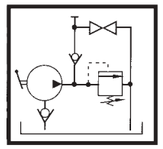
Single-acting hand pumps

BM-04, BM-1, BM-2 and BMPA-1

All are single acting, one-speed hand pumps, and can be used as a portable hydraulic tool or in a fixed position. They can operate both in a horizontal or vertical position. In this case, the pump head should be placed downwards.

Their light weight and small oil volume make them a very useful pump where a quick action is required.

They are fitted with a safety relief valve, factory rated at the maximum working pressure.



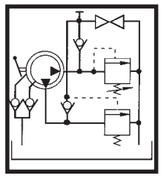
Hydraulic diagram

BM-3, BMAP-3, BM-6 and BM-12

Single-acting, two-speed hand pumps. The two-stage automatic system allows the operation of both pistons for a quick approach of the cylinder to load.

The larger pump piston cuts out when the cylinder activated by the pump is under high pressure.

All fitted with a safety relief valve, factory rated at the maximum working pressure.



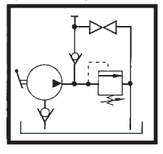
Hydraulic diagram

BK-05, BK-09

Vertical hand pumps. Single and two-speed.

Fitted with holes in the pump base to be used as a fixed hydraulic tool.

Hydraulic diagram



Vertical pump

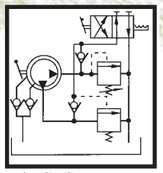
Double-acting hydraulic hand pumps

BMD-3, BMD-6 and BMD-12

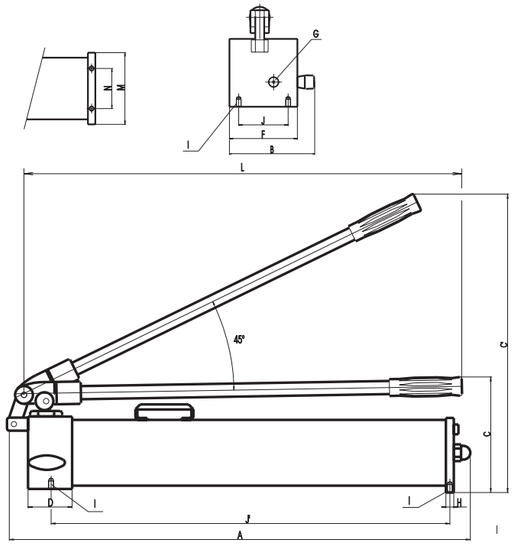
These are double acting and two-speed hand pumps.

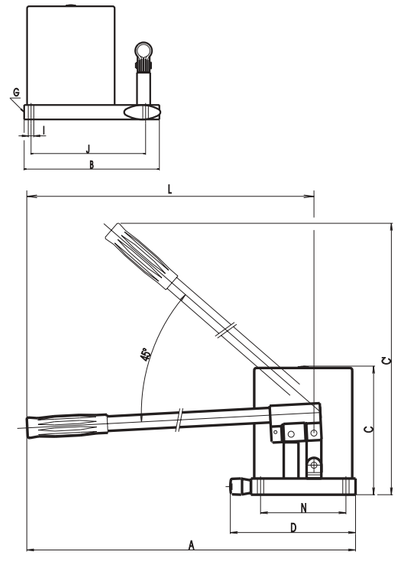
They all feature same technical advantages as the single acting one-speed pumps.

With a safety relief valve, factory rated at the maximum working capacity.



