



**Mechanical Pullers** 

# Maintenance Tools from the Friction Management Experts

With more than a century of experience in friction management technology, Timken knows how critical proper maintenance procedures are in maximizing product and equipment life.



# Mechanical Pullers: Easy and Convenient

For maintenance professionals looking for an easy-to-use maintenance option, Timken offers several mechanical puller models. From standard, general-purpose pullers to units designed for specific removal tasks, Timken mechanical pullers provide safe and reliable support during component extraction.

### **Advantages**

- Compact, self-contained units require little storage space and are highly portable
- Two-arm models are ideal for working in compact spaces
- Three-arm models ensure equal load distribution
- All models are designed to simplify removal and eliminate potential damage to components or machinery during extraction
- Units are capable of removing most shaft-fitted parts, including bearings, wheels, bushings, gears and pulleys

### **Customer Support**

Do you need help to determine which mechanical puller is right for you? Our field support team is available to help you choose tools appropriately, as well as identify other Timken solutions that may boost your productivity and save you money.

# MODELS

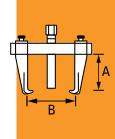
# **SERIES C1000 Standard Duty Pullers**

SLIDING TWO-ARM INTERNAL AND EXTERNAL PULLERS

Standard design for quick and safe use to pull bearings, V-belt pulleys, gear sleeves, bushings and other shaft-fitted parts.



Timken	Arms Length	Width of Grip (B)		No. of	Max. Withdrawal	Spindle Dimensions	SW	Weight
Part No.	(A)	Max.	Min.	Arms	Force	Thread x Length	SVV	vveignt
VPMC 100201	<b>80 mm</b> 3.2 in.	<b>80 mm</b> 3.2 in.	<b>15 mm</b> 0.6 in.	2	2 t	M12 x 1.25 x 140 mm	<b>14 mm</b> 0.55 in.	<b>1.0 kg</b> 2.2 lbs.
VPMC 100202	<b>135 mm</b> 5.3 in.	<b>80 mm</b> 3.2 in.	<b>15 mm</b> 0.6 in.	2	2 t	M12 x 1.25 x 165 mm	<b>14 mm</b> 0.55 in.	<b>1.2 kg</b> 2.6 lbs.
VPMC 100301	<b>80 mm</b> 3.2 in.	<b>125 mm</b> 4.9 in.	<b>15 mm</b> 0.6 in.	2	2 t	M12 x 1.25 x 140 mm	<b>14 mm</b> 0.55 in.	<b>1.1 kg</b> 2.4 lbs.
VPMC 100302	<b>135 mm</b> 5.3 in.	<b>125 mm</b> 4.9 in.	<b>15 mm</b> 0.6 in.	2	2 t	M12 x 1.25 x 165 mm	<b>14 mm</b> 0.55 in.	<b>1.3 kg</b> 2.9 lbs.
VPMC 101001	<b>160 mm</b> 6.3 in.	<b>150 mm</b> 5.9 in.	<b>25 mm</b> 1.0 in.	2	10 t	M20 x 1.5 x 255 mm	<b>22 mm</b> 0.87 in.	<b>2.4 kg</b> 5.3 lbs.
VPMC 101002	<b>160 mm</b> 6.3 in.	<b>195 mm</b> 7.7 in.	<b>30 mm</b> 1.2 in.	2	10 t	M20 x 1.5 x 255 mm	<b>22 mm</b> 0.87 in.	<b>3.6 kg</b> 7.9 lbs.
VPMC 101003	<b>220 mm</b> 8.7 in.	<b>145 mm</b> 5.7 in.	<b>25 mm</b> 1.0 in.	2	10 t	M20 x 1.5 x 330 mm	<b>22 mm</b> 0.87 in.	<b>4.0 kg</b> 8.8 lbs
VPMC 101501	<b>220 mm</b> 8.7 in.	<b>195 mm</b> 7.7 in.	<b>30 mm</b> 1.2 in.	2	10 t	M20 x 1.5 x 330 mm	<b>22 mm</b> 0.87 in.	<b>4.4 kg</b> 9.7 lbs.
VPMC 102001	<b>260 mm</b> 10.2 in.	<b>250 mm</b> 9.8 in.	<b>60 mm</b> 2.4 in.	2	20 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.06 in.	<b>10.5 kg</b> 23.1 lbs.
VPMC 102002	<b>260 mm</b> 10.2 in.	<b>380 mm</b> 15 in.	<b>95 mm</b> 3.7 in.	2	20 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.06 in.	<b>13.0 kg</b> 28.6 lbs.



# **Display Stand**

Specially designed for a show window, sales counter or workshop. Includes C1000 series pullers.



Timken Part No.	Stand Composition	Weight
VPMC 100001	VPMC100201 + VPMC100302 + VPMC101001 + VPMC101002 + VPMC101501	<b>16.2 kg</b> 35.7 lbs.
VPMC 100002	VPMC100201 + VPMC100302 + VPMC101001 + VPMC101501 + VPMC102001	<b>22.7 kg</b> 50 lbs.

