



PULLING & HAULING - UNDERGROUND



TEN offers an extensive range of equipment for Overhead and Underground Distribution construction.

- ▶ Wire Grips, Socks and Swivels
- ▶ Hoists and Dynamometers
- ▶ Stringing Roller and Hand Line Blocks
- ▶ Dyneema, Double Braid and Polypropylene Rope
- ▶ Cable Pullers and Winches
- ▶ Underground Trench, Corner and Manhole Rollers
- ▶ Conduit Proving and Cleaning
- ▶ Cable Pulling Lubricant
- ▶ Duct Rodders
- ▶ Cable Stand and Reel Rollers



PULLING AND HAULING - TABLE OF CONTENTS

UNDERGROUND PULLING AND HAULINGA4

Joints and Swivels	A4
Standard Swivels - Tesmec	A4
Breakaway Swivels - Condux	A4
Rope to Swivel Connector - Condux	A4
Quick Links	A4

Cable Socks and Grips..... A5

Heavy Duty Underground Cable Socks - Tesmec	A5
Heavy Duty Cable Socks - NCG.....	A5
Standard Duty Cable Socks - NCG	A5
Triplex Socks - NCG	A6
Non-Metallic Aramid Socks - Slingco.....	A6

Rollers - Underground

Flat Trench Roller - SPP.....	A7
Flat Trench / Cable Tray Roller - SPP.....	A7
Raised Trench Rollers - SPP	A7
Nylon Raised Trench Rollers - Lancier.....	A7
Corner & Curve Rollers - SPP	A8
Corner Rollers - SPP	A8
Trench Feed In Rollers - SPP.....	A9
Manhole Roller Guides - SPP	A9

Bell-Mouth, Cable Feeding - Lockable - SPP

Sheave, Cable Feeding - Lockable - SPP

Rollers - Cable Tray

Cable Tray Roller - SPP	A10
4-Way Cable Tray Roller - SPP	A10
Box Style Cable Tray Roller - SPP	A10

Sheaves and Guides, Hook - Current Tools

Hook Type Sheaves.....	A11
Right Angle Twin Yoke Sheave	A11
Triangle Sheave Cable Guide.....	A11
Radius Sheaves.....	A11

Conduit Proving Mandrels - SPP.....

DUCT Proving Mandrels	A12
-----------------------------	-----

Conduit Cleaning - Wire Brushes and Squeegees

Wire Brushes - SPP	A13
Rubber Conduit Cleaner - SPP	A13
Rubber Lubricant Spreader - SPP	A13
Line Carriers	A14
Accessory Bag.....	A14

Conduit Blowing

Condux Power Dart Blower.....	A14
Foam Carriers	A14
Poly Blowing Line.....	A14
Chute Carriers.....	A14

Duct Rodders - SPP

Traceable Duct Rodder - 4.5, 6, 9 & 11 mm	A15
---	-----

Cable stands and Reel Rollers

Drum Jack Stands - Scissor - SPP	A16
Cable Drum Stands	A17
Reel Roller - Current Tools.....	A17
Reel Roller - Current Tools.....	A17
Cable Reel Roller - Current Tools	A17

Cable Pulling Lubricant - Polywater

J Lubricant.....	A18
J Front End Pack™ Lubricant.....	A18
PR Lubricant.....	A19
LZ Lubricant.....	A19

Cable Pull Planning Software - Polywater

Pull-Planner™ 4.0	A20
-------------------------	-----

Duct / Conduit Sealing Systems.....

FST-250KIT1 Duct Sealant - Polywater	A21
FSTBP™ Duct Sealant Burst Pack - Polywater.....	A21
FST MINI Duct Sealant - Polywater	A21

Rope - Overhead and Underground

Telstra/Parramatta Rope.....	A22
Prima Dyneema Rope - Hampidjan	A22
Double Braided Hauling Rope - Hampidjan.....	A22
3 Strand Polypropylene Rope - Hampidjan.....	A22

Cable Pusher - Lancier

Electric Cable Feeder - Current Tools	A23
---	-----

Hydraulic Pullers

15kN Puller, Hydraulic - Tesmec	A24
35kN Puller, Hydraulic - Tesmec.....	A24
30 & 50kN Puller, Electric - Tesmec	A25
50kN Puller, Hydraulic - Tesmec.....	A25

Winches - Overhead - Chance

Capstan Winches - 454kg	A26
Hydraulic Winch - 700bar (10,000psi)	A26
Electric Winch - 230V AC	A26
Petrol Winch - Honda 35cc 4-Stroke	A26
Chance Winch Accessories.....	A27
Rope Lock Device	A27
Universal Mounting Bracket	A27
Chain Clamp.....	A27
Swivel Base Truck Mount.....	A27
Swivel Base Truck Mount & Hitch Mount	A27
Foot Switch - Hydraulic.....	A27

Winches - Overhead and Underground

Portable Petrol Capstan Winch - Docma	A28
Docma Capstan Winch Accessories.....	A28
Portable Petrol Drum Winch - Docma.....	A29
Docma Capstan & Drum Winch Accessories.....	A29
Battery Capstan Winches, 1360kg - iTOOLco.....	A30
Electric Capstan Winches, 2727kg - iTOOLco.....	A31
Electric Capstan Winches, 4545kg & 5454kg - iTOOLco	A32

Running Line Tension Gauge - Safe Pull - iTOOLco.....

.....	A32
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UNDERGROUND PULLING AND HAULING

Joists and Swivels

Standard Swivels - Tesmec



Part No. Various

- Swivels for connecting pulling rope to cable sock
- For Overhead or Underground application
- Made from high tensile galvanised and corrosion protected steel
- Chamfered edges allowing smooth passing through rollers or conduit
- Special design can bear high radial loads. Thrust bearings designed to avoid torsion strain accumulation

Part No.	Max Rope Size OD (mm)	Break Load (kN)	Diameter OD (mm)	Overall Length (mm)	Wt (kg)
GGT001	10	70	28	106	0.3
GGT010	13	110	40	143	0.9
GGT020	18	220	54	184	2.1
GGT030	24	360	60	234	3.4
GGT040	28	750	77	322	8.2

Breakaway Swivels - Condux

Part No. Various

- Ensure fibre optic or coaxial is not pulled in excess of rating
- Available in 16mm, 22mm and 32mm diameter swivels
- Break loads from 90kg to 800kg, Replacement pins available
- Contact TEN with your job specifications.

Common Stocked Sizes					
Part No.	Swivel Diameter (mm)	Max Rope Size (mm)	Break Away Load (kN)	Replacement Pin	Colour
08021500	32	14	5.3	08021505	Brown/ White
08019400	32	14	8.4	08019405	Violet/ Black

More Breakaways sizes available

Rope to Swivel Connector - Condux



Part No. 08091230

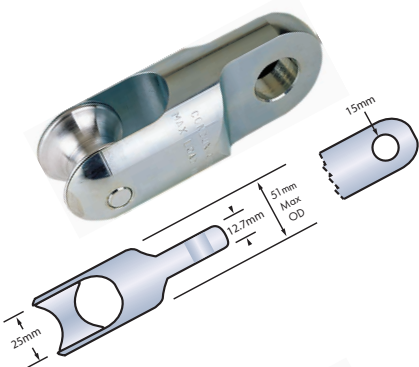
- To connect swivels to rope up to 25mm OD
- Suits swivel GGT010 above
- Precision machined stainless steel construction with 44kN work load
- Ideal for utilising larger diameter ropes on smaller swivels where the WLL allows
- Contact TEN for further information on swivel/connector combinations

Quick Links

Part No. MRG Series

- Suitable for simple connection of rope to rope, socks, pulling eye or accessories
- Zinc Plated Steel

Part No.	Diameter (mm)	Internal Opening (Rope Capacity)(mm)	Break Load (T)	OAL (mm)
MRGOZ08.0	8	17.5	3.25	88
MRGOZ10.0	10	20.5	5.0	105
MRGOZ12.0	12	23.5	6.25	124





Cable Socks and Grips

Heavy Duty Underground Cable Socks - Tesmec

Part No. Various

- Suitable for single and multiple core underground cables
- Longer socks give extra pulling force - larger surface area gives better grip
- Steel wires with protective finish and alloy ferrule offering durability and longevity

Part No.	Conductor OD Ø (mm)	Length (mm)	UTS (kN)	Wt (kg)
GCL180	46-60	1600	50	2.0
GCL194	61-80	1800	80	2.5
GCL200	81-100	2000	100	3.0
GCL210	101-140	2000	100	3.5



Heavy Duty Cable Socks - NCG

Part No. Various

- Suitable for heavier cable hauling applications
- Soft eye for fitting in tight spaces
- Made from durable galvanised wire and swaged with an aluminium alloy ferrule.

Part No.	To suit cable O.D (mm)	Grip Length (mm)	Min Breaking Load (kN)	Working Load Limit (kN)
CHD1006	6-11	350	8	2.6
CHD1010	10-14	350	15	5.0
CHD1014	14-19	400	20	6.6
CHD1019	19-28	500	37	12.3
CHD1028	28-40	600	54	18.0
CHD1040	40-55	800	62	20.6
CHD1055	55-75	900	80	26.6
CHD1075	75-95	1000	180	60.0
CHD1095	95-120	1000	215	71.6
CHD1120	120-150	1800	287	95.0
CHD1150	150-190	1800	287	95.0



Scan or Click to View or Download Grip Inspection Selection & Application

Standard Duty Cable Socks - NCG

Part No. Various

- Suitable for general hauling applications
- Soft eye for fitting in tight spaces
- Made from durable galvanised wire and swaged with an aluminium alloy ferrule.

