm;
— Table of torques:
— Test certificate;
— Manual;
— Stainless steel case with a seat for the wrench





	Model	Torque, Nm	Square drive, inch	D, mm	H, mm	B, mm	Idling speed, rpm	Support arm weight, kg	Weight*, kg
Straight	TES-84	150-850	¾;1	88	535/540	—	16	1,6	8,2/3,4
	TES-104	280-1200	1	88	540	—	14	1,6	8,2
	TES-244	360-2500	1	88	570	—	10	1,6	9,5
	TES-354	360-3500	1½	88	580	—	9	3,5	10,4
	TES-504	700-5000	1½	88	630	—	3	3,5	12,6
	TES-604	816-6000	1½	130	615	—	6,5	5,7	15,9
	TES-904	1024-10000	1½	130	645	—	2,5	5,7	18,9
	TES-1205	1400-12000	1½	172	660	—	2	5,7	29
Angled	TEWS-84	150-850	¾;1	88	270/275	395	16	1,6	9,5/9,7
	TEWS-104	280-1200	1	88	275	395	14	1,6	9,9
	TEWS-244	360-2500	1	88	305	395	10	1,6	11,5
	TEWS-354	360-3500	1½	88	315	395	9	3,5	12,3
	TEWS-504	700-5000	1½	88	365	395	3	3,5	14,4
	TEWS-604	816-6000	1½	130	350	395	6,5	5,7	18
	TEWS-904	1024-10000	1½	130	390	395	2,5	5,7	20,8
	TEWS-1205	1400-12000	1½	172	400	395	2	5,7	31

*without support arm



Pneumatic torque wrenches JUWEL

Series TL..., TLW...
Straight and angled
Torque — 40-12000 Nm

Model: TLW-240

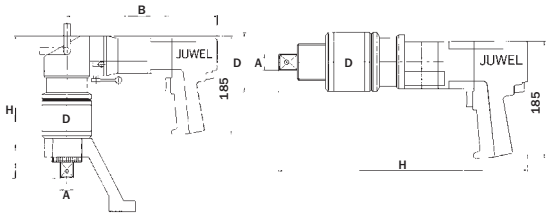
Model: TL-350

Designed for tightening and loosening nuts, bolts and other fasteners.

— Pneumatic torque wrenches have exceptional characteristics - high torque, low weight, tightening stability, low level of noise;
— Angled form of electric torque wrenches of the series TLW ... is very useful when working in confined spaces or when the bolting is located in remote places;
— Configuration and control of the torque is performed by pressure adjustment on the air-preparation unit;
— Accuracy of torque - + / -3.5%; Air consumption at maximum power - 580 l/min.;
— All wrenches are equipped with speed control. Speed modes are easily switched from one to another;
— High-impact support arm has a coherent and durable design and can be otated by 360°;
— Safety clutch, preventing overload, protects operating mechanisms;

The package includes:

— Air-preparation unit;
— Hose connecting the air preparation unit and the wrench;
— Support arm;
— Table of torques;
— Test certificate;
— Manual;
— Stainless steel case with a seat for the wrench



	Model	Torque, Nm	Square drive, inch	D, mm	H, mm	B, mm	Idling speed, rpm	Support arm weight, kg	Weight*, kg
Straight	TL-80	40-880	¾;1	88	360	—	19	1,6	6
	TL-100	40-1200	1	88	360	—	19	1,6	7
	TL-240	70-2500	1	88	410	—	7,5	1,6	7
	TL-350	70-4000	1½	88	410	—	7,5	3,5	8
	TL-500	100-5000	1½	88	460	—	2	3,5	9
	TL-600	400-6000	1½	130	420	—	2,8	5,7	12
	TL-900	450-10000	1½	130	460	—	1,8	5,7	16
	TL-1200	600-12000	1½	175	470	—	1,8	5,7	18
Angled	TLW-80	40-880	¾;1	88	270	250	19	1,6	7
	TLW-100	40-1200	1	88	270	250	19	1,6	8
	TLW-240	70-2500	1	88	300	250	7,5	1,6	8
	TLW-350	70-4000	1½	88	320	250	7,5	3,5	9
	TLW-500	100-5000	1½	88	350	250	2	3,5	10
	TLW-600	400-6000	1½	130	340	250	2,8	5,7	13
	TLW-900	450-10000	1½	130	380	250	1,8	5,7	17
	TLW-1200	600-12000	1½	175	390	250	1,8	5,7	19

*without support arm

Hydraulic Bolt Tensioners

Series DTG...
Capacity — 9-615 ton
Pressure — 600-700 Bar

Designed for screwing and unscrewing nuts with calibrated capacity in heavy duty fasteners when performing installation and dismantling and repair work in all industry branches.
The work of the bolt tensioner is based on pre-stretching of a stud (bolt) with a capacity equal to the required capacity of screw connection fastening and the subsequent tightening of nuts without the application of capacity against stop into the support surface.
Bolt tensioner can be grouped and powered by a single pressure source through multi-way valves, which is the essential solution when you need to produce a synchronized tightening of the large number of bolted joints.
Complete with removable holders and adapters according to the operating range.

Model: DTG600M

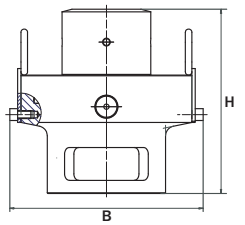
Model: DTG80

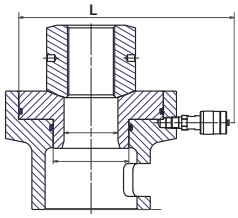
Advantages of Bolt tensioners:

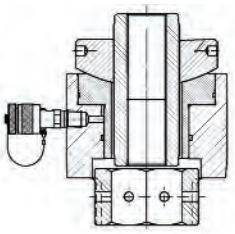
Most conventional tools and devices that are used to tighten screw connections when working with long bolts (studs) can cause them to twist and thus complicate the problems for which they were created. These are the offset flange leaks, damaged seals that cause unplanned downtime for troubleshooting.

In all cases, when tightening screw connections requires maximum accuracy, reliability and dosed torque, the best option is to use a hydraulic bolt tensioner that solves all these problems.

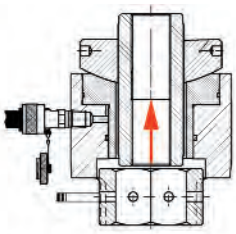
Bolt tensioner range of use: flanged pipe joints, heat exchangers, pressure vessels, rolling mills, presses, motors, crushers, diesel engines, valves, turbines, compressors, and more.



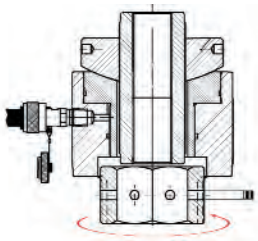




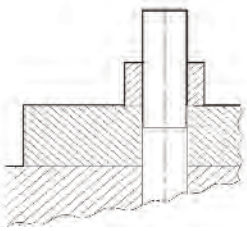
Nut is screwed by hand all the way into the supporting surface, and then the holder is set on the nut. Interchangeable adapter is screwed onto the exposed end of the stud. Length of adapter screwing with the stud must not be less than the diameter of the latter.



Pressure is applied to the cavity of the cylinder, and creates a capacity through which the stud is pulled.



Nut is screwed by hand all the way in without effort, and the pressure is released.



The cylinder is removed.

Model	Capacity, ton	Nominal pressure, Bar	Oil working capacity, cm^3	Nut range, mm	Size of thread, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
DTG10-24	9	700	10	36	M24x1,5	70x178,5x138	2,5	NRG-7004
DTG20	20	700	29	41, 46, 50	M27x2, M30x2, M33x2	104x184x165	8,8	NRG-7004
DTG30	29	700	40	55, 60, 65	M36x3, M39x3, M42x3	120x200x158	12,6	NRG-7004
DTG80	81,7	700	149	65, 95	M42x3, M64x4	190x270x212	31	NRG-7004
DTG85M	87	700	122,5	65, 75	M42, M48	142x233x436	20	NRG-7004
DTG125	125,5	600	246,2	round nut	M52x3	254x300x280	33	NRG-7004
DTG200	197	700	552,2	round nut	M72x4	294x338x280	45,6	NRG-7010
DTG600M	615	600	1043	150	M100x6	290x453x853	251	NRG-7020R

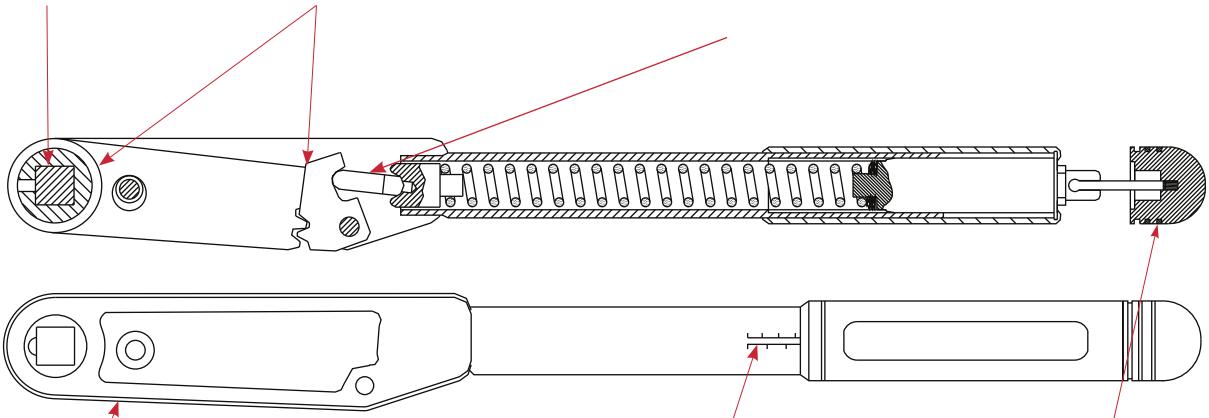
The company "Enerpred" accepts orders for the development and manufacture of hydraulic bolt tensioners on individual size and characteristics of the customer.

Mechanical torque wrenches

CONVENIENCE OF USE
Removable square drive with hinge mount. Guaranteed accuracy at any hand position.

RELIABILITY
Wear-resistant, rugged design. The initial level of accuracy + / - 3% is maintained for 10,000 operations.

SAFETY
The gradual increase of the torque to its set point is determined visually, by the sound and the capacity applied.



PORTABILITY
The width of the wrench head is not greater than the width of the impact head. The wrenches can be used in confined spaces.

ACCURATE TORQUE SETTING
Large, clear graduations on the torque scale. Units of measure: Nm, Kgm, lbf/in, lbf/ft.

CONVENIENCE OF USE
Fast and safe torque adjustment protected from accidental changes.

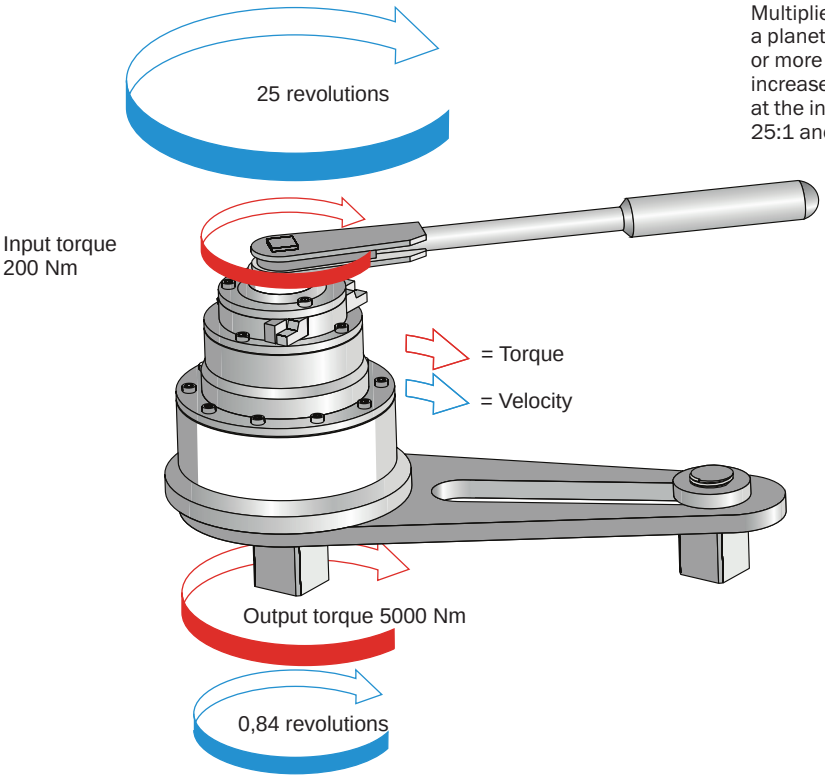
3/8” and 1/2” square drive

Model	Ratchet	Torque range				Square drive, inch	Length, mm	Weight, kg
		Nm	Kgm	Lbf/in	Lbf/ft			
PVT-100A	-	2,5-11	0,3-1,2	20-100	2-8	3/8	318	0,56
PVTR-100	+	2,5-11	0,3-1,2	20-100	2-8	3/8	334	0,65
PVT-300A	-	5-34	0,5-3,5	40-300	4-24	3/8	422	0,60
PVTR-300	+	5-34	0,5-3,5	40-300	4-24	3/8	443	0,75
PVTR-600	+	12-68	1,2-7	100-600	10-50	3/8	499	1,10
PVT-600A	-	12-68	1,2-7	100-600	10-50	1/2	476	1,02
PVT-1200A	-	25-135	3-14	200-1200	20-100	1/2	546	1,62
PVTR-1200	+	25-135	3-14	200-1200	20-100	1/2	555	2,00
PVT-2000A	-	50-225	5-23	400-2000	40-160	1/2	597	2,38
PVTR-2000	+	50-225	5-23	400-2000	40-160	1/2	626	2,49
PVT-3000A	-	70-330	7-35	600-3000	50-250	1/2	825	3,12
PVTR-3000	+	70-330	7-35	600-3000	50-250	1/2	840	4,00

3/4” and 1” square drive

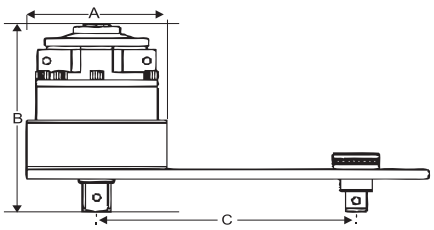
Model	Ratchet	Torque range			Square drive, inch	Length, mm	Weight, kg
		Nm	Kgm	Lbf/ft			
PVT-5000	-	140-560	14-57	100-410	3/4	1130	5,90
PVTR-5000	+	140-560	14-57	100-410	3/4	1210	6,58
PVT-7200	-	200-810	22-82	150-600	3/4	1181	6,50
PVTR-7200	+	200-810	22-82	150-600	3/4	1261	7,00
PVT-8400	-	480-940	49-95	350-700	1	1397	11,30
PVTR-8400	+	480-940	49-95	350-700	3/4	1471	12,70
PVT-12300	-	700-1400	70-140	500-1000	1	1505	15,50
PVTR-12300	+	700-1400	70-140	500-1000	1	1505	17,00
TQW-10	-	1015-1900	105-195	750-1400	1	1356	16,50
TQW-R-10	+	1015-1900	105-195	750-1400	1	1356	18,00
TQW-11	-	1350-2700	135-275	1000-2000	1	1498	19,50
TQW-R-11	+	1350-2700	135-275	1000-2000	1	1498	20,60

Mechanical torque multipliers



Multipliers with manual transmission have a planetary gear system, which can have one or more stages. Each step produces a five-fold increased torque developed by the operator at the input, providing the gear ratio of 5:1, 25:1 and 125:1.

In photo: PVTR-1200 and multiplier BTM-2/25

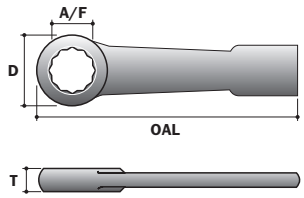


ADVANTAGES:

— Accuracy better than ± 4%.
— Precision tightening and loosening of all heavy duty fasteners.
— Low energy input with high torque transfer.
— Higher capacity multipliers are furnished with strong ratchets (Anti-wind up mechanism) allowing jobs to be performed easily, efficiently, and safely.
— Precision Manufacturing ensures long life and premier quality.
— A groove on output Square breaks if over loaded in excess of 20% of its capacity.
— Highest possible load factor is guaranteed due to design and use of forged components.

Model	Capacity		Gear ratio	Input square, inch	Output square, inch	A, mm	B, mm	C min, mm	C max, mm	Weight, kg
	Nm	Lbf/ft								
BTM-2/25	1700	1250	25	1/2	1	115	151	75	164	7,00
BTM-5	2700	2000	5	3/4	1	136	135	89	260	8,40
BTM-5/25	2700	2000	25	1/2	1	136	163	89	260	11,50
BTM-6	3400	2500	5	3/4	1 1/2	136	149	105	260	9,20
BTM-6/25	3400	2500	25	1/2	1 1/2	136	176	105	260	12,00
BTM-7	6000	4500	5	3/4	1 1/2	168	174	115	310	18,00
BTM-7/25 (AWUR)	6000	4500	25	3/4	1 1/2	168	226	115	310	22,00
BTM-9/25 (AWUR)	9500	7000	25	3/4	1 1/2	195	256	150	350	33,00
BTM-9/125 (AWUR)	9500	7000	125	1/2	1 1/2	195	301	150	350	35,50
BTM-11/25 (AWUR)	17000	12500	25	3/4	2 1/2	220	360	164	480	52,00
BTM-11/125 (AWUR)	17000	12500	125	1/2	2 1/2	220	404	164	480	57,00
BTM-13/125 (AWUR)	47500	35000	125	3/4	2 1/2	315	550	164	480	80,00

Straight slugging wrenches



A/F Dimensions across flats
D Maximum width of head
T Maximum thickness of ring
OAL Nominal overall length

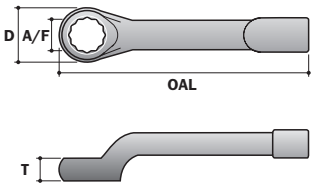
Bihexagon

A / F, mm	Model	T, mm	D, mm	OAL, mm	Weight, kg
22	MSW22	18.0	48.0	182.0	0.610
23	MSW23	18.0	48.0	182.0	0.610
24	MSW24	18.0	48.0	182.0	0.610
25	MSW25	18.0	48.0	182.0	0.590
26	MSW26	18.0	48.0	182.0	0.590
27	MSW27	18.0	48.0	182.0	0.590
28	MSW28	18.0	54.0	185.0	0.580
29	MSW29	18.0	54.0	185.0	0.560
30	MSW30	18.0	54.0	185.0	0.550
31	MSW31	18.0	54.0	185.0	0.540
32	MSW32	18.0	54.0	185.0	0.550
33	MSW33	18.0	54.0	185.0	0.540
34	MSW34	18.0	54.0	185.0	0.540
35	MSW35	18.0	54.0	185.0	0.540
36	MSW36	22.0	64.0	215.0	1.060
37	MSW37	22.0	64.0	215.0	1.060
38	MSW38	22.0	64.0	215.0	1.040
39	MSW39	22.0	64.0	215.0	1.030
40	MSW40	22.0	64.0	215.0	1.030
41	MSW41	22.0	64.0	215.0	1.030
42	MSW42	22.0	64.0	215.0	1.020
43	MSW43	25.0	76.0	238.0	1.480
44	MSW44	25.0	76.0	238.0	1.470
45	MSW45	25.0	76.0	238.0	1.430
46	MSW46	25.0	76.0	238.0	1.400
47	MSW47	25.0	76.0	238.0	1.380
48	MSW48	25.0	80.0	240.0	1.360
49	MSW49	25.0	80.0	240.0	1.350
50	MSW50	25.0	80.0	240.0	1.340
51	MSW51	25.0	80.0	240.0	1.400
52	MSW52	25.0	80.0	240.0	1.400
54	MSW54	25.0	80.0	240.0	2.350
55	MSW55	28.0	88.0	262.0	2.320
56	MSW56	28.0	88.0	262.0	2.325
57	MSW57	28.0	88.0	262.0	2.310
58	MSW58	28.0	88.0	262.0	2.300
59	MSW59	28.0	94.0	265.0	2.250
60	MSW60	28.0	94.0	265.0	2.140
61	MSW61	28.0	94.0	265.0	2.140
62	MSW62	28.0	94.0	265.0	2.500
65	MSW65	30.0	104.0	285.0	2.710
67	MSW67	30.0	104.0	285.0	2.770
70	MSW70	35.0	110.0	315.0	3.410
73	MSW73	35.0	110.0	315.0	3.410
75	MSW75	35.0	110.0	315.0	3.400

A / F, mm	Model	T, mm	D, mm	OAL, mm	Weight, kg
76	MSW76	35.0	110.0	315.0	3.370
80	MSW80	38.0	126.0	340.0	4.860
85	MSW85	38.0	126.0	340.0	4.400
86	MSW86	38.0	126.0	340.0	4.300
90	MSW90	42.0	152.0	400.0	4.650
95	MSW95	42.0	152.0	400.0	4.360
100	MSW100	42.0	152.0	400.0	7.490
105	MSW105	50.0	172.0	410.0	10.580
110	MSW110	50.0	172.0	435.0	11.670
115	MSW115	50.0	172.0	435.0	10.760
120	MSW120	56.0	194.0	475.0	16.070
125	MSW125	56.0	194.0	475.0	16.960
130	MSW130	60.0	205.0	505.0	16.850
135	MSW135	60.0	205.0	510.0	16.550
140	MSW140	65.0	230.0	565.0	19.000
145	MSW145	65.0	230.0	565.0	18.810
150	MSW150	65.0	230.0	565.0	18.550
155	MSW155	65.0	230.0	565.0	18.350
160	MSW160	70.0	270.0	635.0	29.900
165	MSW165	70.0	270.0	635.0	29.700
170	MSW170	70.0	270.0	635.0	29.250
175	MSW175	70.0	270.0	635.0	28.850
180	MSW180	70.0	270.0	635.0	28.500
185	MSW185	75.0	295.0	680.0	35.600
190	MSW190	75.0	295.0	680.0	35.400
195	MSW195	75.0	295.0	680.0	35.200
200	MSW200	75.0	295.0	680.0	34.900
205	MSW205	75.0	295.0	680.0	34.700
210	MSW210	80.0	325.0	725.0	50.850
215	MSW215	80.0	325.0	725.0	50.550
220	MSW220	80.0	325.0	725.0	50.100
225	MSW225	80.0	325.0	725.0	49.800
230	MSW230	80.0	325.0	725.0	49.500

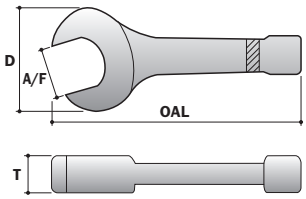
POWERMASTER

Offset slugging wrenches



A/F Dimensions across flats
D Maximum width of head
T Maximum thickness of ring
OAL Nominal overall length

