Hydraulic and Mechanical Pullers



Enerpac offers a complete line of pullers with the widest range of sizes, capacities and styles. Whether your application requires mechanical, hydraulic, Sync Grip or the patented Posi Lock® system, Enerpac can satisfy your requirements.

Made of high strength steel alloys, you can depend on Enerpac pullers to provide years of trouble-free operation, even in the harshest environments.

B DW-HH







Hydraulic Pullers

These hydraulic pullers eliminate timeconsuming and unsafe hammering, heating or prying. Damage to parts is minimized through the use of controlled hydraulic power.

Sync Grip Pullers

The sync grip mechanisme synchronizes movement of jaws for simultaneous engagement, helping tp prevent misalignment for safe and easy use. Mechanical and hydraulic configurations are available with a variety of optional accessories that expand application range and increase utility.

Posi Lock[®] Pullers

The puller that meets the safety challenge. A control cage holds the pulling jaws securely in working position. This patented feature reduces the possibility of the puller jaws slipping off the work surface, thereby increasing productivity and tool life and reducing dangerous situations for the user. The Posi Lock® feature is available in a mechanical or hydraulic version.

WARNING

Do not exceed 50% of the rated puller capacity when using two jaw configurations, a double crosshead (2 grip arms) or when using puller legs in combination with bearing puller attachments.



CAUTION!

Not all puller components and configurations are rated at the set capacity. Please contact Enerpac for details.



IMPORTANT!

Always wear Safety Goggles and Gloves while using pullers.

Puller Section Overview

When selecting a puller it is important to consider 3 basic specifications:

1. The Capacity:

is the amount of force the puller is capable of producing.

Typically, the capacity required for a job can be determined by using the shaft diameter of the part being pulled.

For manual pullers, the center bolt diameter of the puller should be at least half the diameter of the shaft being pulled from.

For hydraulic pullers, the capacity in tons should be 0,28 to 0,4 times the shaft diameter in mm. Use the following chart:

Puller
Capacity
13 ton
22 ton
33 ton
45 ton

2. The Reach:

is the distance between the bottom of the base and the jaw flats. The puller's reach must equal or exceed the same distance of the part being pulled.

3. The Spread:

is the distance between the jaws. The puller's spread needs to be greater than the width of the part being pulled.

Puller Function	Capacity ton	Puller Type	Series		Page
	13-45	Master Puller Sets Max. Reach: 252 - 700 mm Max. Spread: 247 - 1100 mm	BHP		144 ►
	13-45	Grip Puller Sets Max. Reach: 252 - 700 mm Max. Spread: 249 - 1100 mm	BHP		145 🕨
	6-22	Cross Bearing Puller SetsMax. Reach:357 - 864 mmMax. Spread:260 - 580 mm	BHP	i i	146 ► 153 ►
	6-22	Bearing Cup Pullers Max. Reach: 115 - 150 mm Max. Spread: 145 - 240 mm	BHP	=	147 🕨
	6-22	Bearing Separators Max. Width: 110 - 260 mm Max. Spread: 110 - 250 mm	BHP		147 🕨
	1-20	Mechanical Sync Grip Pullers Max. Reach: 105 - 600 mm Max. Spread: 110 - 680 mm	SGM		148 ►
	13-45	Hydraulic Sync Grip Pullers Max. Reach: 320 - 700 mm Max. Spread: 350 - 980 mm	MPS SGH GPS	A	151 🕨
	2-40	Posi Lock[®] Mechanical Pullers Max. Reach: 101 - 355 mm Max. Spread: 12 - 635 mm	ep Epp Epx Eppmi		154 🕨
	10-50	Posi Lock® Hydraulic Pullers Max. Reach: 203 - 355 mm Max. Spread: 304 - 635 mm	EPH EPHR EPHS	L.C.	158 ►
	100	Posi Lock® Hydraulic Pullers Max. Reach: 1219 mm Max. Spread: 190 - 1778 mm	EPH		159 ►

BHP-Series, Master Puller Sets

Shown: Master Puller Set BHP-3751G



Multi Purpose Puller Set



 Maintenance engineers throughout the industry greatly appreciate the Enerpac Master Puller sets



- Supplied with a full hydraulic set including pump, hose, cylinder, gauge, gauge adaptor and wooden case
- High quality, forged steel components provide superior reliability and service
- Sets include speed crank and adjusting screw for fast contact to work before hydraulics are applied
- All Master Puller Sets include a Grip Puller, a Cross Bearing Puller, a Bearing Cup Puller and a Bearing Separator, which can be ordered separately, see items nr. 10, 20, 30 and 40.

Master Puller Set Capacity *		13 ton	22 ton	33 ton	45 ton **	Page:
	Model Number ►	BHP-1752 ¹⁾	BHP-2751G	BHP-3751G	BHP-5751G	
Included Hydraulics	Set Weight ►	37 kg	90 kg	172 kg	298 kg	
Hand Pump		P-142	P-392	P-392	P-80	64-67 🕨
Cylinder		RWH-121	RCH-202	RCH-302	RCH-603	26 🕨
Saddle		_	HP-2015	HP-3015	HP-5016	27 🕨
Hose		HB-7206QB	HC-7206	HC-7206	HC-7206	114 🕨
Gauge		GF-120B	GF-813B	GF-813B	GF-813B	120 🕨
Gauge Adaptor		GA-4	GA-3	GA-3	GA-3	127 🕨
Included Pullers						
10 Grip Puller		BHP-1762	BHP-252	BHP-352	BHP-552	145 🕨
20 Cross Bearing Puller		BHP-1772	BHP-262	BHP-362	BHP-562	146 🕨
30 Bearing Cup Puller		BHP-180	BHP-280	BHP-380	BHP-580	147 🕨
40 Bearing Separator		BHP-181	BHP-282	BHP-382	BHP-582	147 🕨
• Case		CM-6	CW-350	CW-350	CW-750	

¹⁾ Includes Adaptor FZ-1630.

* See warning on this page.