Part No.	To suit cable O.D (mm)	Grip Length (mm)	Min Breaking Load (kN)	Working Load Limit (kN)
C1006	6-12	350	5	1.6
C1010	10-14	350	5	1.6
C1014	14-19	400	9	3.0
C1019	19-28	500	15	5.0
C1028	28-40	600	24	8.0
C1040	40-55	800	35	11.0
C1055	55-75	900	62	20.0
C1075	75-95	1000	98	32.0
C1095	95-120	1200	133	44.0
C1120	120-150	1400	187	62.0
C1150	150-190	1600	283	94.0





Triplex Socks - NCG

Part No. Various

- Three socks swaged into a single eye
- For hauling multiple and Triplex cables

All references of 3:1 safety factor is a guide only, consult your work practices

Part No.	To suit cable O.D - each leg (mm)	Grip Length (mm)	UTS (kN)	Working Load Limit (kN)
C1019X3-1000	19-28	1000	15	5
C1028X3-1000	28-40	1000	24	8
C1040X3-1000	40-55	1000	35	11

Non-conductive Aramid Fibre



Non-Metallic Aramid Socks - Slingco

Part No. Various

Non-metallic cable socks are made of plastic coated Aramid fibres that are light weight, yet much stronger than steel wires. Aramid are a class of heat-resistant and strong synthetic fibres used in aerospace and military applications. These grips are traditionally used in overhead ABC applications or when pulling fibre optic cable.



- Non conductive
- Much lighter yet stronger than steel grips
- Easier to apply and remove
- No frayed wires = no wire cuts or contusions
- UV Resistant
- Strong enough to last in salt water

Ideal for light & Fibre-optic cables

Part No.	Cable Range (mm)	UTS (kN)	Mesh Length (mm)	OAL (mm)
ZCS1040	10-20	11.16	552	711
ZCS1022	20-30	15.89	600	724
ZCS1023	30-40	43.84	642	1245
ZCS1024	40-50	52.86	523	1245
ZCS1179	50-65	70.71	636	1245
ZCS1180	65-76	70.71	908	1460
ZCS1181	76-101	70.71	1029	1460
ZCS4079	101-127	70.71	3048	1460

Determining Working Load Limit is dependent on your application and company/client safety factors



Rollers - Underground

Flat Trench Roller - SPP

Part No. Various



- Flat trench roller with 140mm nylon or aluminium roller
- Can be pinned on side for corner bends
- Galvanised finished frame
- Replacement nylon and aluminium rollers available



Part No.	Roller Material	Max cable Dia. (mm)	Dimensions (mm)			Wt (kg)
			Length	Width	Height	
SPP-2A-140	Nylon	150	330	170	180	1.2
SPP-2A-140A	Aluminium	150	330	170	180	2.6

Flat Trench / Cable Tray Roller - SPP

Part No. Various

- Zinc plated frame
- Nylon and Aluminium rollers available
- Legs can be attached for cable tray /ladder work
- Replacement rollers available



Part No.	Roller Material	Max cable Dia (mm)	Dimensions (mm)			Wt (kg)
			Length	Width	Height	
SPP-3A-140	Nylon	150	210	260	150	2.2
SPP-3A-140A	Aluminium	150	210	260	150	3.2

Raised Trench Rollers - SPP

Part No. SPP-2A-RTR

- Quality aluminium roller complete with bearings
- Galvanised steel frame
- Can be arranged over existing cables in trench



Part No.	Roller Material	Max cable Dia. (mm)	Dimensions (mm)			Wt (kg)
			Length	Width	Height	
SPP-2A-RTR	Aluminium	150	290	230	260	2.6

Nylon Raised Trench Rollers - Lancier

Part No. 14211



- Lightweight and impact resistant
- Can be secured and connected using anchor pins (SPP-PIN)
- Versatile - Numerous connection configurations
- Maintenance free sealed ball bearings to stop water and dirt ingress
- Stackable for easy storage and transport
- Frame made of hard wearing polypropylene



Easily stackable



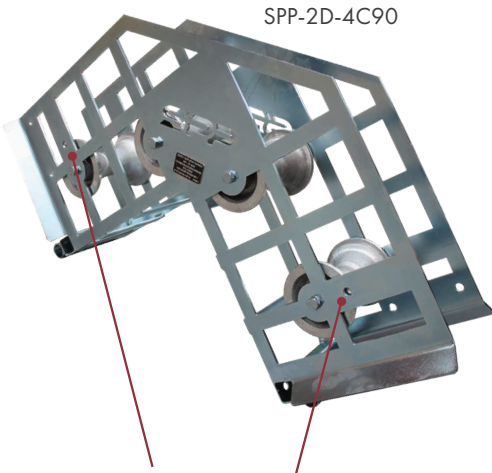
Part No.	14211
Max Load (kg)	500
Dimensions (mm)	345 (L) x 229 (W) x 195 (H)
Max Cable Capacity (mm)	132 Ø
Weight (kg)	2.2



Corner & Curve Rollers - SPP

Part No. Various

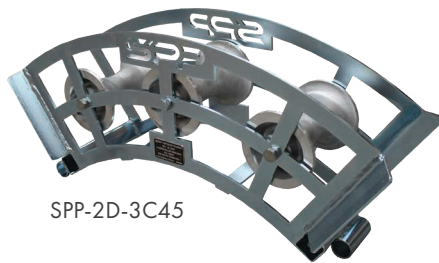
- Solid construction trench roller guides
- Provisions to peg units down and join units together
- Supplied with internal bearings
- Zinc plated finish
- Replacement rollers available



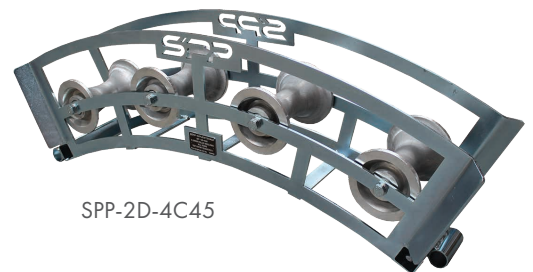
SPP-2D-4C90

Versatile 90° four corner roller with dual radius capabilities by simply moving bolts to other positioned holes on frame

Part No.	Dimensions (mm)	Angle	Bend Radius (mm)	No. of Rollers	Rollers	Max. Cable OD (mm)
SPP-2D-4C90	700 (L) x 170 (W)	90°	350, 600 & 700	4	Aluminium	150
SPP-2D-3C45	550 (L) x 170 (W)	45°	500	3		150
SPP-2D-4C45	800 (L) x 170 (W)	45°	900	4		150



SPP-2D-3C45



SPP-2D-4C45



Corner Rollers - SPP

Part No. Various

- Ground cable laying corner roller/ trench roller
- Corner guide trench roller
- 1 x Horizontal & 2 x Vertical 60mmOD rollers
- Easily pinned together with star pickets or pins
- 1000kg WLL
- Inverted model also available (SPP-2B-TCR-IN)



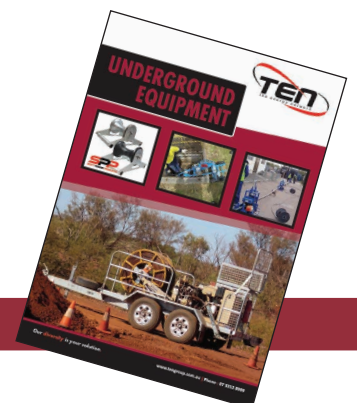
Part No.	Max. Payload (kg)	Dimensions (mm)	Wt (kg)
SPP-2B-TCR	1000	450 (L) x 300 (W) x 310 (H)	12.0
SPP-2B-TCR-IN			14.0



SPP-2B-TCR

SPP-2B-TCR

SPP-2B-TCR-IN



Looking for Cable Hauling Equipment see our Underground Catalogue



Trench Feed In Rollers - SPP

Part No. SPP-2B

- Feed-in roller guides for underground applications
- Sealed roller bearings
- All units have fixing points

Part No.	Roller & Frame	Roller Length (mm)	Dimensions (mm)	Wt (kg)
SPP-2B-1000	Zinc Plated Steel	1000	1105 (L) x 220 (W) x 125 (H)	15.71
SPP-2B-2X45	Zinc Plated Steel	2 x 600	1040 (L) x 220 (W) x 520 (H)	14.7

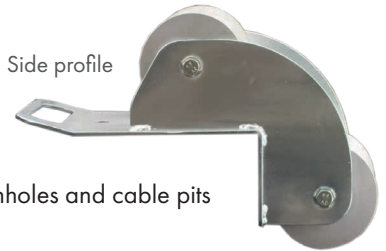


Manhole Roller Guides - SPP

Part No. SPP-MRG

- Right angle corner to assist with laying cables into manholes and cable pits
- Anchoring points in base plates if required
- 140mm aluminium rollers

Side profile



Part No.	Roller Configuration	Bend Radius (mm)	Wt (kg)
SPP-MRG-1	Single Fixed	-	6.5
SPP-MRG-2	Double Fixed	260	8.5
SPP-MRG-3	Triple Fixed	320	12.7
SPP-MRGP-3	Triple Pivoting	320	13.0



Bell-Mouth, Cable Feeding - Lockable - SPP

Part No. SPP-BM

- Made from Zinc Plated Steel
- Split design allows easy removal after cable installation
- Designed for cable entry applications
- Allows multi-direction entry into the conduit

Part No.	Neck OD (mm)	Suits Conduit Nominal Diameter (mm)	Split Feature	Dimensions (mm)	Wt (kg)
SPP-BM-050E	42	50 Electrical	Dual Wingnut	255 (L) x 120 (W) x 115 (H)	1.1
SPP-BM-050T	48	50 Telco		255 (L) x 130 (W) x 115 (H)	1.3
SPP-BM-063E	48	63 Electrical		255 (L) x 140 (W) x 115 (H)	1.3
SPP-BM-063T	60	63 Telco	Hinged	250 (L) x 117 (W) x 110 (H)	1.3
SPP-BM-080	74	80		250 (L) x 130 (W) x 140 (H)	1.6
SPP-BM-100	98	100		250 (L) x 177 (W) x 155 (H)	2.8
SPP-BM-125	118	125		250 (L) x 200 (W) x 165 (H)	3.4
SPP-BM-150	138	150		250 (L) x 220 (W) x 175 (H)	3.8
SPP-BM-200	190	200		300 (L) x 297 (W) x 260 (H)	9.4



Require Pulling Lubricants? Refer pages A44 & A45 for a complete range.
Design safe and efficient cable pulls. Contact TEN for information on the Pull-Planner™ 4.0.