Open-jaw slugging wrenches



A/F Dimensions across flats
D Maximum width of head
T Maximum thickness of ring
OAL Nominal overall length

Bihexagon

A / F, mm	Model	T, mm	D, mm	OAL, mm	Weight, kg
24	MOSW24	20.0	42.0	250.0	1.000
27	MOSW27	25.0	52.0	270.0	1.060
30	MOSW30	25.0	52.0	270.0	1.150
32	MOSW32	25.0	52.0	270.0	1.290
34	MOSW34	25.0	52.0	270.0	1.640
35	MOSW35	32.0	68.0	312.0	1.550
36	MOSW36	32.0	68.0	312.0	1.500
38	MOSW38	32.0	68.0	312.0	1.750
40	MOSW40	32.0	68.0	312.0	1.950
41	MOSW41	32.0	68.0	312.0	2.150
43	MOSW43	35.0	82.0	340.0	2.850
46	MOSW46	35.0	82.0	340.0	2.630
47	MOSW47	35.0	82.0	340.0	2.610
48	MOSW48	35.0	82.0	340.0	2.600
49	MOSW49	35.0	82.0	340.0	2.450
50	MOSW50	35.0	82.0	340.0	2.350
51	MOSW51	35.0	82.0	340.0	3.190
52	MOSW52	38.0	82.0	360.0	3.000
54	MOSW54	38.0	82.0	360.0	3.000
55	MOSW55	38.0	82.0	360.0	2.930
56	MOSW56	38.0	82.0	360.0	2.980
57	MOSW57	38.0	82.0	360.0	4.850
58	MOSW58	38.0	82.0	360.0	4.750
59	MOSW59	38.0	82.0	360.0	4.900
60	MOSW60	44.0	110.0	380.0	4.430
61	MOSW61	44.0	110.0	380.0	4.350
62	MOSW62	44.0	110.0	380.0	4.300
65	MOSW65	44.0	110.0	380.0	5.650
67	MOSW67	44.0	110.0	380.0	5.500
70	MOSW70	50.0	127.0	400.0	7.320
73	MOSW73	50.0	127.0	400.0	7.000
75	MOSW75	50.0	127.0	400.0	6.880
76	MOSW76	50.0	127.0	400.0	6.750
80	MOSW80	50.0	127.0	400.0	8.630
85	MOSW85	50.0	127.0	400.0	7.480
86	MOSW86	57.0	152.0	465.0	9.100
90	MOSW90	57.0	152.0	465.0	8.970
95	MOSW95	57.0	152.0	465.0	11.680
100	MOSW100	57.0	152.0	465.0	11.470
105	MOSW105	63.5	194.0	540.0	12.000
110	MOSW110	63.5	194.0	540.0	11.740
115	MOSW115	63.5	194.0	540.0	11.710
120	MOSW120	63.5	194.0	540.0	11.550
125	MOSW125	63.5	194.0	540.0	11.250
130	MOSW130	63.5	194.0	540.0	11.050

A / F, mm	Model	T, mm	D, mm	OAL, mm
24	MOJ24	17	58	175
27	MOJ27	17	58	175
30	MOJ30	18	66	190
32	MOJ32	18	66	190
34	MOJ34	18	73	200
36	MOJ36	20	78	205
38	MOJ38	20	90	225
41	MOJ41	20	90	225
46	MOJ46	22	100	245
50	MOJ50	22	110	270
55	MOJ55	25	120	300
60	MOJ60	25	130	310
65	MOJ65	30	142	340
70	MOJ70	32	156	370
75	MOJ75	32	164	370
80	MOJ80	35	175	395
85	MOJ85	35	175	395
90	MOJ90	40	197	440
95	MOJ95	40	197	440
100	MOJ100	48	230	480
105	MOJ105	48	230	480
110	MOJ110	50	238	505
115	MOJ115	56	250	505
120	MOJ120	56	258	530
130	MOJ130	56	278	560
135	MOJ135	56	278	560
145	MOJ145	62	308	630
150	MOJ150	62	308	630
155	MOJ155	62	308	630
165	MOJ165	70	345	705
170	MOJ170	70	345	705
175	MOJ175	70	345	705
180	MOJ180	70	345	705
200	MOJ200	75	405	760
215	MOJ215	80	425	830
230	MOJ230	80	475	830

Spring balancers

Series SWF

Series SWA

Siries SBH

— Spring balancers are used on assembly lines, for hanging hand tools, welding gun, machine for sewing bags, measuring instruments, control panels, etc.
— Spring balancers are designed to reduce the physical effort of the operator when working with hand tools. With properly adjusted spring tension, the tool will become almost weightless in the hands of the operator, and it can be raised and lowered with minimal effort.
— When choosing a balancer, it is first necessary to calculate the total weight of the equipment (tools, plus cable or hose, plus accessories). After you have determined the total weight, you need to install the spring tension (weight range).
— For maximum performance and durability, the balancer must be fixed directly above the work place, and perpendicular to the floor. With the constant need to move the balancer with a tool from one location to another, use undercarriage of the series I-Beam.

Series SWF:

Balancers in this series are produced in a closed housing and provided with a nylon guide cap.

Series SWA:

Spring balancers in this series have a cable locking mechanism that closes the drum, in the event of the weight falling. SWA series balancers are used when working with welding tongs, in conditions where the cable is likely to be damaged and the manual tools to be fallen. Spring Balancers up to 300 kg. Cable movement up to 3 meters.

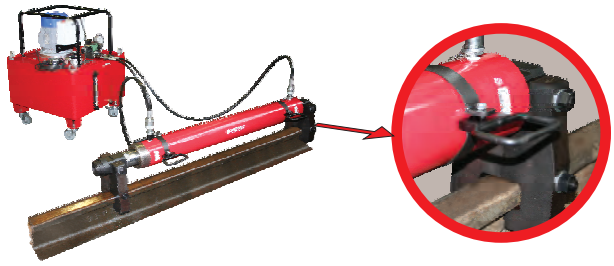
Series SBH:

Spring Balancers up to 300 kg. Cable movement up to 3 meters.

	Capacity, kg	Model	Travel, m	Weight, kg	Capacity, kg	Model	Travel, m	Weight, kg
SWF	0.5 - 1.5	SWF - 01	1,0	1.0	-	-	-	-
	1.0 - 2.0	SWF - 02	1.0	1.0	-	-	-	-
	1.5 - 3.0	SWF - 03	1.3	1.8	1.5 - 3.0	SWF - 03L	2.5	4.2
	3.0 - 5.0	SWF - 05	1.3	1.9	3.0 - 5.0	SWF - 05L	2.5	4.4
	4.5 - 9.0	SWF - 09	1.3	4.0	4.5 - 9.0	SWF - 09L	2.3	8.0
	9.0 - 15.0	SWF - 15	1.3	4.0	9.0 - 15.0	SWF - 15L	2.3	8.0
	15-0 - 22.0	SWF - 22	1.5	8.0	15-0 - 22.0	SWF - 22L	2.3	8.5
	22.0 - 30.0	SWF - 30	1.5	9.0	22.0 - 30.0	SWF - 30L	2.3	9.5
	30.0 - 40.0	SWF - 40	1.5	10.5	30.0 - 40.0	SWF - 40L	2.3	11.0
	40.0 - 50.0	SWF - 50	1.5	11.0	40.0 - 50.0	SWF - 50L	2.3	12.0
	50.0 - 60.0	SWF - 60	1.5	12.0	50.0 - 60.0	SWF - 60L	2.3	13.0
	60.0 - 70.0	SWF - 70	1.5	12.5	60.0 - 70.0	SWF - 70L	2.3	13.5
	70.0 - 85.0	SWF - 85	1.5	13.0	70.0 - 85.0	SWF - 85L	2.5	18.0
	85.0 - 100.0	SWF - 100	1.5	13.5	85.0 - 100.0	SWF - 100L	2.5	28.0
	100.0 - 120.0	SWF - 120	1.5	29.0	100.0 - 120.0	SWF - 120L	2.5	29.0
	120.0 - 140.0	SWF - 140	1.5	31.0	110.0 - 130.0	SWF - 130L	2.5	31.0
	140.0 - 170.0	SWF - 170	1.5	35.0	-	-	-	-
	170.0 - 200.0	SWF - 200	1.5	36.0	-	-	-	-
SWA	9.0 - 15.0	SWA - 15	1.5	6.0	9.0 - 15.0	SWA - 15L	2.3	9.0
	15.0 - 22.0	SWA - 22	1.5	9.5	15.0 - 22.0	SWA - 22L	2.3	10.0
	22.0 - 30.0	SWA - 30	1.5	10.0	22.0 - 30.0	SWA - 30L	2.3	11.0
	30.0 - 40.0	SWA - 40	1.5	12.5	30.0 - 40.0	SWA - 40L	2.3	14.5
	40.0 - 50.0	SWA - 50	1.5	13.0	40.0 - 50.0	SWA - 50L	2.3	15.0
	50.0 - 60.0	SWA - 60	1.5	13.5	50.0 - 60.0	SWA - 60L	2.3	16.0
	60.0 - 70.0	SWA - 70	1.5	14.0	60.0 - 70.0	SWA - 70L	2.3	16.5
SBH	220.0 - 225.0	SBH - 225	1.5	48.0	85.0 - 100.0	SBH - 100	3.0	32.0
	225.0 - 250.0	SWA - 250	1.5	50.0	100 - 120.0	SBH - 120	3.0	42.0
	250.0 - 275.0	SWA - 275	1.5	52.0	120.0 - 140.0	SBH - 140	2.5	2.0
	275.0 - 300.0	SWA - 300	1.5	56.0	140.0 - 160.0	SWF - 05L	2.5	2.1

Hydraulic systems for moving heavy equipment on rails

Series UG…
Capacity — 10-50 ton
Stroke — 400-1000 mm
Pressure — 320 Bar



The system for moving heavy equipment on rails is indispensable for moving power transformers in substations, cars, locomotives, as well as construction and lifting equipment, etc., while installing, repairing and performing emergency repair and construction works. Designed by the construction department of CJSC “Enerpred” technology provides even moving of heavy objects by a unique system (patented in RF) of arms seizure on the rail head, even in conditions of placing the pushed object “uphill” (tilted)

Model	Capacity, ton	Stroke, mm	Pushed object weight, ton		Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Distance from the rail head to the cylinder axis, mm	Recommend pump
			without wheels (Fw=0,15)	on wheels (Fw=0,05)					
UG10-2	10*2	500	65*2	200*2	1560*2	909x284x349	46*2	120	NEE32-2,8ADD20T1
UG25-2	25*2	1000	160*2	500*2	7854*2	1483x332x412	146*2	150	NEE32-6ADD40T1
UG25/400-2	25*2	400	160*2	500*2	3142*2	883x332x412	97*2	150	NEE32-2,8ADD40T1

Model UG10-2 in operation

Model	Nominal pressure, Bar	Pump flow at rated speed of the electric motor drive shaft, l/min	Oil tank useful volume, l	Tempera-ture range, °C	Pump drive	Dimensions (BxLxH), mm	Weight, kg
NEE32-2,8ADD20T1	320	2,8	20	From - 20 to + 60	Three-phase asyn-chronous electric motor 5AIR80V2U3 (№=2,2 kW; p=28 50 rpm; и=380 V/50Hz; 1P54)	315x410x630	46
NEE32-2,8ADD40T1		2,8	40			540x570x800	75
NEE32-6ADD40T1		6,0	40		Three-phase asyn-chronous electric motor 5AIR100S2U3 (№=4,0 kW; p=28 50 rpm; и=380 V/50Hz; 1P54)	540x570x850	85

Equipment for lifting mining excavators (KOP4-100)

Series KOP…
Stroke — 1600 mm

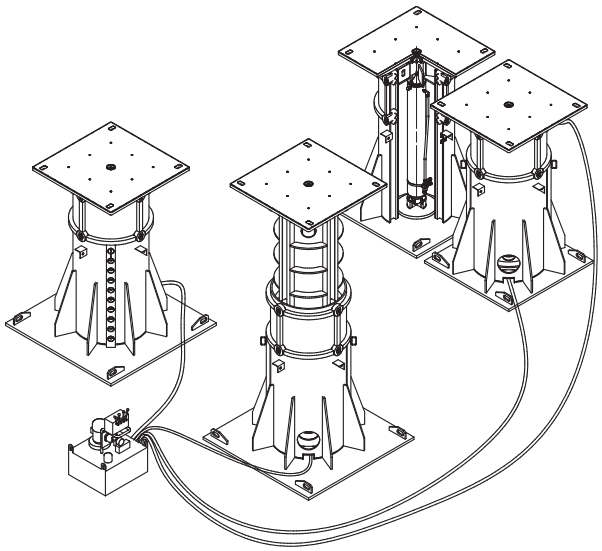
Model: KOP4-100

KOP4-100 - Set of lifting tools, designed for lifting mining excavators during scheduled and emergency repairs on the cuts in the extractive industries;

— This set is a patented development of JSC “Enerpred”;

— Permission to use at hazardous production facilities is granted by the Federal Service for Environmental, Technological and Nuclear Supervision.

NER35-10A250T1-BU4

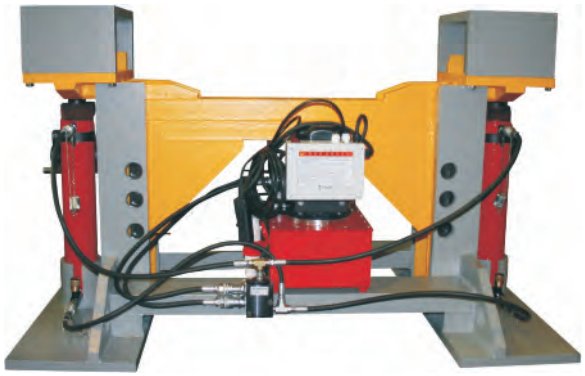


Lifter type	Capacity, ton	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg
Lifter with the base 2000x2000 mm	100	1600	2000x2000x2600	7000
Lifter with the base 1600x1600 mm	100	1600	1600x1600x2600	6600

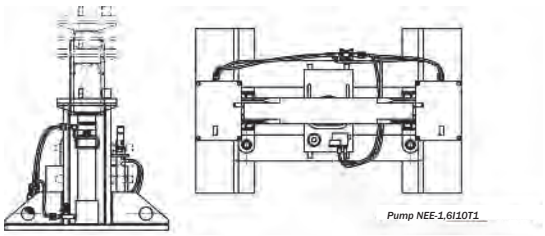
Station model	Flow, l/min	Nominal pressure, Bar	Tank volume, l	Ambient temperature range, °C	Dimensions (BxLxH), mm	Weight, kg	Number of valves
NER35-10A250T1-BU4	10	350	250	от -30 до +40	1000x640x1100	210	4

Equipment for lifting mine dump trucks (KOP1-50)

Series KOP. . .
Lift height — 500 mm



Set of equipment for lifting mine dump trucks KOMATSU HD785 is designed for lifting dump trucks under assembly while setting wheels and for lowering dump trucks on the wheels on the site of assembly.

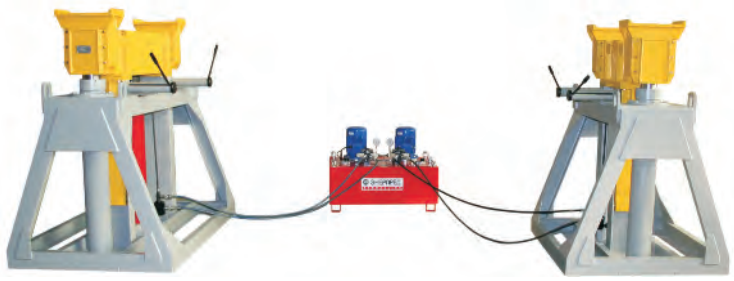


Recommended pump NEE-1,6I10T1

Lifter type	Capacity, ton	Lift height, mm	Lift time, min	Fixing at height by pins, mm	Dimensions (BxLxH), mm	Weight, kg
Cylinder	51,2	500	3	300, 400, 500	1000x1620x860	894

Equipment for lifting mine dump trucks during the assembly work on the assembly site (KOP2-50)

Series KOP. . .
Stroke – 800 mm



Model: KOP2-50

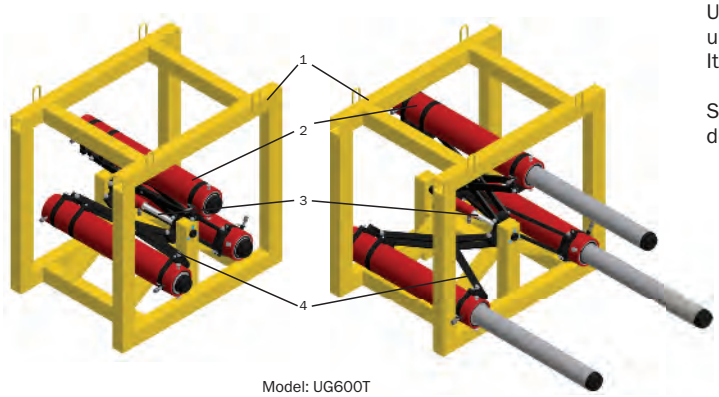
Set of equipment is designed for lifting dump trucks while setting wheels and lowering dump trucks on the wheels of mine dump truck assembly.

Lifter type	Capacity, ton	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg
Lifter with the base 1150x1216 mm	49,2	800	1150x1216x1712	1360
Lifter with the base 1150x1746 mm	49,2	800	1150x1746x1712	1530

Pump	Flow, l/min	Nominal pressure, Bar	Tank volume, l	Ambient temperature range, °C	Dimensions (BxLxH), mm	Weight, kg
2NEE32-6I160T1-M2F	2x6	314	160	from -30 to +40	640x1020x750	180

Equipment for trenchless pipe-laying (UG600T)

Series UG. . .T
Puncture length — up to 200 m
Pressure — 700 Bar



Model: UG600T

UG600T – is designed for trenchless laying of pipelines under highways, railway embankments, in urban areas. It provides high speed and efficiency of work performing.

System compounds, set and characteristics may vary depending on customer requirements.

1 - Frame;
2 - Working hydraulic cylinders;
3 - Auxiliary cylinder (by means of a lever changes the position of the working cylinders);
4 – Leverage

Working sequence:

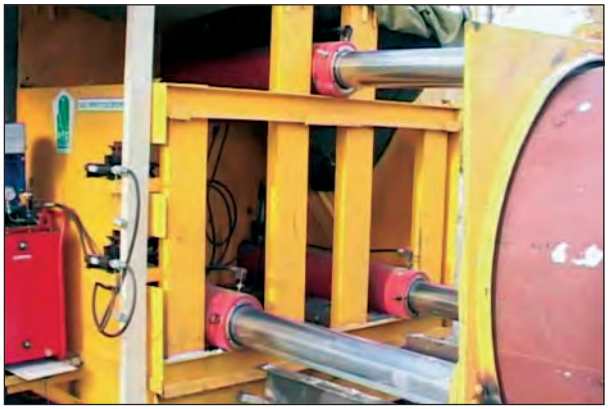
— Punching ground to a depth of the stroke action;
— Return of hydraulic cylinders to the starting position;
— Ground removal out of the pipe;
— Add of remote changeable inserts;

Model	Nominal capacity, ton	Pull capacity, ton	Stroke, mm	Nominal pressure, Bar	Puncture length, m	Ground categories	Pushed pipe diameter, mm	Dimensions (BxLxH), mm
UG600T	600	–	1250	700	up to 200	I-V	up to 2000	1514x1804x1682

Recommended pumps for UG600T:

NEE-10I160T1;

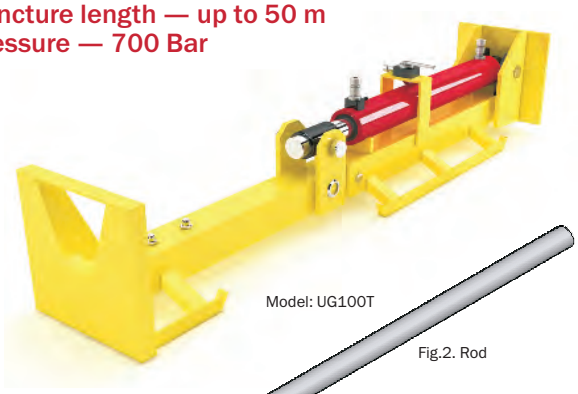
NBR-10I160-1



Model: UG600T in operation

Equipment for trenchless pipe-laying (UG100T)

Series UG. . .T
Puncture length — up to 50 m
Pressure — 700 Bar



Model: UG100T

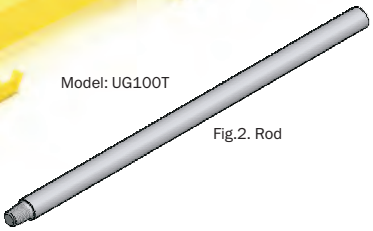


Fig.2. Rod

Fig.3. Extender with a hook

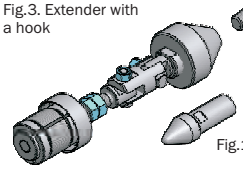


Fig.1. End bit

UG100T - designed for trenchless laying of different types of underground utilities (water, sewer, electric cable, etc.) by a puncture in the soil of the 1-3 categories under roads, tram tracks, railway embankments, marshy soils, forests, etc. with subsequent cable or polyethylene pipe or metal pipe pulling.

The set includes the end bit. Additionally the system includes extenders with hooks and rods. On customer request their characteristics (depending on the diameter of the pushed pipe and soil properties) and amount may vary.

	Diameter, mm	Weight, kg
End bit	60	21
Rod (length 1 m)	48	14
Extenders	130	8,5
	180	13,2
	270	33
Hook (pipe D110 mm)	120	12
Hook (pipe D160 mm)	170	21,2

Model	Capacity, ton	Pull capacity, ton	Stroke, mm	Nominal pressure, Bar	Puncture length, m	Ground categories	Dimensions (BxLxH), mm	Weight, kg
UG100T	100	50	1100	700	up to 50	I-III	500x2360x660	750

Phases and sequence of the pipe-laying:

PUNCTURE

Inserting the rod into the frame bracket, screwing the end bit (Fig. 1).

Pushing the rod (Fig. 2) all the way into soil with the hydraulic cylinder rod, returning to the starting position.

Screwing the subsequent rod in the previous one.

WIDENING OF CHANNELS

Replacing the end bit with the expander (Fig. 3).

Removing the rod out of the embankment with cylinders reverse.

Unscrewing the rod.

While simultaneously laying pipes in the channel the expander is connected to the hook for pipes with the set thereon pipe.