# **SERIES C9100 Heavy Duty Pullers**

SLIDING TWO-ARM INTERNAL AND EXTERNAL PULLERS

For tougher industrial applications, use the C9100 series. The pre-cast arms offer greater durability. The spindle is only available in metric.



Timken Part No.	Arms Length (A)	Width of Grip (B)	No. of Arms	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	Weight
VPMC 912000	<b>200 mm</b> 7.9 in.	<b>210 mm</b> 8.3 in.	2	20 t	M22 x 2 x 317 mm	<b>26 mm</b> 1.02 in.	<b>5.5 kg</b> 12.1 lbs.
VPMC 912002	<b>380 mm</b> 15.0 in.	<b>210 mm</b> 8.3 in.	2	20 t	M22 x 2 x 317 mm	<b>26 mm</b> 1.02 in.	<b>9.0 kg</b> 19.8 lbs.
VPMC 912200	<b>200 mm</b> 7.9 in.	<b>260 mm</b> 10.2 in.	2	20 t	M22 x 2 x 317 mm	<b>26 mm</b> 1.02 in.	<b>6 kg</b> 13.2 lbs.
VPMC 912202	<b>380 mm</b> 15.0 in.	<b>260 mm</b> 10.2 in.	2	20 t	M22 x 2 x 317 mm	<b>26 mm</b> 1.02 in.	<b>9.5 kg</b> 20.9 lbs.
VPMC 912400	<b>200 mm</b> 7.9 in.	<b>330 mm</b> 13.0 in.	2	20 t	M22 x 2 x 317 mm	<b>26 mm</b> 1.02 in.	<b>6.5 kg</b> 14.3 lbs.
VPMC 912402	<b>380 mm</b> 15.0 in.	<b>330 mm</b> 13.0 in.	2	20 t	M22 x 2 x 317 mm	<b>26 mm</b> 1.02 in.	<b>10.0 kg</b> 22.0 lbs.
VPMC 913000	<b>380 mm</b> 15.0 in.	<b>350 mm</b> 13.8 in.	2	20 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.06 in.	<b>13.5 kg</b> 29.7 lbs.
VPMC 913200	<b>380 mm</b> 15.0 in.	<b>450 mm</b> 17.7 in.	2	20 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.06 in	<b>14.7 kg</b> 32.38 lbs.
VPMC 913400	<b>380 mm</b> 15.0 in.	<b>550 mm</b> 21.7 in.	2	20 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.06 in.	<b>15.7 kg</b> 34.6 lbs.

# **SERIES C1800 Multiple Puller Sets**

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. Jaws can be reversed for both internal and external pulling actions. Each set includes four different jaws sets.



Timken	Ar	ms Length	(A)	Width of Grip (B)		No. of	Max. Withdrawal	Spindle	CVV	Weight	
Part No.	Min.	Med.	Max.	Max.	Min.	Arms	Force	Dimensions Thread x Length	SW	vveignt	
VPMC 180500	<b>65 mm</b> 2.56 in.	<b>100 mm</b> 3.94 in.	<b>140 mm</b> 5.5 in.	<b>173 mm</b> 6.8 in.	<b>40 mm</b> 1.57 in.	2	5 t	<sup>9</sup> / <sub>16</sub> in. UNC 12h. X 178 mm	<b>17 mm</b> H0.67 in.	<b>2.7 kg</b> 6.0 lbs.	
VPMC 181000	<b>77 mm</b> 3.03 in.	<b>122 mm</b> 4.80 in.	<b>182 mm</b> 7.2 in.	<b>250 mm</b> 9.8 in.	<b>60 mm</b> 2.36 in.	2	10 t	<sup>3</sup> / <sub>4</sub> in. UNC 10h. X 272 mm	<b>20 mm</b> H0.79 in.	<b>6.0 kg</b> 13.2 lbs.	
VPMC 180530	<b>65 mm</b> 2.56 in.	<b>100 mm</b> 3.94 in.	<b>140 mm</b> 5.5 in.	<b>173 mm</b> 6.8 in.	<b>40 mm</b> 1.57 in.	3	5 t	<sup>9</sup> / <sub>16</sub> in. UNC 12h. X 178 mm	<b>17 mm</b> H0.67 in.	<b>3.7 kg</b> 8.2 lbs.	
VPMC 181030	<b>77 mm</b> 3.03 in.	<b>122 mm</b> 4.80 in.	<b>182 mm</b> 7.2 in.	<b>250 mm</b> 9.8 in.	<b>60 mm</b> 2.36 in.	3	10 t	<sup>3</sup> / <sub>4</sub> in. UNC 10h. X 272 mm	<b>20 mm</b> H0.79 in.	<b>8.5 kg</b> 18.7 lbs.	

# **MODELS**

### **SERIES C1700 Thin Arm Pullers**

SLIDING TWO- AND THREE-ARM INTERNAL AND EXTERNAL PULLERS

Device designed for all pulling work with jaws on both ends. Two-arm models are for use in confined spaces and three-arm models help to ensure equal distribution of load, secure hold on parts and concentric pulling action.