** Puller capacity at 540 bar; maximum cylinder capacity at 700 bar is 60 ton.

144

Grip Puller Sets

Shown: Grip Puller Set BHP-351G



- · Precise hydraulic control allows fast, efficient and safe pulling
- High quality, forged steel components provide superior reliability and service
- Available with and without full hydraulic set.

BHP Series



Capacity: 13, 22, 33 and 45 ton

Maximum Reach: 252 - 700 mm

Maximum Spread: 249 - 1100 mm

Maximum Operating Pressure: 700 bar

Ordering Example

Model Number BHP-251G:

includes Grip Puller BHP-252 and a full hydraulic set. (Hand pump, cylinder, saddle, hose, gauge and gauge adaptor).

Model Number BHP-252:

includes Grip Puller mechanical parts only, for use with your existing hydraulics.

▼	SEL	ECTI.	ON	CHART	•
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Grip Puller Set Capacity **		13 ton	22 ton	33 ton	45 ton ***
	Model Number 🕨	BHP-152 ¹⁾	BHP-251G	BHP-351G	BHP-551G
Included Hydraulics	Set Weight 🕨	22 kg	56 kg	91 kg	160 kg
Hand Pump		P-142	P-392	P-392	P-80
Cylinder		RWH-121	RCH-202	RCH-302	RCH-603
Saddle		-	HP-2015	HP-3015	HP-5016
• Hose		HB-7206QB	HC-7206	HC-7206	HC-7206
• Gauge		GF-120B	GF-813B	GF-813B	GF-813B
Gauge Adaptor		GA-4	GA-3	GA-3	GA-3
O Grip Puller *	Model Number 🕨	BHP-1762 *	BHP-252 *	BHP-352 *	BHP-552 *
Maximum Spread (mm)	2-jaw	249	400	593	899
	3-jaw	249	499	800	1100
Maximum Reach (mm)	2-jaw	252	300	387	700
	3-jaw	252	300	387	700
Jaw (mm)	Thickness	15	20	24	30
	Width	23	27	38	39
Adjusting Screw (mm)	Thread	3⁄4 "- 16 UNF	1"- 8 UNC	1¼"- 7 unc	1%"- 5.5 UNS
	Length	400	670	790	975
Case		CW-166	CW-166	CW-350	CW-750

Includes Adaptor FZ-1630.
 Srip Puller order number w

* Grip Puller order number without hydraulics.
** See warning on page 144.

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** Puller capacity at 540 bar; maximum cylinder capacity at 700 bar is 60 ton.



BHP-Series, Cross Bearing Puller Sets



Shown: Cross Bearing Puller Set BHP-361G



- · Precise hydraulic control allows fast, efficient and safe pulling
- High quality, forged steel components provide superior reliability and service.



Capacity: **6, 11, 16 and 22 ton** Maximum Reach:

357 - 864 mm

Maximum Spread: 260- 580 mm

Maximum Operating Pressure: **350 bar**



Available With Air, Cordless or Electric Pump

These puller sets are also with XA-Series air driven foot pump, cordless pump or electric pump.

Page: 153

Cross Bearing Puller Set Capacity (at 350	bar)	6 ton	11 ton	16 ton	22 ton
	Model Number 🕨	BHP-162 ¹⁾	BHP-261G	BHP-361G	BHP-561G
Included Hydraulics	Set Weight 🕨	26 kg	62 kg	121 kg	185 kg
Hand Pump		P-142	P-392	P-392	P-80
Cylinder		RWH-121	RCH-202	RCH-302	RCH-603
Saddle		-	HP-2015	HP-3015	HP-5016
• Hose		HB-7206QB	HC-7206	HC-7206	HC-7206
• Gauge		GF-120B	GF-813B	GF-813B	GF-813B
Gauge Adaptor		GA-4	GA-3	GA-3	GA-3
O Cross Bearing Puller ²⁾	Model Number 🕨	BHP-1772	BHP-262	BHP-362	BHP-562
Spread (mm)	Maximum	260	345	440	580
	Minimum	115	140	180	220
Reach (mm)	Maximum	357	570	710	864
Adjusting Screw (mm)	Diameter	3⁄4 "- 16 UNF	1"- 8 UNC	1¼"- 7 UNC	15⁄8"- 5.5 UNS
	Length	400	670	790	975
Leg (mm)	Length	106	115	205	609
	Length	357	240	460	864
	Length	-	420	710	-
	Length	-	520	-	-
Upper Leg Ends (mm)	Thread	³ ⁄4" - 16 UNF	¾ "- 16 ∪NF	1-14 UNS	11⁄4"- 12 UNF
Lower Leg Ends (mm)	Thread	5⁄8 "- 18 UNF	5∕8 "- 18 UNF	1-14 UNS	1¼"- 12 UNF
O Bearing Cup Puller ²⁾	Model Number 🕨	BHP-180	BHP-280	BHP-380	BHP-580
O Bearing Separator ²⁾	Model Number 🕨	BHP-181	BHP-282	BHP-382	BHP-582
Wooden Case		CM-6	CW-187	CW-350	CW-750

¹⁾ Includes Adaptor FZ-1630.

²⁾ Can be ordered separately without hydraulic components, see next page.

V SELECTION CHART

Bearing Cup Pullers and Bearing Separators

Shown: BHP-380



Bearing Cup Puller

- Made of high strength steel alloy
- Easily adapted to Cross Bearing Pullers for fast and efficient removal of the most difficult parts
- Adjustable to fit a variety of bearings and seals.

BHP Series



Capacity: 6, 11, 16 and 22 ton

Maximum Reach: 115 - 150 mm

Maximum Spread:

145 - 240 mm

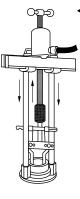
Maximum Operating Pressure: **350 bar**



WARNING!

Do not exceed 50% of the rated puller capacity when using a double crosshead (2 grip arms) ng puller less in combination

or when using puller legs in combination with bearing puller attachments.



 Bearing Cup Puller shown with Crosshead Puller Attachment.