	Recommended pump	Puncture cycle (forward/back) 1 meter embankment*
gasoline	**NBR-2,4I40-1**	7 min./3 min. 30 sec.
	NBR-5,0I40-1	3 min. 30 sec./1 min. 40 sec.
	NBR-10,0I100-1	1 min. 45 sec./50 sec.
electric	**NER-2,8I40T1**	6 min. 10 sec./3 min.
	NER-5,0I40T1	3 min. 30 sec./1 min. 40 sec.
	NER-10,0I40T1	1 min. 45 sec./50 sec.

System compounds, recommended set and characteristics may vary depending on the requirements and wishes of the customer.

* Estimated time does not include preparation and final works, replacement of the rods

Model: UG100T in operation

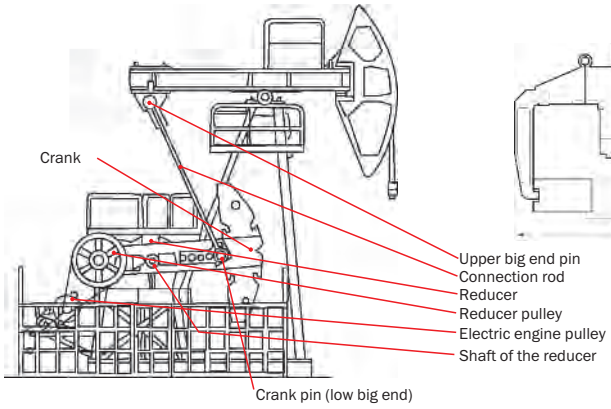
Connecting rod pin pullers

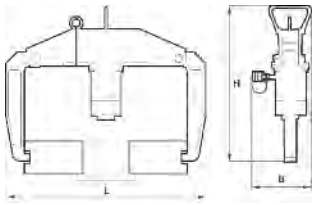
Series SG...PN(V)
Capacity — 15,7-56 ton
Reach — 110-295 mm
Pressure — 700 Bar

SG...PN... models are designed to remove (press out) the crank pin (low big end) during repair and mounting work with rocker-machine models SK-6 and SK-8.

SG...PN... models are designed to remove the small end pin and allows to remove pins with a length exceeding casing puller stroke screwing further the wrench with vertical journal and repeating the cycle (piston stroke out / return / screw the wrench until the pin butts against the journal) until the pin is completely out of the connection rod end.

Model: SG256-PN8





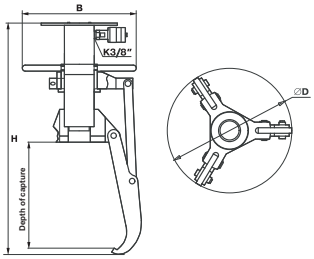
Model	Capacity, ton	Stroke, mm	Rocker-machine model	Max reach, mm	Oil working capacity, cm³	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SG015-PN68	15,7	50	SK-6, SK-8	295	112	132x415x735	40	NRG-7010
SG235-PN6	35,8	50	SK-6	110	251	204x540x534	33	NRG-7020
SG235-PN8	35,8	50	SK-8	120	251	204x705x544	39,5	NRG-7020
SG256-PN6	56	50	SK-6	110	393	207x550x553	46	NRG-7010
SG256-PN8	56	50	SK-8	120	393	207x563x715	46,8	NRG-7010
SG256U-PN8	56	150	SK-8	120	1178	210x661x715	66	NRG-7020

Motor pulley pullers

Series SG...SH...
Capacity — 22,2 ton
Stroke — 360 mm
Pressure — 700 Bar

Designed to remove engine pulley of the rocker-machine models SK-6 and SK- 8 with a capacity of up to 22.2 tons. Fixed position of the pickup device over the entire removal range.

Model: SG322-SH68



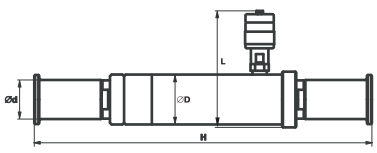
Model	Capacity, ton	Stroke, mm	Rocker-machine model	Outer diameter, mm	Max reach, mm	Oil working capacity, cm³	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SG322-SH68	22,2	360	SK-6, SK-8	296	295	1122	220x296x907	45,3	NRG-7010

Crank spreaders

Series RK...
Capacity — 11,3 ton
Stroke — 35 mm
Pressure — 700 Bar

Designed to remove the crank from the reducer shaft of the rocker-machine models SK-6 and SK-8 in the field conditions and in the workshop.
3 minutes are required to release a crank without spending time for by-work.

Model: RK6



Model	Capacity, ton	Stroke, mm	Rocker-machine model	Outer diameter, mm	Max reach, mm	Dimensions (DxLxH), mm	Weight, kg	Recommended pump
RK6	11,3	35	SK-6	29	55,6	168x145x313	3,88	NRG-7010
RK8	11,3	35	SK-8	35	55,6	168x145x473	5,93	NRG-7010

Hydro Manipulator "INTECH"

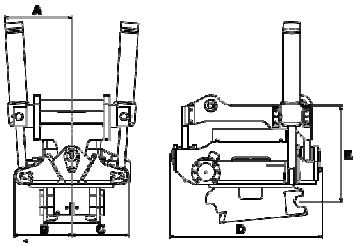
Series GSR. . .

Hydro Manipulator is a unique equipment, which is a full-revolving platform designed to simplify and improve excavator performance. This equipment is installed on the host machine in two quick and easy steps - with the help of quick-hitches on both sides, or by direct connection to the stick and bucket. HFG "INTECH" is used for all operations carried out by excavators and adapted to meet the customer requirements.

We provide warranty and post-warranty service of "INTECH"Hydro Manipulator. Installation of equipment, operational capability monitoring diagnostics, adjustment and repair is carried out by an on-site team of service engineers. With Hydro Manipulator "INTECH" you get a complete solution for almost any ground work contracts!

GSR-020 model suits all excavators weighing 16-24t

Model: GSR-020



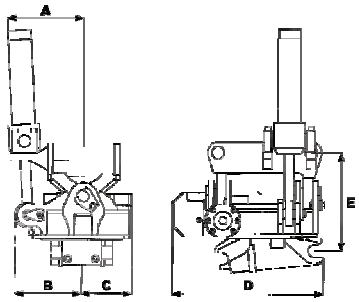
USE OF GSR-020 MODEL "INTECH"

EXCAVATOR BRAND	Model
New Holland	E175, E195, E200SR, E215LC, E235SR, E225BSR, EW160, EW220, MH4.6, MH5.6, MH6.6
Hyundai	R170W-7, R200W-7, 140LC-7, R160LC-7, R180LC-7, R210LC-7
Hitachi	ZX160LC, ZX200LC, ZX230LC, ZX170W-3, ZX180W, ZX190W-3
Caterpillar	M313D, M315D, M316D, M318D, 320DL, CAT 315DL, 319DL, 319D
Komatsu	Komatsu PW160-7, PW200-7, PW220-7, PC200-7, PC220-7
JCB	JS-160, JS-180, JS-200, JS-210, JS-220, JS-240
DAEWOO-DOOSAN	S175LC-V /225/255, S180W-V /210, Solar S140LC-V, S150LC-V, S155LC-V, S160W-V
Volvo	EW160C, EW180C, EC160B, EC180B, EC210B, EC240B
Case	CX135SR,CX160B,CX180B,CX210B,WX165, WX185,CX210B,CX210 NLC,CX230B
Russia	TVEKS EK-18, ET-18, ET-25, ET-26 (KIT), EO-33211, VEKS-20K, EO-4225A, EO-4321B, ATEK-881
HIDROMEK	HMK 200W-2, HMK 220LC-2
HYDREMA	M1700C

Model	Width, mm			Total length D, mm	Height E, mm	Angle of rotation	Weight, kg	Required oil consuption, l/min	Working pressure, Bar	Standard fastening types	Max. recommended bucket Width, mm	Max. breakout force, kNm
	A	B	C									
GSR-020	360	310	310	810	510	2x40°	from 450	40-80	180-210	S60, S1	1700	180

GSR-005 Model suits all excavators weighing 3-6 t

Model: GSR-005



GSR-005 HFP "INTECH" MODEL WHERE USED

EXCAVATOR BRAND	Model
New Holland	E9S, E16, E18, E20.2, E22.2, E27.2SR, E30.2, E35.2, E40.2, E50.2SR
Hyundai	R-35, 55, ROBEX 35LC-3, R55W-7
Hitachi	ZAXIS 25, ZX30, ZX35, ZX40, Zx50
Komatsu	WB93R-5, WB93S-5, WB97S-5 PC20R-8, Pc30, MRX, PC50MR-2, PC60-7, PC35MR-2
JCB	8030 ZTS, 8035 ZTS, 8040 ZTS, 8045 ZTS, 8052, JCB 1CX, 2CX
DAEWOO-DOOSAN	030, DX 27Z, DX 30Z, DX 35Z, 55, DX 55W, 55V
Volvo	EC55B Pr, ECR38, ECR58, BL61, BI71
Caterpillar	303C CR, 305C CR, 308C CR, 307D, 308D CR Fixed Boom, 303.5C CR, 304C CR
Case	CX31B zts, CX36B zts, CX40B zts, CX50B zts
Russia	EO-2621, EO-2626, LEX EO 2621, LEX EO 2626, LEX EO 2626CH

Model	Width, mm			Total length D, mm	Height E, mm	Angle of rotation	Weight, kg	Required oil consuption, l/min	Working pressure, Bar	Standard fastening types	Max. recommended bucket Width, mm	Max. breakout force, kNm
	A	B	C									
GSR-005	260	215	160	485	315	2x40°	from 125	15-40	180-210	S40	1200	45

Attached equipment

Special attached equipment for "INTEH" Hydro Manipulator widely broadens excavator field of application. All equipment (except Extra integratable clamshell) is suitable for installation onto all excavators of 3-24 tons.

Bucket for backhoe GSR - 005/1.1 GSR - 020/1.1

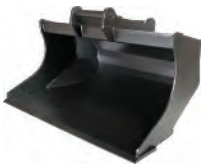
All-ground bucket.
Delivered with teeth or safe enge;
in assembly with nibs and buches.

Bucket volume - from 0,04 m^3

Clamshell GSR - 005/3.2 GSR - 020/3.2

Used for loading-unloading works, sorting, re-screening of reloaded material and destruction of stone and wooden structures.

Planning bucket GSR - 005/1.2 GSR - 020/1.2



Used for embankment planning and for displacement of frible soft soil
Bucket volume - 0,25-1m^3

Asphalt - concrete cutter GSR - 005/4 GSR - 020/4

Ensures clean cuts, thus reducing undesirable and costly asphalt (concrete) losses. Perfect for turf in lawns and other places, where accuracy is required.

Trench bucket GSR - 005/1.3 GSR - 020/1.3

Designed for use in limited areas and for digging narrow trenches (for cabling and other), providing for deeper digging depth. Teeth package is ordered separately.
Bucket volume - 0,04-1 m^3

Ripper GSR - 005/5 GSR - 020/5

Ripper (knife for frozen soil) is used for ground works on frozen or hard soil, specially cultivation and crushing of hard materials.

Extra integratable clamshell GSR - 005/2.1 GSR - 020/2.1

For work at construction sites, with posts, borders ect; for pipe, effluent disposal lines fitting;
for work with scrap metal;
for beams and rail loading.

Fork grip GSR - 005/6 GSR - 020/6

Versatile instrument ensuring good overview for operator, smooth forks opening. Designed for lifting, relocation, loading- unloading and piling of loads

Digging clamshell GSR - 005/3.1 GSR - 020/3.1

Used for deep ground excavation, deep digging, loading and unloading of bulk solids, crushed stone ect.;
To repair railway superstructure during replacement of crushed stone in ballast box.

Wheel block GSR - 005/7 GSR - 020/7

Designed for excavator transfer along railways.

* Overall dimensions of equipment are defined in the design process and can be changed for a special item type in accordance with individual order.

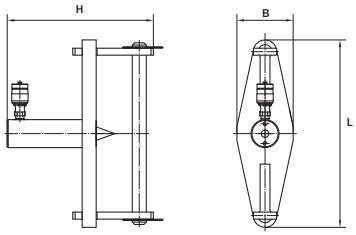
Flange spreaders

Series RF. . .
Capacity — 1,5 - 12 ton
Flange diameters — 80 - 1600 mm

Model: RF101600

Model: RFA1600

Allows to scrap outworn methods of adjustment of flanges of pipelines for replacing gaskets, blinding, replacement or revalving on the main oil and gas pipelines, heating stations, sanitary-engineering system.
— Flange spreader RFV250 is mechanical and the most convenient for adjustment of the flanges when significant effort is required for the adjustment;
— Hydraulic spreaders have two wedges that provide effective and safe spreading of the flanges
— Hydraulic spreader RFA1600 with built-in pump is easy to use when working in limited spaces or at height.



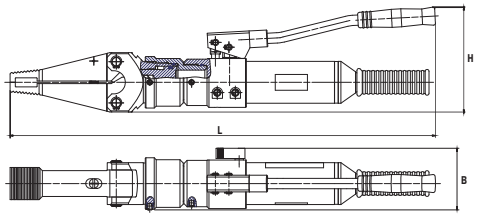
Model	Capacity, ton	Width of spread, mm		Flange diameters, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
		1st head	2st head				
RFV250	1,5	0-15	—	80-250	76x130x215	2,2	—
RF05800	5	0-20	18-35	32-800	76x210x255	4,5	NRG-7010
RF101600	10	0-27	25-50	225-1600	108x280x297	8,9	NRG-7010
RFA1600	12	0-27	25-50	225-1600	460x280x510	14,3	Built-in

Hydraulic spreaders

Series KR...
Capacity — 1-2,5 ton
Pressure — 600/700 Bar
Hydraulic stroke retraction

Model: KRA1150

Spreader is used for correct installation, setting-out of the equipment on the foundation and by the expansion of the narrow openings.
— Compact, lightweight and easy to use;
— The minimum required clearance is 25 mm;
— The corrugated surface prevents the slipping of the load.



Model	Capacity, ton	Min. clearance required, mm	Max. spread H1, mm	Working oil capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
KR1150*	1	34	150	30	71x359x92	5,8	NRG-7004A
KRA1150*	1	34	150	30	96x661x163	9,2	Built-in
KR2, 5120	2,5	25	120	40	80x339x110	9,2	NRG-7004A

* — Pressure is 600 Bar

Valving test equipment

Valving test equipment is designed to test structural integrity of the shut-off valves built-in technological pipelines, new and after repair. The principle of operation of the setup is based on the formation of a hermetically closed space in the enclosure of the test valving with self-aligning cones, one of which is mobile and moves with help of the hydraulic cylinder.

For work equipment must be equipped with:
— Pumping NER-1,6I10T1(F1) and hoses RVD2000;
— Pumping NEE-1,6I10T1(F1) and hoses RVD2000;
— The customer must have a source of pressure of the test environment.

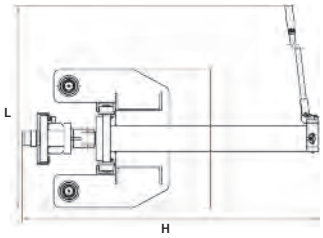
Parameters	Clamping capacity, mm	Pipe size of the test valving, ton	Max pressure, Bar	Length of the valving, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
Values	200	50,65,80,100,110,125,150,175,200, 225,250	380	360-800	965x250x1520	1100	NER-1,6I10T1(F1) NEE-1,6I10T1(F1)

Trolley lifter for inspection pits

Series PGP. . .M. ..
Capacity — 16,5 ton

Model: PGP16M750

Designed to display front or rear axles, during repair or maintenance of the vehicles.
— Installed on a lift platform or repair pit;
— Possibility to move the lift along the repair pit, and move a trolley with a hydraulic cylinder and pump in a transverse direction;
— Built-in hydraulic pump ensures ease of use in limited spaces.



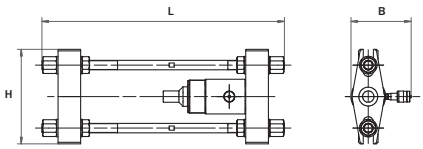
Model	Capacity, ton	Stroke, mm	Track width, mm	Oil capacity, sm^3	Dimensions (BxLxH), mm	Weight, kg
PGP16M750	16,5	750	1350	2500	590x1410x1275	344

Pressing-out pintle tool

Series VSH...
Capacity — 35,8 ton

Model: VSH35

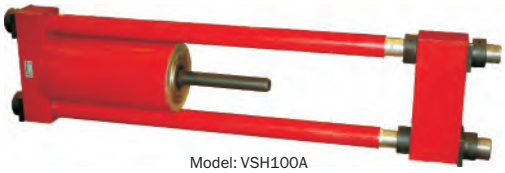
Designed to press-out fulcrum pins. Withdrawal tool may be used as a press to remove details in pressure couplings.



Model	Capacity, ton	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
VSH35	35,8	50	172x770x300	42	NRG-7004A

Pressing-out track pin tool

Series VSH...
Capacity — 109,8 ton



Model: VSH100A

Hydraulic pressing-out tool is designed to withdraw caterpillar band pins of harvesters and road building machines. Tool may be used as a press to remove details in pressure couplings

Model	Capacity, ton	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
VSH100A	109,8	250	317x1420x335	82,4	NRG-7080R

PSC strand tightener

Series UN. . .
Capacity — 25 ton
Stroke — 600 mm

Model: UN25-600

PSC strand tightener is designed for tension of PSC strand in prestressed concrete constructions, in seismic belt etc.
The product must be used in areas with temperate climate where the air temperature is minus 30° C to 40 ° C, or 25° if the relative humidity is 80%.

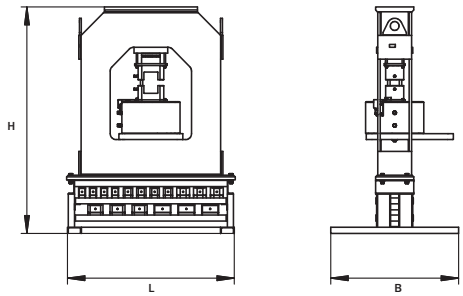
Model	Capacity, ton	Pulling capacity, ton	Stroke, mm	Nominal pressure, Bar	Oil working capacity, cm^3	Oil volume for cavity fill, cm^3	Dimensions (BxLxH), mm	Weight, kg
UN25-600	25	12,6	600	650	2261	1145	255x955x189	48,1

Grimping sling ropes press

Series PS. . .
Capacity — 400 ton
Pressure — 320 Bar

Model: PS400

Crimping press PS400 is designed to crimp the cable ends having diameter of 8 to 37 mm with aluminum ferrule. The following pump with electric-contact pressure gauge NEE12/32-32 /12I160T2-My is recommended for work, as well as model NEE12/32-16/6I63T2-Mu and hoses RVD12,7. 166.2500.0,18.13/13-90G1/2G1/2-y1 2 pcs.



Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
PS400	400	50	7536	1100x1450x1912	1419	NEE12/32-32/12I160T2-Mu NEE12/32-16/6I63T2-Mu

Set of dies				
Crimping ferrule DIN3093	**Steel cable Diameter, mm**	**Die dimensions, Height x length x width, mm**	**Designation**	**1 Die weight kg**
Um9	8,3...9,0	65x120x60	Um 9	3,55
Um10	9,1...10,1		Um 10	3,53
Um11	10,2...11,2		Um 11	3,51
Um12	11,3...12,3		Um 12	3,48
Um13	12,4...13,4	65x120x 80	Um 13	4,49
Um14	13,5...14,5		Um 14	4,45
Um16	14,6...16,1		Um 16	4,40
Um18	16,2...18,2		Um 18	4,33
Um20	18,3...20,2	65x120x 110	Um 20	5,40
Um22	20,3...22,4		Um 22	5,32
Um24	22,5...24,6		Um 24	5,22
Um26	24,7...26,9	65x120x 130	Um 26	6,32
Um28	27,0...28,6		Um 28	6,15
Um30	28,7...30,8		Um 30	6,00
Um32	30,9...32,7	65x120x 145	Um 32	6,74
Um34	32,8...34,9		Um 34	6,49
Um36	35,0...37,1		Um 36	6,27

NEE12/32-32/12I160T2-Mu

Model	Nominal Pressure, mPa (kgs/cm^2), 1/ 2 stage	Pump rate, l/min., 1/ 2 stage	Power fluid	Effective tank volume, l	Pump drive	Dimensions (BxLxH), mm	Weight, (with dry tank), kg
NEE12/32-16/6I63T2-Mu	12 (120)/32(320)	16/6	Hydraulic oils	63	N=4,0 kW; 380 V	514x650x850	85
NEE12/32-32/12I160T2-Mu	12 (120)/32(320)	32/12		160	N=7,5 kW; 380 V	620x640x960	140

Sling ropes test machine

Series SISG...
Capacity — 12,5 - 100 ton
Sling length — 1-16 m

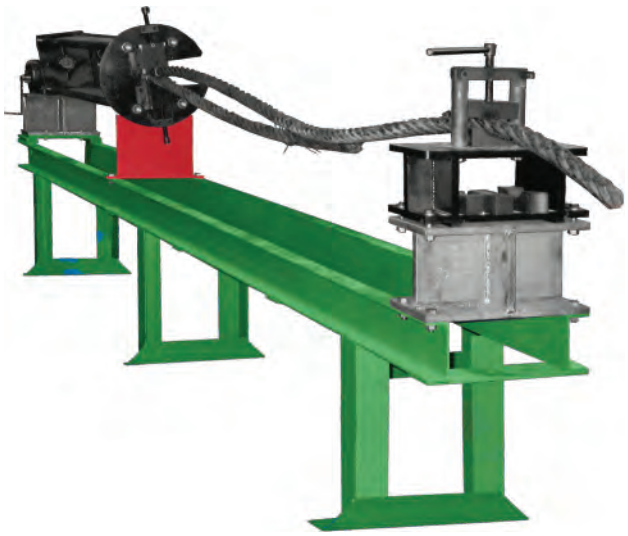
The sling testing device is designed for tension test of rope, chain and textile slings. The tool is commonly applied in various branches of the industry where rope slings are used. Setups can be equipped with additional digital pressure gauges, which show a tension at strap in tones. Pumps of the tensioner SISG10-3 is configured to auto-maintenance of the tension during the period required to test the slings.

Model	Capacity, ton	Stroke, mm	Sling lenght, m	Dimensions (BxLxH), mm	Setup Weight, kg	Recommended pump
SISG10-3	12,5	600	1-3	1100x4950x993	970	NEA-1,6I10T1-C
SISG20-10	21,9	500	1-10	1090x4377x993	970	NRG..R, NER, NEE, NEA
SISG20-10V*	21,9	500	1-10	1090x4476x993	970	NRG, NER, NEE, NEE
SISG20-16	20,1	500	1-16	1110x9086x993	1600	NRG..R NER, NEE, NEA
SISG100-16	100	630	1-16	974x 10405x876	2400	NEE-1,6I20T1

* — Pneumatic stroke retraction

Splicing sling ropes machine

Series PZS. . .
Diameter of splicing sling— 10-60 mm



The machine is designed to form sling loops on the steel rope (cable) that is, to make sub-slings. Device provides unwinding and stretching of the spliced part of the cable and then covering of the spliced part. Cable is fastened in special clamps, then stretched and unwound. Then it is spliced and covered.