	Timken Part No.	Arms Length (A)	Width of Grip (B)	No. of Arms	Jaws Tip Thickness	Spindle Dimensions Thread x Length	SW	Weight
)	VPMC 175003	<b>110 mm</b> 4.3 in.	<b>140 mm</b> 5.5 in.	2	<b>2.0 mm</b> 0.07 in.	<sup>9</sup> / <sub>16</sub> in. UNC 12h. x 178 mm	<b>17 mm</b> H0.67 in.	<b>1.4 kg</b> 3.1 lbs.
	VPMC 175001	<b>150 mm</b> 5.9 in.	<b>140 mm</b> 5.5 in.	2	<b>2.0 mm</b> 0.07 in.	<sup>9</sup> / <sub>16</sub> in. UNC 12h. x 178 mm	<b>17 mm</b> H0.67 in.	<b>1.7 kg</b> 3.8 lbs.
	VPMC 175002	<b>200 mm</b> 7.9 in.	<b>140 mm</b> 5.5 in.	2	<b>2.0 mm</b> 0.07 in.	<sup>9</sup> / <sub>16</sub> in. UNC 12h. x 178 mm	<b>17 mm</b> H0.67 in.	<b>2.1 kg</b> 4.6 lbs.
	VPMC 176001	<b>200 mm</b> 7.9 in.	<b>210 mm</b> 8.3 in.	2	<b>3.5 mm</b> 0.1 in.	M18 x 2.50 x 230 mm	<b>22 mm</b> H0.87 in.	<b>5.0 kg</b> 11.0 lbs.
	VPMC 176002	<b>300 mm</b> 11.8 in.	<b>210 mm</b> 8.3 in.	2	<b>3.5 mm</b> 0.1 in.	M18 x 2.50 x 230 mm	<b>22 mm</b> H0.87 in.	<b>6.0 kg</b> 13.2 lbs.
	VPMC 175033	<b>110 mm</b> 4.3 in.	<b>140 mm</b> 5.5 in.	3	<b>2.0 mm</b> 0.07 in.	<sup>9</sup> / <sub>16</sub> in. UNC 12h. x 178 mm	<b>17 mm</b> H0.67 in.	<b>1.9 kg</b> 4.2 lbs.
	VPMC 175031	<b>150 mm</b> 5.9 in.	<b>140 mm</b> 5.5 in.	3	<b>2.0 mm</b> 0.07 in.	<sup>9</sup> / <sub>16</sub> in. UNC 12h. x 178 mm	<b>17 mm</b> H0.67 in.	<b>2.5 kg</b> 5.5 lbs.
	VPMC 175032	<b>200 mm</b> 7.9 in.	<b>140 mm</b> 5.5 in.	3	<b>2.0 mm</b> 0.07 in.	<sup>9</sup> / <sub>16</sub> in. UNC 12h. x 178 mm	<b>17 mm</b> H0.67 in.	<b>3.1 kg</b> 6.8 lbs.
	VPMC 176031	<b>200 mm</b> 7.9 in.	<b>210 mm</b> 8.3 in.	3	<b>3.5 mm</b> 0.1 in.	M18 x 2.50 x 230 mm	<b>22 mm</b> H0.87 in.	<b>7.5 kg</b> 16.5 lbs.
	VPMC 176032	<b>300 mm</b> 11.8 in.	<b>210 mm</b> 8.3 in.	3	<b>3.5 mm</b> 0.1 in.	M18 x 2.50 x 230 mm	<b>22 mm</b> H0.87 in.	<b>9.0 kg</b> 19.8 lbs.

# **SERIES E1400 Pulling**

SWIVELTWO- AND THREE-ARM EXTERNAL PULLERS

Device designed for all pulling work with jaws on both ends. Two-arm models are for use in confined spaces and three-arm models help to ensure equal distribution of load, secure hold on parts and concentric pulling action.



Timken Part No.	Arms Length (A)	Width of Grip (B)	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	No. of Arms	Weight
VPME 140101	<b>65 mm</b> 2.6 in.	<b>80 mm</b> 3.2 in.	1 t	M10 x 1 x 110 mm	<b>12 mm</b> 0.5 in.	2	<b>0.3 kg</b> 0.7 lbs.
VPME 140401	<b>85 mm</b> 3.4 in.	<b>150 mm</b> 5.9 in.	4 t	M14 x 1.5 x 180 mm	<b>16 mm</b> 0.7 in.	2	<b>1.0 kg</b> 2.2 lbs.
VPME 140701	<b>125 mm</b> 4.9 in.	<b>200 mm</b> 7.9 in.	7 t	M18 x 1.5 x 250 mm	<b>19 mm</b> 0.8 in.	2	<b>2.1 kg</b> 4.6 lbs.
VPME 141001	<b>260 mm</b> 10.2 in.	<b>320 mm</b> 12.6 in.	10 t	M20 x 1.5 x 330 mm	<b>22 mm</b> 0.9 in.	2	<b>4.5 kg</b> 9.9 lbs.
VPME 140102	<b>65 mm</b> 2.6 in.	<b>80 mm</b> 3.2 in.	1 t	M10 x 1 x 110 mm	<b>12 mm</b> 0.5 in.	2/3	<b>0.6 kg</b> 1.3 lbs.
VPME 140402	<b>85 mm</b> 3.4 in.	<b>150 mm</b> 5.9 in.	4 t	M14 x 1.5 x 180 mm	<b>16 mm</b> 0.7 in.	2/3	<b>1.5 kg</b> 3.3 lbs.
VPME 140702	<b>125 mm</b> 4.9 in.	<b>200 mm</b> 7.9 in.	7 t	M18 x 1.5 x 250 mm	<b>19 mm</b> 0.8 in.	2/3	<b>3.0 kg</b> 6.6 lbs.
VPME 141002	<b>260 mm</b> 10.2 in.	<b>320 mm</b> 12.6 in.	10 t	M20 x 1.5 x 330 mm	<b>22 mm</b> 0.9 in	2/3	<b>6.5 kg</b> 14.3 lbs.