Bearing Separator shown with Crosshead Puller Attachment. ►



Bearing Puller

Bearing Separator has wedge shaped edges for placing puller behind hard to reach bearings, gears, etc., where clearance

prevents direct application of grip puller arms.

The Bearing Separator can be used with the Cross Bearing Puller or the Grip Puller.

V SELECTION CHART

Capacity *		6 ton	11 ton	16 ton	22 ton					
30 Bearing Cup Pull	30 Bearing Cup Puller									
Model N	lumber 🕨	BHP-180	BHP-280	BHP-380	BHP-580					
Spread (mm)	Max.	145	160	240	240					
	Min.	40	32	60	60					
Reach (mm)	Max.	115	140	150	150					
Center Screw	Thread	³ ⁄4 "- 16 UNF	1"- 8 UNC	1¼"- 7 UNC	1%"- 5.5 UNS					

* Bearing cup pullers rated at 50% of puller capacity.

Shown: BHP-382



Bearing Separator

- Made of high strength steel alloy
- Wedge-shaped edges allow removal of the most hard-to-grip components
- Easily adapted to Cross Bearing Pullers for fast and efficient removal of the most difficult parts.

▼ SELECTION CHART

Capacity *		6 ton	11 ton	16 ton	22 ton
40 Bearing Puller		_			
Model N	lumber 🕨	BHP-181	BHP-282	BHP-382	BHP-582
Spread (mm)	Max.	110	134	250	250
	Min.	10	12	17	17
Width (mm)		110	155	260	260
Thread		5∕8 "-18 UNF	5∕8" -18 UNF	1"- 14 UNS	1¼"-12 UNF

* Bearing separator rated at 50% of puller capacity. See warning on this page.

Sync Grip Pullers

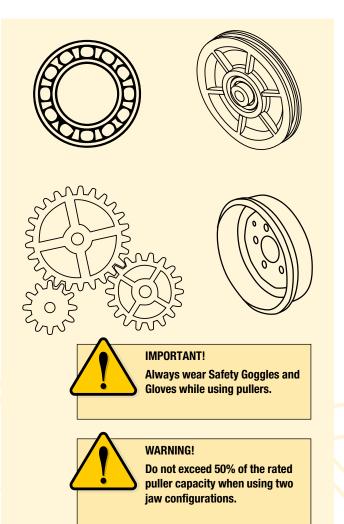
Overview and Dimension Guide

The Enerpac Sync Grip multi-purpose puller range is designed to make your jobs easier and safer to accomplish.

Remove bearings, bushings, gears, sleeves, wheels and flywheels, sprockets and other shaft mounted items simply and effectively.

Mechanical and hydraulic configurations are available with a variety of optional accessories that expand application range and increase utility.

Hydraulic models are available in standard sets which include detachable hydraulic cylinders and a choice of pump options, along with a gauge assembly and hose for safe monitoring of applied pulling forces.



OVERVIEW AND DIMENSION GUIDE

Puller Capacity	Puller Model Number	Sync Grip Pullers Dimensions (mm)								
		Wi Standaı			ptional ed Jaws		Jaw Tip		Jaw Hole	
		Max. Reach	Max. Spread	Max. Reach	Max. Spread	Height	Width	Thick- ness	Spacing	
(ton)		А	В	A	В	D	E	F	н	(kg**)
Mechanic	al Pullers									
1	SGM01	105	110	-	-	8,0	7,0	7,5	19,0	0,8
4	SGM04	185	175	-	-	7,5	8,0	21,0	51,0	2,0
7	SGM07	225	240	-	-	10,0	8,0	25,0	44,5	6,5
10	SGM10	410	350	490	405	12,5	15,0	25,0	83,0	14,5
20	SGM20	600	680	640	720	22,0	24,0	41,0	125,0	55,5
Hydraulic	Pullers									
13	SGH14	320	350	400	405	12,5	15,0	25,0	83,0	25
22	SGH24	320	480	435	540	15,5	17,5	31,0	115,0	49
33	SGH36	410	650	525	720	22,0	24,0	41,0	125,0	75
45 *	SGH64	700	980	850	1080	30,0	27,0	50,0	150,0	165

* Puller capacity at 540 bar, maximum cylinder capacity at 700 bar is 54 ton.

** Weight of SGH-models with standard legs and hydraulic cylinder.

Sync Grip Pullers



Sync Grip Pullers: available in both mechanical or hydraulic versions. Some models can be configured as a two jaw puller, however, three jaws are recommended for most even distribution of pulling forces.

Cross Puller: hydraulically powered via detachable cylinder and choice of pump. The Cross Puller can be used individually as a 'push' puller or in conjunction with the Bearing Separator or Bearing Cup Puller.

Bearing Separator: use where access is restricted. The Bearing Separator is used in conjunction with the Cross Puller.

Bearing Cup Puller: specifically designed for cup style bearing and other applications requiring an internal style puller.

Detachable Hollow Cylinder: provided with all hydraulic puller models including both the standard Sync Grip and Cross Puller.

In Sync Grip, Cross Bearing and Master Puller Sets a hose and gauge are provided as standard along with your choice of pump including manual hand operated, cordless battery powered, electric or air powered. In each case the pump selection has been optimized for compatibility with the pullers.



Simple, Safe, Productive

All three jaws close simultaneously making the puller easier and safer to operate.

The synchronous feature of the SGM and SGH-Series Pullers makes positioning the puller simple and helps prevent misalignment.



