



Mechanical Pullers



# Less Friction. More Solutions.

With more than 100 years of experience in bearing technology,
Timken understands the importance of proper maintenance
procedures in maximizing product and equipment life. High-quality
Timken maintenance products help to decrease downtime and
operating costs.

Our line of maintenance tools are an example of how we extend beyond bearings with friction management solutions to keep your business running smoothly. These value-added products are grounded in our knowledge of motion, lubrication, friction and metallurgy. They are designed to help you extend bearing life in your applications through proper installation, removal and service.

For more than 100 years, Timken has provided quality products to the industrial marketplace. Our maintenance tools are made to the same standards you've come to expect from Timken® bearings. Our field support team is available to help you use these tools appropriately, as well as identify other Timken solutions that may boost your productivity and save you money.

Through our products, programs and services, we're providing less friction and more solutions to help you achieve greater success.

For more information, contact your local Timken distributor or sales representative.





#### **REMOVAL TOOLS**

# Mechanical Pullers



After the required type of puller has been identified, it is easy to choose the most suitable model from the series listed in the catalog.

Please note: Understanding the work space and possibility of gripping will ensure proper fit of grip.

Compare size and measurement of the part to be removed to the values indicated in the tables to choose the suitable puller. The choice of mechanical puller depends also on required pulling force.

The most important factor is safety; make sure to always choose a larger or stronger puller. Three-arm pullers better distribute the pulling force than two-arm devices. Therefore, if there is enough space, three-arm pullers should be the first choice.

For safety purposes and service life of the puller, never exceed the maximum capacity. The capacity data has been determined for new pullers. Normal wear and tear in practice and damage may decrease these figures.



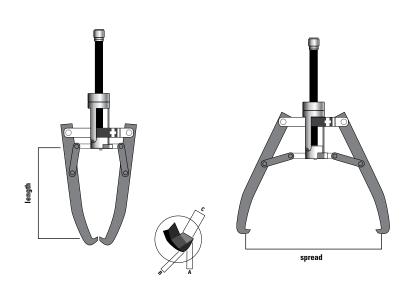
For economical-minded maintenance professionals, Timken offers a simple to use mechanical line of pullers. Several of our mechanical pullers have a self-centering feature – making life easier for you.

## MODELS

## **Mechanical Pullers**



Model	Max. Withdrawal Force t	Arm Length	Width of Grip	Stroke Width	A	В	С	D	E	F	G	Mass
VMPS2	2	80 mm (3.1 in.)	120 mm (4.7 in.)	-	8.3 mm (0.3 in.)	6 mm (0.2 in.)	15 mm (0.6 in.)	-	1	-	16 mm (0.625 in.)	1.6 kg (3.5 lbs.)
VMPS3	3	120 mm (4.7 in.)	180 mm (7.1 in.)	-	6 mm (0.2 in.)	7 mm (0.3 in.)	15 mm (0.6 in.)	-	1	-	16 mm (0.625 in.)	2.3 kg (5.1 lbs.)
VMPS5	5t		270 mm (10.6 in.)	-	11 mm (0.4 in.)	10 mm (0.4 in.)	25 mm (1 in.)	-	-	-	19 mm (0.75 in.)	4.3 kg (9.5 lbs.)
VMPS8	8	210 mm (8.3 in.)	300 mm (11.8 in.)	-	13 mm (0.5 in.)	14 mm (0.6 in.)	27 mm (1.1 in.)	-	-	-	19 mm (0.75 in.)	6.1 kg (13.4 lbs.)



## **MODELS**

## **SERIES C1000 Pulling/Extracting**

SLIDING TWO-ARM INTERNAL AND EXTERNAL PULLERS

Standard design for quick and safe use to pull bearings, V-belt pulleys, gears sleeves, bushings and all kinds of shaft-fitted parts.