# MODELS

# **SERIES E1300 Pulling**

### **THREE-ARM EXTERNAL PULLERS**

Pullers designed for all types of applications. Three-arm external puller arms are adjustable on two or three positions and help to ensure equal load distribution, secure hold and concentric pulling action.



Timken Part No.	Arms Length (A)	Width of Grip (B)	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	No. of Arms	Weight
VPME 130001	<b>55 mm</b> 2.2 in.	<b>70 mm</b> 2.8 in.	0.5 t	M8 x 1 x 92 mm	<b>9 mm</b> 0.4 in.	3	<b>0.31 kg</b> 0.7 lbs.
VPME 130102	<b>105 mm</b> 4.1 in.	<b>110 mm</b> 4.3 in.	1 t	M10 x 1 x 110 mm	<b>12 mm</b> 0.5 in.	2/3	<b>0.7 kg</b> 1.5 lbs.
VPME 130402	<b>185 mm</b> 7.3 in.	<b>175 mm</b> 6.9 in.	4 t	M14 x 1.5 x 180 mm	<b>16 mm</b> 0.7 in.	2/3	<b>2.1 kg</b> 4.6 lbs.
VPME 130702	<b>225 mm</b> 8.9 in.	<b>240 mm</b> 9.5 in.	7 t	M18 x 1.5 x 250 mm	<b>19 mm</b> 0.8 in.	2/3	<b>3.5 kg</b> 7.7 lbs.
VPME 131002	<b>385 mm</b> 15.2 in.	<b>360 mm</b> 14.2 in.	10 t	M20 x 1.5 x 330 mm	<b>22 mm</b> 0.9 in.	2/3	<b>8.5 kg</b> 18.7 lbs.
VPME 131702	<b>480 mm</b> 18.9 in.	<b>480 mm</b> 18.9 in.	17 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.1 in.	3	<b>18.5 kg</b> 40.8 lbs.
VPME 133002	<b>585 mm</b> 28.0 in.	<b>580 mm</b> 22.8 in.	30 t	1 <sup>3</sup> / <sub>8</sub> in. x 12h. x 495 mm	<b>35 mm</b> 1.5 in.	3	<b>39 kg</b> 86.0 lbs.

# **SERIES VMPS Pulling**

SELF-CENTERING THREE-ARM EXTERNAL PULLERS

The legs are assembled by a self-centering system so when one leg moves, the other legs follow.



Timken Part No.	Arms Length (A)	Width of Grip (B)	Max. Withdrawal Force	SW	No. of Arms	Weight
VMPS2	<b>80 mm</b> 3.1 in.	<b>120 mm</b> 4.7 in.	2 t	<b>16 mm</b> 0.625 in.	2/3	<b>1.6 kg</b> 3.5 lbs.
VMPS3	<b>120 mm</b> 4.7 in.	<b>180 mm</b> 7.1 in.	3 t	<b>16 mm</b> 0.625 in.	2/3	<b>2.3 kg</b> 5.1 lbs.
VMPS5	<b>160 mm</b> 6.3 in.	<b>270 mm</b> 10.6 in.	5 t	<b>19 mm</b> 0.75 in.	2/3	<b>4.3 kg</b> 9.5 lbs.
VMPS8	<b>210 mm</b> 8.3 in.	<b>300 mm</b> 11.8 in.	8 t	<b>19 mm</b> 0.75 in.	2/3	<b>6.1 kg</b> 13.4 lbs.

### **SERIES E1303 Pulling**

SELF-CENTERING THREE-ARM EXTERNAL PULLERS

The legs are assembled by a self-centering system so when one leg moves, the other legs follow. The arms are adjustable on three different positions.



Timken Part No.	Arms Length (A)	Width of Grip (B)	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	No. of Arms	Weight
VPME 130703	<b>225 mm</b> 8.9 in.	<b>240 mm</b> 9.5 in.	7 t	M18 x 1.5 x 250 mm	<b>19 mm</b> 0.8 in.	2/3	<b>6.5 kg</b> 14.3 lbs.
VPME 131003	<b>385 mm</b> 15.2 in.	<b>360 mm</b> 14.2 in.	10 t	M20 x 1.5 x 330 mm	<b>22 mm</b> 0.8 in.	2/3	<b>14.5 kg</b> 32.0 lbs.
VPME 131703	<b>480 mm</b> 18.9 in.	<b>480 mm</b> 18.9 in.	17 t	M27 x 2 x 377 mm	<b>27 mm</b> 1.1 in.	3	<b>31.5 kg</b> 69.5 lbs.
VPME 133003	<b>585 mm</b> 28.0 in.	<b>580 mm</b> 22.8 in.	30 t	1 <sup>3</sup> / <sub>8</sub> in. x 12h. x 495 mm	<b>35 mm</b> 1.5 in.	3	<b>55.5 kg</b> 122.4 lbs.