Hydraulic diagram





Ref.	Working pressure		Effective oil volume		Oil flow per stroke				Dimensions mm/in.																						Weight	
					1st stage		2nd stage		A		B		C		C'		D		F		G	H		I		J		J'		L		M		N			
	kg/cm²	psi	cm³	in³	cm³	in³	cm³	in³																											Kg.	lbs.
BM-04	700	10000	400	24,4	–	–	2,5	0,15	460	18 1/64	127	5	137	5 13/32	440	17 5/16	30	1 3/16	97	3 13/16	3/8-18NPT	33	1 5/16	8,5	11/32	–	–	–	–	400	15 3/4	–	–	50	2	4,25	9,4
BM-1	700	10000	1250	76,3	–	–	2,5	0,15	590	23 7/32	133	5 1/4	155	6 1/64	610	24	30	1 3/16	104	4 1/64	3/8-18NPT	33	1 5/16	8,5	11/32	–	–	–	–	600	23 5/8	–	–	80	3 6/32	6,7	14,8
BM-2	700	10000	2000	122	–	–	2,5	0,15	570	22 7/16	155	6 1/64	175	6 7/8	630	14 13/16	30	1 3/16	140	5 1/2	3/8-18NPT	33	1 5/16	8,5	11/32	–	–	–	–	600	23 5/8	–	–	90	3 9/16	12	26,5
BMAP-1	1500	21430	1250	76,3	–	–	1	0,06	590	23 7/32	142	5 5/8	155	6 1/64	610	24	30	1 3/16	112	4 7/16	1/4-19GAS	33	1 5/16	8,5	11/32	–	–	–	–	600	23 5/8	–	–	80	3 6/32	7,2	15,9
BK-05	700	10000	650	39,7	–	–	2,5	0,15	625	24 5/8	180	7 3/32	144	5 11/16	610	24	140	5 1/2	–	–	3/8-18NPT	–	–	8,5	11/32	–	–	–	–	600	23 5/8	–	–	96	3 3/4	7	15,4
BKD-09	700	10000	1100	67,1	8	0,5	2,5	0,15	625	24 5/8	228	8 15/16	233	9 3/16	610	24	140	5 1/2	–	–	3/8-18NPT	–	–	8,5	11/32	–	–	–	–	600	23 5/8	–	–	96	3 3/4	9,5	20,9
BM-3	700	10000	3000	183	19	1,15	2,5	0,15	700	27 9/16	135	5 5/16	185	7 9/32	595	23 7/16	67	2 5/8	110	4 5/16	3/8-18NPT	12	15/32	M8x1,25		80	3 6/32	607	23 7/8	665	26 3/16	80	3 6/32	65	2 9/16	14	30,9
BMAP-3	1500	21430	3000	183	18	1,1	1,15	0,07	700	27 9/16	135	5 5/16	185	7 9/32	595	23 7/16	67	2 5/8	110	4 5/16	1/4-19GAS	12	15/32	M8x1,25		80	3 6/32	607	23 7/8	665	26 3/16	80	3 6/32	65	2 9/16	14	30,9
BM-6	700	10000	6000	366	19	1,15	2,5	0,15	700	27 9/16	168	6 5/8	185	7 9/32	595	23 7/16	67	2 5/8	110	4 5/16	3/8-18NPT	10	25/64	M6x1		130	5 1/8	–	–	665	26 3/16	165	6 1/2	–	–	20	44,1
BM-12	700	10000	12000	732	19	1,15	2,5	0,15	700	27 9/16	290	11 7/16	185	7 9/32	595	23 7/16	67	2 5/8	110	4 5/16	3/8-18NPT	10	25/64	–		–	–	–	–	665	26 3/16	290	11 7/16	–	–	25	55,1
BMD-3	700	10000	3000	183	19	1,15	2,5	0,15	730	27 9/16	146	5 3/4	185	7 9/32	595	23 7/16	125	4 15/16	110	4 5/16	3/8-18NPT	12	15/32	M8x1,25		80	3 6/32	607	23 7/8	665	26 3/16	80	3 6/32	65	2 9/16	17	37,5
BMD-6	700	10000	6000	366	19	1,15	2,5	0,15	730	27 9/16	168	6 5/8	185	7 9/32	595	23 7/16	125	4 15/16	110	4 5/16	3/8-18NPT	10	25/64	M6x1		130	5 1/8	–	–	665	26 3/16	165	6 1/2	–	–	23	50,7
BMD-12	700	10000	12000	732	19	1,15	2,5	0,15	730	27 9/16	290	11 7/16	185	7 9/32	595	23 7/16	125	4 15/16	110	4 5/16	3/8-18NPT	10	25/64	–		–	–	–	–	665	26 3/16	290	11 7/16	–	–	28	61,7

Air hydraulic pumps

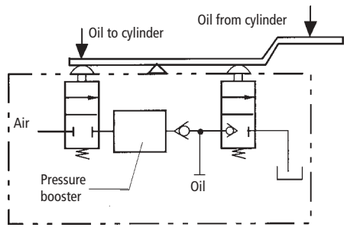
NS-1, NS-21, NS-22 and NAP-3

Single-acting, one-speed air pumps.

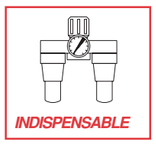
Air driven pumps for operation where electric power is not available or dangerous.

With safety relief valve, factory rated at the maximum working pressure.

Once the NS-1, NS-21 and NS-22 air pumps are connected to the air line, press down on the back section of pedal for operation. Descent or pressure release is effected by pressing down on the front section.



Recommended air pressure:
7-10 kg/cm^2. / 100-140 psi
Minimum air flow:
270 l./min. / 59,39 gpm



Important. It is recommended the use of an air filter-regulator-lubricator unit with these pumps to resist corrosion and for longer life.