Workpiece before splicing

Rotary clamp

Insertion of the loop rope into the rotary clamp

Fixed clamp

A loop of rope in a rotation clamp

Model	Diameter of the spliced sling, mm	Dimensions (BxLxH), mm	Weight of device, kg
PZS30	10-30	1500x534x1452	180
PZS60	10-60	5000x600x1504	618

Universal hand-operated hydraulic rescue set

Universal hydraulic set is designed for rescue, repair, construction, installation and dismantling, as well as specialized work. Is used by the Emergencies Ministry (EMERCOM).

KRUG-1S

KRUG–1S on operation

KRUG–1S on operation

KRUG-1S includes:

— KRUG-1 (power module);
— RB-310 (large spreader);
— R-120 (small spreader);
— RU-120 (inclined spreader);
— K-16 (nipper);
— N-16 (cutter).

KRUG-AM includes:

— KRUG-1 (power module);
— RB-310 (large spreader);
— R-120 (small spreader);
— RU-120 (inclined spreader);
— K-16 (nipper);
— N-16 (cutter);
— NL-5 (sheet cutter);
— NSV (attachment for wagon moving).

Power module KRUG-1

Parameters	Value
Nominal Pressure, Bar	700
Volume of the hydraulic oil, cm^3	230
Plunger stroke, mm	17
Rotation angle the rocker arm, degrees	45
Handle effort, max kgf	20
Performance, cm^3/stroke:	
1 stage	6,46
2 stage	0,85
Dimensions (BxLxH), mm	85x543x155
Weight, kg	4,7

Cutter N-16

Like nipper they are used as a cutting tool providing greater cutting capacity. Designed for cutting metal rods, fittings, wire.

Parameters	Value
Nominal cutting capacity, ton (кН)	20 (196)
Material diameter, max, mm	16
Material hardness, max, HB	200
Dimensions (BxLxH), mm	166x325x100
Weight, kg	4,8

Nipper K-16

Designed for cutting of metallic rods, valves, pipes, wire, etc.

Parameters	Value
Nominal cutting capacity, min, ton (kN)	11,5 (113)
Material diameter, max, mm	16
Blades Span, max, mm	25
Material hardness , max, HB	200
Dimensions (BxLxH), mm	45x194x70
Weight, kg	1,92

Large spreader RB-310

Designed for expansion of the gap and deformation of different structures, moving, lifting loads, etc., corrugated surface of the ends prevents loads sliding.

Parameters	Value
Spreading capacity, ton (кН)	1,3 (12,7)
Width of spread, mm	310
Dimensions (BxLxH), mm	142x354x55
Weight, kg	4,2

Small spreader R-120

The special shape of the levers allows to move, push, lift various objects with a slight gap between the support and the load, work in confined spaces, providing a great capacity.

Parameters	Value
Spreading capacity, ton (kN)	3,5 (34,3)
Width of spread, min, mm	120
Dimensions(BxLxH), mm	83x258x95
Weight, kg	3,2

Inclined spreader RU-120

Angular design is preferable for specific operations in hard-to-reach places (opening of metal doors, lifting lying cargo in a confined space, etc.).

Parameters	Value
Spreading capacity, ton (кN)	3,3 (32,3)
Width of spread, min, mm	120
Dimensions(BxLxH), mm	68x214x159
Weight, kg	4

Attachment for wagon moving NSV

Serves as a lever stop for car breakaway with help of the large spreader (RB-310)

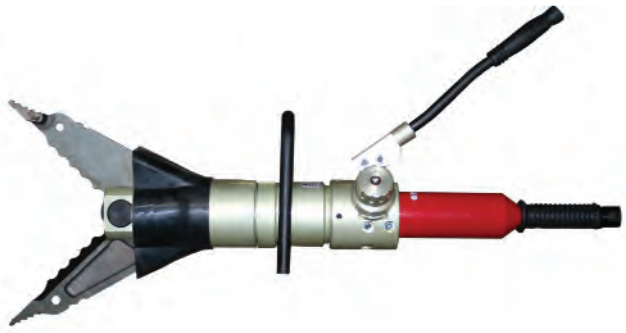
Parameters	Value
Dimensions (BxLxH), mm	166x325x100
Weight, kg	4,8

Sheet cutter NL-5

Used as a cutting tool, providing greater cutting capacity. Designed to cut metallic sheets.

Parameters	Value
Cutting thickness, mm	5
Cutting Length for 1 stage, mm	50
Dimensions (BxLxH), mm	54x208x144
Weight, kg	3,1

KRUG-2M



Used during special, emergency, installation and dismantling, repair and construction works;
Easy to operate;
For a relatively small weight (15 kg) has the advanced functional characteristics: displacements, lifting, cutting.
Designed for rescue, repair and construction, mounting and dismantling, as well as specialized works.

Parameters	Value
Nominal cutting capacity, ton (kN)	29 (284)
Spreading capacity at the lever ends, max, ton (kN)	4,2 (41,2)
Clamping capacity at the lever ends, max, ton (kN)	5,2 (51)
Opening of the lever ends, max, mm	300
Cut rod diamter, mm	20
Cut pipe diamter, mm	30
Nominal Pressure, Bar	700

Parameters	Value
Volume of the filling hydraulic oil, cm^3	230
Rotation the rocker arm, degree	45
Handle capacity, max, kgf	20
Performance, cm^3/stroke, 1 stage 2 stage	6,46 0,85
Ambient temperature range, ∫C	-40 to + 80
Dimensions, (BxLxH), mm	189x910x240

KRUG-2S

For the speedy execution of various works in hard-to-reach places, in emergency situtaions, completed with two quick-change attachmets: P-300 - for spreading, lifting objects; N-20 - for cutting

The set is designed for rescue, construction and demolition.

Characteristics of the KRUG-2S

Dimensions (with attachment-cutter / with combined attachment), (BxLxH), mm - 189x836x254/189x917x240
Ambient temperature range,°C -40 to +80
Weight, max, kg
With attachment-cutter - 14,7
With combined attachment - 16,1
Total - 22,6
Number of fixed positions of attachments - 4 units

Power module KRUG-2

Parameters	Value
Nominal Pressure, Bar	700
Volume of the filling hydraulic oil, cm^3	230
Rotation angle the rocker arm, degree	55
Handle capacity, max, kgs	29
Performance, cm3/stroke:	
1 Stage	9,3
2 Stage	1,27
Dimensions (BxLxH), mm	191x549x224
Weight, kg	8,0

Combined attachment R-300

Allows moving, spreading and lifting of various objects with a slight gap between the support and the load, work in confined spaces, providing greater capacity.

Parameters	Value
Nominal cutting capacity, ton (кN)	29 (284)
Spreading capacity at the lever ends, min, ton	4,2 (41,2)
Clamping capacity at the lever ends, max, ton (кN)	5,2 (51)
Opening of the lever ends, max, mm	300±5
Cut pipe diameter, mm	22
Dimensions (BxLxH), mm	107x413x187
Weight, kg	7,6

Cutter N-20

Used as a cutting tool, providing greater cutting pressure. Designed for cutting metal rods, car racks and steering columns of the cars.

Parameters	Value
Nominal cutting capacity, ton (кN)	29 (284)
Opening of the lever ends, max, mm	150±5
Cut rod diameter, mm	30
Dimensions(BxLxH), mm	107x333x187
Weight, kg	6,4

KRUG-2S in operation

Hydraulic equipment for rescue and recovery operations on rail transport

Hydraulic equipment set of light alloys „AVSO“ for installation of wagons on rails (pressure 300 Bar)

The set of equipment is designed for rescue and recovery operations, lifting, moving, alignment and installation of the wagons and rolling stock units on rails

Rolling stock lifting equipment

Model	Description
NBR30-7A40-1	Gasoline pump, unloading crane, tank 40 liters, 7 liters / min (controls 4 cylinders with control panel PU-4)
NBR30-7A40-1BU4	Gasoline pump, four-channel control unit, tank 40 l, 7 liters / min (controls 4 cylinders)
NBR30-3,6A20-1BU2	Gasoline pump and two-channel control unit, tank 20 l, 3,6liters / min (controls 2 cylinders)
NER30–5,7A40T1	Gasoline pump, unloading crane, tank 40 l, 5,7 liters / min, 380V (controls 4 cylinders with control panel PU-4)
NER30–5,7A40T1BU4	Gasoline pump, four-channel control unit, tank 40 l, 5,7 liters / min, 380V (controls 4 cylinders)
NER30–3,6A20T1BU2	Gasoline pump, two-channel control unit, tank 20 l, 3,6 liters / min, 380V (controls 2 cylinders)
NDR30-11A63-1	Diesel pump, unloading crane, tank 63 l, 11 liters / min (controls 4 cylinders from the control panel PU-4)
NRG30200R	Hand pump, hand control valve, tank 20 l (controls 1 cylinder)
NRG30200R2	Hand pump, two hand control valves, tank 20 l (controls 2 cylinders)
NRG30200R3	Hand pump, three hand control valves, tank 20 l (controls 1 cylinder)
PU-4	Four-channel control panel, 4 hand three-position control valve (controls 4 cylinders)
DTA40/20G230-250	Aluminum telescopic cylinder, double-acting (40/20тс, height 250mm, stroke 230mm)
DTA40/20G640-470	Aluminum telescopic cylinder, double-acting (40/20тс, height 470mm, stroke 640mm)
DGA60G110-250	Aluminum load-lifting cylinder, double-acting (60ton, height 250mm, stroke 110mm)
DTA60/30G215-250	Aluminum telescopic cylinder, double-acting (60/30тс, height 250mm, stroke 215mm)
DGA60G250-420	Aluminum load-lifting cylinder, double-acting (60тс, height 420mm, stroke 250mm)
DTA60/30G500-420	Aluminum telescopic cylinder, double-acting (60/30тс, height 420mm, stroke 500mm)
DTA60/30G565-450	Aluminum telescopic cylinder, double-acting (60/30тс, height 450mm, stroke 565mm)
DGA120G50-160	Aluminum load-lifting cylinder, double-acting (120тс, height 160mm, stroke 50mm)
DGA120G90-250	Aluminum load-lifting cylinder, double-acting (120тс, height 250mm, stroke 90mm)
DTA120/60G180-250	Aluminum telescopic cylinder, double-acting (120/60тс, height 250mm, stroke 180mm)
DGA120G120-315	Aluminum load-lifting cylinder, double-acting (120тс, height 315mm, stroke 120mm)
DGA120G250-420	Aluminum load-lifting cylinder, double-acting (120тс, height 420mm, stroke 250mm)
DTA120/60G500-420	Aluminum telescopic cylinder, load-lifting (120/60тс, height 420mm, stroke 500mm)
DTA120/60/30G700-420	Aluminum telescopic cylinder, load-lifting (120/60/30тс, height 420mm, stroke 700mm)
DGA35G825-1030K	Aluminum load-lifting double-acting cylinder 35т-825mm (with low pick-up point, height 1030mm)
KN40-2	Attachment set, 40ton, 360 mm upstroking (for DTA 40/20G230-250)
KN60-2	Attachment set, 60ton, 320 mm upstroking (for DTA60/30G215-250 and DGA60G110-250)
KN120-1	Attachment set, 120ton, 100 mm upstroking (for DGA120G50-160)
KN120-2	Attachment set, 120ton, 260 mm upstroking (for DTA120/60G180-250 and DGA120G90-250)
KN120-3	Attachment set, 120ton, 380 mm upstroking (for DGA120G120-315)
2RVD30-10000	High-pressure hose, length 10000 mm, with couple BRSH003 (pair set), 300Bar
2RVD30-5000	High-pressure hose, length 5000 mm, with couple BRSH003 и BRSD003(pair set), 300Bar
2RVD30-10000	BRS4 High-pressure hose, length 10000 mm, with couple BRSH004 (pair set), 300Bar (compatible with equipment Hegenscheidt MFD
2RVD30-5000	BRS4High-pressure hose, length 5000 mm, with couple BRSH004 and BRSD004 (pair set), 300Bar (compatible with equipment Hegenscheidt MFD)

Equipment for displacement stock in across-track direction

Bridge beams for installation of the wagons on rails

M60/120-2250

— Represent a solid-drawn hollow beam, made of lightweight and stabile tenacious alloy
— Provide roller bearing trucks moving and they are the main support for a lifting
— All beams (for extension) can be interconnected with joints and equipped with 4th handles for easy carrying
— There are the holes on the upper surface of the beams, the supporting bearings of the skidding cylinders are attached to these holes

Model	Length, mm	Width, mm	Height, mm	Weight, kg
M60/120-1200	1200	275	175	41
M60/120-2250	2250	275	175	76
M60/120-3300	3300	275	175	111

Socket set for marking longer of bridge beam

Model	Thickness, mm	Weight, kg
NMB-180	180	37,5

Roller wagon without a swing mount

RT60/120

— Roller wagon truck is used to move goods in across-track direction along the bridge beams and serves a platform for the cylinders
— Equipped with two special seats designed for connection to the skidding cylinder, braces or limiters
— Equipped with bearings that require no lubrication, making it easy to move loads in cross direction on the bridge girder with minimum effort
— Has limit stops for a stable and straight line motion on bridge girder

Model	Capacity, ton	Height, mm	Weight, kg
RT60/120	120	110	70

Spacing beam for the connection of roller wagons

Model	Length, mm	Weight, kg
RB-1	1020-1905	25

Displacement hydraulic cylinder

CP15G350-575

— It is used for cross movement of the roller wagon
— Work pressure 300 Bar
— The case is made of lightweight and tenacious alloy
— Compact design, ease of manual transportation, light weight

Model	Pulling capacity, ton	Retracting capacity	Stroke, mm	Oil working capacity, cm^3	Cylinder height, mm	Weight without oil, kg
CP15G350-575	13	8,5	350	1,6	575	22

Displacement cylinder bearing stays

KCP

Single supporting bearing — is fixed in the holes of bridge beams and is used to install the skidding cylinder
Double supporting bearing — is fixed in the holes of bridge beams and is used to install two parallel skidding cylinders on one roller truck; it is used only with a double connection piece.
Double connection piece — allows simultaneous installation of two parallel working skidding cylinder to one seat on the roller truck, it is used only with a double supporting bearing

Model	Name	Weight, kg
KCP	Single supporting bearing	7
DKCP	Double supporting bearing	13
DSSHC	Double connection piece	11

Cable system to right overturned wagons

Allows raising of overturned wagons with horizontally displaced mounted wheels, righting and installing wagons on rails, when wheel flanges lay on railroad

Double-acting cylinder with low pick-up point

Model	Capacity, ton	Stroke, mm	Initial height, mm	Weight with clamp for low pick-up, kg
DGA35G825-1030K	35	825	1110	83

Scalariform rope loop with fixing bolt

Model	Capacity, ton	Length, mm	Weight, kg
LT	35	3100	35

Fixing rope

Model	Length, mm	Weight, kg
KT4	4000	10

Holding rope

Model	Length, mm	Weight, kg
UT6	6000	15

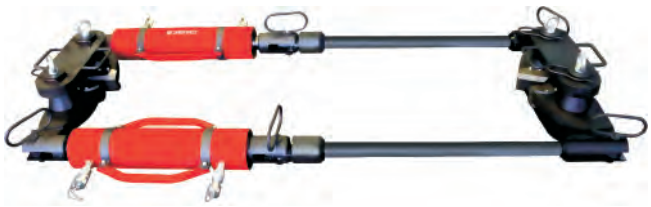
Attachments set

Model	Weight, kg
NVD	30

Model: DGA35G825-1030K

Equipment for rail string tensioning

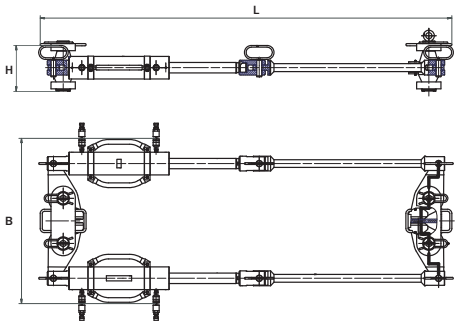
Series UG...
Capacity — 71,6 ton



Model: UG70/400

The equipment is designed for tensioning of the rails up to 1,200 m with temperature compensation up to 25℃.
— The modular design provides easy mounting and dismantling of the device and it transportation by individual elements;
— Hydraulic cylinder is equipped with quick-disconnect couplers to avoid a loss of hydraulic oil during disconnection from the source of pressure;
— High performance is achieved by using pumps with electric or gasoline drive.
Tensioner UG70/400 is used for the construction of new railways.

Model: UG70/400 in operation



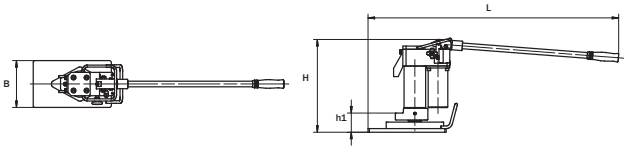
Model	Tension capacity, ton	Stroke, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
UG70/400	71,6	380	3800	964x2329x337	310	NRG-7080R, NBR...

Rail lifting jacks

Series DJ. ., DJA. . .
Capacity — 12-30 ton
Pressure — 520-700 Bar

Model: DJA15P200, DJA20M300, DJ30P300

Provide safe and rapid uplift of the track panels and turnouts for the average and major repairs as well as current maintenance of railway track.
— Models with load capacity of 20 ton can be used for work on the tracks with ferroconcrete sleepers, as well as to raise the rolling stock and other facilities;
— Series DJA... has an built-in pump, series DJ are powered by an external pump;
— Cylinders Series DJA ... P. .. are with limiting dimensions that allows not to remove them when the rolling stock passes by (when the rolling cylinder passes unload the cylinder to set the stroke to the original position)



Model	Capacity, ton	Stroke, mm	Height of the pick-up point, h1, mm	Pressure, Bar	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg
DJA12P160	12	160	70,5	600	314	180x952x352	25
DJA15P200	15	200	72	520	565	180x952x388	25
DJA20P160	20	160	73	630	499	180x952x354	26
DJA20M300**	20	300	70	630	930	180x923x540	32,8
DJ30P300*	30	300	72	700	1507	224x444x490	50

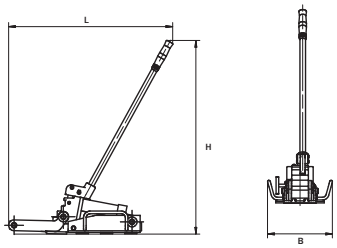
* — recommended pump NRG-7020
** — gravity return of the stroke

Railway leveler

Series RGA. . .
Capacity — 10-12 ton

Model: RGA10

It is designed for lining of the track panels and turnouts, laid on wooden and concrete sleepers, during repairs and maintenance of the railroad. Machine for track lining eliminates the need for a preliminary loosening of the ballasting at the butt ends of the sleepers and digging it out from the cribs. To increase stability on the loose ground a removable base plate is installed at the U piece.



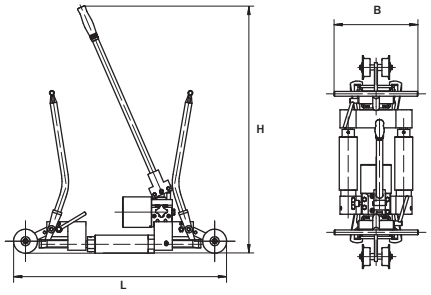
Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight, kg
RGA10	10	100	200	240x495x186	23
RGA12	12	160	314	240x551x194	26,8

Rail gap spreader

Series RRA...
Force — 22,6 ton
Spreading range — 100 mm

Model: RRA04

It is designed for lineal shifting of the rail-track or rails to restore normal gaps between the rails, damaged as a result of track displacement by rolling stock. The spreader is free to move along the rails with special wheels to the next joint providing for quick and easy work.



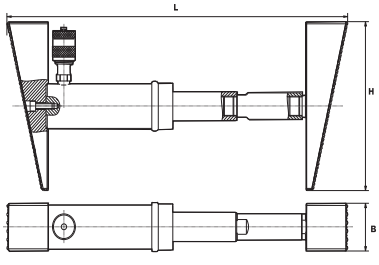
Model	Capacity, ton	Maximum spreading, mm	Dimensions (BxLxH), mm	Weight, kg
RRA-04	22,2	100	280x710x825	38

Reincapacityd concrete beam expander

Series PRB. . .
Pressure — 700 Bar

Model: PRB10

It is designed to obtain the required distance between ferroconcrete (f / c) beams when laying track panel. The device is installed between joists and preads the beams pumping hydraulic fluid into the cylinder chamber. The stroke returns with the pressure relieve by spring capacity.



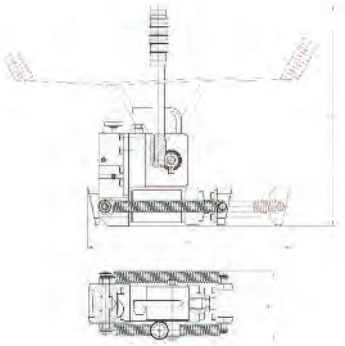
Model	Tension capacity, ton	Spreading in a single cycle, mm	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
PRB10	10	100	65x420x230	12,8	NRG-7010

Hydraulic sleepers expander

Series RRSH. . .
Capacity — 11,1 ton

It is designed to rearrange and readjust the distance between the sleepers. It provides for the mechanization of operations at the current maintenance and repair of the road.

Model: RRSH10



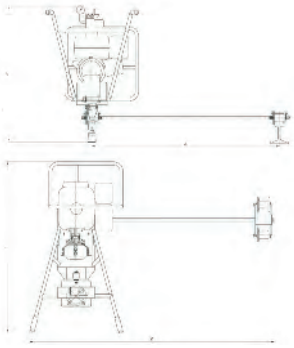
Model	Capacity, ton	Pressure, max, Bar	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg
RRSH10	11,1	700	125	140x313x1304	19,3

Hydromechanical torque wrench with built-in nut splitter

Series GMG. . .
Capacity — 20 ton

It is a hydraulic car driven by an internal combustion engine. It is designed for tightening and loosening butts nuts, expander nuts, terminal bolts of JBR and KB type of bolting and for removal of damaged or rusted nuts. Hydromechanical torque wrench with built-in nut splitter is used for current maintenance and repair, as well as for assembly and disassembly of the rail track panel with gage of 1520 mm for R50, R65, R75 types of the rails

Model: GMG-180K



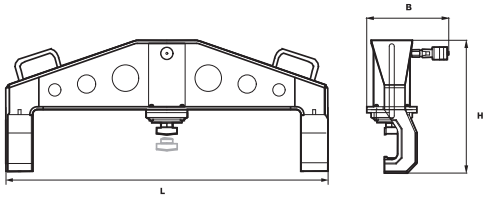
Model	Capacity, ton	Dimensions range of the cut nuts, mm	Max pressure in the hydraulic system, Bar	Torque max, nm	Rated speed of the hydraulic motor take-off shaft	Dimensions (BxLxH), mm	ICE type, gasoline	Engine rating, kW	Weight (dry without support attachment group), kg
GMG-180K	20	32 ... 41	500	730	100	1200x450x600	Honda	6,6	82

Hydraulic rail-bender

Series RG...
Bend capacity — 35,2 ton

It is designed for bending of the rails directly at the point of installation by the required form of section (for station sites, open pits, mines).
— The minimum bend radius is 3 m;
— Double extra strong welded steel frame;
— Equipped with a carrying handle;
— Single general purpose bending punch.