# MODELS

# **SERIES E1700 Pulling**

ELECTRIC MOTOR BALL BEARING EXTRACTOR

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

	Timken	Bearir	g O.D.	
	Part No.	Max.	Min.	Weight
	VPME	<b>14.5 mm</b>	<b>16 mm</b>	<b>0.3 kg</b>
	171600	0.6 in.	0.6 in.	0.7 lbs.
	VPME	<b>17.5 mm</b>	<b>19 mm</b>	<b>0.3 kg</b>
	171900	0.7 in.	0.8 in.	0.7 lbs.
	VPME 172200	<b>20.5 mm</b> 0.8 in.	<b>22 mm</b> 0.9 in.	<b>0.7 kg</b> 1.5 lbs.
	VPME 172400	<b>22.5 mm</b> 0.9 in.	<b>24 mm</b> 0.9 in.	<b>0.7 kg</b> 1.5 lbs.
	VPME	<b>24 mm</b>	<b>26 mm</b>	<b>1.0. kg</b>
	172600	0.9 in.	1.0 in.	2.2 lbs.
	VPME 172800	<b>26 mm</b> 1.0 in.	<b>28 mm</b> 1.1 in.	<b>1.0 kg</b> 2.2 lbs.
	VPME	<b>28 mm</b>	<b>30 mm</b>	<b>1.3 kg</b>
	173000	1.1 in.	1.2 in.	2.9 lbs.
_	VPME	<b>30 mm</b>	<b>32 mm</b>	<b>1.3 kg</b>
	173200	1.2 in.	1.3 in.	2.9 lbs.
	VPME	<b>33 mm</b>	<b>35 mm</b>	<b>1.3 kg</b>
	173500	1.3 in.	1.4 in.	2.9 lbs.
	VPME	<b>35 mm</b>	<b>37 mm</b>	<b>2.3 kg</b>
	173700	1.4 in.	1.5 in.	5.1 lbs.
-	VPME	<b>37 mm</b>	<b>40 mm</b>	<b>2.4 kg</b>
	174000	1.5 in.	1.6 in.	5.3 lbs.
	VPME	<b>40 mm</b>	<b>42 mm</b>	<b>2.5 kg</b>
	174200	1.6 in.	1.7 in.	5.5 lbs.
	VPME	<b>42 mm</b>	<b>47 mm</b>	<b>2.7 kg</b>
	174700	1.7 in.	1.9 in.	6.0 lbs.

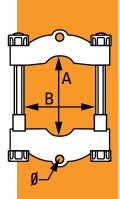
# **SERIES E1200 Separating**

**BEARING SEPARATOR** 

Developed to extract bearings, gears, bushings, sleeves and other tight shaft-fitted parts. The flat sides of the separator plates provide all-around support.



Timken	Effective Width	Shaft Dia	nmeter (A)		
Part No.	(B)	Max.	Min.	Ø	Weight
VPME 120201	<b>60 mm</b> 2.4 in.	<b>55 mm</b> 2.2 in.	<b>4 mm</b> 0.16 in.	<sup>3</sup> / <sub>8</sub> in.	<b>0.75 kg</b> 1.7 lbs.
VPME 120301	<b>80 mm</b> 3.1 in.	<b>80 mm</b> 3.1 in.	<b>5 mm</b> 0.20 in.	<sup>3</sup> / <sub>8</sub> in.	<b>1.3 kg</b> 2.9 lbs.
VPME 120402	<b>110 mm</b> 4.3 in.	<b>110 mm</b> 4.3 in.	<b>10 mm</b> 0.39 in.	<sup>5</sup> / <sub>8</sub> in.	<b>2.75 kg</b> 6.1 lbs.
VPME 120602	<b>152 mm</b> 6.0 in.	<b>134 mm</b> 5.3 in.	<b>11 mm</b> 0.43 in.	<sup>5</sup> / <sub>8</sub> in.	<b>5.7 kg</b> 12.6 lbs.
VPME 120802	<b>180 mm</b> 7.1 in.	<b>210 mm</b> 8.3 in.	<b>13 mm</b> 0.51 in.	<sup>5</sup> / <sub>8</sub> in.	<b>12.5 kg</b> 27.6 lbs.
VPME 120803	<b>180 mm</b> 7.1 in.	<b>210 mm</b> 8.3 in.	<b>13 mm</b> 0.51 in.	1 in.	<b>12.5 kg</b> 27.6 lbs.
VPME 121003	<b>260 mm</b> 10.2 in.	<b>250 mm</b> 9.8 in.	<b>15 mm</b> 0.59 in.	1 in.	<b>28.5 kg</b> 62.8 lbs.
VPME 121004	<b>260 mm</b> 10.2 in.	<b>250 mm</b> 9.8 in.	<b>15 mm</b> 0.59 in.	1 <sup>1</sup> / <sub>4</sub> in.	<b>28.5 kg</b> 62.8 lbs.
VPME 121204	<b>300 mm</b> 11.8 in.	<b>300 mm</b> 11.8 in.	<b>20 mm</b> 0.79 in.	1 <sup>1</sup> / <sub>4</sub> in.	<b>43.5 kg</b> 95.9 lbs.
VPME 121304	<b>330 mm</b> 13.0 in.	<b>300 mm</b> 11.8 in.	<b>20 mm</b> 0.79 in.	1 <sup>1</sup> / <sub>4</sub> in.	<b>86.5 kg</b> 187 lbs.