Sheave, Cable Feeding - Lockable - SPP

Part No. SPP-LFS

- Made from Zinc Plated Steel with Aluminium Roller
- Split design allows easy removal after cable installation
- Designed to suit Cable Exit or Entry
- Lockable to conduit by expansion screw



Part No.	Neck OD (mm)	Suits Conduit ID (mm)	Split Feature	Dimensions (mm)	Wt (kg)
SPP-LFS-080	74	80	Hinged	375 (L) x 190 (W) x 160 (H)	4.15
SPP-LFS-100	98	100		365 (L) x 190 (W) x 190 (H)	5.30
SPP-LFS-125	118	125		390 (L) x 195 (W) x 200 (H)	6.05
SPP-LFS-150	138	150		380 (L) x 225 (W) x 220 (H)	6.60
SPP-LFS-200	190	200		460 (L) x 310 (W) x 300 (H)	14.85

Rollers - Cable Tray

Cable Tray Roller - SPP

Part No. SPP-3A

- Quality aluminium roller complete with bearings
- Easily adaptable for a variety of uses, low profile
- Ideal for cable or ladder tray work
- Suits cable up to 150mm diameter
- Remove legs to convert to "Flat Trench Rollers"

Part No.	Roller Material	Max cable Dia. (mm)	Dimensions (mm)	Wt (kg)
SPP-3A-140L	Nylon	150	600 (L) x 260 (W) x 150 (H)	3.8
SPP-3A-140AL	Aluminium	150	600 (L) x 260 (W) x 150 (H)	4.7

4-Way Cable Tray Roller - SPP

Part No. SPP-TR-605R

- 5 bar rollers with sealed bearings
- Mounting bracket suits cable ladder and cable tray (1mm to 50mm)
- Large wind in dials for easy opening and closing
- Zinc plated
- 200kg WLL

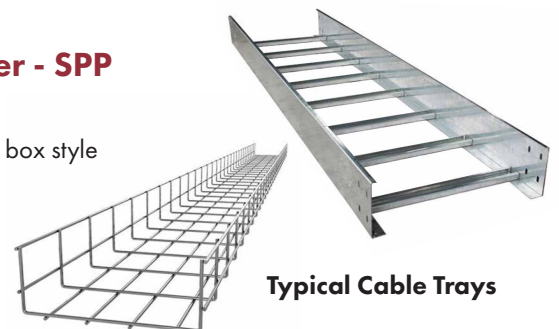


Part No.	Max cable Dia (mm)	Dimensions (mm)	Wt (kg)
SPP-TR-605R	80	125 (L) x 260 (W) x 360 (H)	4.45

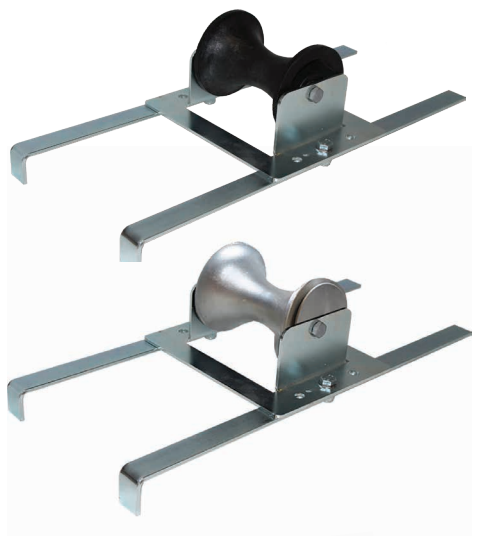
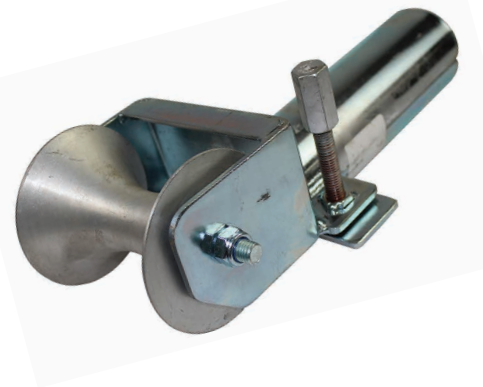
Box Style Cable Tray Roller - SPP

Part No. SPP-3A-100

- Aluminium box style cable tray roller box style
- 42mm x 100mm roller



Typical Cable Trays





MADE IN THE USA



Sheaves and Guides, Hook - Current Tools

Hook Type Sheaves

Part No. Various

- 1814kg capacity
- Forged steel hooks with 25mm opening
- Welded steel frames
- 127mm wide aluminium sheaves with self-lubricating bearings
- EZ* opening - See QR-Code

Part No. 812

- 3628kg capacity
- Forged steel hooks with 35mm opening
- Heavy duty welded steel frames
- Self-lubricating bearings



Part No.	Diameter (mm)	Width (mm)	Wt (kg)
412EZ*	305	127	8.4
418EZ*	457		12.7
424EZ*	610		17.2

Part No.	Diameter (mm)	Width (mm)	Wt (kg)
812	305	127	10.9

EZ Opening for easy cable installation & removal. See QR-Code below

Right Angle Twin Yoke Sheave

Part No. 4424

- 1814kg capacity
- Forged steel hooks with 25mm opening
- Yokes rotate independently for various setups
- Welded steel yoke frames
- 127mm wide aluminium sheave with self lubricating bearings
- Weight 22.7kg



Triangle Sheave Cable Guide

Part No. 333

- 2948kg capacity
- Adjustable center sheave to vary pulling radius from 495mm - 915mm
- Pinned steel yoke for easy removal
- Aluminum frame for light weight
- Weight 11.8kg
- EZ* opening - See QR-Code



Scan or Click to View EZ* opening video

Radius Sheaves

Part No. Various

- 1814kg capacity
- Heavy duty design with aluminium sheaves and frame for light weight
- Sheaves spaced to prevent cable damage
- Aluminum sheaves 127mm wide with self-lubricating bearings
- EZ* opening - See QR-Code

Part No.	Sheave Radius (mm)	Number of Sheaves	Wt (kg)
12036EZ*	915	9	32.6
12048EZ*	1220	12	52.1





Conduit Proving Mandrels - SPP

DUCT Proving Mandrels

Part No. SPP-PM-Series

Used for testing circular integrity of Conduits before cable Hauling

Features

- Manufactured standard with Stainless-Steel Wire Rope and Thimbles or Stainless-Steel Eye Nuts & Threaded Rod attachments to secure ropes for cable hauling
- Ideal for testing NBN & Telstra ducts or conduits
- Tests electrical and communications conduits
- Made from high quality HDPE material for long life and lubricity



Supplied with
Stainless Steel
Fittings



50mm Proving Mandrel
SPP-PM-50E



80mm Proving Mandrel
SPP-PM-080

Stainless Steel Wire Rope,
Thimble & Ferrule



Stainless Steel Eye Nut
& Threaded Rod



STAINLESS STEEL eye fittings means extended service life

Part No.	Conduit Size (mm)	Conduit Type	Mandrel Length (mm)	Mandrel OD (mm)	Overall Length (mm)	Wt (kg)	Eye Fitting (mm)
SPP-PM-18		Telco	40	18	115	0.05	2 ¹
SPP-PM-24		Telco	40	24	115	0.05	2 ¹
SPP-PM-28		Telco	60	28	160	0.05	3.2 ¹
SPP-PM-32		Telco	60	32	180	0.05	3.2 ¹
SPP-PM-38		Telco	60	38	180	0.07	3.2 ¹
SPP-PM-50T	50	Telco	80	47	145	0.15	6*
SPP-PM-63T	63	Telco	100	60	180	0.30	8*
SPP-PM-50E	50	Electrical	80	40	200	0.10	3.2 ¹
SPP-PM-63E	63	Electrical	100	52	180	0.25	8*
SPP-PM-080	80	Electrical	180	74	260	0.75	8*
SPP-PM-100	100	Electrical	180	90	275	1.10	10*
SPP-PM-125	125	Electrical	245	113	340	2.20	10*
SPP-PM-150	150	Electrical	245	130	340	2.85	10*
SPP-PM-200	200	Electrical	280	184	375	5.80	10*