Model: RG 3550



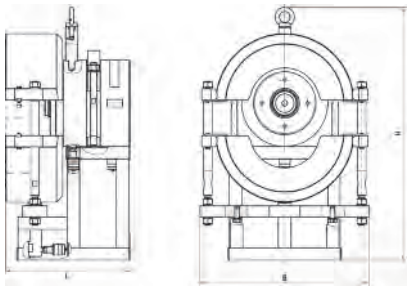
Model	Capacity, ton	Stroke, mm	Minimum bend radius, m	Rail type	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
RG3550	35,2	150	3	R18, R24, R33, R43, R50	280x1110x456	71,5	NRG-7020

Small gear puller

Series SMSH. . .
Capacity — 202 ton

Model: SMSH200

Small gear puller is designed to remove the small gear of the drive motor.
— Equipped with a variety of optional fittings;
— Electric locomotives VL80, VL65, VL60k, VL60PK, OPE-1;
— Diesel-electric locomotives TEM, CHME, TE-10, TEM-2.



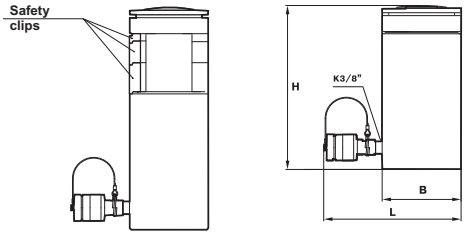
Model	Capacity, ton	Stroke, mm	Lower bracket clamping capacity, ton	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
SMSH200	202	60	5,6	550x405x819	371	NEE-1,6l10T1

Cylinder for display of the wheel-motor units of locomotives

Series DG. . .P. . .KMB
Capacity — 35,8 ton
Pressure — 700 Bar

Model: DG35P100KMB

It is designed for integration into the system for display of the wheel-motor units of locomotives during diagnostics and repair of locomotive drive engine bearings in the loco depot. It is equipped with a set of three safety brackets which ensure unlimited hold-up of the load and eliminate its emergency drop in case of the hydraulic system failure. It is equipped with a floating fulcrum block, made of high-strength steel with a special heat treatment, which compensates radial load on the stroke (up to 25% of the total load) and provides reliable and safe operation.



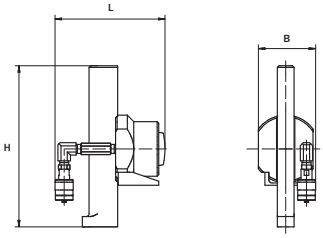
Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Height of the safety brackets			Dimensions (BxLxH), mm	Weight, kg
				1	2	3		
DG35P100KMB	35,8	100	502	43	33	23	108x188x225	15

Absorbing devices removal tools

Series PPA. . .
Capacity — 20 ton
Pressure — 700 Bar

Model: PPA1

It is designed for removal of the cushioning units of SH-1-TM, SH-2-8, SH-2-T and SH6-TO-4U types of the wagons and locomotives for repair work. The device helps to reduce the time required for removal of cushioning units installed at the automatic coupling of railway rolling stock, to increase efficiency and safety. Two models:
PPA1 with single 55 mm wide wedge can be used for removal of cushioning units of the freight wagons and passenger cars;
PPA2 with two 45 mm and 55 mm wide wedges can be used for electric locomotives VL65, VL80, VL85 and other locomotives.



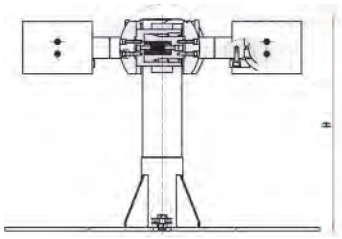
Model	Capacity, ton	Stroke, mm	Oil working capacity, cm^3	Dimensions (BxLxH), mm	Weight of hydraulic cylinder, kg	Wedge weight, kg	Recommended pump
PPA1	20	20	100,5	107x250x310	6,8	4,1	NRG-7004A
PPA2	20	20	100,5	107x250x310	6,8	3,3; 4,1	NRG-7004A

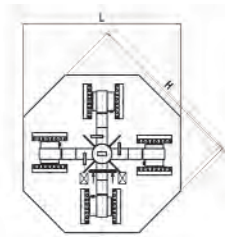
Machines for building up boxes

Series UNB...
Capacity — 35 ton

Device for axle-box build up welding is used during repair of parts and components of the railway rolling stock and designed for stationary welding of seats for the axle equipment.

UNB35-4





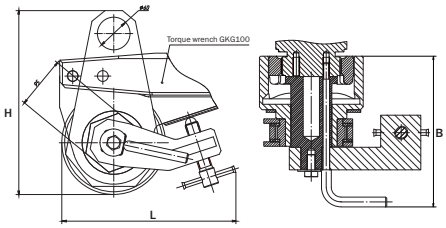
Model	Capacity, ton	Rated pressure, Bar	Stroke, mm	Axle-box bore diameter	Number of seat, pcs.	Axle equip-ment turning angle, degree	Oil working capacity, cm^3	Ambient tem-perature range, °C	Dimen-sions (Bx LxH),mm	Weight, kg
UNB35-4	35,8	700	30	250	4	90	150	-30 to +40	940x940x607	191

Cup nut loosening tool

Series PTG. . .
Pressure — 700 Bar

The tool helps to unscrew problem cup nuts, screwed with adhesive sealant in the wheel set axle of railway cars. It is used in conjunction with the wrench GKG1000

Model: PTG155



Model	Nut width across flats, mm	Torque, kg-m, max	Dimensions (BxLxH), mm	Weight with torque, wrenchkg	Weight, kg	Recommended pump
PTG155	155	1000	221x305x337	36,6	23	NEE...,NEA...

Polyspast blocks

Series B...
Capacity — 1,25-3,2 ton

It is designed to double the pulling capacity of the crab winches and other pulling and lifting mechanisms equipped with pulling rope / cable.

Model: B-3,2

Model	Capacity, ton	Maximum rope diameter, mm	Weight, kg
B-1,25	1,25	5,6	3,6
B-3,2	3,2	8,3	4,5

Coffing hoists

Series LR...
Pulling capacity — 0,63-1,6 ton
Travel — 3-9 m

Models: LR-1,6/3, LR-0,63/6

They are designed to move goods in a horizontal direction, string wires, pull out stuck cars and for other operations in industry as well as in household use. One person can easily move cargo weighing up to 1.6 tones. All models are equipped with a free handle. LR-1,6/... models have a screwed telescopic handle with adjustable length.

Model	Pulling capacity, ton	Travel, m	Diameter, mm	Maximum capacity on the handle, kgn	Dimensions (BxLxH), mm	Weight, kg
LR-0,63/3	0,63	3	5,6	28	130x760x105	6,7
LR-0,63/6	0,63	6	5,6	28	130x760x105	7
LR-0,63/9	0,63	9	3,6	27	130x760x105	7
LR-1,6/3	1,6	3	8,3	35	155x1250x145	12,7
LR-1,6/6	1,6	6	8,3	35	155x1250x145	13
LR-1,6/9	1,6	9	8,3	35	155x1250x145	14,3

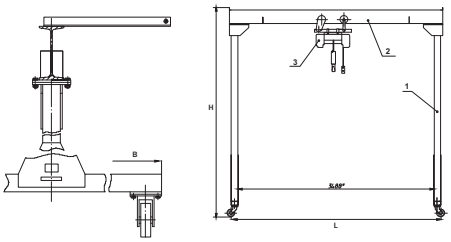
Gantry crane

Series EKP...
Capacity — 1 ton

Gantry cranes are classified as labor saving tools for cargo handling and they are widely used at the enterprises with different turnover, designed for cargo lifting, lowering and moving in the shops and at the sites.

Types of possible operations:

— Loading and unloading;
— Replacement of parts and components of machines;
— Any type of repairs of the cars and machines;
— Operation in storehouse facilities



1 - rack;
2 - beam;
3 - pulley;
4 - control panel.

— Cranes consist of the rack and pulley. Crane pulley is controlled by a pendant control panel;
— The advantage of this crane is not only light weight and dimensions but also availability, and low cost in comparison with other lifting equipment;
— Cranes of this type move with help of mounted wheels. Two wheels of four are equipped with brake. Even for one person it is not a problem to move the crane by hand. The other convenience of the cranes of this type is a possibility adjustment of the height of lift.

Model	Capacity, ton	Power supply	Height of lift H1, mm	Gantry width, mm	Gantry height, mm	Dimensions (BxLxH), mm	Weight, kg
EKP1	1	380 V	2600	3488	3460	1200x3820x3740	558

Pumps selection table

Choose the pump for a particular instrument according to the following directions:
1. Follow the recommended compatibility of pumps with cylinders (see selection table).
2. Choose a pump basing on the compliance of technical characteristics of the pumps (see selection table) and tools (note that the displacement volume of the Oil of the tool (s) and hose (s) must be less the effective volume of the pump tank). If you need more information regarding the pump or recommendations about the proper completing units of the full hydraulic system, please contact your nearest representative of CJSC "TD" Enerpred."

Stroke, mm	Capacity of the cylinders DU..P, DG..P, DG..P..G, DN, DO..P, DP..P, DS, DGA..P, DGA..P..G, ton																
	5	8	10	15	20	30	35	50	60	100	140	150	200	300	400	500	600
15																	
50																	
100																	
150																	
200																	
250																	
300																	
360																	
400																	
500																	

Pump	NRG-7004A	NRG-7010	NRG-7020	NRG-7035	NRG-7080	NRG-7160	NER-...A
Useful oil capacity, cm³	350	800	1600	3500	8000	16000	>16000

Stroke, mm	Capacity of the cylinders DU..G, DG..G, DO..G, DP..G, CS, DT, ton														
	5	8	10	15	20	35	50	60	100	150	200	300	400	500	600
50															
100															
150															
200															
250															
300															
400															
500															
600															
800															
1000															
1250															

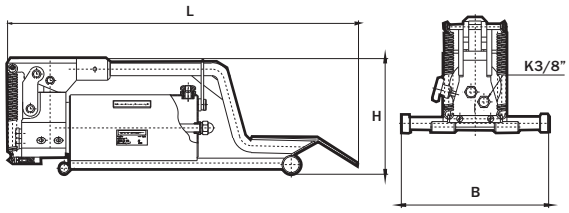
Pump	NRG-7020R	NRG-7035R	NRG-7080R	NRG-7160R	NER..I
Useful oil capacity, cm³	1600	3000	8000	16000	>16000

Hydraulic foot pump

Series NGN...
Resirvoir — 2000 cm≥
Pressure — 700 Bar

— Reliable source of pressure for hydraulic tool, independent on external power supply;
— Has the ability to operate with double-acting hydraulic tool with integrated hydraulic valve.

Model: NGN-7020



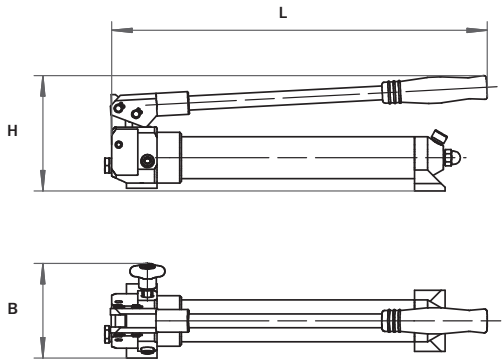
Model	Nominal oil capacity, cm³	Useful oil capacity, cm³	Pressure, Bar		Volume per stroke, cm³		Max. handle effort, kgs	Demensions (BxLxH), mm	Weight, kg
			1 stage	1 stage	1 stage	2 stage			
NGN-7020	2000	1500	12	700	12	1,5	45	240x571x188	8

Manual hydraulic pumps for equipment with spring or gravity retraction

Series NRG...
Nominal oil capacity — 400-18000 cm^3
Pressure — 700-1000 Bar

Model: NRG-7020, Model: NRG-7004A

Reliable source of pressure for hydraulic tools, independent of external power source.
— All pumps are equipped with built-in safety valves, which are set to nominal pressure;
— NRG -7004A - lightweight model with aluminum body;
— NRG-10035 - Model with an aluminum body, operates with pressure of 1000 Bar;



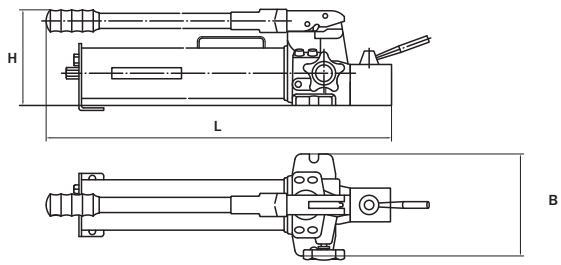
Model	Nominal oil capacity, cm^3	Useful oil capacity, cm^3	Pressure, Bar		Volume per stroke, cm^3		Dimensions (BxLxH), mm	Weight, kg
			1 stage	2 stage	1 stage	2 stage		
NRG-7004A	400	350	13,8	700	12,9	1	110x391x140	3,2
NRG-7010	1000	800	13,8	700	13	2,8	136x710x152	8,2
NRG-7020	2000	1600	13,8	700	13	2,8	148x580x189	12,4
NRG-10035	3500	3000	20	1000	21,4	1,3	130x208x670	10,5
NRG-7035	4000	3500	27,5	700	40	3	170x630x220	12,7
NRG-7080	10000	8000	27,5	700	113	4	310x715x320	22,2
NRG-7160	18000	16000	27,5	700	113	4	389x715x320	29,4

Manual hydraulic pumps for equipment with hydraulic retraction

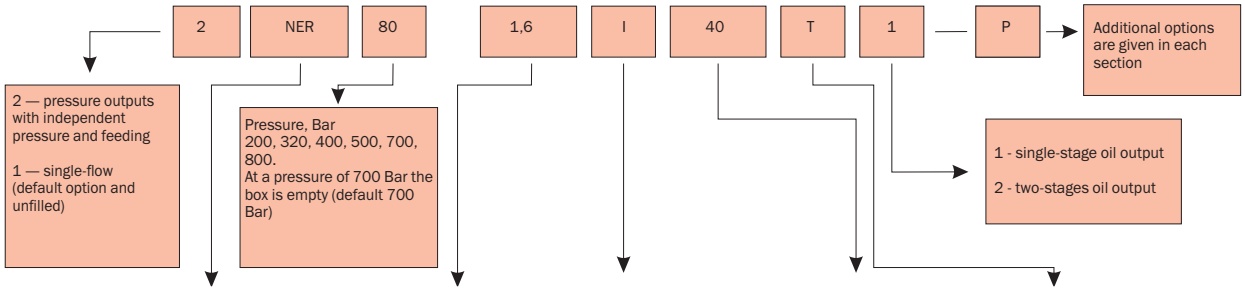
Series NRG. . .R
Nominal oil capacity — 2000-18000 cm^3
Pressure — 700 Bar

— NRG...R models have built-in hydraulic control valves allowing to work with double-acting tools.

Model: NRG-7035R



Model	Nominal oil capacity cm^3	Useful oil capacity, cm^3	Pressure, Bar		Volume per stroke, cm^3		Max. handle effort, kg	Dimensions (BxLxH), mm	Weight, kg
			1 stage	2 stage	1 stage	2 stage			
NRG-7020R	2000	1600	13,8	700	13,5	2,5	50	148x635x189	15,8
NRG-7035R	3500	3000	13,8	700	13,5	2,5	55	148x795x189	18
NRG-7080R	10000	8000	27,7	700	113	4	50	310x715x340	22,8
NRG-7160R	18000	16000	27,5	700	113	4	50	389x700x340	30



Type of station		Output flow rate, l/min	Valve type	Tank volume, l	Power supply	Type of tool
NER **Electric pump with manual valve**		0,5	A; I	4, 8	F ; T	
		0,8	A; I ; ADD*	10, 20, 40, 63	F ; T	
		1,6	A; I ; ADD*	10, 20, 40, 63, 100, 160	F ; T	
		2,8	A; I ; ADD*	20, 40, 63, 100, 160*, 200	T	
		5,0	A; I ; ADD*	40, 63, 100, 160, 200, 250	T	
		10,0	A; I ; ADD*	40, 63, 100, 160, 200, 250	T	
NEE **Electric pump with remote electromagnetic control**		0,5	A; Г; I	10, 20, 40	F ; T	
		0,8	Г; I; ADD*	10, 20, 40, 63	F; T	
		1,6	Г; I ; ADD*	10, 20, 40, 63, 100, 160	T	
		2,8	Г; I ; A*	20, 40, 63, 100	T	
		5,0	Г; I ; ADD*	40, 63, 100, 160, 200, 250	T	
		10,0	Г; I ; A*	40, 63, 100, 160, 200	T	
NEA **Electric pump with remote electromagnetic automatic control**		0,5	Г; I ; A*	10, 20, 40	F ; T	
		0,8	Г; I; ADD*	10, 20, 40, 63	F; T	
		1,6	Г; I ; ADD*	10, 20, 40, 63, 100, 160	T	
		2,8	Г; I ; A*	20, 40	T	
		5,0	Г; I ; ADD*	40, 63, 100, 160, 200, 250	T	
		10,0	Г; I ; A*	100	T	
VNER **Electric pump with manual valve and with explosion-proof motor**		0,8	A; I; ADD*	10, 20, 40, 63	T	
		1,6	A; I; ADD*	10, 20, 40, 63	T	
		2,8	A; I; ADD*	20, 40, 63, 100	T	
		5,0	A; I; ADD*	40, 63, 100, 160, 200, 250	T	
		10,0	A; I; ADD*	40, 63, 100, 160, 200, 250	T	
NBR **Gasoline pump**		1,6	A; I ; ADD*	10, 20, 40	—	
		2,4	A; I ; ADD*	20, 40	—	
		5,0	A; I ; ADD*	100, 160	—	
		10,0	A; I ; ADD*	100, 160, 200, 250		
NPR **Air pump**		0,5	A; I	4,8	—	
		1,6	A; I ; ADD*	10, 20, 40, 63, 100	—	

* Valves are manufactured on special order

A — relief valve (stroke - retract)

G — 2-position valve (stroke - retract)

I — 3- position valve (stroke- retention- retract)

ADD — two (3 or more D4D) 3-position valves for several cylinders - (stroke - retention - retract).

Single-acting

Double-acting

F — 220 V, 50Hz, 1 phase

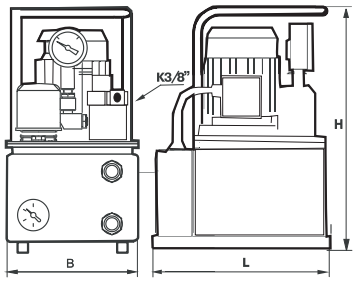
T — 380 V, 50Hz, 3 phase

With manual valve

Series NER. . .A. . .
Pressure — 700 Bar

Model: NER-1,6A10T1

Pumps of the series NER...A are a simplified version with the minimum complete set for manual operation. Equipment is controlled by manual relief valve set to a pump. It is equipped with a collector rivet nut with threaded seats (K3 / 8'') for connection of pressure and discharge hoses and seat (K3 / 8'') for connection of the pressure gauge with adapter. Pressure control valve group, pressure gauge and plug connector are not included in the scope of supply of the basic equipment. If these completing units of pump are necessary, as well as the collector threaded rivet nuts to connect several devices, they must be ordered separately. The stations are used with single-acting hydraulic equipment /tools that do not require retention in a loaded position (cutting tools, pullers, pipe benders, etc.).



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric motor power, kw	Dimensions (BxLxH), mm	Weight*, kg
NER-0,8A10F1	0,8	10	220V, 50 Hz	1,1	300x570x420	40,5
NER-0,8A20F1		20			300x630x420	42,0
NER-0,8A40F1		40			410x660x530	48,5
NER-1,6A10F1	1,6	10		2,2	300x570x420	41,5
NER-1,6A20F1		20			300x630x420	43,0
NER-1,6A40F1		40			410x660x530	49,5
NER-0,8A10T1	0,8	10	380V, 50 Hz	1,1	300x570x420	41,0
NER-0,8A20T1		20			300x630x420	42,5
NER-0,8A40T1		40			410x660x530	49,0
NER-1,6A10T1	1,6	10		2,2	300x570x420	42,0
NER-1,6A20T1		20			300x630x420	43,5
NER-1,6A40T1		40			410x660x530	50,0
NER-2,8A20T1	2,8	20		3,0	300x690x420	49,5
NER-2,8A40T1		40			410x690x530	56,0
NER-5,0A40T1	5,0	40		7,5	410x796x530	121,0
NER-5,0A63T1		63			430x886x550	123,0
NER-5,0A100T1		100			455x1006x590	127,5

* Weight of the pum without oil;

Feeding oil for pumps is delivered on customer request.

Model: NER-2,8A20T1-MKZSH
In protective frame, with gauge and plug-and-socket connector

Extras:

R — adjustment and pressure relief valve;

T — thermometer;

M — gauge;

SH — plug-and-socket connector;

K — the wheels on the tank;

B2 (B3, Б4) - collector threaded rivet nuts for parallel connection of 2 (3 or 4) simultaneously operating hydraulic tools;

Zk - protective frame;

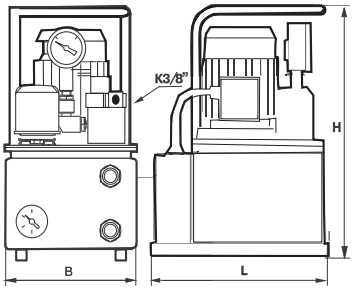
Dr - throttle control of the supply

With manual valve

Series NER. . .I. . .
Pressure — 700 Bar

Model: NER-1,6I10T1

Pump of the series NER...I... is a complete package for manual operation and control. It is equipped with a vibration-resistant gauge, safety valve, pressure control valve group, 2m power cable with plug-and-socket connector. Hydraulic equipment is controlled with help of the manual three-position valve mounted on the pump. Motor control buttons (start-stop) are located on the cover of the electromagnetic starter with thermal relay. Manual three-position valve of the series I... (Model GR-3IR-1) operates in "stroke-hold-back" mode (cylinders, hydraulic cylinders, pipe benders, pressure machines, etc.). Pumps are used with all types of hydraulic equipment /tools both single and double-acting. Optional units are frequency converter for the motor frequency regulation, thermometer, electric heater with a thermostat, radiator for cooling the drain flow, gauge with digital display of pressure (capacity) and wheels to roll the station.