Puller Capacity	Cross Dim			
	Standard Leg Height	Long Leg Height	Max. Spread	
(ton)	A	A	В	(kg**)
Mechanic	al Pullers			
-	-	-	-	-
-	-	_	_	-
-	-	-	-	_
-	-	-	-	-
-	_	-	-	-
Hydraulic	Pullers			
13	106	357	260	18,5
22	115	34,5		
33	205	710	440	56,0
45 *	609	864	580	113,5

Bearing Separators Dimensions (mm)							
Dia- meter	Min. Spread	Max. Spread	Thread Size				
А	В	В	С	(kg)			
Mechar	ical Pulle	ers					
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
-	-	-	-	-			
Hydrau	lic Pullers	;					
110	10	110	%"-18UNF	2,7			
155	12	134	%"-18UNF	5,7			
260	17	250	1" -14UNS	28,5			
260	17	250	11/4"-12UNF	28,5			

Bearing Cup Pullers Dimensions (mm)									
		B		E D	Ĥ	F			
Height	Height	Min. Spread	Max. Spread	Tip Height	Tip Width	Thick- ness			
А	В	С	С	D	Е	F	(kg)		
Mecha	nical Pu	llers							
_	_	_	_	_	-	-	-		
_	Ι	-	-	_	Ι	-	-		
_	-	-	-	-	-	-	-		
_	-	-	-	-	-	-	-		
_	-	-	-	-	-	-	-		
Hydrau	lic Pulle	rs							
115	237	40	145	5,0	4,5	31	2,0		
140	266	32	160	4,5	4,5	25	2,4		
150	310	60	240	8,0	11,0	55	6,0		
150	310	60	240	8,0	11,0	55	6,4		

** With standard legs and hydraulic cylinder.

SGM-Series, Mechanical Sync Grip Pullers



SGM10 Mechanical Sync Grip Puller with three jaws



- Sync Grip mechanism synchronizes movement of all jaws for simultaneous engagement, helping to prevent misalignment for safe and easy use
- Threaded spindle and jaw indexes provide adjustable reach
- Three-jaw configuration for even load distribution •
- Two-jaw configuration for confined access applications available on pullers of 1 to 10 ton (not available on SGM20)
- High-strength forged jaws for superior reliability •
- Suitable for a variety of applications including bearings, bushings, • wheels, gears and pulleys.

SGM Series

Puller Capacity: 1 - 20 ton

Maximum Reach: 105 - 600 mm

Maximum Spread: 110 - 680 mm



Dimensions

Dimensional information for all puller models is included in the dimensional overview and dimension guide.



Always wear Safety Goggles and Gloves while using pullers.

148

Page:

WARNING! Do not exceed 50% of the rated puller capacity when using two jaw configurations.

▼ SGM10 with two jaws.



▼ SELECTION CHART

Puller Capacity	3-Jaw Puller Model Number	Max. Reach	Max. Spread	i	Optional Long Jaw Sets (3 jaws) Model Number	Max. Reach	Max. Spread
(ton)		A (mm)	B (mm)	(kg)		A (mm)	B (mm)
1	SGM01 *	105	110	0,8	-	-	-
4	SGM04 *	185	175	2,0	-	-	-
7	SGM07 *	225	240	6,5	_	-	-
10	SGM10 *	410	350	14,5	SG1002K	490	405
20	SGM20	600	680	55,5	SG3002K	640	720

* Can be configurated into 2-jaw puller.

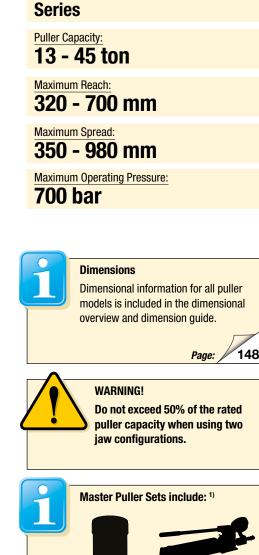
Hydraulic Sync Grip Master Puller Sets

MPS

MPS14H



- Sync Grip mechanism synchronizes movement of all jaws for simultaneous engagement
- Hydraulically applied pulling force increases pulling capacity reducing operator fatigue
- Standard jaws adjust to accommodate different reach requirements. Optional long jaws sets available for additional reach requirements
- Designed for applications including pulling, pushing and dismounting gears, bearings, bushings, etc.



¹⁾ Choose pump options below.

V SELECTION CHART

Puller	3-Jaw Buller only	Cylinder	Max.	Max.	À	Model	Numbers Hyd	raulic Sync G	rip Master Pul	ler Sets	Optional	Max.	Max.
Capacity	Puller only Model Number *	Stroke	Reach	Spread		1	1	-	La L	30	Long Jaw Sets (3 jaws) Model Number	Reach	Spread
(ton)		(mm)	A (mm)	B (mm)	(kg)	Hand Pump	Air Driven Foot Pump	Electric Pump ³⁾	Cordless Pump ³⁾	All Sets include		A (mm)	B (mm)
13	SGH14	25	320	350	25	MPS14H	MPS14A	MPS14E	MPS14C	1)	SG1002K	400	405
22	SGH 24	49	320	480	49	MPS24H	MPS24A	MPS24E	MPS24C	GA45GC	SG2002K	435	540
33	SGH 36	64	410	650	75	MPS 36H	MPS36A	MPS 36E	MPS36C	with	SG3002K	525	720
45 ²⁾	SGH64	76	700	980	165	MPS64H	MPS64A	MPS64E	MPS64C	HC7206C	SG6002K	850	1080

13 ton sets include an AR630 female coupler, GA45 gauge adaptor and G2535L gauge.
 Puller capacity at 540 bar; maximum cylinder capacity is at 700 bar is 60 ton.

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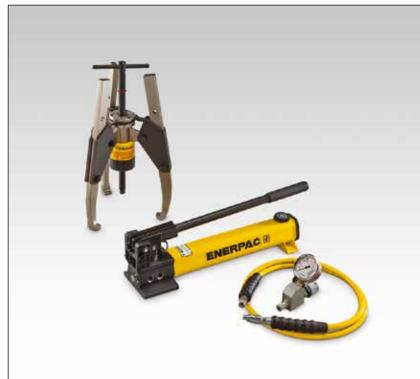
³ For 115 Volt application with eletric pump add suffix "B" to model nr; example MPS24EB For 230 Volt application with cordless pump add suffix "E" to model nr; example MPS14CE



Hydraulic Sync Grip Puller Sets



GPS14H



- Sync Grip mechanism synchronizes movement of all jaws for simultaneous engagement
- Hydraulically applied pulling force increases pulling capacity and reduces operator fatigue
- · Threaded spindle and jaw indexes provide adjustable reach
- Three jaw configuration for even load distribution
- High strength forged jaws for superior reliability
- The versatile puller set facilitates safe and easy dismounting in a variety of applications.