1 = Stainless Steel Wire & Thimble - * = Stainless Steel Eye-Nut



Conduit Cleaning - Wire Brushes and Squeegees



Wire Brushes - SPP

Part No. Various

- Clean debris from the inside of conduits or ducts (50 to 200mm) before cable hauling/pulling
- Welded eyes for rope attachment
- Galvanised

Part No.	Description	Approx Equipment OD (mm)	Suit Conduit Size (mm)
SPP-WB-050	Wire Brush	55	50 Electrical
SPP-WB-063		70	63 Electrical
SPP-WB-080		90	80
SPP-WB-100		110	100
SPP-WB-125		130	125
SPP-WB-150		160	150
SPP-WB-200		230	200

Contact TEN for Telecommunications Duct Cleaning Needs



Rubber Conduit Cleaner - SPP

Part No. Various

- Cleans finer dirt and debris from conduits or ducts (50 to 200mm). For larger or stubborn debris, use wire brush (SPP-WB) first
- Welded eyes for rope attachment.
- Galvanised finish with 5 rubber squeegees

Part No.	Description	Approx Equipment OD (mm)	Suit Conduit Size (mm)	Wt (kg)
SPP-RCC-050E	Rubber Conduit Cleaner	46	50 Electrical	0.35
SPP-RCC-063E		58	63 Electrical	0.40
SPP-RCC-080		85	80	0.95
SPP-RCC-100		105	100	1.50
SPP-RCC-125		130	125	2.35
SPP-RCC-150		155	150	2.90
SPP-RCC-200		205	200	5.05



Rubber Lubricant Spreader - SPP

Part No. Various

- Used to spread Lubricant through conduits or ducts (50 to 200mm)
- Galvanised finish with rubber squeegees

Part No.	Description	Approx Equipment OD (mm)	Suit Conduit Size (mm)	Wt (kg)
SPP-RLS-050E	Rubber Lubricant Spreader	46	50 Electrical	0.15
SPP-RLS-063E		58	63 Electrical	0.20
SPP-RLS-080		85	80	0.45
SPP-RLS-100		105	100	0.60
SPP-RLS-125		130	125	0.75
SPP-RLS-150		155	150	0.95
SPP-RLS-200		205	200	1.30

See pages A44 & A45 for the range of Polywater Lubricants



Conduit Blowing

Condux Power Dart Blower

Part No. 08030004

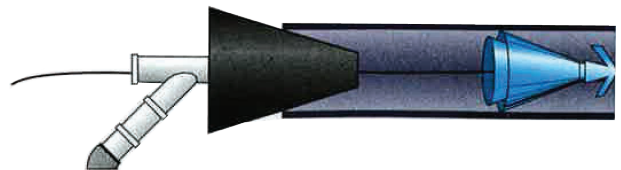
The Condux Power Dart Blower is a pneumatic rodding system especially suited for long duct runs.

A three-motor system allows you to choose the correct pressure output for your needs. With all three motors engaged, the Power Dart Blower will deliver a market leading 300cfm (8.5m³/min) of air at 3psi maximum pressure.



- Compressed air system for long duct runs in up to 152mm diameter conduit
- Blow 13mm line or measuring tape over 610m
- Three-motor system allows choice of speed
- Can deliver up to 300cfm/8.5m³/min of air at 3psi/0.2bar maximum pressure
- Main unit weighs only 14kg
- Operates at 220V

**3 Motor System
for complete control
and maximum distance**



Line Carriers

Part No. Various



Flexible rubber duct projectile cones are durable for many repeated uses. These projectiles are fast & efficient for long runs with easy pull back.



Fast and efficient plastic missile line carriers for conduit fishing with high speed blowers even in/out of round duct.

Duct Projectile Options	
Part No.	Size (mm)
08031820	51
08031830	76
08031840	102
08031850	127
08031860	152
08031880	203

Line Carrier Options	
Part No.	Line Carrier Size (mm)
08067900	51
08030100	76
08030300	102
08030400	127
08030500	152

Foam Carriers

Part No. Various



Lightweight foam conduit line carrier easily blows through duct. Best suited for short runs and runs with multiple bends.

Foam Carrier Options	
Part No.	Foam Carrier Size (mm)
08032200	25
08033600	30
08039800	38
08032400	51
08032500	76
08032100	90
08032600	102
08059100	127
08059200	152

Chute Carriers

Part No. Various



Tie a line or webbing to a chute, insert the chute into the conduit or duct, and blow compressed air propelling the chute to the end of the duct.

Cable Chute Line Carrier Options	
Part No.	Carrier, Chute (mm)
08033532	51 Nylon
08033548	76 Nylon
08033564	102 Nylon
08033580	127 Nylon
08033596	152 Nylon

Accessory Bag

Part No. 08030060

A convenient canvas bag holds the power dart hose, and an additional inner bag holds the Line Carriers, Foam Carriers, Seal-off Body and Seal-offs.



Part No.	Description
08030060	Power dart blower accessory bag

Poly Blowing Line

Part No. Various

Blow through conduit attached to darts



Part No.	Description
08561285	Poly Line Pail 1981m, 890N BL
08561297	Poly Line Pail 762m, 2002N BL
08073900	Poly Tape 914m, 578N BL



Duct Rodders - SPP

Traceable Duct Rodder - 4.5, 6, 9 & 11 mm

Part No. SPP-DR-Series



Utilised to prepare for cable installations in Electrical & Telecommunication conduits ranging from 20 to 200mm OD.

The tough flexible rod is ideal for pushing or pulling draw ropes and small cables through conduits / ducts.



11 mm Rod & Reel



9mm Rod & Reel



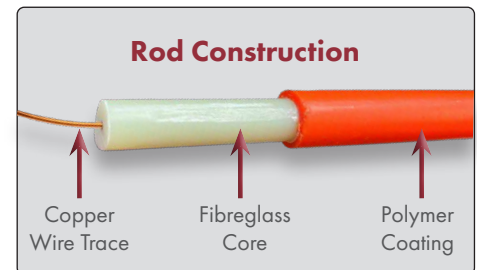
6mm Rod & Reel



4.5mm Rod & Reel

Features

- Quality Fibreglass rod coated with abrasion resistant UV stable polymer
- All sizes supplied standard with an internal copper wire for traceability.
- Supplied with Stainless Steel End Fitting & Removable Pulling Eyes for 6, 9 & 11 mm
- Brass End Fitting & Removable Pulling Eyes for 4.5mm
- 9 & 11 mm Reels are Powder-coated and fitted with a Drag Brake and Wheels
- 4.5 & 6mm Reels are Galvanised
- All Rodders include a Jointing/Repair Kit in pouch attached to the Reel (details below)
- Full range of Accessories available (detail below)



Ordering Information

Rodder Part No.	Rod OD (mm)	Rod Length (m)	Replacement Rod Part No.	Jointing Kit Part No.	Jointing Kit Components
SPP-DR4.5-60	4.5	60	SPP-DR-ROD4.5-*	SPP-DR-JK4.5	1 x Joiner
SPP-DR6-60	6	60	SPP-DR-ROD6-*	SPP-DR-JK6	1 x Rod End
SPP-DR6-100	6	100	SPP-DR-ROD6-*	SPP-DR-JK6	1 x Pulling Eye
SPP-DR9-100	9	100	SPP-DR-ROD9-*	SPP-DR-JK9	2 x Allan Keys - 6, 9, 11mm Rod
SPP-DR9-200	9	200	SPP-DR-ROD9-*	SPP-DR-JK9	1 x Glue
SPP-DR11-200	11	200	SPP-DR-ROD11-*	SPP-DR-JK11	1 x Rubber Rod Grip
SPP-DR11-300	11	300	SPP-DR-ROD11-*	SPP-DR-JK11	

*Nominate Length of rod required - Supplied with Rod Ends

Jointing Kit Components (Included with Rodder)



Accessory & Jointing Kit Pouch (Included with Rodder)

Accessories

Part No.	Rod Grip	Rod End	Pulling Eye	Swivel Rod End	Rod Joiner	Flexible Guide	Roller Guide
	SPP-DR-RG	SPP-DR-RE-*	SPP-DR-PE-*	SPP-DR-SRE-*	SPP-DR-RJ-*	SPP-DR-FG-*	SPP-DR-RG-*
Image							

*Nominate Rod Size

Other Accessories Available, Contact TEN for further information



Cable stands and Reel Rollers

Drum Jack Stands - Scissor - SPP

Part No. SPP-DJ-Series

Features

- Collapsible design for easy transport and storage
- Bolt-down points for secure and permanent fixing
- Can be set-up on uneven ground, as drum can be leveled with by adjusting one side
- Nylon wheels and handle for easy maneuverability
- Significant reduced pinch points
- Reinforced retaining cup and sealed bearing for threaded spindle
- Jacks labeled with ratings
- Easy wind up design with handle or hex head for fast winding with rattle gun
- Powder-coated finish
- Supplied with two spindles
 1. Jack joining spindle for rigidity during operation
 2. Drum spindle and placement collars to hold drum during operation



4T Jack shown
Part No. SPP-DJ-4T



Wheels and handle for easy maneuverability

Bolt-down points for secure and permanent fixing



Easy wind design with handle and hex head for a faster winding action with rattle gun



Jack shown folded for transport

Ordering Information

Part No.	Spindle OD (mm)	Min/Max Drum Diameter (mm)	Max Drum Width (mm)	WLL (kg)	Suitable for	Wt per Set (kg)
SPP-DJ-2T	60-76	1800	1180	2000	1 to 2T Drums	90
SPP-DJ-4T	60-76	1400/2400	1180	4000	2 to 4T Drums	180