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric motor power, kw	Dimensions (BxLxH), mm	Weight*, kg
NER-0,8I10F1	0,8	10	220V, 50 Hz	1,1	300x570x420	41,0
NER-0,8I20F1		20			300x630x420	42,5
NER-0,8I40F1		40			410x660x530	49,0
NER-1,6I10F1	1,6	10		2,2	300x570x420	42,0
NER-1,6I20F1		20			300x630x420	43,0
NER-1,6I40F1		40			410x660x530	50,0
NER-0,8I10T1	0,8	10	380V, 50 Hz	1,1	300x570x420	42,5
NER-0,8I20T1		20			300x630x420	44,0
NER-0,8I40T1		40			410x660x530	50,5
NER-1,6I10T1	1,6	10		2,2	300x570x420	42,5
NER-1,6I20T1		20			300x630x420	44,0
NER-1,6I40T1		40			410x660x530	50,5
NER-1,6I63T1		63			430x750x550	52,0
NER-1,6I100T1		100			455x870x590	54,5
NER-2,8I20T1	2,8	20		3,0	300x690x420	50,5
NER-2,8I40T1		40			410x690x530	56,5
NER-2,8I63T1		63			430x780x550	58,0
NER-2,8I100T1		100			455x900x590	60,5
NER-5,0I40T1	5,0	40		7,5	410x796x530	121,5
NER-5,0I63T1		63			430x886x550	124,0
NER-5,0I100T1		100			455x1006x590	128,0
NER-10,0I40T1	10,0	40		11,0	410x816x530	126,5
NER-10,0I63T1		63			430x906x550	129,0
NER-10,0I100T1		100			455x1026x590	133,0

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Extras:

CH - motor frequency regulation
T - thermometer;
P - power fluid heating;
H- power fluid cooling;
C - digital gauge;
K - the wheels on the tank;

For transportation:
Zk - protective frame;
Dr - throttle control of the supply

Model: NER-10,0I100T1

Model: NER-5,0I40T1

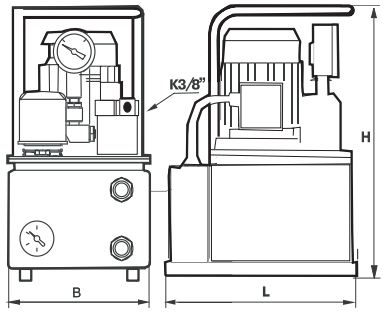
Model: NER-2,8I20T1 tropicalized

With a solenoid valve

Series NEE. . .G. . .
Pressure — 700 Bar

Model: NEE-1,6G10F2

NEE series pumps are designed for manual remote control.
They are equipped with vibration-proof manometer, safety relief valve, pressure control valve, 2m power supply cable with plug-and-socket connector, remote control panel with 4m cable, powered by safe voltage of 24 V and allowing for engine (start/stop) and solenoid hydraulic directional valve handling.
G series solenoid two-position hydraulic directional valve (GE-2G-1 model) switches between working stroke/idle stroke phases without pressure holding phase (torque-wenches, cutting tool, grip pullers, pipe benders, pressers, etc.)



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric engine power, kW	Dimensions (BxLxH), mm	Weight*, kg
NEE-0,8G10F1	0,8	10	220V, 50 Hz	1,1	300x570x420	42,0
NEE-0,8G20F1		20			300x630x420	43,5
NEE-0,8G40F1		40			410x660x530	50,0
NEE-1,6G10F1	1,6	10		2,2	300x570x420	42,5
NEE-1,6G20F1		20			300x630x420	44,0
NEE-1,6G40F1		40			410x660x530	50,5
NEE-0,8G10T1	0,8	10	380V, 50 Hz	1,1	300x570x420	43,0
NEE-0,8G20T1		20			300x630x420	44,5
NEE-0,8G40T1		40			410x660x530	51,0
NEE-1,6G10T1	1,6	10		2,2	300x570x420	43,0
NEE-1,6G20T1		20			300x630x420	44,5
NEE-1,6G40T1		40			410x660x530	51,0
NEE-2,8G20T1	2,8	20		3,0	300x690x420	49,5
NEE-2,8G40T1		40			410x690x530	56,0
NEE-5,0G40T1	5,0	40		7,5	410x796x530	122,0
NEE-5,0G63T1		63			430x886x550	124,0

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Model: NEE-1,6G10T1- TN (for press drive) with thermometer and valve control foot pedal.

Model: NEE-1,6G20F1

Extra options:

N — valve foot control pedal;
Ru— radio remote control with range up to 70m;
CH — electric engine frequency regulation;
T — thermometer;
P — hydraulic fluid heating;
H — hydraulic fluid cooling;
C — digital pressure gauge;
K — tank wheels;
Zk — safety cage;
Dr — flow throttle control.

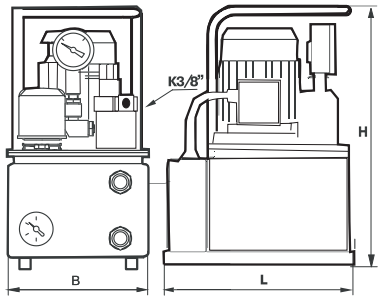
With a solenoid valve

Series NEE. . .I. . .
Pressure — 700 Bar

Model: NEE-5,0I40T1

NEE series pumps are designed for manual remote control. The pump is equipped with vibration-proof manometer, safety relief valve, pressure control valve, 2m power supply cable with plug-and-socket connector, remote control panel with m cable, powered by safe voltage of 24 V and allowing for engine (start/stop) and solenoid hydraulic directional valve handling.

"I" series three-position solenoid hydraulic directional valve (model GE-3IR-1) switches between working stroke/pressure holding/idle stroke phases, allowing for pressure holding (lift cylinders, hydraulic cylinders, pipe benders, etc.)



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric engine power, kW	Dimensions (BxLxH), mm	Weight*, kg
NEE-0,8I10F1	0,8	10	220V, 50 Hz	1,1	300x570x420	43,5
NEE-0,8I20F1		20			300x630x420	45,0
NEE-0,8I40F1		40			410x660x530	51,0
NEE-1,6I10F 1	1,6	10		2,2	300x570x420	43,5
NEE-1,6I20F1		20			300x630x420	45,0
NEE-1,6I40F1		40			410x660x530	52,0
NEE-0,8I10T1	0,8	10	380V, 50 Hz	1,1	300x570x420	44,5
NEE-0,8I20T1		20			300x630x420	46,5
NEE-0,8I40T1		40			410x660x530	52,0
NEE-1,6I10T1	1,6	10		2,2	300x570x420	44,0
NEE-1,6I20T1		20			300x630x420	46,5
NEE-1,6I40T1		40			410x660x530	52,0
NEE-2,8I20T1	2,8	20		3,0	300x690x420	49,7
NEE-2,8I40T1		40			410x690x530	56,2
NEE-2,8I100T1		100			455x900x590	60,2
NEE-5,0I40T1	5,0	40		7,5	410x796x530	123,5
NEE-5,0I63T1		63			430x886x550	125,5
NEE-5,0I100T1		100			455x1006x590	131,0
NEE-10,0I40T1	10,0	40		11,0	410x816x530	126,5
NEE-10,0I63T1		63			430x906x550	129,0
NEE-10,0I100T1		100			455x1026x590	133,0

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Extra options:

N — valve foot control pedal;
Ru — radio remote control with range up to 70 m;
CH — electric engine frequency regulation;
T — thermometer;
P — hydraulic fluid heating;
H — hydraulic fluid cooling;
C — digital gauge;
K — tank wheels;
S — folding handles for transportation;
Zk — safety cage;
Dr — flow throttle control.

Model: NEE-1,6I20T1-3k in a safety cage with quick connect couplers for quick connection of hydraulic equipment.

Model: NEE-5,0I40T1

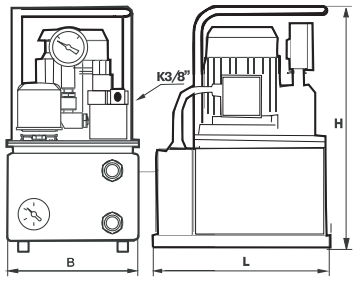
Model: NEE-0,8I10F2-K

With an automatic solenoid valve

Series NEA. . .G. . .
Pressure — 700 Bar

Model: NEA-1,6G10F2

NEA series pumps are fully equipped for both automatic and manual remote control.
Automatic control feature uses either a clock timer to set the desired interval (in seconds) for working and idle strokes, or the boundary values of the pressure in the cavities of hydraulic equipment.
Pump is equipped with vibration-proof manometer, safety relief valve, pressure control valve, thermometer and temperature sensor, clock timer, 2m power supply cable with plug-and-socket connector, reserve remote control panel with 4m cable, powered by safe voltage of 24 V and allowing for engine (start/stop) and solenoid distribution valve handling; and an automatic/manual toggle switch.
Solenoid two-position distribution valve “G “ series (model “GE-2G-1”) switches between working stroke/idle stroke phases without pressure holding phase (torque wrenches, cutting tools, grip pullers, pipe benders, etc.)



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric engine power, kW	Dimensions (BxLxH), mm	Weight*, kg
NEA-0,8G10F1	0,8	10	220В, 50 Гц	1,1	300x570x420	43,0
NEA-0,8G20F1		20			300x630x420	44,5
NEA-0,8G40F1		40			410x660x530	51,0
NEA-1,6G10F1	1,6	10		2,2	300x570x420	43,5
NEA-1,6G20F1		20			300x630x420	45,0
NEA-1,6G40F1		40			410x660x530	51,5
NEA-0,8G10T1	0,8	10	380В, 50 Гц	1,1	300x570x420	44,0
NEA-0,8G20T1		20			300x630x420	45,5
NEA-0,8G40T1		40			410x660x530	52,0
NEA-1,6G10T1	1,6	10		2,2	300x570x420	44,0
NEA-1,6G20T1		20			300x630x420	45,5
NEA-1,6G40T1		40			410x660x530	52,0
NEA-2,8G20T1	2,8	20		3,0	300x690x420	49,5
NEA-2,8G40T1		40			410x690x530	56,0
NEA-5,0G40T1	5,0	40		7,5	410x796x530	123,0
NEA-5,0G63T1		63			430x886x550	125,0
NEA-5,0G100T1		100			455x1006x590	130,0

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Model: NEA0,8G10F1-K with wheels

NEA series pumps are ideal for torque wrenches

Extra options:

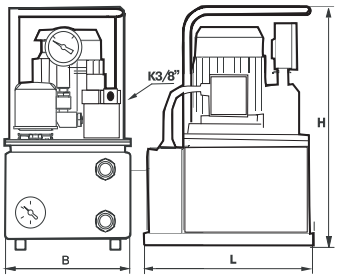
N — valve control foot pedal;
Ru — radio remote control with range up to 70 m;
CH — electric engine frequency regulation;
P — hydraulic fluid heating;
H — hydraulic fluid cooling;
C — digital gauge;
K — tank wheels;
Zk — safety cage;
Dr — flow throttle control.

With an automatic solenoid valve

Series NEA. . .I. . .
Pressure — 700 Bar

Model: NEA-1,6I20T1

NEA series pumps are fully equipped for both automatic and manual remote control. Automatic control feature uses either a clock timer to set the desired interval (in seconds) for working, pressure holding and idle strokes, or the boundary values of the pressure in the cavities of hydraulic equipment. Pump is equipped with vibration-proof manometer, safety relief valve, pressure control valve, thermometer and temperature sensor, clock timer, 2m power supply cable with plug-and-socket connector, reserve remote control panel with 4m cable, powered by safe voltage of 24 V and allowing for engine (start/stop) and solenoid distribution valve handling; and an automatic/manual toggle switch.
"I" series three-position solenoid distribution valve (model "GE-3IR-1") switches between working stroke/pressure holding/idle stroke phases, allowing for pressure holding (lift cylinders, hydraulic cylinders, pipe benders, etc.)



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric engine power, kW	Dimensions (BxLxH), mm	Weight*, kg
NEA-0,8I10F1	0,8	10	220V, 50 Hz	1,1	300x570x420	44,0
NEA-0,8I20F1		20			300x630x420	45,5
NEA-0,8I40F1		40			410x660x530	52,0
NEA-1,6I10F1	1,6	10		2,2	300x570x420	44,5
NEA-1,6I20F1		20			300x630x420	46,0
NEA-1,6I40F1		40			410x660x530	52,5
NEA-0,8I10T1	0,8	10	380V, 50 Hz	1,1	300x570x420	44,5
NEA-0,8I20T1		20			300x630x420	46,0
NEA-0,8I40T1		40			410x660x530	52,5
NEA-1,6I10T1	1,6	10		2,2	300x570x420	44,5
NEA-1,6I20T1		20			300x630x420	46,0
NEA-1,6I40T1		40			410x660x530	52,5
NEA-2,8I20T1	2,8	20		3,0	300x690x420	49,7
NEA-2,8I40T1		40			410x690x530	56,2
NEA-5,0I40T1	5,0	40		7,5	410x796x530	124,0
NEA-5,0I63T1		63			430x886x550	126,0
NEA-5,0I100T1		100			455x1006x590	130,5
NEA-10,0I100T1	10	100		11	455x1026x590	133,0

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Model: NEA-0,8G10F1-K with wheels

Extra options:

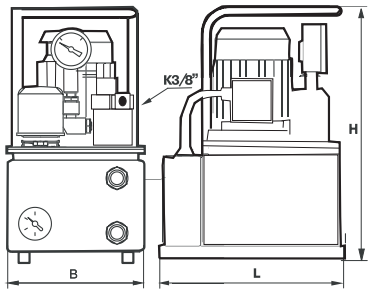
N2 — double valve control foot pedal;
Ru — radio remote control with range up to 70 m;
CH — Electric engine frequency regulation;
P — hydraulic fluid heating;
H — hydraulic fluid cooling;
C — digital gauge;
K — tank wheels;
S — folding handles for transportation;
Zk — safety cage;
Dr — flow throttle control.

With explosion-proof electric motor and manual valve

Series VNER. . .I. . .
Pressure — 700 Bar

Model: VNER-1,6I40T1

VNER series pumps are similar to NER pumps, although being equipped with explosion-proof engine. They are supplied without electrical connection equipment. The engine must be connected to the explosion-proof engine starter on the working site in accordance with safety rules and regulations of the electrical code.
Basic models are equipped with vibration-proof gauge, safety valve, pressure regulator. The hydraulic equipment is controlled by the “I” series three-position manual distribution valve (model “GR-3IR-1”) allowing for working stroke/pressure holding/idle stroke phases (lift cylinders, hydraulic cylinders, pipe benders, etc.) Could be used with any type of hydraulic equipment and tools, both single-acting and double-acting. Additional equipment could be installed, like a thermometer, wheels for transportation, folding handles for carrying by 2 to 4 staff members (available for stations with tanks of 40, 63, and 100 liters).



Model	Output flow rate, l/min	Tank volume, l	Power supply	Electric engine power, kW	Dimensions (BxLxH), mm	Weight*, kg
VNER-1,6I10T1	1,6	10	380V, 50 Hz	2,2	300x570x420	56
VNER-1,6I20T1		20			300x630x420	58
VNER-1,6I40T1		40			410x660x530	64
VNER-1,6I63T1		63			430x750x550	65,5
VNER-2,8I20T1	2,8	20		3,0	300x690x420	75
VNER-2,8I40T1		40			410x690x530	81,5
VNER-2,8I63T1		63			430x780x550	84
VNER-5,0I40T1	5,0	40		7,5	430x920x590	143,5
VNER-5,0I63T1		63			460x1010x610	145,5
VNER-5,0I100T1		100			480x1130x650	150
VNER-10,0I100T1	10	100		11	480x1150x650	159,5

* Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Since the station series VNER are supplied without remote and automatic control electrical equipment, it is highly recommended to connect a hydraulic tool with built-in valve to VNER pump.

Model: NER-10IG100T1

Extra options:

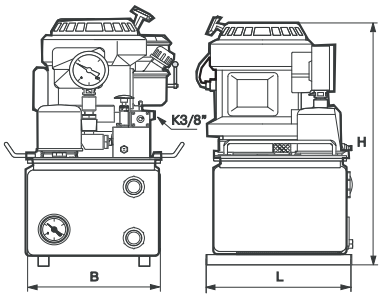
T — thermometer;
K — tank wheels;
S — folding handles for transportation;
3k — safety cage;
Dr — flow throttle control.

With a manual relief valve

Series NBR...A...
Pressure — 700 Bar

Model: NBR-5,0I63-1

NBR series pumps are designed for operation in the absence of a power supply. Rotation of the pump is performed by a four-stroke, air-cooled gasoline engine. The hydraulic equipment is controlled by manual relief valve or manual three-position distribution valve mounted on the pump.
NBR...A... series pumps are supplied without a pressure gauge and pressure valve. These parts are optional and, if necessary, must be ordered separately. “A” series manual relief valve (model “RK-80/5-1”) operates in a two-stroke mode (working/idle) without pressure holding phase (cutting tools, grip pullers, pipe benders, etc.)
NBR...I... series pumps are equipped with a vibration proof gauge, safety valve and pressure regulator valve. “I” series manual three-position valve (model “GR-3IR-1”) operates in a three-position mode (working/pressure/idle), allowing for the pump to be used with any type of hydraulic equipment and tools, both single-acting and double-acting (lift cylinders, hydraulic cylinders, pipe benders, etc.).



Model	Output flow rate, l/min	Tank volume, l	Dimensions (BxLxH), mm	Weight*, kg
NBR-1,6A10-1	1,6	10	330x570x430	33,0
NBR-1,6A20-1		20	370x620x430	34,5
NBR-1,6A40-1		40	530x720x560	41,0

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

With a manual distribution valve

Series NBR. . .I. . .
Pressure — 700 Bar

Model	Output flow rate, l/min	Tank volume, l	Dimensions (BxLxH), mm	Weight*, kg
NBR-0,5I4-1	0,5	4,0	390x610x410	36,0
NBR-1,0I4-1	1,0	4,0	390x610x410	36,0
NBR-1,6I10-1	1,6	10	330x570x430	33,5
NBR-1,6I20-1		20	370x620x430	35,0
NBR-1,6I40-1		40	530x720x560	41,5
NBR-2,4I20-1	2,4	20	300x620x420	46,0
NBR-2,4I40-1		40	410x530x720	47,5
NBR-5,0I40-1	5,0	40	540x760x580	91,5
NBR-5,0I63 1		63	540x860x580	93,0
NBR-5,0I100-1		100	540x1120x580	97,5
NBR-10,0I160-1	10	160	1250x670x860	210

* — УDry weight of the pumping station is specified. Oil for refilling is supplied on customer's demand

Model: NBR-1,0I4-1

Model: NBR-1,6I20-1 in half frame

Model: NBR-10I160-1 with petrol engine electric start

Extra options:

T — thermometer;
Dr — flow throttle control;
K — tank wheels;
S — folding handles for transportation;
Zk — safety cage;.

Special options for NBR. . .A. . .

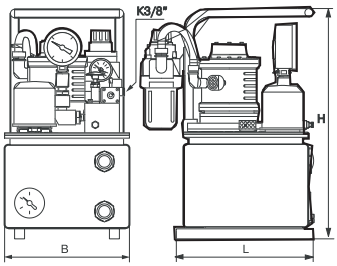
R — pressure safety valve (PSV);
M — gauge;
B2 (B3, B4) — spacer rings for parallel connection of 2 to 4 hydraulic tools for simultaneous operation.

With a manual relief valve

Series NPR…A…
Pressure — 700 Bar

Model: NPR-1,6A10-1-FM-M with moist separator filter, oil lubricator (FM) and gauge

NPR pumps are equipped by a plate-type pneumatic engine operating as a pump actuator. It could be powered by any air supply line with pressure up to 6,2 Bar**, feed of 4.3 m / min and nominal diameter (DN) of the pipe at least 16 mm.
The hydraulic equipment is controlled by manual relief valve or manual three-position distribution valve and air valve (feed control) installed at the pump.
It is recommended to equip the “NPR” pump with an air handling unit (filter/lubricator), if used air supply line does not include this equipment. The presence of air handling unit in the set is designated by letters F (air filter / drip leg) and M (oil lubricator), such as NPR-1,6I10-1AM (with filter and oil distributor), NPR-1,6I40-1-F (with filter/drip leg only).
NPR...A... series pums are supplied without gauge and pressure control valve. These parts are optional and, if necessary, must be ordered separately. “A” series manual relief valve (model “RK-80/5-1”) operates in a two-stroke mode (working/idle) without pressure holding phase (cutting tools, grip pullers, pipe benders, etc.)



Pumps NPR…A… series without air preparation units

Model	Output flow rate, l/min	Tank volume, l	Air pressure, Bar, min	Pneumatic motor power, kW	Dimensions (BxLxH), mm	Weight*, kg
NPR-1,6A10-1	0,8-2,5	10	4-62	4,0	300x570x480	36,5
NPR-1,6A20-1		20			370x620x480	38,0
NPR-1,6A40-1		40			530x590x560	44,5

With a manual distribution valve

Series NPR…I…
Pressure — 700 Bar

“I” series three-position manual control valve (model GR-3IR-1) switches between working stroke/pressure holding/idle stroke phases, allowing for pressure holding (lift cylinders, hydraulic cylinders, pipe benders, pressers, etc.)

NPR…I… series pumps without air preparation units

Model	Output flow rate, l/min	Tank volume, l	Air pressure, Bar, min	Pneumatic motor power, kW	Dimensions (BxLxH), mm	Weight*, kg
NPR-1,6I10-1	0,8-2,5	10	4-62	4,0	300x570x480	37,0
NPR-1,6I20-1		20			370x620x480	38,5
NPR-1,6I40-1		40			530x590x560	45,0

* Weight of the pump without oil; Feeding oil for pumps is delivered on customer request
** If pressure in the air supply exceeds 6,2 Bar, the pump must be equipped with an air pressure regulator.

Model: NPR-1,6I10-1-FM with air filter and air-oil lubricator

Model: air filter and air handling unit FM

Extra options:

FM — air filter (F) with a drip leg and an air-oil lubricator (M);
T — thermometer;
Dr — flow throttle control;
K — tank wheels;
S — folding handles;
Zk — safety cage;

Extra options for НПР…А…

R — control safety valve (PSV);
M — gauge;
B2 (B3, B4) — spacer rings for parallel connection of 2 to 4 hydraulic tools for simultaneous operation.

Electric pump

Series NER...A(I)...
Pressure — 700 Bar

Model: NER-0,5A4T1

Model: NEA-0,5G4T1

Portable pumps are simplified versions of standard pumps described above, being light-weighted and using a smaller 4 liter tank. Basic versions of portable pumps contain only the minimum equipment required for operation and supplied without pressure control valve, thermometer, gauge, power cable with plug-and-socket connector. If the operating conditions of the pump demand inclusion of these elements, they must be ordered as separate options. Hydraulic control is provided by means of “A” series manual relief valve (model RK.80/5-1) and "I" series three-position manual distribution valve (model GR-3IR-1).