### **MODELS**

# **SERIES 1904 Universal Bearing Separator**

**BEARING SEPARATOR** 

Tool designed to extract bearings when a shoulder makes griping difficult. Parts are separated by tightening the radial screw and forcing the sharp edge of the jaws behind the bearing.



	Timken Part No.	Arms Length (A)	Width of Grip (B)		Max.	No. of	Spindle Dimensions			
			Max.	Min.	Withdrawal Force	Arms	Thread x Length	SW	Weight	Weight
	VPME 190400	<b>89 mm</b> 3.5 in.	<b>120 mm</b> 4.7 in.	<b>34 mm</b> 1.3 in.	2 t	2	M14 x 1.50 x 180 mm	<b>16 mm</b> 0.6 in.	<b>1.7 kg</b> 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, E1200 series, I1500 series and internal pullers when there is no supporting point.



Timken	Arms	Width o	f Grip (B)	Max. Withdrawal	Spindle Dimensions	SW	No. of	\Maight
Part No.	Length (A)	Max.	Min.	Force	Thread x Length	SVV	Extensions	Weight
VPME 110211*	<b>120 mm</b> 4.7 in.	<b>110 mm</b> 4.3 in.	<b>47 mm</b> 1.8 in.	2 t	M12 x 1.25 x 165 mm	<b>14 mm</b> 0.6 in.	2	<b>1.0 kg</b> 3.8 lbs.
VPME 110311*	<b>120 mm</b> 4.7 in.	<b>140 mm</b> 5.5 in.	<b>47 mm</b> 1.8 in.	2 t	M12 x 1.25 x 165 mm	<b>14 mm</b> 0.6 in.	2	<b>1.1 kg</b> 2.4 lbs.
VPME 111011**	<b>190 mm</b> 7.5 in.	<b>195 mm</b> 7.7 in.	<b>62 mm</b> 2.4 in.	10 t	<sup>3</sup> / <sub>4</sub> in. 16h. x 280 mm	<b>14 mm</b> 0.6 in.	2	<b>3.4 kg</b> 7.5 lbs.
VPME 112011**	<b>255 mm</b> 10.0 in.	<b>325 mm</b> 12.8 in.	<b>105 mm</b> 4.1 in.	20 t	1 in. 14h. x 398 mm	<b>17 mm</b> 0.7 in.	2	<b>9.5 kg</b> 20.9 lbs.
VPME 113511**	<b>480 mm</b> 18.9 in.	<b>450 mm</b> 17.7 in.	<b>177 mm</b> 7.0 in.	30 t	1 <sup>1</sup> / <sub>2</sub> in. 12h. x 550 mm	<b>25 mm</b> 1.0 in.	2	<b>35.0 kg</b> 77.2 lbs.
VPME 115011**	<b>680 mm</b> 26.8 in.	<b>580 mm</b> 22.8 in.	<b>220 mm</b> 8.7 in.	50 t	1 <sup>5</sup> / <sub>8</sub> in. 12h. x 700 mm	<b>32 mm</b> 1.3 in.	2	<b>53.0 kg</b> 116.8 lbs.

<sup>(\*)</sup> Puller body is threaded. Nut and washer are not necessary.

<sup>(\*\*)</sup> Spindle nut and washer included.