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Timken Part#	Arms Length	Width B Max.	of Grip B. Min.	No. of Arms	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW > 3		
	Α				t				
VPMC 100201	80 mm (3.2 in.)	80 mm (3.2 in.)	15 mm (0.6 in.)	2	2	M12 x 1.25 x 140 mm	H14 mm (H0.6 in.)		
VPMC 100202	135 mm (5.3 in.)	80 mm (3.2 in.)	15 mm (0.6 in.)	2	2	M12 x 1.25 x 165 mm	H14 mm (H0.6 in.)		
VPMC 100301	80 mm (3.2 in.)	125 mm (4.9 in.)	15 mm (0.6 in.)	2	2	M12 x 1.25 x 140 mm	H14 mm (H0.6 in.)		
VPMC 100302	135 mm (5.3 in.)	125 mm (4.9 in.)	15 mm (0.6 in.)	2	2	M12 x 1.25 x 166 mm	H14 mm (H0.6 in.)		
VPMC 101001	160 mm (6.3 in.)	150 mm (5.9 in.)	25 mm (1.0 in.)	2	10	M20 x 1.5 x 255 mm	22 mm (0.9 in.)		
VPMC 101002	220 mm (8.7 in.)	145 mm (5.7 in.)	25 mm (1.0 in.)	2	10	M20 x 1.5 x 330 mm	22 mm (0.9 in.)		
VPMC 101003	220 mm (8.7 in.)	145 mm (5.7 in.)	25 mm (1.0 in.)	-	10	M20 x 1.5 x 330 mm	22 mm (0.9 in.)		
VPMC 101501	220 mm (8.7 in.)	195 mm (7.7 in.)	30 mm (1.2 in.)	2	10	M20 x 1.5 x 330 mm	22 mm (0.9 in.)		
VPMC 102001	260 mm (10.2 in.)	250 mm (9.8 in.)	60 mm (2.4 in.)	2	20	1 in. x 14h x 380	27 mm (1.1 in.)		

## **Display Stand**

Specially designed for a show window, sales counter or workshop.



Timken	0. 1.0 %
Part #	Stands Composition

**VPMC** 100001

VPMC100201 + VPMC100302 + VPMC101001 + VPMC101002 + VPMC101501 (Standard Assortment)

## **SERIES C9100 Pulling/Extracting**

For tougher industrial applications, use the C9100 series. The pre-cast arms offer more durability.



Timken Part#	Arms Length A	Width of Grip	No. of Arms	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	sw	Weight
VPMC 912000	200 mm (7.9 in.)	210 mm (8.3 in.)	2	20	M22 x 2 x 317 mm	26 mm (1.0 in.)	5.5 kg (12.1 lbs.)
VPMC 912200	200 mm (7.9 in.)	260 mm (10.2 in.)	2	20	M22 x 2 x 317 mm	26 mm (1.0 in.)	6 kg (13.2 lbs.)
VPMC 913000	380 mm (15.0 in.)	350 mm (13.8 in.)	2	20	M22 x 2 x 317 mm (M0.9 in. x 0.1 in. x 12.5 in.)	26 mm (1.0 in.)	13.5 kg (29.7 lbs.)
VPMC 912400	200 mm (7.9 in.)	350 mm (13.8 in.)	2	20	M22 x 2 x 317 mm (M0.9 in. x 0.1 in. x 12.5 in.)	26 mm (1.0 in.)	6.5 kg (14.3 lbs.)
VPMC 913200	380 mm (15.0 in.)	450 mm (17.72 in.)	2	20	M22 x 2 x 317 mm (M0.9 in. x 0.1 in. x 12.5 in.)	26 mm (1.0 in.)	14.7 kg (32.38 lbs.)

## **SERIES C1800 Pulling/Extracting Set**

SLIDING TWO- AND THREE-ARM INTERNAL AND EXTERNAL PULLERS

Sets designed for field service engineers. They are economical and versatile pullers with four multi-purpose pairs of jaws for different jobs. Jaws can be reversed for both pulling and extracting actions.



Timken Part #	Arms Length A	Width B Max.	of Grip B. Min.	No. of Arms	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	SW	Weight
VPMC 180500	140 mm (5.5 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	2	5	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	2.7 kg (6.0 lbs.)
VPMC 181000	182 mm (7.2 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	2	10	3/4 in. UNC 10h.	H20 mm (H0.8 in.)	6 kg (13.2 lbs.)
VPMC 180530	140 mm (5.6 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	3	5	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	3.7 kg (8.2 lbs.)
VPMC 181030	182 mm (7.2 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	3	10	3/4 in. UNC 10h.	H20 mm (H0.8 in.)	8.5 kg (18.7 lbs.)

## **MODELS**

## **External And Internal Puller Set 2 Arms**

EXTERNAL AND INTERNAL PULLER SET 2 ARMS

Sets designed for field service engineers. They are economical and versatile pullers with four multi-purpose pairs of jaws for different jobs. Jaws can be reversed for both pulling and extracting actions.