GPS Series
Puller Capacity: 13 - 45 ton
Maximum Reach: 320 - 700 mm
Maximum Spread: 350 - 980 mm
Maximum Operating Pressure: 700 bar
Dimensions Dimensional information for all puller models is included in the dimensional overview and dimension guide.
Page: 148
IMPORTANT! Always wear Safety Goggles and Gloves while using pullers.
Grip Puller Sets include: 1)

¹⁾ Choose pump options below.

▼ SELECTION CHART

Puller	3-Jaw Puller only	Cylinder	Max.	Max.	Model Numbers Hydraulic Sync Grip Puller Sets				Optional Long Jaw	Max.	Max.		
Capacity	Model Number *	Stroke	Reach	Spread			1	-		30	Sets (3 jaws) Model Number	Reach	Spread
			А	В		Hand	Air Driven	Electric	Cordless	All Sets		A	В
(ton)		(mm)	(mm)	(mm)	(kg)	Pump	Foot Pump	Pump ³⁾	Pump ³⁾	include		(mm)	(mm)
13	SGH14	25	320	350	25	GPS14H	GPS14A	GPS14E	GPS14C	1)	SG1002K	400	405
22	SGH24	49	320	480	49	GPS24H	GPS24A	GPS24E	GPS24C	GA45GC	SG2002K	435	540
33	SGH 36	64	410	650	75	GPS 36H	GPS 36A	GPS36E	GPS36C	with	SG3002K	525	720
45 ²⁾	SGH64	76	700	980	165	GPS64H	GPS64A	GPS64E	GPS64C	HC7206C	SG6002K	850	1080

13 ton sets include an AR630 female coupler, GA45 gauge adaptor and G2535L gauge.
 Puller capacity at 540 bar; maximum cylinder capacity is at 700 bar is 60 ton.

³⁾ For 115 Volt application with eletric pump add suffix "B" to model nr; example **GPS24EB** For 230 Volt application with cordless pump add suffix "E" to model nr; example **GPS14CE**

▼ BHP361G



- Precise hydraulic control allows fast, efficient and safe pulling
- · High quality forged components provide superior reliability and service
- Quick set-up to tackle a variety of jobs.

Cross Bearing Puller Sets

BHP Series

Puller Capacity:

6 - 22 ton

Maximum Reach: 357 - 864 mm

Maximum Spread: 260 - 580 mm

Maximum Operating Pressure: **350 bar**



Dimensions

Dimensional information for all puller models is included in the dimensional overview and dimension guide.

149

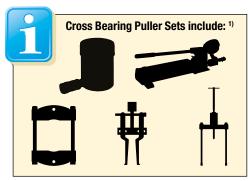
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WARNING!

Enerpac cylinder and pump can be operated to 700 bar, but should not be operated past

350 bar pressure when using the cross bearing puller set tools.



¹⁾ Choose pump options below. The BHP-sets include a gauge, adaptor and hose. For details on the puller components see page 146.

▼	SEL	ECT	ON	CHART
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Puller	Cross	Cylinder	Maximum	Maximum	Model Numbers Hydraulic Cross Bearing Puller Sets				
Capacity ¹⁾	Bearing only Model Number	Stroke	Reach	Spread		E	-		
(ton)		(mm)	A (mm)	B (mm)	Hand Pump	Air Driven Foot Pump	Electric Pump ²⁾	Cordless Pump ²⁾	
6	BHP1772	25	357	260	BHP162	BHP162A	BHP162E	BHP162C	
11	BHP262	49	570	345	BHP261G	BHP261GA	BHP261GE	BHP261GC	
16	BHP362	64	710	440	BHP361G	BHP361GA	BHP361GE	BHP361GC	
22	BHP562	76	864	580	BHP561G	BHP561GA	BHP561GE	BHP561GC	

¹⁾ Puller capacity at 540 bar; maximum cylinder capacity is at 700 bar is 60 ton.

²⁾ For 115 Volt application with eletric pump add suffix "B" to model nr; example MPS24EB For 230 Volt application with cordless pump add suffix "E" to model nr; example MPS14CE

ENERPAC 153

EP-Series, Posi Lock[®] Mechanical Pullers

3 POWERFUL SOLUTIONS. GLOBAL FORCE.

▼ Shown from left to right: EP-206, EP-108



- Patented 'Safety Cage' jaw retention system •
- Roll threaded shafts for less effort when applying high torque •
- Slim tapered jaws for improved gripping in tight spots •
- Available in 2 and 3 jaw design and inside and outside pulling • configuration
- More efficient pulling, as one man can do the job where manual • pullers often require two operators.





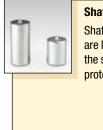
Long Jaws

Long Jaws are used to increase the reach and spread of manual pullers. They maintain the same pulling capacity as the standard jaws, but reduce clamping force to 25%.



157

Page:



Shaft Attachments

Shaft protectors and extenders are live centers that fit over the standard puller shaft for tip protection and additional reach.



Application Tip

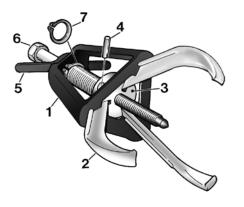
Because of the unique safety cage design, Posi Lock[®] pullers will grip on surfaces where normal pullers would slip off; e.g. tapered bearings.



Positioning an EP-104, 3-jaw puller on the drive pulley of an electric motor.

Posi Lock® Mechanical Grip Pullers

External Posi Lock® Pullers



- 1 Patented 'Safety Cage' guides jaws, holding them securely onto the part.
- 2 Durable forged jaws provide positive grip.
- **3** Jaw head provides pivot and reaction point for jaws.
- 4 Pin, for easy jaw removal and replacement.
- **5** T-handle provides control of the puller jaws.
- 6 Drive bolt with rolled threads for increased force with reduced input torque.
- 7 Snap-ring retains cage to drive bolt and provides quick removal for easy service.