Model	Output flow rate, l/min	Tank volume, l	Power supply	Pneumatic motor power, kW	Dimensions (BxLxH), mm	Weight*, kg
NER-0,5I4F1	0,5	4	220V, 50 Hz	0,55	225x430x180	18,0
NER-0,5A4F1					255x430x180	
NER-0,5I4T1			380V, 50Hz		225x450x180	
NER-0,5A4T1					225x450x180	

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

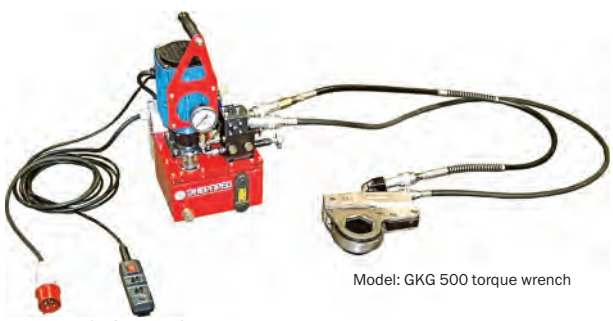
Series NEA...G(I)... and NEE...G(I)...
Pressure — 700 Bar

Hydraulic control is provided by means of “I” series (model GE-3IR-1) and “G” series (model GE-2R-1) solenoid distribution valves.

Model	Output flow rate, l/min	Tank volume, l	Power supply	Pneumatic motor power, kW	Dimensions (BxLxH), mm	Weight*, kg
NEE-0,5G4G1	0,5	4	220V, 50 Hz	0,55	300x430x280	25,5
NEE-0,5I4Ф1					300x430x310	26,0
NEE-0,5G4T1			380V, 50Hz		300x430x280	25,5
NEE-0,5I4T1					300x430x310	26,5
Model	**Output flow rate, l/min**	**Tank volume, l**	**Power supply**	**Pneumatic motor power, kW**	**Dimensions (BxLxH), mm**	**Weight*, kg**
NEA-0,5G4F1	0,5	4	220V, 50 Hz	0,55	300x430x280	23,0
NEA-0,5I4F1					300x430x310	23,5
NEA-0,5G4T1			380V, 50Hz		300x430x280	23,3
NEA-0,5I4T1					300x430x310	23,8

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Model: NEE-0,5I4T1-RM with pressure control valve and gauge



Model: NEA-0,5G4T1-RMSHT with pressure control valve and gauge, plug-and-socket connector and thermometer

Model: GKG 500 torque wrench

Extra options:

T— thermometer;
M— gauge;
SH—plug-and-socket connector;
R—pressure safety value (PSV);
Zk—safety cage;
N— valve control foot pedal;
H— hydraulic fluid cooling;
C—digital gauge;
Ru—radio remote control with range up to 70 m.

Extra options for NER...A...

B2 (B3, B4) — collector spacer rings for parallel connection of 2 to 4 hydraulic tools for simultaneous operation.

Air pump

Series NPR…A…, NPR…I…

Model	Output flow rate, l/min	Tank volume, l	Air pressure, Mpa, min	Pneumatic motor power, kW	Dimensions (BxLxH), mm	Weight*, kg
NPR-0,5A4-1	0,3-0,7	4	0,63	0,55-1,1	225x430x180	15,0
NPR-0,5I4-1					225x450x180	15,5

* — Weight of the pump without oil; Feeding oil for pumps is delivered on customer request

Model “NPR-0,5I4-1-RMT” with pressure regulator, pressure gauge and thermometer

Model “NPR-0,5A4-1-RMT” with pressure regulator, gauge and thermometer

Extra options for NPR:

T — thermometer;
M — gauge;
R — pressure control gauge;
Zk — safety cage.

Special options for NPR…A…

B2 (B3, B4) — collector spacer rings for parallel connection of 2 to 4 hydraulic tools for simultaneous operation.

Additional options for pumps

T — thermometer

Recommended for installation in pumps tanks working under heavy load for a long time. On special demand, a digital thermometer could be installed.

P — hydraulic fluid heating

Designed for pump operation at low temperatures (down to -40 degrees), includes a heating element and an electrical circuit. Switching on and off is carried out manually or automatically, if the temperature sensor is installed.

H — heat exchanger

Consists of a radiator and a fan for cooling of hydraulic fluid drained into the tank. Recommended for installation in pumps for long-term operation with a processing equipment, and especially pumps where the volume of the tank is less than required for a three-minute operation.

N — control foot pedal

Designed for control of pump electric equipment like valves and the engine. It is recommended for pumps working with presses, cutters, pipe benders, and similar processing equipment.

Ru — radio remote control

Radio remote control, having up to 5 channels, can be used for starting/ stopping the engine, handling of the solenoid valve, secondary control circuits, etc. Operation range is 70 m.

Zk — safety cage

Safety cage is designed for pumps with tank volume of 4, 10, 20, 40 and 63 liters. The cage guards the pump from physical damage on site and during transportation, and allows mounting or connecting additional units of hydraulic equipment, folding handles, etc.

K — tank wheels

Designed for moving the pump between workshops and other facilities. In order to prevent the spontaneous moving, wheels are equipped with brakes.

B2 (B3 or B4) — collector spacer rings

A special collector with spacer rings for connection of intake and output of 2 to 4 units of single-action hydraulic equipment (with spring or gravity return) to a single pump, providing simultaneous flow of hydraulic fluid to all units.

CH — frequency regulation

Frequency regulation of rotating speed of the pump engine provides a variable flow of hydraulic fluid in the range of 1:5.

Dr — flow throttle control

Throttle control provides a variable fluid consumption from the pump to the pressure (return) line using installed throttling element or flow controller.

C — digital gauge

It can be installed in the pump instead of common gauge. Has a higher accuracy class, data display configuration interface, hydraulic equipment pressure control interface and PC output interface. The maximum scale values are 100 and 255 Mpa. 24V, DC.

Special options for pumps with “A” series relief valve and portable pumps

R — pressure safety valve

Designed to control the pressure at the valve’s output when the pump pressure drops below the relief valve setting.

M — vibration-proof gauge

Is a special option for stations with “A” series relief valve and portable pumps.

SH — supply plug

It is designed to connect the pump to the 220 or 380 V electric power supply.

Equipment of the pumps with several valves

Model — BU4

ADD — two valves with normally closed neutral and relief valve for connection of two independent double-action hydraulic cylinders (pressure up to 800 Bar)
AD3D, AD...D — for handling of three and more double-action hydraulic cylinders (pressure up to 800 Bar)
BU2 — two valves with relieved neutral for connection of two independent double-action hydraulic cylinders (pressure up to 305 Bar)
BU3, BU... — for handling of three and more double-action hydraulic cylinders (pressure up to 350 Bar)

Pump control electric boxes

For series NER

Allows to control the start / stop operations of the pump engine using the buttons on the electric box case. Incorporates a magnetic starter and an engine protection thermal relay.
Power supply: 220 V, 380 V
Operating voltage: 220 V

For series NEE

Allows to control the start / stop operations of the pump engine via cable using the remote control panel. Incorporates a magnetic starter and an engine protection thermal relay.
Power supply: 220 V, 380 V
Operating voltage: 24 V

For series NEA

Allows to control the start / stop operations of the pump engine via cable using the remote control panel. Incorporates a magnetic starter and an engine protection thermal relay.
Power supply: 220 V, 380 V
Operating voltage: 24 V

Radio remote control panel

Allows to control manage all types of pumps beside the standard cable remote control panel, doubling all of its functions. For NER pumps an engine control is implemented.
Operation range: 70 m
Operating voltage: 12 V

Operating system for continuous maintaining of a constant pressure in the hydraulic system.

— Designed to automatically maintain a constant pressure in the hydraulic pump (within the defined limit values).
— Makes the constant operation of the pump redundant, effectively reducing the pump load.
— Dramatically reduces the heating fluid process, increases the life time of the pump.

This is implemented with a digital gauge (CM) connected to the control electric box of the pump. This system allows reducing the load on the pump in cases when it is required to maintain a constant load. Gauge provides for the pumping operation to become intermittent, turning feed on when the pressure decreases to the lower boundary of the defined range and turning feed off when the pressure reaches the top. Digital gauge can be connected to a personal computer via COM port:
— Laboratory and testing equipment;
— Pile pressing machines;
— Retention devices, such as clips, etc.

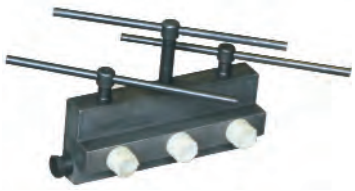
Locking-valve elements of hydraulic systems

Locking-valve elements are designed to provide control of hydraulic fluid flow (and hence the operation of hydraulic equipment or tools) and regulate the pressure in the hydraulic system.

Multi-stage valves

Model: KMH4

Model: KRAN003/40



Model: KRAN003

Multi-stage valves are designed to provide simultaneous operation of multiple hydraulic equipment (such as one-way lift cylinders) by means of connection to a single pressure source.

Model	Number of stages	Threads
KMH	1	K3/8"
KMH2	2	K3/8"
KMH3	3	K3/8"
KMH4	4	K3/8"
KMH5	5	K3/8"
KMH6	6	K3/8"

Each position of the valve has a separate flow control. The number of separate valves in the multiway valve can be increased on customer's request.

Model	Number of stages	Threads
KRAN-002/40	2	K3/8"
KRAN-003/40	3	K3/8"
KRAN-004/40	4	K3/8"
KRAN-005	5	K3/8"
KRAN-006	6	K3/8"
D2P	2-section valve	
D4P	4-section valve	

External valves

Model: GR-2GR-2 for torque wrenches

Model: GE-2DR-2

Model: GE-3DR-2

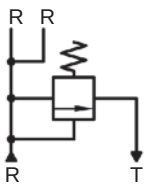
Model: GR-3IR-2

External valves are designed for installation and control of hydraulic equipment or tools in any convenient location away from the hydraulic pump (like right next to the lift cylinder of nut-runner).

External valves is essentially a distributing device for handling the flow of hydraulic fluid, mounted on remote collector plate, connected to hoses from the pressure source (pump).

Model	Description	Thread
GR-2GR-2	Manual 2-position valve	K3/8''
GR-3DR-2	Manual 3-position valve with locked neutral	K3/8''
GR-3IR-2	Manual 3-position valve with unloaded neutral	K3/8''
GE-2GR-2	Solenoid 2-position valve with unloaded neutral	K3/8''
GE-3DR-2	Solenoid 3-position valve with locked neutral	K3/8''
GE-3IR-2	Solenoid 3-position valve with unloaded neutral	K3/8''

External safety valve

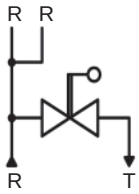


PK-80/5-2

External safety valve is meant for throttling the hydraulic fluid by partial discharging to the outlet drain in case of exceeding the set pressure value, effectively adjusting the flow rate and pressure in the pipeline. Can be installed anywhere in the hydraulic system and sealed. External valve is essentially a valve with an adjustment knob screwed into a hydraulic round collector with threads for mounting of pressure and return hoses.

Model	Max. operating pressure, Bar	Thread
PK-80/5-2	800	K3/8''

External relief valve

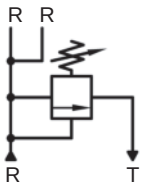


RK-80/5-2

External relief valve is meant for throttling the hydraulic fluid by partial discharging into the tank, effectively adjusting the flow rate and pressure in the pipeline. Can be installed anywhere in the hydraulic system. External relief valve is essentially a valve with an adjustment knob screwed into a hydraulic round collector with threads for mounting of pressure and return hoses.

Model	Max. operating pressure, Bar	Thread
RK-80/5-2	800	K3/8''

Side-mounted control safety valve



RPK-80/5-2

External control safety valve is meant for throttling the hydraulic fluid by partial discharging to the outlet drain in case of exceeding the set pressure value, effectively adjusting the flow rate and pressure in the pipeline. Can be installed anywhere in the hydraulic system. External relief valve is essentially a valve with an adjustment knob screwed into a hydraulic round collector with threads for mounting of pressure and return hoses.

Model	Max. operating pressure, Bar	Thread
RPK-80/5-2	800	K3/8''

Indicators and gauges

Digital gauge M100C up to 1000 Bar

T-127 T-76 GU-1
Oil level gauge with thermometer, 127 mm and 76 mm. in length.

Indicators and gauges are meant to inform the user about the state of the pump, its pressure, level and temperature of the hydraulic fluid in the tank.
Gauges are designed to control and monitor the pressure in the hydraulic system and can be installed through the use of adapter anywhere on the line or actuator. Gauges are filled with silicone oil or glycerine, their construction is vibration proof. Operating temperature ranges from -30°C to +80°C. Gauges can be either vertical (radial) or axial type. Maximum scale ranges up to 1000 Bar.

Models: M100VD100 and M100VD63

Model	Scale range, Bar	Diameter, mm	Accuracy class	Thread
M100VD63	0-1000	63	1,6	G1/4"
M100VD100	0-1000	100	1,0	G1/2"
M1D40 (axiel)	0-10	40	2,5	M10x1

Gauge adapters

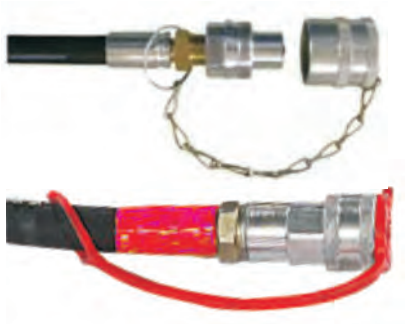
Model: MA-3-G1/4"

Model: MA100VU63 (gauge M100VD63 in the MA-3-G1/4" adapter)

These adapters are designed for installation of gauges in in any convenient place of the hydraulic system lines.

Model	Length, mm	Thread	Weight, kg
MA-2-G1/2"	120	K3/8"-G1/2"-K3/8"	0,6
MA-3-G1/4"	150	K3/8"-G1/4"-K3/8"	0,75

High pressure hoses



Model: RVD2000 with couple BRSN001
RVD30-10000 with couple BRSN003

Designed for assembly of hydraulic systems, connection of hydraulic actuators and hydraulic equipment to each other, to remote locking and distribution elements, pumps. As a matter of convenience, it is recommended to use couplers BRSM001, BRSM003;
— Supplied length is 2m and more.
— Can be used in a cyclic dynamic load conditions.

Model	Inner hose diameter, mm	Outer hose diameter, mm	Min. radius of bend, mm	Length, mm	Max. operating pressure, Bar	Burst pressure (not less than), Bar	Weight per 1 meter of length, kg	Coupling fitting thread
RVD2000	6	16,6	105	2000	800	1750	0,7	K3/8"
RVDI2000	6	16,6	105	2000	800	2800	0,7	K3/8"
RVD30-10000	12	22	180	10000	300	1100	4,0	G1/2"

Couplers

Couple BRSM001
with safety caps

Model: BRSD001

Model: BRSN001

Model: BRSN003

Model: BRSD003

Model: snap coupling
"BRSM003" assembled and
disassembled

These couplers are designed for quick connection of hydraulic equipment with each other, pumps.

— Snap coupling consists of two coupling halves fitted with one-way valves and protective caps that prevent contamination of internal cavities of joints when disconnected. Ball valves of both coupling halves allow to avoid the loss of hydraulic fluid when disconnected.
— Can be used in a cyclic dynamic load conditions.

Model	Coupling dimensions		Max. operating pressure, Bar	Weight, kg
	Female thread	Male thread		
BRSD001	—	K3/8"	800	0,3
BRSN001	K3/8"	—	800	0,2
BRSM001	K3/8"	K3/8"	800	0,5
BRSN003	—	G1/2"	350	0,25
BRSD003	G1/2"	—	350	0,10
BRSM003	G1/2"	G1/2"	350	0,40

BRSM=BRSD+BRSN

Fittings

SHU-1650
Elbow choke
Male thread:
K3/8"- K3/8"

MP-1614
Straight coupling
Female thread:
K3/8"- K3/8"

MT-1612
T-coupling
Female thread:
K3/8"- K3/8"- K3/8"

MU-1610
Elbow coupling
Female thread:
K3/8"- K3/8"

SHMT-1651 Choke/
coupling T-coupling
Male thread: K3/8"
Female thread:
K3/8"-K3/8"

SHP-1617
Straight choke
Thread: K3/8"- K3/8"

SHMU-1616
Elbow choke/coupling
Male thread: K3/8"
Female thread: K3/8"

MK-1613
Cross coupling
Female thread:
K3/8"-K3/8"
K3/8"-K3/8"

SH-1601
Blank off plug
Thread: K3/8"

SH-1602
Blank off plug
Thread: K1/4"

Valves and cranes

Model: RK80/5-1

Model: RPK80/5-1

Model: PK80/5-1

All hydraulic components of pumps are designed for a maximum pressure of 800 Bar and meet the single ENERPRED coupling standard, so thay can easily be installed at any pump manufactured by ENERPRED.

Model	Max. operating pressure, Bar	Coupling thread
PK-80/5-1	800	K3/8"
RK-80/5-1	800	K3/8"
RPK-50/5-1	800	K3/8"

Valves

Output flow rate: 10 l/min
Pressure — 800 Bar

Model: GR-3IR-1

Model: GE-2GR-1

Model: GE-3DR-1

Designed for installed at pumps and connected control equipment and tools. They control the flow of hydraulic fluid, supplied by the pump into the hydraulic system. High-pressure hoses or coupler could be connected directly to the distributor.

Model	Description	Coupling thread
GR-3DR-1	Three-position manual valve locked neutral	K 3/8"
GR-3IR-1	Three-position manual with unloaded neutral	K 3/8"
GE-2GR-1	Two-position solenoid with unloaded neutral	K 3/8"
GE-3DR-1	Three-position solenoid with locked neutral	K 3/8"
GE-3IR-1	Three-position solenoid with unloaded neutral	K 3/8"

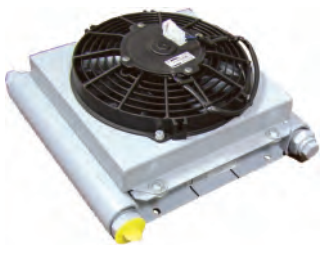
Air preparation equipment

Model: FM

Model: FRM

Air preparation equipment meant for installation at NPR pump with pneumatic engines.
FILTER (F) is designed to collect dirt particles, condensation and moisture present in the supply line of compressed utilty air.
REGULATOR (R) is designed for reducing the pressure in the supply pneumatic system.
AIR-OIL LUBRICATOR (M) provides the lubrication of pneumatic engine. It sprinkles the supply air with oil, as a result, increasing the service life of the engine.
Versions:
FM—Filter/air-oil lubricator
FRM— Filter/regulator/air-oil lubricator

Air oil-coolers



Model: UH-10

Oil coolers are designed to cool the working fluid being drained into the tank. Generally, they are used in the process equipment working for a long time, or in pumps with tanks too small for natural cooling. Air cooled hydraulic oil cooler is basically a heat radiator with 24 V exhausting fan.

Model	Description	Weight, kg
UH-10	Air cooled hydraulic oil cooler H-10 for tanks 4-20 liters	3,0
UH-63	Air cooled hydraulic oil cooler H-10 for tanks 40-160 liters	4,5

Pump electric equipment

Electric connectors

Model: RSH-3

Model: RSH-1

Electrical accessories for pumps can be applied to any standard pump.

They are designed to connect pump control electric boxes to the main power supply.

Model	Power supply	Notes
RSH-1	220 V, 50 Hz	without cable
RSH-1K	220 V, 50 Hz	with cable of 2 m and more
RSH-3	380 V, 50 Hz	without cable
RSH-3K	380 V, 50 Hz	with cable of 2 m and more

Remote control panels

Model: PDU-1N

Model: PDU-3R

— Working voltage: 24 V
— Cables of any length are supplied on demand

Model	Description	Controlled devices	Range	Weight, kg
PDU-2R	Hand remote control panel	Electric engine + 2-pos. solenoid valve	4 m cable	0,5
PDU-3R	Hand remote control panel	Electric engine + 3-pos. solenoid valve	4 m cable	0,5
PDU-1N	Foot remote control panel	Electric engine or 2-pos. solenoid valve	4 m cable	1,1
PDU-1B	Wireless remote control panel	Electric engine or 2-pos. solenoid valve	50 m	0,1

Additional tanks

Model: BD63

Additional tanks are designed to increase the amount of hydraulic fluid in the system. They can be connected to the station with a connecting hose attached to the main tank and turned on and off by ball valve mounted on the tank.

Model	Volume, l	Dimensions (BxHxL), mm	Weight, kg
BD16	16	300x305x300	17,6
BD25	25	300x360x400	19,8
BD50	50	530x370x560	23,3
BD63	63	530x490x560	24,8
BD100	100	530x650x560	26,6
BD160	160	530x940x560	33,2

Additional mechanical accessories

Wheels can be mounted to the following tanks: 10, 20, 40, 63 liters.
Wheel diameter: 75 mm.

Model: KNS-10 safety cage

Model NBR-1,2I8-1 in safety cage KNS-10

Pump tank can be equipped with a safety cage and wheels for easy movement.

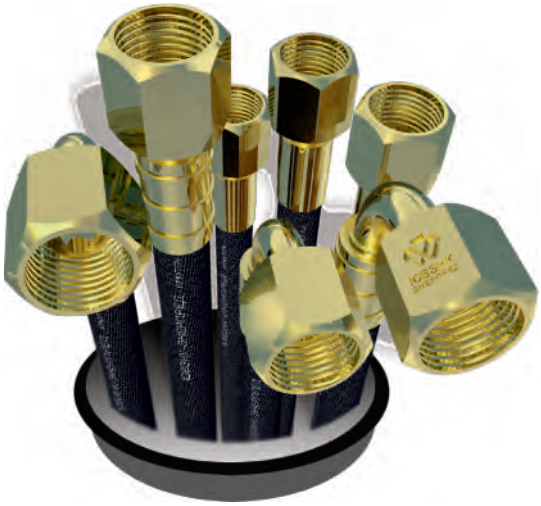
Model	Volume, l	Weight, kg
KNS-10	10 and 20	4,5
KNS-40	40 and 63	6,5
KNS-100	100	7,5

High-pressure hoses

This unique technology is protected by patents 2151943, 2098710, 2132992.

Mechanical rubber components of these hoses are manufactured by Alfa Gomma and Manuli (both Italy), Hansa Flex (Germany), Semperit (Austria), Parker (USA).

Modern equipment produced by Finnish and Swedish manufactures provides the highest level of adhesion between the rubber parts and terminal fittings, and perfectly clean interior surface of the high-pressure hose.



18 Months Warranty!

And only for YOU:

The high quality of our products has been awarded with gold medals, diplomas and Grand Prizes at regional exhibitions and trade shows.