Timken Part#	Arms Length A	Width B Max.	of Grip B. Min.	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	Weight
VPMC 180501	140 mm (5.5 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	2.7 kg (6.0 lbs.)
VPMC 180502	65 mm (2.6 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	2.7 kg (6.0 lbs.)
VPMC 180503	100 mm (3.9 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	2.7 kg (6.0 lbs.)
VPMC 180504	140 mm (5.5 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	2.7 kg (6.0 lbs.)
VPMC 181010	182 mm (7.2 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	6 kg (13.2 lbs.)
VPMC 181002	77 mm (3.0 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	6 kg (13.2 lbs.)
VPMC 181003	122 mm (4.8 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	6 kg (13.2 lbs.)
VPMC 181004	182 mm (7.2 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	6 kg (13.2 lbs.)

## **External And Internal Puller Set 3 Arms**

Sets designed for field service engineers. They are economical and versatile pullers with four multi-purpose pairs of jaws for different jobs. Jaws can be reversed for both pulling and extracting actions.



Timken Part#	Arms Length A	Width B Max.	of Grip B. Min.	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	Weight
VPMC 180531	140 mm (5.5 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	3.7 kg (8.1 lbs.)
VPMC 180532	65 mm (2.6 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	3.7 kg (8.1 lbs.)
VPMC 180533	100 mm (3.9 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	3.7 kg (8.1 lbs.)
VPMC 180534	140 mm (5.5 in.)	173 mm (6.8 in.)	20 mm (0.8 in.)	5	9/16 in. UNC 12h.	3.7 kg (8.1 lbs.)
VPMC 181031	182 mm (7.2 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	8.5 kg (18.7 lbs.)
VPMC 181032	77 mm (3.0 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	8.5 kg (18.7 lbs.)
VPMC 181033	122 mm (4.8 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	8.5 kg (18.7 lbs.)
VPMC 181034	182 mm (7.2 in.)	250 mm (9.8 in.)	75 mm (3.0 in.)	10	3/4 in. UNC 10h.	8.5 kg (18.7 lbs.)

## MODELS

## **SERIES C1700 Pulling/Extracting**

SLIDING TWO- AND THREE-ARM INTERNAL AND EXTERNAL PULLERS

Puller designed to be used in confined small areas. The jaws are extremely flat.



_	ıken rt#	Arms Length A	Width of Grip B	No. of Arms	Thickness of Jaw	Spindle Dimensions Thread x Length	SW	Weight
	MC 5003	110 mm (4.3 in.)	140 mm (5.5 in.)	2	2 mm (0.07 in.)	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	1.4 kg (3.1 lbs.)
	MC 5001	150 mm (5.9 in.)	140 mm (5.5 in.)	2	2 mm (0.07 in.)	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	1.7 kg (3.8 lbs.)
	MC 5002	200 mm (7.9 in.)	140 mm (5.5 in.)	2	2 mm (0.07 in.)	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	2.1 kg (4.6 lbs.)
	MC 6001	200 mm (7.9 in.)	210 mm (8.3 in.)	2	3.5 mm (0.1 in.)	M18 x 2.50 x 230 mm	H22 mm (H0.9 in.)	5 kg (11.0 lbs.)
	MC 6002	300 mm (11.8 in.)	210 mm (8.3 in.)	2	3.5 mm (0.1 in.)	M18 x 2.50 x 230 mm	H22 mm (H0.9 in.)	6 kg (13.2 lbs.)
	MC 5033	110 mm (4.3 in.)	140mm (5.5 in.)	3	2 mm (0.07 in.)	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	1.9 kg (4.2 lbs.)
	MC 5031	150 mm (5.9 in.)	140 mm (5.5 in.)	3	2 mm (0.07 in.)	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	2.5 kg (5.5 lbs.)
	MC 5032	200 mm (7.9 in.)	140 mm (5.5 in.)	3	2 mm (0.07 in.)	9/16 in. UNC 12h.	H17 mm (H0.7 in.)	3.1 kg (6.8 lbs.)
	MC 6031	200 mm (7.9 in.)	210 mm (8.3 in.)	3	3.5 mm (0.1 in.)	M18 x 2.50 x 230 mm	H22 mm (H0.9 in.)	7.5 kg (16.5 lbs.)
	MC 6032	300 mm (11.8 in.)	210 mm (8.3 in.)	3	3.5 mm (0.1 in.)	M18 x 2.50 x 230 mm	H22 mm (H0.9 in.)	9 kg (19.8 lbs.)