<u>Capacity:</u> **2 - 40 ton**

Maximum Reach: 101 - 355 mm

Spread Range:





IMPORTANT!

Always wear Safety Goggles and Gloves while using pullers.



Application Tip

In determining the correct manual puller capacity for your application, use the following rule:

The center bolt diameter of the puller should be at least 1/2 the diameter of the shaft being pulled on.

Example:

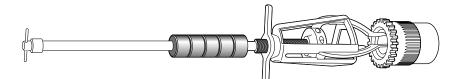
A part being pulled from a shaft with a diameter of 38 mm would require a puller with a center bolt diameter of at least 19 mm.

▼ QUICK SELECTION CHART EXTERNAL PULLERS

For quick technical information see next page.

Number of Jaws	Maximum Reach	Spread (min max.)	Capacity	Model Number	Center Bolt Diameter	Ă
	(mm)	(mm)	ton (kN)		(mm)	(kg)
2	101	12 - 127	2 (17)	EP-204	14	1,4
3	101	12 - 127	5 (45)	EP-104	14	1,8
2	152	12 - 178	6 (53)	EP-206	16	3,2
3	152	12 - 178	10 (89)	EP-106	16	3,6
2	203	19 - 304	12 (106)	EP-208	20	5,4
3	203	19 - 304	17 (151)	EP-108	20	6,4
2	245	25 - 381	14 (124)	EP-210	20	5,9
3	245	25 - 381	20 (178)	EP-110	20	7,3
2	304	63 - 457	25 (222)	EP-213	29	17,2
3	304	63 - 457	30 (267)	EP-113	29	20,0
2	355	76 - 635	35 (311)	EP-216	31	25,8
3	355	76 - 635	40 (356)	EP-116	31	30,8

Internal Posi Lock® Puller



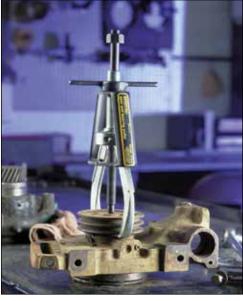
▼ QUICK SELECTION CHART INTERNAL PULLERS

Number of Jaws	Maximum Reach	Spread (min max.)	Jaw Style	Model Number	Jaw Length	İ
	(mm)	(mm)			(mm)	(kg)
3	168	14 - 101	Standard *	EPPMI-6	168	3,9
3	218	25 - 133	Long *	EFFINII-0	218	3,9

* Both Standard and Long Jaws are included with EPPMI-6.

EP-Series, Posi Lock® Mechanical Pullers





▲ EP-204 2 jaw puller positioned to pull a water pump drive pulley.

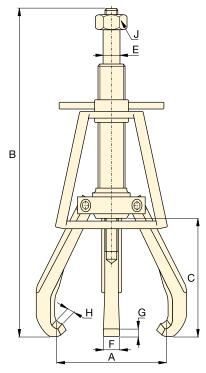


Number of Jaws	Maximum Reach (mm)	Spread min max. (mm)	Capacity ton (kN)	Model Number	Center Bolt Diameter (mm)	Maximum Torque (Nm)	
2	101	12 - 127	2 (17)	EP-204	14	27	
3	101	12 - 127	5 (45)	EP-104	14	54	
2	152	12 - 178	6 (53)	EP-206	16	102	
3	152	12 - 178	10 (89)	EP-106	16	176	
2	203	19 - 304	12 (106)	EP-208	20	203	
3	203	19 - 304	17 (151)	EP-108	20	298	
2	245	25 - 381	14 (124)	EP-210	20	237	
3	245	25 - 381	20 (178)	EP-110	20	373	
2	304	63 - 457	25 (222)	EP-213	29	644	
3	304	63 - 457	30 (267)	EP-113	29	814	
2	355	76 - 635	35 (311)	EP-216	31	1085	
3	355	76 - 635	40 (356)	EP-116	31	1153	

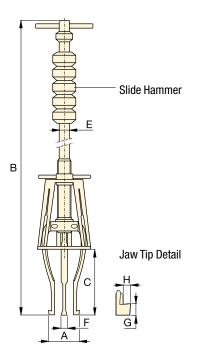
▼ QUICK SELECTION CHART INTERNAL PULLERS

Number of Jaws	Maximum Reach	Spread min max.	Jaw Style	Model Number	Jaw Length	Slide- hammer weight	
	(mm)	(mm)			(mm)	(kg)	
3	168	14 - 101	Standard *	EPPMI-6	168	1,1	
3	218	25 - 133	Long *		218	1,1	

* Both Standard and Long Jaws are included with EPPMI-6.



2 and 3 Jaw External Puller EP-Series



Internal Puller EPPMI-6

Posi Lock[®] Mechanical Pullers



Shaft Attachments Shaft protectors and extenders are live centers that fit over the standard puller shaft for tip protection and additional reach.



Long Jaws

Long Jaws are used to increase the reach and spread of pullers. They maintain the same pulling capacity as the standard jaws, but reduce clamping force to 25% of rating.





Capacity: 2 - 40 ton

Maximum Reach: 101 - 355 mm

12 - 635 mm

Spread Range:

▼ SHAFT ATTACHMENTS

Length (mm)	Dia- meter (mm)	Increases Center Bolt Length (mm)	Model Number
25	19	9	EPP-4
50	19	38	EPX-4
31	22	12	EPP-6
50	22	38	EPX-6
31	25	12	EPP-10
50	25	38	EPX-10
50	35	21	EPP-1316

▼ LONG JAWS

V LUNU JA	110	
Spread min max. (mm)	Max. Reach (mm)	Model Number
57 - 381	245	EP-11054
38 - 558	400	EP-11054L
38 - 762	508	EP-11354L
25 - 133	218	EP-10554L*