Cable Drum Stands

- Various sizes, styles available
- 1.5 Tonne up to 30 Tonne
- Power pack and braking options
- Contact TEN with your requirements



Sold individually
Two required

Reel Roller - Current Tools

Part No. 610

- Easy set-up for ground level cable reel payout
- Integral ramp for reel loading
- Roller lock for reel removal
- 5-position roll adjustment for various reel diameters
- Heavy duty permanently lubricated ball bearing rollers
- Made in the USA



Part No.	Dimensions (mm)	Max Drum Dia. (mm)	Max Drum Width (mm)	Max Drum Wt (kg)	Reel Roller Wt (kg)
610	267 x 642	-	1065	900per pr	18.2 ea



Reel Roller - Current Tools

Part No. 613

- Easy set-up for ground level cable reel payout
- Integral ramp for reel loading
- Roller lock for reel removal
- 5-position roll adjustment for various reel diameter s
- Heavy duty permanently lubricated ball bearing rollers
- Made in the USA

Part No.	Dimensions (mm)	Max Drum Dia. (mm)	Max Drum Width (mm)	Max Drum Wt (kg)	Reel Roller Wt (kg)
613	806 x 940	-	762	1100	34



Cable Reel Roller - Current Tools

Part No. 615

- Heavy duty all welded construction
- Handles up to 13.6 Tonne cable reels
- One roller adjusts for various reel sizes
- Speed control adjustment
- Foot control for remote operation
- Heavy duty 10 amp. motor* for long service life
- Convenient fork sockets on sides
- Made in the USA

Part No.	Dimensions (mm)	Max Drum Dia. (mm)	Max Drum Width (mm)	Max Drum Wt (kg)	Unit Wt (kg)
615	3100 x 1550	3650	2400	13,600	1275

* 110v motor - Transformer required



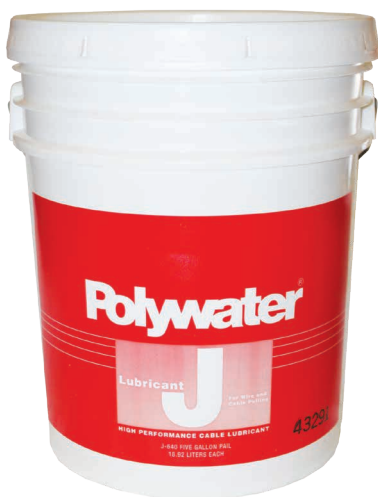
Polywater
Solutions at work.

Specific Lubricants Available

- Fibre Optic
- Low-Smoke Zero halogen
- High Water Environments
- Cable Blowing
- Winter Conditions

FULL RANGE OF CABLE LUBRICANTS TO SUIT ALL APPLICATIONS

Polywater
Solutions at work.



Cable Pulling Lubricant - Polywater

J Lubricant

Part No. Various

Polywater Lubricant J is a high performance, clean, slow-drying, water-based gel lubricant. Lubricant J provides maximum tension reduction in all types of cable pulling. It is especially recommended for long pulls, multiple-bend pulls and pulls in a hot environment. Lubricant J dries to form a thin lubricating film which retains its lubricity for months after use.

Polywater Lubricant J is a specification-grade lubricant that does not promote flame propagation when used with fire-retardant cables and systems. It is harmless to humans, environmentally safe, compatible with common Australian cable jacket materials, and can be easily applied as part of the unique Polywater® Lubricant Application System.

Features

- High performance cable lubricant for heavy cable installations
- Maximum Friction Reduction
- High Cling Factor
- Compatible with common Australian cables
- Temperature Stable
- Non-Combustible Residue
- Specification Grade "J" - The lubricant contain no waxes, greases, silicones, or polyalkylene glycol oils
- Application System available in 'Front End Packs'
- Complete cleanup is possible with water

J Front End Pack™ Lubricant

Part No. J-99 & J-110

The front end pack is a conduit-sized polyethylene bag of lubricant. The Front End Pack™ travels through the conduit on the winch line prelubricating the conduit ahead of the cable being pulled.

Part No.	Description
J-DRUM	208L Drum
J-640	18.9L Drum
J-128	3.8L Bucket
J-110	1.9L Front End Pack
J-99	950ml Front End Pack



CLICK or SCAN for Polywater J Application Video

SCAN OR CLICK TO VIEW VIDEO

Polywater® Front End Packs lubricate ahead of the cable during the pull





Bulk 208 litre Drum
PR-DRUM

PR Lubricant

Part No. Various

Polywater® PR Power Cable Lubricant is a complex polymer liquid lubricant that provides excellent friction reduction.

Perfect for installing cables from the transformer to the service entrance of businesses or homes.

Polywater PR is a stringy, silicone-enhanced liquid that can be poured or pumped into duct.

Pourable 3.8litre Bottle
PR-128



**Universal, Pourable
Underground Cable Pulling
Lubricant**

Features

- **Field Friendly:** Packaging designed for the installer
- **High Shear Resistance:** Allows friction reduction even under high sidewall pressure in bends
- **Slow Drying:** The residue is a thin, slippery film that retains lubricity for months after use
- **Compatible with Common Cables:** Suitable for use on many cable jackets

Part No.	Description
PR-128	3.8 litre bottle
PR-DRUM	208 litre drum



LZ Lubricant

Part No. Various

Polywater® LZ offers proven cable compatibility, superior combustion resistance, and an inherently low coefficient of friction.

Polywater LZ should be specified for installations of LSZH/LSHF cable in ducts and where fire propagation is a concern.

Features

- **Low Friction Coefficient:** Maximum tension reduction on all types of cable jackets
- **Universal:** Suitable for all types of jackets and cable
- **Specification Grade:** Meets the performance requirements of power and petrochemical plants, mass transit systems, airports, and high-occupancy buildings
- **Compatible:** Tested on LSZH/LSHF thermoplastic and thermo-set jackets
- **Safe:** Suitable for use on CSPE and CPE fire-retardant cable jackets



Lubricant Pump

Part No.	Description
LZ-640	18.9L Drum
LZ-DRUM	208L Drum
LP-D5	Lubricant Pump

**Suitable for use on
CPE and CSPE Fire-Retardant
Cable Jacket**

**Tested on Low Smoke - Zero
Halogen Thermoplastic &
Thermoset jackets**



Polywater®

Solutions at work.

Cable Pull Planning Software - Polywater

Pull-Planner™ 4.0

Design Safe and Efficient Cable Pulls with Pull-Planner™ 4.0

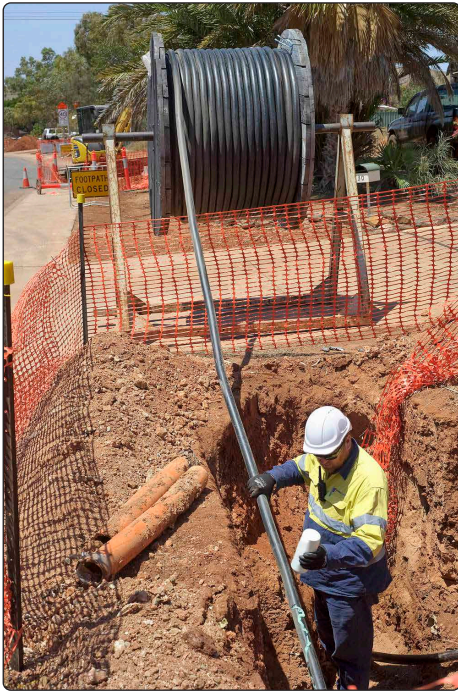
Pull-Planner 4.0 makes the planning of small or complex, large-scale cable pulling projects easier and more efficient.

Providing coefficient of friction (COF) guidance to reduce risks during cable pulls.

Calculates maximum pulling and sidewall tensions to reduce joints and avoid cable damage

Benefits

- Calculate pulling tensions and sidewall loadings during your job planning
- Provide a detailed pull plan to your client for sign off
- Understand your coefficient of friction and maximise the length of run, based on using a high quality or specification grade lubricant*
- See the difference in varying coefficients of friction and determine the significant value created using a specification grade lubricant from Polywater
- Resource your job with the most suitable equipment
- Designers can minimise the number of pulling pits required in a cable run, saving considerable time and money
- Calculate the impact of bends, multiple cables, rollers/sheaves, pushing devices and back tension off drums and direction of pull
- Ability to provide a field based COF once the cable pull is complete