## **SERIES E1400 Pulling**

Device designed for all pulling work with jaws on both ends. Two-arm models are for use in confined spaces and three-arm models ensure equal distribution of load, secure hold on parts and concentric pulling action. These pullers also are supplied in a combined design.



Timken Part #	Arms Length A	Width of Grip B	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	sw	No. of Arms	Weight
VPME 140101	65 mm (2.6 in.)	80 mm (3.2 in.)	1	M10 x 1 x 110 mm	12 mm (0.5 in.)	2	0.3 kg (0.7 lbs.)
VPME 140401	85 mm (3.4 in.)	150 mm (5.9 in.)	4	M14 x 1.5 x 180 mm	17 mm (0.7 in.)	2	1 kg (2.2 lbs.)
VPME 140701	125 mm (4.9 in.)	200 mm (7.9 in.)	7	M18 x 1.5 x 225 mm (M0.9 in. x 0.1 in. x 12.5 in.)	19 mm (0.8 in.)	2	2.1 kg (4.6 lbs.)
VPME 141001	260 mm (10.2 in.)	320 mm (12.6 in.)	10	M20 x 1.5 x 330 mm	22 mm (0.9 in.)	2	4.5 kg (9.9 lbs.)
VPME 140102	65 mm (2.6 in.)	80 mm (3.2 in.)	1	M10 x 1 x 110 mm	12 mm (0.5 in.)	2/3	0.6 kg (1.3 lbs.)
VPME 140402	85 mm (3.4 in.)	150 mm (5.9 in.)	4	M14 x 1.5 x 180 mm (M0.9 in. x 0.1 in. x 12.5 in.)	17 mm (0.7 in.)	2/3	1.5 kg (3.3 lbs.)
VPME 140702	125 mm (4.9 in.)	200 mm (7.9 in.)	7	M18 x 1.5 x 225 mm	19 mm (0.8 in.)	2/3	3 kg (6.6 lbs.)
VPME 141002	260 mm (10.2 in.)	320 mm (12.6 in.)	10	M20 x 1.5 x 330 mm (M0.9 in. x 0.1 in. x 12.5 in.)	22 mm (0.9 in.)	2/3	6.5 kg (14.3 lbs.)

#### **MODELS**

## **SERIES E1300 Pulling**

MECHANICAL THREE-ARM EXTERNAL PULLERS

Pullers designed for all types of applications. Three-arm external puller arms are adjustable and ensure equal load distribution, secure hold and has concentric pulling action.



Timken Part#	Arms Length A	Width of Grip B	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	No. of Arms	Weight
	A	Ь	·				
VPME 130001	55 mm (2.2 in.)	70 mm (2.8 in.)	0.5	M8 x 1 x 90 mm	9 mm (0.4 in.)	3	0.31 kg (0.7 lbs.)
VPME 130102	105 mm (4.1 in.)	110 mm (4.3 in.)	1	M10 x 1 x 110 mm	12 mm (0.5 in.)	2/3	0.7 kg (1.5 lbs.)
VPME 130402	185 mm (7.3 in.)	175 mm (6.9 in.)	4	M14 x 1.5 x 180 mm	17 mm (0.7 in.)	2/3	2.1 kg (4.6 lbs.)
VPME 130702	225 mm (8.9 in.)	240 mm (9.5 in.)	7	M18 x 1.5 x 225 mm	19 mm (0.8 in.)	2/3	3.5 kg (7.7 lbs.)
VPME 131002	385 mm (15.2 in.)	360 mm (14.2 in.)	10	M20 x 1.5 x 330 mm	22 mm (0.9 in.)	2/3	8.5 kg (18.7 lbs.)
VPME 131702	480 mm (18.9 in.)	480 mm (18.9 in.)	17	M27 x 2 x 377 mm	27 mm (1.1 in.)	3	18.5 kg (40.8 lbs.)
VPME 133002	585 mm (28.0 in.)	580 mm (22.8 in.)	30	1-3/8 in. x 12h x 510	37 mm (1.5 in.)	3	39 kg (86.0 lbs.)

### **SERIES E1303 Pulling**

MECHANICAL SELF-CENTERING THREE-ARM EXTERNAL PULLERS

The legs are assembled by a self-centering system so when one leg moves the other two move at the same time.