* for EPPMI-6 only

Dimensions (mm) Spread min max. Overall Length Max. Reach Center Bolt Diam. Jaw Width Tip Clearance Tip Depth A B C E F G H 12 - 127 245 - 323 101 14 15 4,1 4,6 12 - 127 245 - 323 101 14 15 4,1 4,6 12 - 127 245 - 323 101 14 15 4,1 4,6 12 - 127 245 - 323 101 14 15 4,1 4,6 12 - 178 323 - 476 152 16 19 8,1 6,1 12 - 178 323 - 476 152 16 19 8,1 6,1									0	ptional Accessor	ies
		Dir	nensions (r	nm)				Model Number		~	
			Bolt				Hex Socket Size				D
A	В	С		F	G	н	(inch) J		Shaft Protectors	Shaft Extenders	Long Jaws
12 - 127	245 - 323	101	14	15	4,1	4,6	7⁄8	EP-204	EPP-4	EPX-4	-
12 - 127	245 - 323	101	14	15	4,1	4,6	7⁄8	EP-104	EPP-4	EPX-4	-
12 - 178	323 - 476	152	16	19	8,1	6,1	1 ¹ / ₁₆	EP-206	EPP-6	EPX-6	-
12 - 178	323 - 476	152	16	19	8,1	6,1	1 ¹ / ₁₆	EP-106	EPP-6	EPX-6	-
19 - 304	412 - 615	203	20	22	6,4	9,1	1 ¼	EP-208	EPP-10	EPX-10	EP-11054
19 - 304	412 - 615	203	20	22	6,4	9,1	11⁄4	EP-108	EPP-10	EPX-10	EP-11054
25 - 381	489 - 736	245	20	25	6,4	9,1	1 ¼	EP-210	EPP-10	EPX-10	EP-11054L
25 - 381	489 - 736	245	20	25	6,4	9,1	11⁄4	EP-110	EPP-10	EPX-10	EP-11054L
63 - 457	660 - 965	304	29	31	12,7	9,7	1 ¹¹ / ₁₆	EP-213	EPP-1316	-	EP-11354L
63 - 457	660 - 965	304	29	31	12,7	9,7	1 ¹¹ / ₁₆	EP-113	EPP-1316	-	EP-11354L
 76 - 635	800 - 1155	355	31	36	13,5	11,7	1 ¹³ / ₁₆	EP-216	EPP-1316	-	-
76 - 635	800 - 1155	355	31	36	13,5	11,7	1 ¹³ / ₁₆	EP-116	EPP-1316	-	-

Note: Overall length (B) is dependent on position of center bolt.

	Dimensions (mm)									
Spread min max. A	Overall Length B	Max. Reach C	Slide Rod Dia. E	Jaw Width F	Tip Clearance G	Tip Depth H	. Number			
14 - 101	736	168	14,2	8	3,0	1,5	EPPMI-6			
25 - 133	787	218	14,2	8	7,6	4,6	EFFINI-0			



Always wear Safety Goggles and Gloves while using pullers.

EPH-Series, Posi Lock® Hydraulic Pullers



EPHR-110



- Patented 'Safety Cage' jaw retention system
- High force hydraulic system for effortless pulling of large components
- Slim tapered jaws for better gripping in tight spots
- Available in 2 and 3 jaw design
- More efficient pulling, as one man can do the job where manual pullers often require two operators.

High-Tech Pulling



Transport and Store

Conveniently stores and transports hydraulic pullers and accessories. Order the **EPT-2550** Storage Cart and make your job easier to do!



Long Jaws

Used to increase the reach and spread of pullers. They maintain the same pulling capacity as the standard jaws, but reduce clamping force to 25%.





Application Tip

Because of the unique safety cage design, Posi Lock[®] pullers will grip on surfaces where normal pullers would slip off; e.g. tapered bearings.

 An EPH -113 hydraulic Posi Lock[®] puller easily removes machined parts from a heavy-production press.



V SELECTION CHART

Number of Jaws	Maximum Spread	Capacity	Model Number *	
	(mm)	ton (kN)		
2	304	10 (101)	EPH-208	
3	304	10 (101)	EPH-108	
2	381		EPH-210	
3	381	15 (142)	EPH-110	
2	457	0E (000)	EPH-213	
3	457	25 (232)	EPH-113	
2	635	EO (400)	EPH-216	
3	635	50 (498)	EPH-116	

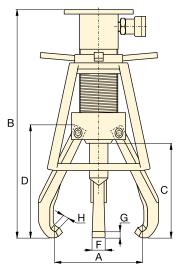
* Cylinder is not included.

Posi Lock® Hydraulic Grip Pullers

▼ SETS SELECTION CHART

Style	Capa- city (ton)	Basic Puller	Cylinder	Stroke (mm)	Pump Set	Set Model Number **	(kg)
	10	EPH-208	RC-106	152	-	EPHR208	10
	10	EPH-208	RC-106	152	EP-1E	EPHS208E	27
	15	EPH-210	RC-1510	254	-	EPHR210	22
2 Jaw	15	EPH-210	RC-1510	254	EP-1E	EPHS210E	38
Puller	25	EPH-213	RC-2514	362	-	EPHR213	44
	25	EPH-213	RC-2514	362	EP-1E	EPHS213E	53
	50	EPH-216	RC-5013	336	-	EPHR216	87
	50	EPH-216	RC-5013	336	EP-2E	EPHS216E	123
	10	EPH-108	RC-106	152	-	EPHR108	11
	10	EPH-108	RC-106	152	EP-1E	EPHS108E	28
	15	EPH-110	RC-1510	254	-	EPHR110	23
3 Jaw	15	EPH-110	RC-1510	254	EP-1E	EPHS110E	39
Puller	25	EPH-113	RC-2514	362	-	EPHR113	48
	25	EPH-113	RC-2514	362	EP-1E	EPHS113E	57
	50	EPH-116	RC-5013	336	-	EPHR116	91
	50	EPH-116	RC-5013	336	EP-2E	EPHS116E	127