Program for Cable Pulling Tension Calculation and Conduit System Design

Typical Pull-Planner™ Report

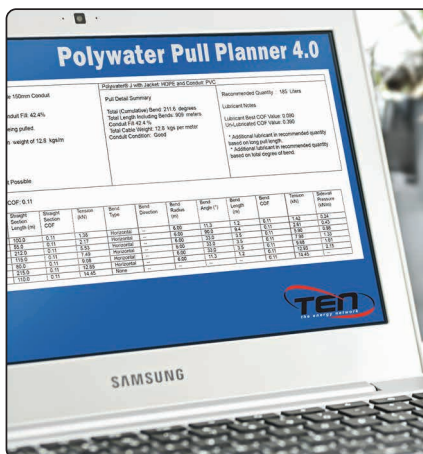
Pull-Planner™ Report

<p>Pull Name: 1C 630mm² 132kV HDPE Cable 150mm Conduit</p> <p>Conduit ID: 150 millimeter(s) Conduit Fill: 42.4%</p> <p>Total of 1 cable(s) of 1 different type(s) being pulled.</p> <p>Type #1 1 Cable(s) O.D. of 97.6 mm weight of 12.8 kgs/m</p> <p>Total cable weight: 12.8 kgs/m</p> <p>Weight correction factor set to: 1 Configuration: Single Cable Jam/Clearance Analysis: Jamming Not Possible</p>	<p>Polywater® J with Jacket: HDPE and Conduit: PVC</p> <p>Pull Detail Summary</p> <p>Total (Cumulative) Bend: 211.6 degrees Total Length Including Bends: 909 meters Conduit Fill 42.4 % Total Cable Weight: 12.8 kgs per meter Conduit Condition: Good</p>	<p>Recommended Quantity : 185 Liters</p> <p>Lubricant Notes</p> <p>Lubricant Best COF Value: 0.090 Un-Lubricated COF Value: 0.390</p> <p>* Additional lubricant in recommended quantity based on long pull length. * Additional lubricant in recommended quantity based on total degree of bend.</p>
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Incoming Tension: 0 kN Pull COF: 0.11

Seg #	Straight Section Slope (°)	Slope Direction	Straight Section Length (m)	Straight Section COF	Tension (kN)	Bend Type	Bend Direction	Bend Radius (m)	Bend Angle (°)	Bend Length (m)	Bend COF	Tension (kN)	Sidewall Pressure (kN/m)
1	--	--	100.0	0.11	1.38	Horizontal	--	6.00	11.3	1.2	0.11	1.42	0.24
2	--	--	55.0	0.11	2.17	Horizontal	--	6.00	90.0	9.4	0.11	2.61	0.43
3	--	--	212.0	0.11	5.53	Horizontal	--	6.00	33.0	3.5	0.11	5.90	0.98
4	--	--	115.0	0.11	7.49	Horizontal	--	6.00	33.0	3.5	0.11	7.98	1.33
5	--	--	80.0	0.11	9.08	Horizontal	--	6.00	33.0	3.5	0.11	9.68	1.61
6	--	--	215.0	0.11	12.65	Horizontal	--	6.00	11.3	1.2	0.11	12.93	2.15
7	--	--	110.0	0.11	14.45	None	--	--	--	--	0.11	14.45	--

The Pull-Planner™ 4.0 Software uses the cable pulling (tension estimation) equations common in technical studies and included in a number of industry standards. The friction coefficients in the software database are laboratory measurements. A number of field factors can influence the effective coefficient of friction. Engineering judgement and experience should be used in the selection of appropriate friction coefficients for use in the calculations.



* See previous pages for Polywater's range of Cable Lubricants

SCAN or CLICK to view Polywater's Cable Jacket Coefficient of Friction Test methods



Contact TEN for further information on how the Planner can help your cable pull work better.



Duct / Conduit Sealing Systems

FST™ Duct Seal is a “closed cell foam”, with high density properties, this keeps water, acids, greases, gases, insects and rodents out of the conduit.

The foam has good wetting and adhesion to metals, plastics, and concrete.

Features

- FST Duct Sealant™ has 98% closed-cell content for increased strength and resiliency
- FST Duct Sealant™ resists 6.7m of water-head pressure
- FST Duct Sealant™ is compatible with cable and duct materials
- FST Duct Sealant™ is chemically resistant to gasoline, oils, dilute acids and bases, and most unsaturated hydrocarbons
- Prevents the passage of gas; does not sag; will not dry out; and is re-alterable
- Quick: Foam expands and cures quickly even when water is present
- Multi-Use: Packages are resealable

FST-250KIT1 Duct Sealant - Polywater

Part No. FST-250KIT1

FST™ Quick setting Duct Sealant in a 2 part 250ml field ready cartridge kit.

Recommended for conduits 50 to 200mm



Part No.	Kit Includes
FST-250KIT1	1 x 240g two-part Foam Sealant caulking tube style with resealing cap 3 x Mixing nozzles, 4 x 600m Foam damming strips 1 x Position rod, 1 x Pre-treating wipe, Instruction Sheet

FSTBP™ Duct Sealant Burst Pack - Polywater

Part No. FSTBP-200KIT1

FSTBP Duct Sealant comes in an easy to use, self-dispensing burst pack.

Ideal for the protection of conduits 125mm to 200mm.



Part No.	Kit Includes
FSTBP-200KIT1	1 x FSTBP-200KIT1-200 Burst Pack 1x Pair of gloves, 1 x Sanding cloth 4 x Foam Strips, 1 x Prep. Wipes, 1 x Instructions

FST MINI Duct Sealant - Polywater

Part No. Various

Effectively Seals Small Conduits and Inner-ducts

Polywater® FST™ MINI is 50ml field ready kit.

Recommended for small conduits 20 to 50mm.



Part No.	Description
FST-MINI	1 x 50ml FST Cartridge, 2 x Mixing Nozzles, 6 x Foam Discs 1x Pair of gloves, 1 x Instructions
TOOL-50-11	Application Tool



Rope - Overhead and Underground

Telstra/Parramatta Rope

Part No. Various



- Polypropylene rope, Telstra certified
- 6mm in diameter with 2 Blue and 1 Yellow strand
- Tangle free uncoiling to coil end, no waste



Part No.	OD (mm)	Length (m)	Colour	Break Force (kN)
ROS0614	6	400	Blue/ Yellow	602
ROS0652	6	500		

Prima Dyneema Rope - Hampidjan

Part No. Various



PRIMA rope is an ultra-high strength, low cost solution that meets the need for light but strong ropes in cost driven environment. PRIMA rope is stronger than steel in the same diameter. PRIMA ropes are made from HMPE fibre produced by DSM Dyneema.

Characteristics

- Extremely high strength
- Light weight
- Abrasion resistant
- Low stretch
- Neutral buoyancy
- Splicable
- Flexible

Applications

- Alternate to wire rope
- Winch lines
- Tow lines
- Rigging lines
- Utility line

More sizes available
Contact TEN

Part No.	OD (mm)	Wt per metre (g)	Max Break Force (T)
29081035	6	23.29	4.0
29081040	8	38.81	6.7
29081050	10	54.34	10.7
29081061	12	93.15	16.0
29081070	14	103.25	18.7
29081080	16	137.67	24.9

Specify length in metres

Double Braided Hauling Rope - Hampidjan

Part No. Various



- Manufactured in Australia with a braided polyester cover over a braided Polyester core
- Ideal for use as winch and tow lines and for pulling cable

Characteristics

- High strength
- High UV resistance
- Flexible & Splicable

Applications

- Winch, Tow & Rigging lines
- Pulling and stringing line

Part No.	OD (mm)	Wt per 100 m (kg)	Max Break Force (T)
DBPR-12*	12	11.10	3.49
DBPR-14*	14	13.90	4.36
DBPR-16*	16	18.25	5.75
DBPR-18*	18	22.20	6.98
DBPR-20*	20	27.30	8.59
DBPR-22*	22	33.30	10.48
DBPR-24*	24	41.60	13.10
DBPR-26*	26	46.30	14.56

*Specify length in metres

3 Strand Polypropylene Rope - Hampidjan

Part No. Various



- Higher breaking strength
- Abrasion resistance
- Excellent shock absorption
- Better grip
- Minimal elongation
- Durable and ultraviolet stabilized
- Excellent shape retention
- Strength: wet/dry 100%
- Floats/sinks: Floats
- Elongation: Moderate
- Water absorption: None
- Chemical Resistance
 - Acids: Excellent
 - Alkalis: Excellent
 - Oil/Gas: Very Good

Part No.	OD (mm)	Wt per 100 m (kg) 250m Standard (Coil)	Max Break Force (T)
PPR-12	12	7.0	2.84
PPR-14	14	9.0	3.91
PPR-16	16	12.0	4.90
PPR-18	18	15.0	5.50
PPR-20	20	18.0	7.52
PPR-22	22	22.0	8.45
PPR-24	24	26.0	10.20
PPR-26	26	31.0	11.87

Specify length in metres



LANCIER



EKR350



EKR700



Cable Pusher - Lancier

Part No. Various

- Used for underground cable pushing
- Installation forces are applied evenly across cable with caterpillar track pusher, rather than being pushed via wheel
- Suitable for narrow trenches
- Can be linked in series
- Optional multiple unit control available

Benefits

- Providing supplementary pulling and pushing force when laying heavy cables
- Optimum and gentle transmission of power to the cable
- Suitable for narrow trenches
- No cabling winches necessary in cascade connection
- Length measuring device
- Electric switch for reversing direction of push
- Integrated Disc brake

Field of use

The caterpillar cable-roller is used for laying delicate underground cables which are sensitive to pulling-tension and surface pressure. It may be used as a cable forward feeding roller either in association with a cabling winch, to reduce the pulling tension on the cable, as a cable-laying roller on its own or to assist in drum payout.

Several EKR's are needed at intervals along the cable track to provide an effective reduction in the pulling tension experienced by the cable. The number required will depend upon how sensitive the cable is to pulling tension and the difficulty of the track.