# **SERIES E1200 and SERIES E1100 Combined**

**EXTERNAL PULLER** 

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



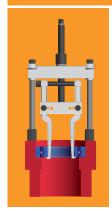
	Recomm Combina		Exten- sions	Shaft Dia	meter (B)	Max. Bearing	Max. Withdrawal	Spindle Dimensions	SW	Weight
	Separator	Pulling Device	Length (A)	Max.	Min.	O.D.(C)	Force	Thread x Length	SVV	vveigiit
	VPME 120201	VPME 110211	<b>100 mm</b> 3.9 in.	<b>55 mm</b> 2.2 in.	<b>4 mm</b> 0.16 in.	<b>90 mm</b> 3.5 in.	2 t	M12 x 1.25 x 165 mm	<b>14 mm</b> H0.6 in.	<b>1.75 kg</b> 3.9 lbs.
)	VPME 120301	VPME 110311	<b>100 mm</b> 3.9 in.	<b>80 mm</b> 3.1 in.	<b>5 mm</b> 0.2 in.	<b>130 mm</b> 5.1 in.	2 t	M12 x 1.25 x 165 mm	<b>14 mm</b> H0.6 in.	<b>2.4 kg</b> 5.3 lbs.
	VPME 120402	VPME 111011	<b>152 mm</b> 6.0 in.	<b>108 mm</b> 4.2 in.	<b>10 mm</b> 0.4 in.	<b>175 mm</b> 6.9 in.	10 t	<sup>3</sup> / <sub>4</sub> in. 16h x 280 mm	<b>14 mm</b> H0.6 in.	<b>6.15 kg</b> 13.6 lbs.
	VPME 120602	VPME 111011	<b>152 mm</b> 6.0 in.	<b>77 mm</b> 3.0 in.	<b>11 mm</b> 0.4 in.	<b>182 mm</b> 7.2 in.	10 t	<sup>3</sup> / <sub>4</sub> in. 16h x 280 mm	<b>14 mm</b> H0.6 in.	<b>9.1 kg</b> 20.1 lbs.
	VPME 120602	VPME 112011	<b>220 mm</b> 8.7 in.	<b>134 mm</b> 5.3 in.	<b>11 mm</b> 0.4 in.	<b>230 mm</b> 9.1 in.	20 t	1 in. 14h x 398 mm	<b>17 mm</b> 0.7 in.	<b>15.2 kg</b> 33.5 lbs.
	VPME 120803	VPME 113511	<b>418 mm</b> 16.5 in.	<b>210 mm</b> 8.3 in.	<b>13 mm</b> 0.5 in.	<b>285 mm</b> 11.2 in.	30 t	1 <sup>1</sup> / <sub>2</sub> in. 12h x 550 mm	<b>25 mm</b> 1.0 in.	<b>47.5 kg</b> 104.7 lbs.
	VPME 121003	VPME 113511	<b>418 mm</b> 16.5 in.	<b>250 mm</b> 9.8 in.	<b>15 mm</b> 0.6 in.	<b>372 mm</b> 14.6 in.	30 t	1 <sup>1</sup> / <sub>2</sub> in. 12h x 550 mm	<b>25 mm</b> 1.0 in.	<b>63.5 kg</b> 140.0 lbs.
7	VPME 121004	VPME 115011	<b>617 mm</b> 24.3 in.	<b>250 mm</b> 9.8 in.	<b>15 mm</b> 0.6 in.	<b>362 mm</b> 14.2 in.	50 t	1 <sup>5</sup> / <sub>8</sub> in. 12h. x 700 mm	<b>32 mm</b> 1.3 in.	<b>81.5 kg</b> 179.7 lbs.
<u>'</u>	VPME 121204	VPME 115011	<b>617 mm</b> 24.3 in.	<b>300 mm</b> 11.8 in.	<b>20 mm</b> 0.8 in.	<b>435 mm</b> 17.1 in.	50 t	1 <sup>5</sup> / <sub>8</sub> in. 12h. x 700 mm	<b>32 mm</b> 1.3 in.	<b>96.5 kg</b> 212.8 lbs.
	VPME 121304	VPME 115011	<b>617 mm</b> 24.3 in.	<b>300 mm</b> 11.8 in.	<b>20 mm</b> (0.8 in.)	<b>450 mm</b> 17.7 in.	50 t	1 <sup>5</sup> / <sub>8</sub> in. 12h. x 700 mm	<b>32 mm</b> 1.3 in.	<b>139.5 kg</b> 307.5 lbs.

# **MODELS**

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

**INTERNAL PULLER** 

Specially designed to extract bearing cups from housing where there is no support point for the spindle. It should be used in combination with pulling device E1100 series, as shown. Please refer to E1100 series chart for detail on the pulling device.

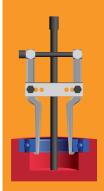


Timken	NA/ 1 '41	Arms Length	Bearing	Bore (B)	Vocale Thomas d	<b>NA</b> / * 1 ·	
Part No.	Works with.		Min.	Knob Thread	Weight		
VPMI 150600	VMPE 111011 or VMPE 112011	<b>115 mm</b> 5 in.	<b>145 mm</b> 5.7 in.	<b>40 mm</b> 6 in.	UNS 1 in. 14h.	<b>2.4 kg</b> 5.3 lbs.	
VPMI 150700	VMPE 111011 or VMPE 112011	<b>140 mm</b> 5.5 in.	<b>160 mm</b> 6.3 in.	<b>32 mm</b> 3 in.	UNS 1 in. 14h.	<b>2.6 kg</b> 5.7 lbs.	
VPMI 150900	VMPE 112011 or VMPE 113511	<b>150 mm</b> 9 in.	<b>240 mm</b> 9.4 in.	<b>60 mm</b> 4 in.	UNF 1 <sup>1</sup> / <sub>2</sub> in. 12h.	<b>6.0 kg</b> 13.2 lbs.	

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

INTERNAL PULLER

Specially designed to extract bearing cups from a housing where a support point is available. Spindle is included.