** Standard set EPHS models shipped with 230 VAC pump.



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										Standard included	Standard included	Optional	
	Dimensions (mm)						Ā	Model Number *	ωM	6			
-	Spread min max.	Overall Length	Maximum Reach	Jaw Length	Jaw Width	Tip Clearance	Tip Depth		Number *			D	
	A	в	с	D	F	G	н	(kg)		Ram Point Sets	Lift Plates	Long Jaws	
	19 - 304	498	203	237	22	7,4	6,9	6,4	EPH-208	EPH-155	EPH-11052	EP-11054	
	19 - 304	498	203	237	22	7,4	6,9	7,3	EPH-108	EPH-155	EPH-11052	EP-11054	
	25 - 381	665	245	270	25	11,2	9,1	10,0	EPH-210	EPH-155	EPH-11052	EPH-11054L	
	25 - 381	665	245	270	25	11,2	9,1	11,3	EPH-110	EPH-155	EPH-11052	EPH-11054L	
	63 - 457	846	304	348	31	12,9	9,7	21,3	EPH-213	EPH-257	EPH-11352	EPH-11354L	
	63 - 457	846	304	348	31	12,9	9,7	25,0	EPH-113	EPH-257	EPH-11352	EPH-11354L	
	76 - 635	919	355	413	36	15,0	11,7	40,8	EPH-216	EPH-508	EPH-11652	-	
	76 - 635	919	355	413	36	15,0	11,7	45,4	EPH-116	EPH-508	EPH-11652	-	

¹⁾ See next page for details.



EPH Series



Capacity: 10 - 50 ton

Maximum Reach: 203 - 355 mm

Spread Range:

19 - 635 mm

Maximum Operating Pressure:

700 bar



Pump Sets

All Posi Lock® Hydraulic Puller Sets that include 230 VAC pumps, will feature the following components:

	EP-1E Pump Set	EP-2E Pump Set
Pump	PUJ-1200E	ZE4210ME
Hose	HC-7210	HC-7210
Gauge	G-2535L	G-2535L
Adaptor	GA-3	GA-3

Components for 115 VAC pumps are available on request.

Accessories 1)

Posi Lock[®] Hydraulic Puller Accessories

V RAM POINT SETS SELECTION CHART

Fits Puller Set Model Number	EPH-208, EPH-210 EPH-108, EPH-110	EPH-213 EPH-113	EPH-216 EPH-116
			ţ,
Ram Point Set ¹⁾ Model Number	EPH-155	EPH-257	EPH-508
Ram Points Included:	Ram Point D	imensions Diameter x	Length (mm)
	ø25 x 25	ø38 x 57	ø51 x 76
Flat Ram Points	ø25 x 76	ø51 x 57	ø70 x 76
	-	ø51 x 102	ø70 x 127
	ø25 x 38	ø38 x 64	ø51 x 95
Tapered Ram Points	ø25 x 89	ø51 x 64	ø51 x 95
	_	ø51 x 114	ø70 x 140
Ram Point Adaptor	_	_	ø70 x 57

¹⁾ Standard included in EPH-Series Posi Lock Pullers.

▼ LIFT PLATE SELECTION CHART

Fits Puller Set Model Number	Model Number *	Thick- ness	Dia- meter	
		(mm)	(mm)	
EPH-208	EPH-11052	6,4	ø153	
EPH-108	EPH-11052	6,4	ø153	
EPH-210	EPH-11052	6,4	ø153	
EPH-110	EPH-11052	6,4	ø153	
EPH-213	EPH-11352	9,7	ø203	
EPH-113	EPH-11352	9,7	ø203	Par
EPH-216	EPH-11652	9,7	ø254	
EPH-116	EPH-11652	9,7	ø254	

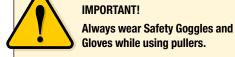
* Mounting screws included. Lifting plates are standard included with EPH-Series Pullers.

▼ LONG JAW SELECTION CHART

Fits Puller Set Model Number	Model Number	Number of Jaws required	Spread	Reach	à	A	Long Jaws are optional accessories and used for added
			(mm)	(mm)	(kg)		reach and spread. They have the same
EPH-208	EP-11054	2	57 - 381	246	1,1		load capacity as
EPH-108	EP-11054	3	57 - 381	246	1,1		standard jaws with
EPH-210	EPH-11054L	2	38 - 559	401	2,5		25% of the clamping
EPH-110	EPH-11054L	3	38 - 559	401	2,5		force.
EPH-213	EPH-11354L	2	38 - 762	508	4,8		
EPH-113	EPH-11354L	3	38 - 762	508	4,8		







Posi Lock® 100 Ton Hydraulic Grip Pullers

EPH Series

EPH-1003E



- Roller cart with power lift
- Hydraulically actuated lift cylinder on cart extends puller from ground to a height of 1,69 m
- Adjustable jaw tips
- Includes ZE3-Series 230 Volt electric one stage pump with remote pendant for fingertip control of the removal process.



Capacity: **100 ton**

Maximum Reach: 1219 mm

Spread Range:

190 - 1778 mm

Maximum Operating Pressure: **700 bar**



Pushing Adaptors

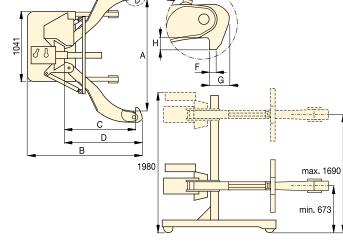
All Posi Lock[®] 100 Ton Hydraulic Pullers include following pushing adaptors.

Diameter (mm)	Length (mm)	Model Number
89	737	EPHT-1162
89	483	EPHT-1163
89	229	EPHT-1164

▼ The EPH-1002E quickly and easily removes this drive coupler from its shaft.



Number of Jaws	Spread Range A (mm)	Capacity ton (kN)	Model Number	Cylinder Stroke (mm)	Overall Length B (mm)	Reach C (mm)	Jaw Length D (mm)	Jaw Width F (mm)	Tip Clearance G (mm)	Tip Depth H (mm)	(kg)
2	190 - 1778	100 (980)	EPH-1002E	250	1955	1219	1346	32	89	89	771
3	190 - 1778	100 (980)	EPH-1003E	250	1955	1219	1346	32	89	89	907



ENERPAC 161