Part No.	EKR 350	EKR 700
Max Pulling/Pushing (kN)	3.5	7kN
Max Speed (m/min)	10	10
Cable Ø (mm)	30 - 150	30 - 150
Engine Type	Electric	Electric
Engine Output (kW)	1.1	1.5
Operating Voltage	400 V, 3-phase, 50Hz 220 V, 50Hz (optional)	400 V, 3-phase, 50Hz
Dimensions (mm)	1100 (L) x 450 (W) x 930 (H)	1720 (L) x 550 (W) x 1100 (H)
Options	Series connection with switch board + cable remote control Cable length measuring device	
Weight (kg)	115	185

7 & 10kN Hydraulic and 7kN Petrol versions available
Contact TEN for further information

Current Tools

FOR THE PROFESSIONAL ELECTRICIAN



Electric Cable Feeder - Current Tools

- Hinged upper drive to allow for easy side loading
- Dual drive motors for maximum grip on cables
- Cable separator guides cables to ensure positive grip on tires
- Heavy duty transport caster with quick release mechanism
- Variable speed control
- Operate with remote pendant or optional foot switch
- Self-lubricating drive chains

Part No.	Model 99
Cable Capacity (mm)	6.3 to 88.9
Total width of all cables (mm)	152.4
Maximum Pushing Force (kg)	Single cable: 113 All cables: 452
Feeding speed (m/ min)	0.0 to 11
Wt (kg)	156.5

Requires 110v Transformer



Hydraulic Pullers

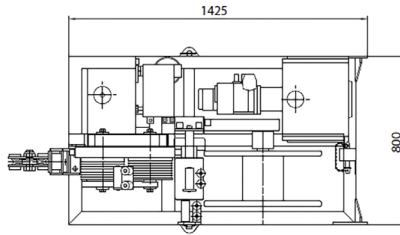
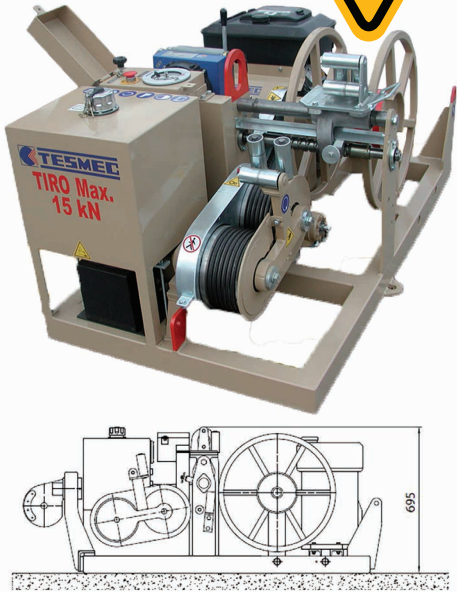
15kN Puller, Hydraulic - Tesmec

Part No. ARS200

The ARS200 Hydraulic Puller is suitable to string one rope.

The bull wheel grooves are made of heat treated steel

- Negative self-acting hydraulic brake
- Hydraulic dynamometer with set-point and automatic control of maximum pull
- On board reel winder with automatic level wind and special reel BOF370 for 500m of 8mm rope



PERFORMANCE

Max pull (kN)	15
Speed at max. pull (km/hr)	0.7
Max speed (km/hr)	3.6
Pull at max. speed (kN)	4

Hydraulic Transmission

Closed hydraulic circuit for stepless speed variation in both rotating directions

CHARACTERISTICS

Bull Wheel dia. (mm)	200
Max. rope dia. (mm)	8.0
Mass (without rope) (kg)	500
Engine	
Petrol (kW)	13 (18hp)
Cooling System	Air
Electrical System (V)	12

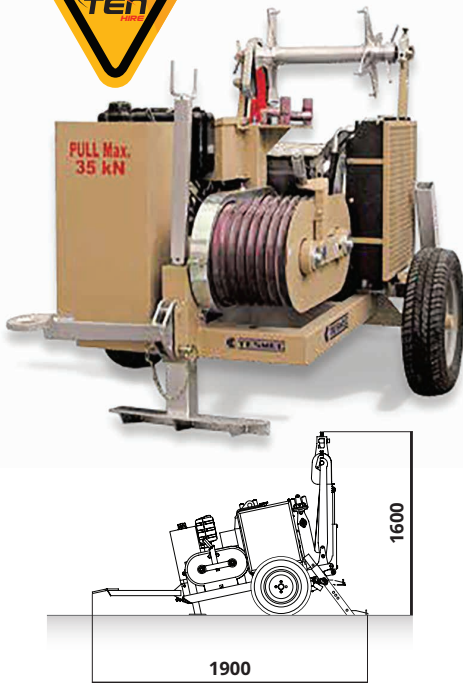


35kN Puller, Hydraulic - Tesmec

Part No. ARS403

The ARS403 Hydraulic Puller is suitable to string one rope. The bull wheel grooves are made of wear proof thermally treated steel.

- Used for overhead and underground pulling
- Negative self-acting hydraulic brake
- Hydraulic dynamometer with set-point and automatic control of max. pull
- Hydraulic oil cooling system
- Control instruments for hydraulic system and diesel engine
- Rigid axle for towing at max speed of 30km/hr
- Built-in reel winder with automatic level wind, suitable for standard reel BOF010 and BOF020 (AXR001 included)
- Electronic pull and speed recorder kit (instrument not included)
- Pull pre-setting system
- Mechanical front stabiliser
- Grounding connection point



PERFORMANCE

Max pull (kN)	35
Speed at max. pull (km/hr)	1.2
Max speed (km/hr)	3.6
Pull at max. speed (kN)	12

Hydraulic Transmission

Closed hydraulic circuit for stepless speed variation in both rotating directions

CHARACTERISTICS

Bull Wheel dia. (mm)	325
Max. rope dia. (mm)	13
Mass (without rope) (kg)	980
Engine	
Gasoline (kW)	25 (34hp)
Cooling System	Water
Electrical System (V)	12



Contact TEN for further information on Australian Roadworthy Trailer options





Cleaner | Quieter | Greener

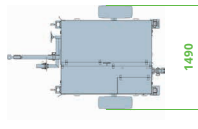
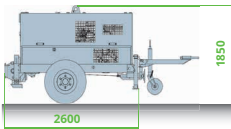


NEW DIGITAL HMI*

The 178mm (7") color display indicates machine working parameters, maintenance records and has integrated pull and speed recorder.

REMOTE CONTROL

The radio remote control provides total user machine control while integrating with the new digital user interface.



30 & 50kN Puller, Electric - Tesmec

Part No. PE1150 & PE1250

The Tesmec PE1150 & PE1250 all-electric pullers are an industry exclusive. With an electric motor, they eliminate the need for hydraulic components such as hydraulic motors, pump and valves, and requires no oil. The unit's silent operation makes it ideal for almost any location, while the electric power system generates zero emissions. The PE1150 & PE1250 delivers a maximum pull force of 30kN & 50kN respectively and offer an advanced user interface and remote control.

Features

- Setting pull value
- Setting reel winder value
- Control of direction and speed of bull-wheels
- Display to check stringing parameters
- Stop Operation push button
- Negative self-acting electrical brake
- Lockable sound proof integrated covers
- Automatic reel winder with automatic level wind
- Earthing connection point
- Mechanical front and rear stabilizers
- Free-wheel device
- Electronic pull value limitation control
- Integrated warm-up system

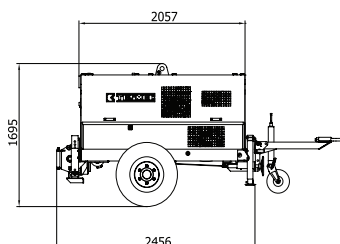
50kN Puller, Hydraulic - Tesmec

Part No. PM1250

The PM 1250 Hydraulic Puller is suitable to string one rope and operates using the latest in technology from Tesmec.

Features

- Utilises New Tesmec digital HMI*
- Automatic reel winder
- Lockable sound proof integrated covers
- Negative self-acting hydraulic brake
- Rigid axle - 30km/h
- Earthing connection point
- Mechanical front and rear stabilizers
- On board reel winder with automatic level wind and reel for 700m of 14mm dia. rope
- Free wheel device
- Electronic pull value limitation control
- Hydraulic Transmission: Closed hydraulic system for stepless speed variation in both directions



The perfect Machine for Urban Underground Pulling

PERFORMANCE	PE1150	PE1250
Max pull (kN)	30	50
Speed at max pull (m/min)	15	10
Max speed (m/min)	70	70
Pull at max speed	5	5
Free wheel max speed (m/min)	70	70

CHARACTERISTICS	PE1150	PE1250
Bull-wheel diameter (mm)	250	300
Max rope diameter (mm)	11	13
Weight (without rope) (kg)	2350	2500
Number of grooves	8	8
Suitable for	1 rope	1 rope
Layout	Single	Single

ELECTRIC POWER PACK	PE1150	PE1250
Battery Pack (V)	96	350
Charge Time (Hr @ 230V)	5	5

BATTERY STORAGE CAPACITY	PE1150	PE1250
Rope length recovered		
Working Cycle (Average) (m)	5000	7000
Working Cycle (Max Pulling Force) (m)	1300	1400

PERFORMANCE	
Max pull (kN)	50
Speed at max. pull (m/min)	17
Max speed (m/min)	67
Pull at max. speed (kN)	12.5
Free wheel max speed (m/min)	150

CHARACTERISTICS	
Bull Wheel dia. (mm)	350
Max. rope dia. (mm)	14
Mass (without rope) (kg)	2000
Number of grooves	7
Suitable for	1 rope
Layout	Single

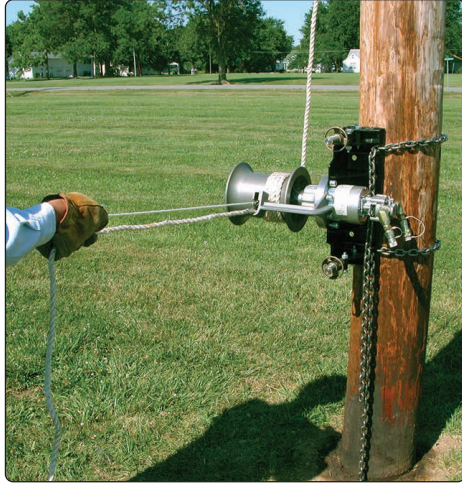
ENGINE	
Diesel (kW)	42 (56hp)
Emission level	tier 4f/Stage IIIB
Cooling System	Water
Electrical System (V)	12

* See Transmission Stringing for further information on "Digital HMI"



Winches - Overhead - Chance

Capstan Winches - 454kg



Hydraulic Winch shown with Rope Lock (sold separately)

Chance Capstan Winches - 454kg Capacity

Chance Capstan Winches are available for all on-site situations.