Timken	Arms Length	Bearing	Bore (B)	Spindle Dimensions	Spindle Dimensions		
Part No.	(A)	Max.	Thread x Lengt		SW	Weight	
VPMI 150601	<b>115 mm</b> 5 in.	<b>145 mm</b> 5.7 in.	<b>40 mm</b> 6 in.	<sup>5</sup> / <sub>8</sub> in. 18h. x 268 mm	<b>20 mm</b> 0.8 in.	<b>2.4 kg</b> 5.3 lbs.	
VPMI 150701	<b>140 mm</b> 5.5 in.	<b>160 mm</b> 6.3 in.	<b>32 mm</b> 3 in.	<sup>5</sup> / <sub>8</sub> in. 18h. x 268 mm	<b>20 mm</b> 0.8 in.	<b>2.6 kg</b> 5.7 lbs.	
VPMI 150901	<b>150 mm</b> 9 in.	<b>240 mm</b> 9.4 in.	<b>60 mm</b> 4 in.	1 in. 14h. x 398 mm	<b>17 mm</b> 0.7 in.	<b>6.0 kg</b> 13.2 lbs.	

### **SERIES 14300 Internal Puller**

**INTERNAL PULLER** 

Specially designed to extract bearing cups from housing. Collets should be used in combination with the slide hammer VPMI 439000 or puller VPMI 439200 as shown.



### **MODELS**

### **SERIES B1600 Extracting**

### **BALL BEARING EXTRACTOR**

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



### **SERIES 14100 Extracting**

### **BALL BEARING EXTRACTOR**

Puller designed to extract ball bearings from blind housings. The bearing cage must be drilled prior to extraction. Ball shaped adapters allow for immediate engagement of the bearing races.



Timken Part No.	IS	O Ball Bearings Rang	ge		Weight	
	60 Series	62 Series	63 Series	Bearing O.D.		
VPMI 410000	6004 - 6010	6200 - 6205	6300 - 6302	<b>20 to 95 mm</b> 0.79-3.74 in.	<b>0.85 kg</b> .9 lbs.	

# **Small External Puller Set**

**PULLER SET** 

Set includes two external pullers with 2/3 arms.



Timken Part No.	Arms Length (A)	Width of Grip (B)	Max. Withdrawal Force	Spindle Dimensions Thread x Length	SW	No. of Arms	Weight
VPME 930001	<b>55 mm</b> 2.2 in.	<b>70 mm</b> 2.8 in.	0.5 t	M8 x 1 x 92 mm	<b>10 mm</b> 0.4 in.	2-3	1.8 kg
	<b>85 mm</b> 3.4 in.	<b>100 mm</b> 3.9 in.	1 t	M10 x 1 x 110 mm	<b>12 mm</b> 0.5 in.	2-2/3	4.0 lbs.

# **Puller Set with Screw Adapters**

**PULLER SET** 

Complete set includes: one pulling device VPME110211, one separator VPME120201, two puller arms and seven screw adaptors.



Timken Part No.	Pullers that can be assembled with set	Weight
VPMS 900001	VPME110211 + VPME 120201 + VPME100201 + 7 screw adaptors for M6 -M8 -M10 -M12 -M14-1/2"-3/8"	<b>8.5 kg</b> 18.7 lbs.

# **Puller Set with Stud Extractors**

PULLER SET

Complete set of pullers with a stud extractor set.



Timken Part No.	Pullers that can be assembled with set	Weight
VPMS 900002	VPMC100201 + VPME120201 + VPME110211 + VPME140401 + VPME140402 + VPME130402* + VPMI501000	<b>3.0 kg</b> 6.6 lbs.

(\*) Arms have 2 holes to set length.

# MODELS

### **Point Protectors**

Tempered point designed to protect the puller spindle. Select the proper point protector based on the puller capacity.



Timken Part No.	Puller capacity
VPMP 100001	<2t
VPMP 100004	<7 t
VPMP 100010	≥ 10 t

### **Stud Extractors Set**

Set is designed to extract broken screws.

Timken Part No.	Set composition	Bit Diam.	Weight
VPMI 501000	5 studs		<b>0.27 kg</b> 0.6 lbs.
VPMI 501001	5 studs + 10 external/external guides + 5 bits	4-5-6-7.5-8.5 mm	<b>0.6 kg</b> 1.3 lbs.
VPMI 501050	4 spiral studs + 8 guides + 4 bits	4-5-7-10 mm	<b>0.7 kg</b> 1.5 lbs.

# **VPMI 501001 Components Selection Chart**

Select proper guide, bit and stud for each given screw size.



Guide	1	2	3	4	5	5	6	7	8	9
Screw (external)	M-5	M-6	Ø 7	M-8	M-8	Ø9	M-10	Ø 11	M-12	M-14
Screw (internal)	-	M-6	M-8	<sup>3</sup> / <sub>8</sub> in.	¹/ <sub>2</sub> in.	M-10	<sup>7</sup> / <sub>16</sub> in.	M-12	M-14	M-16
Bit Ø mm	4	4	4	4	5	5	5	6	7.5	8.5
Stud	1	1	1	1	2	2	2	3	4	5

# **VPMI 501050 Components Selection Chart**

Select proper guide, bit and stud for each given screw size.



Guide	1	2	3	4	5	6	7	8
Screw (external)	M 5	M 6	Ø 7	M 8	Ø 9	M 10	M 12	M 14
Bit Ø mm	4	4	4	5	5	5	7	10
Stud	1	1	1	2	2	2	3	4



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