We can:

- Produce high-pressure hoses of any complexity and configuration, and deliver it to you by any acceptable means of transportation.
- Develop design documentation and high-pressure hoses technical operating conditions complying with national and international standards.
- Develop design documentation for high-end and very complex terminal fittings.
- Offer consultations on components of the hoses (rubber parts, terminal fittings): how the proper use of those components in operation of your equipment and tools will significantly increase the service life of high-pressure hoses.
- Supply some high-pressure hose prototypes for reliability tests conducted in most extreme climatic and technological conditions of your equipment and tools can endure. Establishing a business relationship with you, we take responsibility for your business as well.

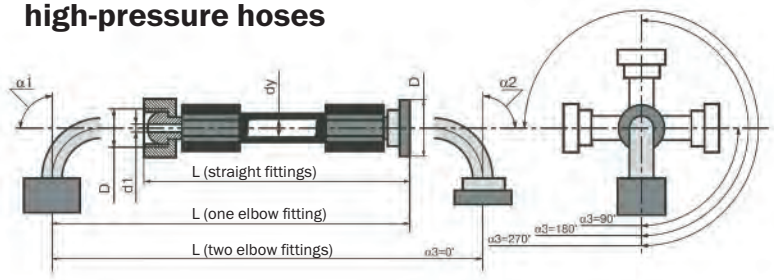
To order our high-pressure hoses you must fill in a form for each dimension-type of hoses and send it to us. If you are unable to fill the form, you can send us a request in arbitrary form with samples or sketches of desired terminal fittings.
To ensure that your orders are executed more quickly, please specify the grade or type of equipment used by your company.

High-pressure hoses for all types of tools and equipment of domestic and foreign manufacture

All hoses have a 2-fold safety margin for hydraulic shock during operation (operating pressure x 2 = water hammer pressure) and 4-fold burst margin.
High-pressure hoses manufacturer CJSC «UVENK ENERPRED» guarantees quality and stable performance!

Hoses are manufactured under license of CJSC NPF «UVENK»

Application for production of high-pressure hoses



Dy: Nominal diameter, mm.

P: bursting pressure for hose, MPa.

10 atm = 10 bar. = 1 MPa

L: hose length, mm.

R: minimum hose bend radius, m

XX: fittings pattern code.

a1: bending angle of the left nipple, degrees

a2: bending angle of the right nipple, degrees.

a3: rotation angle of the right fitting with respect to the left fitting, degrees.

D: cap nut or threaded nipple thread size / flange or plain nipple diameter, mm.

K: climatic version (T, U1, HL)

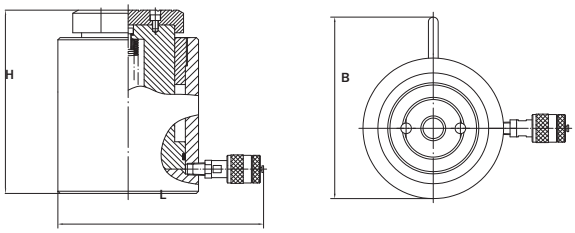
№ п/п	Dy	P burst	L	R	XX-a1	XX-a2	D	D	k	a3	Quantity	Grade or type of equipment; no. acc. to the catalogue

Single-acting load-lifting cylinders

Series DG...P...
Capacity — 10-100 ton
Pressure — 700 Bar
Spring stroke retraction

Model DG100P50

Designed for lifting and moving of cargo load during assembling, dismantling and repairing operations in various industries.



Load-lifting cylinders of TM Enerpred p.10

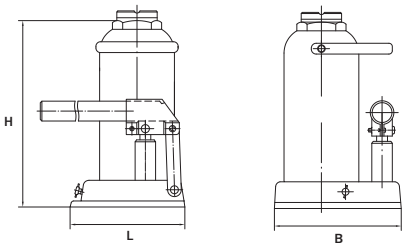
Model	Capacity, ton	Stroke, mm	Oil working capacity, sm^3	Dimensions (BxLxH), mm	Weight, kg	Recommended pump
DG10П50	10	50	73	58x138x139	2,8	NRG-7010
DG10П100	10	100	145	58x138x189	3,4	NRG-7010
DG10П150	10	150	220	58x138x239	4,8	NRG-7010
DG20П50	20	50	140	88x168x140	5,6	NRG-7010
DG20П100	20	100	280	88x168x195	8,2	NRG-7010
DG20П150	20	150	420	88x168x260	10	NRG-7010
DG30П50	30	50	208	107x187x160	9,4	NRG-7010
DG30П100	30	100	416	107x187x210	12,4	NRG-7010
DG30П150	30	150	624	107x187x260	14,6	NRG-7020
DG50П50	50	50	350	128x208x165	13,6	NRG-7010
DG50П100	50	100	700	128x208x210	17,4	NRG-7020
DG50П150	50	150	1060	128x208x260	20,8	NRG-7020
DG100П50	100	50	660	175x255x165	25,8	NRG-7020

Self-contained cylinders

Series DA...M...
Capacity — 4-50 ton
Gravity stroke retraction

Model: DA201M145V

Have built-in pump with a removable handle, equipped with an additional screw to compensate for the distance between the support and the load, effectively avoiding the installation of additional pads.



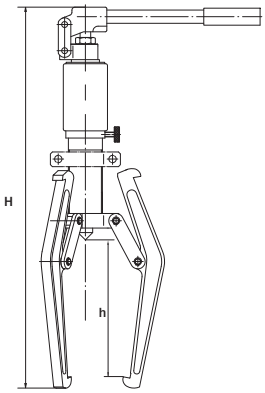
Model	Capacity, ton	Stroke, mm	Screw stroke, mm	Dimensions (BxLxH), mm	Weight, kg
DA41M110V	4	110	60	110x100x170	3,3
DA61M110V	6	110	80	115x110x190	4,5
DA81M125V	8	125	80	120x118x195	5,6
DA101M125V	10	125	80	130x125x190	6,3
DA121M125V	12	125	80	140x135x200	7,5
DA161M140V	16	140	80	145x145x210	9,0
DA201M145V	20	145	60	165x155x225	11,5
DA321M150	32	150	—	170x140x245	18,0
DA501M180	50	180	—	215x180x300	35,6

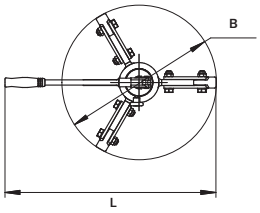
Hydraulic pullers with built-in pump

Series SGA...
Capacity — 3,3-20 ton
Spread range — 200-350 mm

Model: SGA320-1

The ultimate solution for removing machine parts fitted with preload, such as bearings, sprockets, gears and sheave wheels. Built-in pump with a removable handle is rotating through 360°, allowing to quickly and effectively dismantling the parts. Has a corrosion-resistant chrome finish and a safety valve.





Pullers with built-in pump
TM Enerpred, p. 24

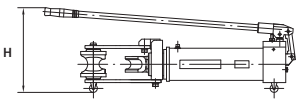
Model	Capacity, ton		Spread range, mm	Max. reach , mm	Stroke, mm	Dimensions (BxLxH), mm	Weight, kg
	3 jaws	2 jaws					
SGA305	5	3,3	200	140	55	60x125x510	6,5
SGA310-1	10	6,6	250	160	55	76x100x620	9
SGA320-1	20	13,4	350	200	68	90x140x770	14

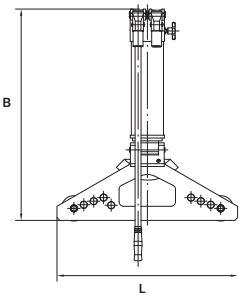
Hydraulic frame-closed pipe benders

Series TG...R...
Capacity — 16-20 ton
Bending range — 1/2"-4"

Model: TG1R1650

Designed for cold bend of pipes according to GOST 3262-75. Rated pressure: 700 Bar.
— Benders are provided with a built-in hydraulic pump with manual transmission, enabling operation in absence of power supply;
— Equipped with a set of dies, providing a wide range of pipe bending dimensions;
— Lightweight and compact design allows for on-site installation f pipes;
— Capable to work in both the horizontal and vertical position.





Pipe bender with closed frame
TM Enerpred p.20

Model	Bending range, inch	Bending capacity, ton	Thickness of pipe, mm	Dimensions (BxLxH), mm	Weight, kg
TG1R1650	1/2", 3/4", 1", 1 1/2", 2"	16	2,75-4,50	695x700x315	60
TG1R1880	1/2", 3/4", 1", 1 1/2", 2", 2 1/2", 3"	18	2,75-4,50	940x765x345	120
TG1R20100	1/2", 3/4", 1", 1 1/2", 2", 2 1/2", 3", 4"	20	2,75-6,00	1150x920x430	200

RiKline®

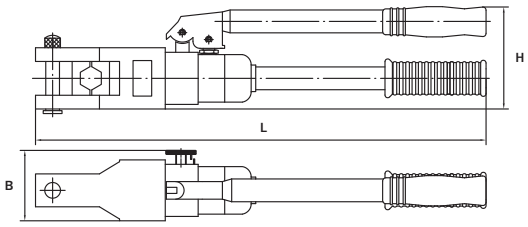
Hydraulic crimping presses

Series PP-NA...
Capacity — 16 ton
Crimping range — 10-300 mm^2

Model: PP-NA16300

Designed for banding and jointing of wires and cables by means of crimping with suitable couplings and sleeves. Crimping is based on deformation of material of contacting pair "conductor + coupling/sleeve" leading to formation of contact zone in between.

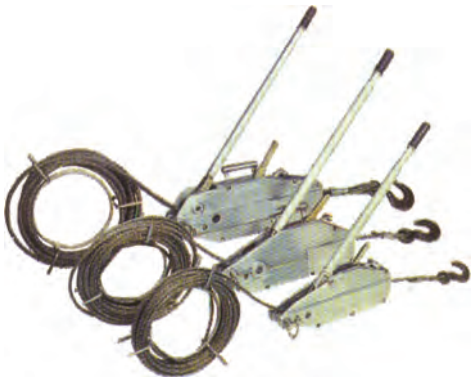
Deformation form and degree are defined by set of dies and formers that come with the press.



Model	Capacity, ton	Stroke, mm	Crimping range area, mm^2		Dimensions (BxLxH), mm	Weight, kg
			Aluminium	Copper		
PP-NA16300	16	22	10-240	10-300	75x485x145	4,2

Wire rope pulling hoist

Series MTM...
Capacity — 800-3200 kgf



Model: MTM-3,2/20, MTM-1,6/20, MTM-0,8/20

Designed for lifting and traction operation, as well as load descending, rope stretching and loosening. The operating principle of the tirfor winch mechanism is based on pulling the rope through the traction mechanism with two pairs of clamps that interchangeably compress the rope with a capacity proportional to the load weight, and pull it in the appropriate direction step by step.
— A 20-meter cable fitted with a hook;
— High strength aluminum alloy frame;
— Telescopic control lever with the ability of forward and reverse stroke;
— The opening on the top surface of the case eases the washing the inside of the tap. After washing and oiling the winch will be ready for operation again in no time.

Model	Capacity, kgf	Maximum handle capacity, kgf	Lever length, mm	Rope length, mm	Rope diameter, mm	Rated forward traval, mm	Dimensions (BxLxH), mm	Weight without wire, kg	Wire weight (20 m), kg
MTM-0,8/20	800	32	740	20	8,3	> 52	105x462x235	7,4	5,8
MTM-1,6/20	1600	42	1120	20	11	> 52	120x545x280	14,4	11,2
MTM-3,2/20	3200	44	1120	20	16	> 52	150x660x325	24,4	23,6

Hydraulic pallet truck

Series TGR....
Capacity— 1000-3500 kgf

Model: TGR2/190e

Model: TGR2/200

Model: TGR3,5/195

TGR2/190e: with resin coating, abrasion and corrosion resistant

TGR2/200: with electronic scales

TGR3,5/195: steering angle of 210 degrees provides the maximum mobility

Model	Capacity, kgf	Lifting height, mm	Pickup height, mm	Fork length, mm	Steer wheel diameter, mm	Load wheel diameter, mm	Dimensions (BxLxH), mm	Weight, kg
TGR1/800	1000	800	85	1150	180	74	520x1225x1515	110
TGR2/190e	2000	190	75	1100	160	70	550x1470x1160	55
TGR2/200	2000	200	85	1150	180	74	540x1515x1200	100
TGR2,5/195	2500	195	85	1100	200	80	550x1477x1200	80
TGR3,5/195	3500	195	85	1150	200	80	550x1550x1250	85

Scissor lift table

Series SPG...
Capacity — 300-800 kgf
Lifting height — up to 1000 mm

Model: SPG0,3/900

Hydraulic tables are essentially durable, reliable and low-wearing equipment for lifting and transportation of a variety of goods. Presence of foot hydraulic lift control and manual lowering system makes the work easy and convenient.

Model	Capacity, kgf	Lifting height, mm	Minimum table height, mm	Table dimensions, mm	Dimensions (BxLxH), mm	Weight, kg
SPG0,3/900	300	900	280	815x500x50	500x935x1000	75
SPG0,5/900	500	900	280	815x500x50	500x935x1000	85
SPG0,8/1000	800	1000	420	1000x515x55	515x996x1150	115

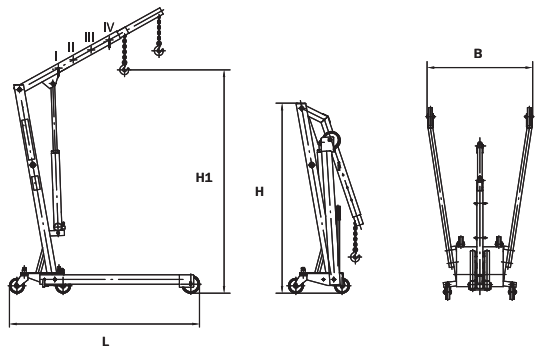
RiKline

Hydraulic crane

Series KGS…
Capacity — 400-2000 kgf
Lifting height — 50-2382 mm

Model: KGS1000

Designed for cargo lifting and handling; crane relocation is carried out manually, lifting is performed by hydraulic actuation. Cranes are equipped with a hydraulic cylinder with manually actuated integrated pump. Telescopic crane arm can be fixed in several positions.



Model	Rated capacity, kgf				Lifting height H, mm	Dimensions (BxLxH), mm		Weight, kg
	I	II	III	IV		Operating mode	Folded down	
KGS1000	1000	800	800	400	50-1800	920x1061x1210	700x500x1210	72
KGS2000	2000	1500	1000	500	50-2382	920x1061x1475	700x500x1475	75

Hydraulic stackers

Series SHGR…, SHGEE…
Capacity — 500-2000 kgf
Lifting height — 1500-3000 mm

Model: SHGR1/2500

Model: SHGEE1/3000

Designed for lifting, moving and lowering of cargo loads for the purpose of storage and retrieval operations. Solid steel frame, protective screen allows protecting the operator without view obstruction.
SHGR series: user-friendly manual operations and maneuverability, adjustable lowering speed, decent compact size (could pass the standard doors).
SHGEE series: self-propelled hydraulic stackers with an electric lift drive.

Model	Capacity, kgf	Lifting height, mm	Dimensions (BxLxH), mm	Weight, kg
SHGR0,5	500	1500	810x1340x2000	149
SHGR1	1000	1500	740x1640x2050	230
SHGR1/2500	1000	2500	860x1640x2050	276

Model	Capacity, kgf	Lifting height, mm	Engine power, kW		Dimensions (BxLxH), mm	Weight, kg
			Moving	Lifting		
SHGEE1/3000	1000	3000	1,2	2,2	780x1835x2090	685
SHGEE2/3000	2000	3000	1,2	3	780x2100x2090	730

Lifters

Series PT..., PP...
Capacity — 125-500 kgf
Lifting height — 6-16 mm

Model: PT0,3/8

Model: PT0,125/8

Lifts are designed for installation, maintenance and building operations in industrial plants, malls and exhibition centers, gym halls, airports, building facades, etc.
PP series: scissor-type lifts.
PT series: telescoping lifts. Light weight of telescopic mast is ensured by construction of special aluminum alloy. Lift controls are located on a central console mounted on the lift chassis, and on the operator panel on the lifting platform.
— To maintain a stable tilt base, lifts are equipped with hinged supports, designed to align the lift and prevent tilting.
— Mobile telescoping lifts feature compact design, ease of use and maintenance, and, above all, high reliability.

Model: PP...

Model	Capacity, kgf	Lifting height, mm	Platform size, mm	Power supply voltage, V	Dimensions , (BxLxH), mm	Engine power, kW	Weight, kg
PT0,125/8	125	8	630x640	220	880x1200x1980	1,1	250
PT0,3/8	300	8	1200x600	220	900x1480x2060	1,1	385
PT0,3/10	300	10	1440x600	220	900x1480x2060	1,1	490
PP0,3/6	300	6	1500x750	380	1150x2000x1300	2,2	700
PP0,3/12	300	12	2530x1500	380	1600x2650x2050	2,2	1500
PP0,3/14	300	14	2750x1500	380	1600x2650x2280	2,2	2200
PP0,3/16	300	16	2820x1500	380	1750x2950x2300	2,2	2600
PP0,5/6	500	6	1500x900	380	1150x2000x1300	2,2	740

— **Battary Powered Tools** feature compact Li-Ion batteries. Their advantages: high energy density, low self-discharge, no memory effect;
— Operating head is rotatable through 360 ° to provide access to the most sophisticated work areas;
— The hydraulic unit is equipped with a two-stage pump, which provides a fast approach stroke idling;
— Ergonomic grip allows for crimping, cutting and punching with one hand;
— Equipped with a LED to indicate the insufficient battery level;
— Equipped with a manual stroke return button for malfunction cases;
— Controls with a start button;
— Temperature sensor causes automatic shutdown when tool temperature exceeds 60°;
— At the nominal pressure, the hydraulic unit provides automatic stroke return to the starting position;
— All models are supplied in steel cases.

Crimping presses

Series PNE...
Capacity — 5-12 tf
Crimping range — 16-400 mm^2

Models: PNE240, PNE300, PNE400

Designed for crimping of tips, sleeves, and various stretching, connecting, T-coupling, and terminal clamps for installation of wires and cables of power lines and open switchgears. Models are autonomous and have built-in electro-hydraulic actuator.

The package includes:

— Set of crimping dies
— 2x Battery
— Battery charging device

Model	Capacity, ton	Profile	Crimping range, mm^2	Stroke, mm	Power supply	Crimping time, s	Charging time, h
PNE240	5	⬡	16-240	12	18V	3-6	2
PNE300	6		16-300	17	18V	3-6	2
PNE400	12		16-400	42	18V	6-18	2

Cable cutters

Series NKE...
Capacity — 6 ton
Overcut cable diameter — 45-85 mm

Model: NKE45, NKE85

Electrohydraulic-driven cutters designed to cut cables and wires with aluminum and copper conductors, including armored and stranded wires of the same material, except cables and wires with a steel core.

The package includes:

— Blades
— 2x Battery
— Battery charging device.

Model	Capacity, ton	Overcut cable diameter, mm	Stroke, mm	Power supply	Charging time, h
NKE45	6	45	50	18B	2
NKE85	6	85	86	18B	2

Multi-functional tool

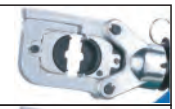
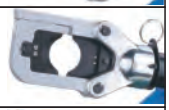
Series NPPE...
Capacity — 6 ton
Crimping range — 16-300 mm²
Overcut cable diameter — 45-85 mm
Punching diameter — 22.5-61.5 mm

Model: NPPE06

Versatile multipurpose tool with interchangeable adapters for crimping, cable cutting, or punching holes in metal sheets (thickness up to 3.5 mm).

The package includes:

— Set of crimping dies
— Set of punching dies
— Blades
— Adapter for crimping
— Adapter for punching
— 2x Battery
— Battery charging device.

	Copper cable crimping (section area): 16-300 mm² ⎔ Aluminium cable crimping 0-240 mm² ⎔	
	Cu/Al cable cutting, diameter: 40 mm	
	Metal sheets hole punching (thickness 3.5 mm) 22.5-61.5 mm	

Model	Capacity, ton	Overcut cable diameter, mm	Crimping range, mm²	Puncing diameter, mm	Stroke, mm	Power supply	Charging time, h
NPPE06	6	40	16-300	22,5-61,5	42	18B	2

FOR NOTES:

FOR NOTES:

ADVANTAGES AND DIFFERENCES TD ENERPRED EQUIPMENT

Strict quality control system
Our enterprise has carried out continuous monitoring at all stages of production, beginning with checking the quality of materials and finishing checking the quality of the finished product.

Increased strength, compactness and light weight of the tool
Due to the use of a tool manufacturing of heat-treated steels, strength of the products is increased in comparison with the products made of non-heat-treated steel. It allows our instrument to withstand heavy loads at relatively low weight and compact design.

Making essential parts by stamping
In the manufacture of essential parts used method of stamping tool. It gives a good structure of the material, strength, reduces the need for metal, and provides maximum approximate form of harvested parts.

Effective protective coating
Protective coating TD Enerpred is different by type and selected depending on the product: chemical, oxidized (black) - the most affordable, zinc, hard chrome plating, powder coating polymer paint with increased resistance. Method of powder coating - abrasion -resistant coating that protects from corrosion metal, and the aesthetic appearance.
Selecting protective coating technology takes into account the nature of a essential tool problems and conditions of use. It guarantees an optimum value of the instrument, its operating properties and provides long service life while maintaining aesthetic condition of product.

High class interior of surface roughness
In manufacturing the inner surface of the cylinder TD Enerpred made a number of finishing operations for high-class roughness. This allows the compaction of the long run.

Cylinder design
Besides the standard seal elements based on rubber rings in the TD Enerpred products used for sealing elements of the leading Russian and foreign manufacturers. For operating at high temperatures, heat-resisting rubber gaskets are installed on the products.

Sealing elements
In addition to standard sealing elements on the basis of rubber rings in the products of TM Enerpred used for sealing elements of the leading Russian and foreign manufacturers. To operate at high temperatures seals from heat resistant rubber are installed on the products.

Several versions of the tool
A significant number of models TD Enerpred tool has several options: with manual operating, with built-in hydro-electric, with an external hydro, electricity, gasoline and air motor. Such diversity allows choosing the best option for you only.

Tool mark
Since 2006, all instrument of TM Enerpred is applied with mechanical shock marking. It guarantees the authenticity of the purchased your instrument. Such measure is a way to protect against forgery, the number of which, unfortunately, constantly growing.
Mechanical shock marking is a sequence of points produced by vibrations of carbidic tungsten needle.
Mechanical shock marking TM Enerpred contains a logo, model and serial number of the product.

ENERPRED®

Post address: 664040, Irkutsk, Roza Luxemburg, str.,184,p/b 129
tel.: +7(3952) 211-168, +7(3952) 211-140, fax: +7(3952) 211-139
www.enerpred.com
e-mail: info@enerpred.com, zakaz@enerpred.com