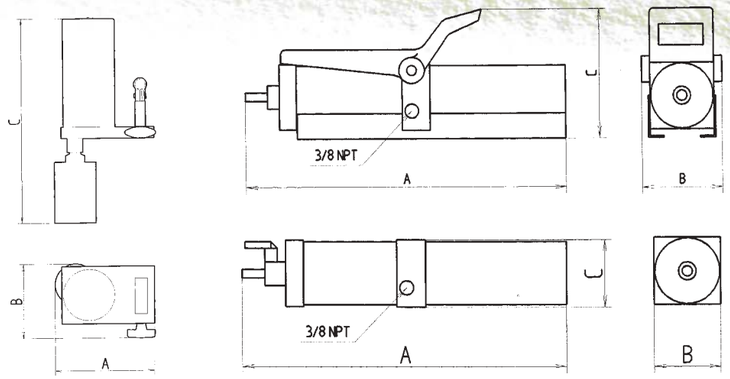
Single-acting

BKN-09

Manual and air powered pump.

The pneumatic operation allows for a faster movement of the piston.

The manual operation is required for precision pressing jobs or when compressed air supply is not available.



Ref.	Working pressure		Effective oil volume		Oil flow		Oil flow per stroke		Dimensions mm/in.						Weight	
									A		B		C			
	kg/cm^2	psi.	cm^3	in^3	cm^3/min	in^3/min	cm^3	in^3							Kg.	lbs.
NS-1	700	10000	500	30,5	50	3,05	–	–	440	17 5/16	120	4 3/4	150	5 7/8	7	15,5
NS-21	700	10000	1250	76,3	50	3,05	–	–	697	27 7/16	120	4 3/4	150	5 7/8	8	17,6
NS-22	225	3215	1000	61	155	9,45	–	–	606	23 7/8	120	4 3/4	150	5 7/8	7,6	16,7
NAP-3	1500	21430	3000	183	43	2,6	–	–	800	31 1/2	120	4 3/4	120	4 3/4	15	33
BKN-09	700	10000	1100	67,1	50	3,05	2,5	0,15	193	7 5/8	140	5 1/2	407	16	8,2	18

Electric pumps

BES-5, BES-10, BES-20 and BES-30: SINGLE-ACTING

BED-5,BED-10, BED-20 and BED-30: DOUBLE ACTING

They have a two-stage, radial pump that provides a working pressure of 700 kg/cm^2/10.000 psi.

The first stage allows a quick approach of piston to load and the second stage gives the effective working pressure.

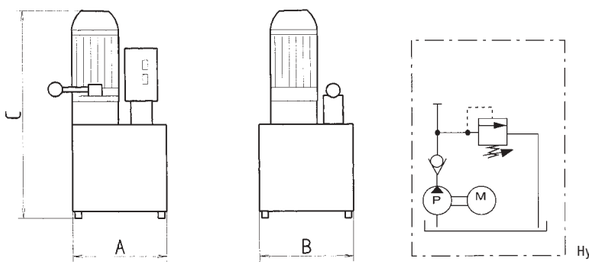
With precision made components, electric power provides improved operation for applications requiring high pressure.

With safety relief valve, factory rated at the maximum working pressure. For a continuous operation, pressure should not exceed 560 kg/cm^2/8.000 psi.

Frequency: 50 Hz.: 220/380 V - 1,5 kW - 2 HP - 1400 rpm.

Frequency: 60 Hz.: 265/460 V - 1,7 kW - 2,3 HP - 1700 rpm.

BES: single-acting
BED: double-acting



Hydraulic diagram

Ref.	Working pressure		Effective oil volume		Power	R.p.m.	Oil flow				Dimensions mm/in.								Weight	
							1st stage		2nd stage		A			B			C			
	kg/cm^2	psi.	l.	Gal.	kW		l/min	in^3/min	l/min	in^3/min									Kg.	lbs.
BES-5	700	10000	5	1,32	0,552	1390	0,8	48,8	0,5	30,5	215	8 1/2		250	9 7/8		443	17 7/16	36	79
BES-10	700	10000	10	2,65	0,736	1400	1,1	67	0,7	42,7	285	11 1/4		255	10		485	19 3/32	48	106
BES-20	700	10000	20	5,3	1,472	1390	2,1	128	1,3	79,3	325	12 3/4		325	12 3/4		615	24 3/16	73	161
BES-30	700	10000	30	7,95	1,472	1390	2,1	128	1,3	79,3	365	14 3/		365	14 3/8		625	24 5/8	95	210
BED-10	700	10000	10	2,65	0,736	1400	1,1	67	0,7	42,7	285	11 1/4		255	10		485	19 3/32	48	106
BED-20	700	10000	20	5,3	1,472	1390	2,1	1,28	1,3	79,3	325	12 3/4		325	12 3/4		615	24 3/16	73	161
BED-30	700	10000	30	7,95	1,472	1390	2,1	1,28	1,3	79,3	365	14 3/8		365	14 3/8		625	24 5/8	95	210