Timken Part#	Arms Length A	Width of Grip B	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	sw	No. of Arms	Weight
VPME 130703	225 mm (8.9 in.)	240 mm (9.5 in.)	7	M18 x 1.5 x 225 mm	19 mm (0.8 in.)	2/3	6.5 kg (14.3 lbs.)
VPME 131003	385 mm (15.2 in.)	360 mm (14.2 in.)	10	M20 x 1.5 x 330 mm	22 mm (0.8 in.)	2/3	14.5 kg (32.0 lbs.)
VPME 131703	480 mm (18.9 in.)	480 mm (18.9 in.)	17	M27 x 2 x 377 mm (M0.9 in. x 0.1 in. x 12.5 in.)	27 mm (1.1 in.)	3	31.5 kg (69.5 lbs.)
VPME 133003	585 mm (28.0 in.)	580 mm (22.8 in.)	30	1-3/8 in. x 12h x 510	37 mm (1.5 in.)	3	55.5 kg (122.4 lbs.)

## **SERIES E1700 Pulling**

Designed to remove all electric motor ball bearings. The best working condition is obtained when used for maximum bearing O.D.

1	Timken Part #	Bearii Min.	ng O.D. Max.	Weight
TRINKEN	VPME	14.5 mm	16 mm	0.3 kg
	171600	(0.6 in.)	(0.6 in.)	(0.7 lbs.)
	VPME	17.5 mm	19 mm	0.3 kg
	171900	(0.7 in.)	(0.8 in.)	(0.7 lbs.)
	VPME	20.5 mm	22 mm	0.7 kg
	172200	(0.8 in.)	(0.9 in.)	(1.5 lbs.)
	VPME	22.5 mm	24 mm	0.7 kg
	172400	(0.9 in.)	(0.9 in.)	(1.5 lbs.)
5 0	VPME	24 mm	26 mm	1 kg
	172600	(0.9 in.)	(1.0 in.)	(2.2 lbs.)
_	VPME	26 mm	28 mm	1 kg
	172800	(1.0 in.)	(1.1 in.)	(2.2 lbs.)
	VPME	28 mm	30 mm	1.3 kg
	173000	(1.1 in.)	(1.2 in.)	(2.9 lbs.)
	VPME	30 mm	32 mm	1.3 kg
	173200	(1.2 in.)	(1.3 in.)	(2.9 lbs.)
1	VPME	33 mm	35 mm	1.3 kg
	173500	(1.3 in.)	(1.4 in.)	(2.9 lbs.)
	VPME	35 mm	37 mm	2.3 kg
	173700	(1.0 in.)	(1.58 in.)	(5.1 lbs.)
	VPME	37 mm	40 mm	2.4 kg
	174000	(1.1 in.)	(1.6 in.)	(5.3 lbs.)
	VPME	40 mm	42 mm	2.5 kg
	174200	(1.2 in.)	(1.7 in.)	(5.5 lbs.)
	VPME	42 mm	47 mm	2.7 kg
	174700	(1.3 in.)	(1.9 in.)	(6.0 lbs.)

## MODELS

## **SERIES E1200 Separating**

**BEARING SEPARATOR** 

Developed to extract bearings, gears, bushings, sleeves and all other tight shaft-fitted parts. The flat sides of the separator plates give all-around support. Parts are removed by tightening the forcing screw when griping separator plates into gap behind part to be withdrawn.



Timken Part #	Effective Width	Bearii Max.	ng O.D. Min.	Extension Data		Bolt	Weight
I dit#	В	A	A	Holes Distance	Ø		sw
VPME	60 mm	50 mm	5 mm	90 mm	3/8 in.	H17 mm	0.75 kg
120201	(2.4 in.)	(2.0 in.)	(0.2 in.)	(3.5 in.)		(H0.7 in.)	(1.7 lbs.)
VPME	76 mm	76 mm	7 mm	125 mm	3/8 in.	H17 mm	1.3 kg
120301	(3.0 in.)	(3.0 in.)	(0.3 in.)	(4.9 in.)		(H0.7 in.)	(2.9 lbs.)
VPME	130 mm	110 mm	10 mm	170 mm	5/8 in.	H24 mm	2.75 kg
120402	(5.1 in.)	(4.3 in.)	(0.4 in.)	(6.7 in.)		(H0.9 in.)	(6.1 lbs.)
VPME	170 mm	130 mm	10 mm	230 mm	5/8 in.	H27 mm	5.7 kg
120602	(6.7 in.)	(5.1 in.)	(0.4 in.)	(9.1 in.)		(H1.1 in.)	(12.6 lbs.)
VPME	180 mm	205 mm	15 mm	285 mm	5/8 in.	H32 mm	12.5 kg
120802	(7.1 in.)	(8.1 in.)	(0.6 in.)	(11.2 in.)		(H1.3 in.)	(27.6 lbs.)
VPME	180 mm	205 mm	15 mm	285 mm	1 in.	H32 mm	12.5 kg
120803	(7.1 in.)	(8.1 in.)	(0.6 in.)	(11.2 in.)		(H1.3 in.)	(27.6 lbs.)
VPME	260 mm	245 mm	15 mm	365 mm	1 in.	H41 mm	28.5 kg
121003	(10.2 in.)	(9.7 in.)	(0.6 in.)	(14.4 in.)		(H1.6 in.)	(62.8 lbs.)
VPME	260 mm	245 mm	15 mm	365 mm	1-1/4 in.	H41 mm	28.5 kg
121004	(10.2 in.)	(9.7 in.)	(0.6 in.)	(14.4 in.)		(H1.6 in.)	(62.8 lbs.)
VPME	300 mm	290 mm	20 mm	440 mm	1-1/4 in.	H50 mm	43.5 kg
121204	(11.8 in.)	(11.4 in.)	(0.8 in.)	(17.3 in.)		(H2.0 in.)	(95.9 lbs.)
VPME	330 mm	320 mm	25 mm	515 mm	1-1/4 in.	H65 mm	86.5 kg
121304	(13.0 in.)	(12.6 in.)	(1.0 in.)	(20.3 in.)		(H2.6 in.)	(187 lbs.)

## **Universal Bearing Separator**



Timken Part#	Effective Length of Arms	Width of Grip	Max. Withdrawal Force (t)	No. Arms	Spindle Dimensions	Weight	
VPME 190400	120 mm (4.7 in.)	89 mm (3.5 in.)	2	2	M12 x 1.25 x 165 mm	1.7 kg (3.8 lbs.)	

## **SERIES E1100 Pulling/Extracting**

PULLING DEVICE WITH THE NUT END

Pulling device designed to pull out tap-hole parts. It can be used with bearing separators and with internal pullers when there is no supporting point.



Timken Part #	Arms Length	Width	of Grip	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	No. of Arms	Weight
	Α	B Max.	B Min.	(t)				
VPME 110211	120 mm (4.7 in.)	95 mm (3.7 in.)	40 mm (1.6 in.)	2	M12 x 1.25 x 165 mm	H14 mm (H0.6 in.)	2	1 kg (2.2 lbs.)
VPME 110311	120 mm (4.7 in.)	130 mm (6.1 in.)	40 mm (1.6 in.)	2	M12 x 1.25 x 166 mm	H14 mm (H0.6 in.)	2	1.1 kg (2.4 lbs.)
VPME 111011	205 mm (8.1 in.)	170 mm (6.7 in.)	50 mm (2.0 in.)	10	3/4 in. 16h x 315	H14 mm (H0.6 in.)	2	3.4 kg (7.5 lbs.)
VPME 112011	255 mm (10.0 in.)	300 mm (11.8 in.)	85 mm (3.4 in.)	20	1 in. 14h x 398	19 mm (0.8 in.)	2	9.5 kg (20.9 lbs.)
VPME 112501	255 mm (10.0 in.)	300 mm (13.0 in.)	85 mm (3.4 in.)	25	1 in. 14h x 398	19 mm (0.8 in.)	2	9.5 kg (20.9 lbs.)
VPME 113511	485 mm (19.1 in.)	450 mm (17.7 in.)	117 mm (4.6 in.)	30	1-1/2 in. 12h x 550	25 mm (1.0 in.)	2	35 kg (77.2 lbs.)
VPME 115011	640 mm (25.0 in.)	530 mm (20.9 in.)	215 mm (8.5 in.)	50	1-5/8 in. 12h x 700	32 mm (1.3 in.)	2	53 kg (116.8 lbs.)

## MODELS

## **SERIES E1200 Separating**

**BEARING SEPARATOR** 

Using bearing separators E1200 series together with pulling device series E1100 can extend the usage of different pulling jobs.



·	Possible Sets		Arms Length A	Min. Bearing O.D. B	Max. Bearing O.D. C	Max. Withdrawal Force t	Spindle Dimensions Thread x Length	SW	Weight
VPME 110202	VPME 120201	VPME 110211	100 mm (3.9 in.)	5 mm (0.2 in.)	90 mm (3.5 in.)	2	M12 x 1.25 x 165 mm	H14 mm (H0.6 in.)	1.75 kg (3.9 lbs.)
VPME 110303	VPME 120301	VPME 110311	100 mm (3.9 in.)	7mm (0.3 in.)	120 mm (4.7 in.)	2	M12 x 1.25 x 166 mm	H14 mm (H0.6 in.)	2.4 kg (5.3 lbs.)
VPME 111004	VPME 120402	VPME 111011	170 mm (6.7 in.)	10 mm (0.4 in.)	170 mm (6.7 in.)	10	3/4 in. 16h x 315	H14 mm (H0.6 in.)	6.15 kg (13.6 lbs.)
VPME 111006	VPME 120602	VPME 111011	170 mm (6.7 in.)	10 mm (0.4 in.)	230 mm (9.1 in.)	10	3/4 in. 16h x 315	H14 mm (H0.6 in.)	9.1 kg (20.1 lbs.)
VPME 112006	VPME 120602	VPME 112011	200 mm (7.9 in.)	10 mm (0.4 in.)	230 mm (9.1 in.)	20	1 in. 14h x 398	19 mm (0.8 in.)	15.2 kg (33.5 lbs.)
VPME 112508	VPME 120802	VPME 112511	200 mm (7.9 in.)	15 mm (0.6 in.)	285 mm (11.2 in.)	20	1 in. 14h x 398	19 mm (0.8 in.)	22 kg (48.5 lbs.)
VPME 113508	VPME 120803	VPME 113511	410 mm (16.1 in.)	15 mm (0.6 in.)	285 mm (11.2 in.)	30	1-1/2 in. 12h x 550	25 mm (1.0 in.)	47.5 kg (104.7 lbs.)
VPME 113510		VPME 113511	410 mm (16.1 in.)	15 mm (0.6 in.)	365 mm (14.4 in.)	30	1-1/2 in. 12h x 550	25 mm (1.0 in.)	63.5 kg (140.0 lbs.)
	VPME 121004	VPME 115011	610 mm (24.0 in.)	15 mm (0.6 in.)	365 mm (14.4 in.)	50	1-5/8 in. 12h x 700	32 mm (1.3 in.)	81.5 kg (179.7 lbs.)
	VPME 121204	VPME 115011	610 mm (24.0 in.)	20 mm (0.8 in.)	440 mm (17.3 in.)	50	1-5/8 in. 12h x 700	32 mm (1.3 in.)	96.5 kg (212.8 lbs.)
	VPME 121304	VPME 115011	610 mm (24.0 in.)	25 mm (1.0 in.)	515 mm (20.3 in.)	50	1-5/8 in. 12h x 700	32 mm (1.3 in.)	139.5 kg (307.5 lbs.)

## **SERIES B1600 Extracting**

#### **BALL BEARING EXTRACTOR**

Specially designed race extractor for withdrawal of ball races from blind housings or when space is limited where standard pullers are not able to grip bearing.



Timken Part #	60 Series	ISO Ball Be	arings Range 63 Series	64 Series	Weight
VPMB 160001	6000, 6001, 6002, 6003, 6004, 6005,6006	6200, 6201, 6202, 6203, 6204, 6205	6300, 6301, 6302, 6303		1.3 kg (2.8 lbs.)
VPMB 160002	6007, 6008, 6009 6010, 6011, 6012	6206, 6207	6304, 6305, 6305		1.9 kg (4.2 lbs.)
VPMB 160003		6208, 6209, 6210, 6211, 6212	6307, 6308, 6309, 6310, 6311	6403, 6404, 6405, 6406	4.5 kg (9.9 lbs.)
VPMB 160004	All of above bearings.	All of above bearings.	All of above bearings.	All of above bearings.	7.5 kg (16.5 lbs.)

## MODELS

## **SERIES I1500 Internal Puller – No Support Point**

INTERNAL PULLER

Specially designed to extract bearing cups from housing.



Timken Part #	Arms Length A		ring ore B Min.	Knob Thread	When there is no support point works with:	Weight
VPMI 150600	115 mm (5 in.)	145 mm (5.7 in.)	40 mm (6 in.)	1 in.14h	VMPE 111011	2.4 kg (5.3 lbs.)
VPMI 150700	140 mm (5.5 in.)	160 mm (6.3 in.)	32 mm (3 in.)	1 in.14h	VMPE 111011	2.6 kg (5.7 lbs.)
VPMI 150900	150 mm (9 in.)	240 mm (9.4 in.)	60 mm (4 in.)	1-1/2 in.	VMPE 112011	6 kg (13.2 lbs.)

## **SERIES I1500 Internal Puller – For a Support Point**

INTERNAL PULLER

Specially designed to extract bearing cups from housing.



Timken Part#	Arms Length A		ring ore B Min.	Knob Thread	When there is no support point works with:	Weight
VPMI 150601	115 mm (5 in.)	145 mm (5.7 in.)	40 mm (6 in.)	5/8 in. 18h x 350 mm	H20 mm (H0.8 in.)	2.4 kg (5.3 lbs.)
VPMI 150701	140 mm (5.5 in.)	160 mm (6.3 in.)	32 mm (3 in.)	5/8 in. 18h x 350 mm	H20 mm (H0.8 in.)	2.6 kg (5.7 lbs.)
VPMI 150901	150 mm (9 in.)	240 mm (9.4 in.)	60 mm (4 in.)	1 in. 14h x 398 mm	H20 mm (H0.8 in.)	6 kg (13.2 lbs.)

## **Slide Hammer and Collet Set**

SLIDE HAMMER AND COLLET SET

Specially designed to extract bearing cups from housing.



Timken Part #	Set Description	Weight
VPMI 439000	Slide hammer - main unint	1.40 kg (3.1 lbs.)
VPMI 430500	Slide hammer collet - 5-8	0.08 kg (1.8 lbs.)
VPMI 430800	Slide hammer collet - 8-12	0.09 kg (2 lbs.)
VPMI 431200	Slide hammer collet - 12-15	0.27 kg (0.6 lbs.)
VPMI 431500	Slide hammer collet - 15-20	0.27 kg (0.6 lbs.)
VPMI 432000	Slide hammer collet - 20-25	0.32 kg (0.7 lbs.)
VPMI 432500	Slide hammer collet - 25-30	0.37 kg (0.7 lbs.)
VPMI 433000	Slide hammer collet - 30-37	0.42 kg (0.9 lbs.)
VPMI 433800	Slide hammer collet - 38-46	0.55 kg (1.2 lbs.)
VPMI 434700	Slide hammer collet - 47-54	1.32 kg (1.2 lbs.)
VPMI 435500	Slide hammer collet - 55-64	1.58 kg (3.5 lbs.)
VPMI 436500	Slide hammer collet - 65-76	1.95 kg (4.3 lbs.)
VPMI 439200	Puller	1.50 kg (3.3 lbs.)









## MODELS

## **Point Protectors**



Timken Part #	Description	Weight	
VPMA P0001	point protector	0.8	
VPMA P0004	reversible point	0.8	
VPMA P0010	point protector	0.8	

## NOTES

#### **Puller Warning**

- Check condition of puller before use.
- If there are indications of wear and tear such as ground-down parts, overloaded parts, or worn-out parts, exchange them with new parts.
- Do not use a hammer when operating spindle.
- If any indications of overload, stiff working, etc., occur during pulling, please stop the procedure at once. Try to use a larger or different type of puller if necessary.
- For proper puller engagement, the jaws/legs should be centered.
- When pulling, make sure puller and pulled parts are kept covered by the safety blanket to provide protection from injury caused by flying parts should a part ever break.
- When operating the puller, please wear protective clothing, including safety shoes, protective glasses, gloves and helmet.
- Spindle and puller body should always be kept clean and oiled.
- Make sure you avoid puller overload, as it can result in breakage of the
  puller's arms and/or beam. This breakage can cause damage to the puller,
  shaft and bearing as well as personal injury.
- Do not heat bearing before pulling.
- Make sure to always choose a larger or stronger puller.

 $\triangle$  WARNING Failure to observe the following warnings could create a risk of serious bodily harm.

Proper maintenance and handling practices are critical. Failure to follow user manual can result in equipment failure, creating a risk of serious bodily harm.





Bearings • Steel •
Precision Components • Lubrication •
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