Hydraulic - Powered by 700bar (10,000psi) Hydraulic Pump

230V AC - Plug into any single phase power outlet or a truck inverter

Petrol - Utilise independently of all other power supplies

Improved design features a multi-planetary drive/backstop clutch, assembled on the centre shaft of the steel gear-case with full-length internal teeth.

This design handles more rugged conditions, extends life and reduces maintenance

For improved load control, steel capstan drum features nickel-plated rope surface, larger radius at load-line wrap and rope hook.



Petrol Winch shown with Foot Switch (included)

Versatile Application

Lightweight, powerful portable winches move heavy weights and tackle difficult to access tasks, including:

- Pulling underground and indoor cable
- Stringing and tensioning conductors
- Lifting transformers



Honda 35cc 4 Stroke Engine

- Hoisting heavy insulator strings
- Tower erection
- Pulling wheeled equipment over obstacles



Hydraulic Winch - 700bar (10,000psi)

Part No. C308-1180

Capacity (kg)	Speed at Max Load (m)	Source required for speed	Wt (kg)
454	28.3	30lt per min @ 10,000psi	12.9

Foot Switch not Included - see accessories on next page

Electric Winch - 230V AC

Part No. C308-1171

Capacity (kg)	Speed at Max Load (m)	Source required for speed	Wt (kg)
454	6.4	7 amps motor current	22.5

Includes Foot Switch

Petrol Winch - Honda 35cc 4-Stroke

Part No. C308-1190

Capacity (kg)	Speed at Max Load (m)	Source required for speed	Wt (kg)
454	12.2	7,000rpm	20.9

Includes Foot Switch

See following page for available accessories



Chance Winch Accessories



Rope Lock Device

Part No. C308-0856

- Automatically supports load if rope is released
- Accepts 12.7mm to 19.0mm rope
- Includes 2 mounting bolt, washers and lanyard



Universal Mounting Bracket

Part No. C308-0925

- Recommended for petrol Winch
- Can be bolted down or uses two C417-0346 Chain Clamps (below) for mounting on poles, angles and beams



Chain Clamp

Part No. C417-0346

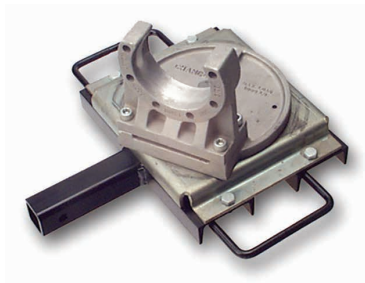
- Recommended for above Universal Bracket
- Use two Chain Clamps for Universal Bracket (above)
- 2.15m long



Swivel Base Truck Mount

Part No. T308-1506

- Recommended for Electric and Hydraulic Winches
- Weight: 10.4kg



Swivel Base Truck Mount & Hitch Mount

Part No. PSC3081563

- Recommended for Electric and Hydraulic Winches
- Weight: 28.1kg



Foot Switch - Hydraulic

Part No. C308-0685

- Use for Hydraulic Winch
- Weight: 10.9kg



Winches - Overhead and Underground

Portable Petrol Capstan Winch - Docma

Part No: VF-Series

Docma offer a highly innovative range of Winches for Pulling and lifting loads for the Power Utilities, Telecommunication, Railway, Mining, Oil & Gas industries.

They combine Italian quality materials, modern and functional design to achieve excellent Performance, Speed and Portability. Perform these tasks in remote locations or areas where power is not yet available.

The portable winches are designed to handle all of your day-to-day conductor pulls from loads of 800 to 1150kg (2300kg via single pulley)

The Innovative built-in rope accelerator, controlled by the operator, simply tug on the rope to start the pull/lift.

Features

- Italian Quality
- Pulling from remote locations no longer a challenge
- Ready for immediate use on site
- Over 1 tonne pulling capacity
- Built-In Rope Accelerator Switch
- Quickly mobilised and placed in working position
- 2 or 4 Stroke options (Honda 4 stroke HGX50)
- No tilt restrictions (Honda 4 stroke HGX50)
- Balanced Cast Carry Handle
- Wide range of attachment & accessories

DOCMA

MADE IN ITALY

Honda 4 Stroke model shown



Balanced, strong cast Handle



Rope Accelerator



VF900-4



VF815-2



VF105-2

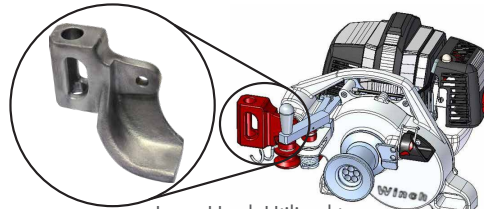
Part No.	Capacity (kg)			Engine type	Pull Speed (m/pm)	Engine (cc)	Rope		Wt (kg)
	Pulling	Double Rope	Lifting				Size (mm)	Wraps on Drum	
VF900-4	865	1730	200	Honda 4 Stroke	14	50	10 / 12*	8 / 7	10.85
VF815-2	815	1630		2 Stroke	26	50.8	10 / 12*	7 / 6	10.50
VF105-2	1050	2100		2 Stroke	20	50.8	10 / 12*	8 / 7	10.50

* 10 and 12mm Double Braid Polyester Hauling Rope available in a variety of lengths. Contact TEN for further information.

Docma Capstan Winch Accessories



Double Hook Assembly Utilised to attached Winch to Slings



Loop Hook Utilised to attached Winch to all Accessories



Vertical Anchor - For Poles, Posts & Towers or Anchor with bolts through anchor holes



50mm Tow-Ball attachment

Vehicle attachments



Hayman Reece attachment



Lifting attachment



Ground attachment

Contact TEN for further information on the Winch Pulling & Lifting attachment equipment and set-up



Portable Petrol Drum Winch - Docma

Part No: VF-Series

Docma offer a highly innovative range of Winches for Pulling loads for the Power Utilities, Telecommunication, Railway, Mining, Oil & Gas industries.

They combine Italian quality materials, modern and functional design to achieve excellent Performance, Speed and Portability. Perform these tasks in remote locations or areas where power is not available.

The portable Drum winches are designed to handle all of your day-to-day pulls from loads of up to 1485kg (2970kg via single pulley)

Features

- Italian Quality
- Pulling from remote locations no longer a challenge
- Ready for immediate use on site
- Quickly mobilised and placed in working position
- Over 1.4 tonne capacity
- Innovative quick release system for free-wheel unwinding
- Textile rope
- Balanced Carry Handle
- Wide range of accessories
- Steel Rope version available upon request



VF155-AUTO

DOCMA

MADE IN ITALY



Auto Rewind Guide



Hook or Tow-Ball Attachment

Part No.	Pull Capacity (kg)	Dimensions (mm)	Pull Speed	Engine (cc)	Rope Dia & Length	Rope Type	Wt (kg)
VF155-AUTO	1485	595 x 385 x 360	20m/min	50.8	5mm x 80m	Textile	25.0

Docma Capstan & Drum Winch Accessories

Docma offers a wide range of accessories to handle all of your day-to-day pulling, from poles, trees and towers to vehicle tow-balls.

Slings & Ratchet Strap



Double Ended Sling



Ratchet Strap

Redirection or double capacity Pulleys



16kN Steel Pulley



16kN Steel Pulley



40kN AL Pulley



40kN AL Pulley

Hooks & Shackles



Rated Hooks and Shackles

Replacement Ropes for Drum Winches



Textile Rope



Steel Rope

Wide range of other accessories available, including equipment bags & back-packs and pole, tree & equipment sleighs & trolleys



Ideal for Overhead & Underground Pulling



Safety Rope Diversion allows Operator to stand out of pulling line



Powered by Milwaukee Batteries



Battery Capstan Winches, 1360kg - iTOOLco

Ideal for Industrial/Commercial applications.

Pulling from remote locations is no longer a challenge.

This portable 1360kg puller is intuitively designed to handle all of your day-to-day pulls.

Features

- Pulling from remote locations no longer a challenge
- Built-In Rope Engagement Capstan Switch
- Wide angle Dual Head Adjustment
- Ready for immediate use on site
- Quickly mobilised and placed in working position
- Pulling from remote locations
- 5 Conduit adaptors with built-in carry rack

Performance

Pull Speed:

Up to 15m p/m 1360kg small Capstan

Up to 33m p/m 680kg large Capstan

Max pulling Capacity: 1360kg

Pull at max speed: 680kg

Powered by: Milwaukee M18 drive unit

Battery: Milwaukee M18 - 18V 6.0Ah

Battery Cannon Puller

Part No. CM3K

Speed, Versatility, and Performance are all yours with iToolco's Battery Capstan Winch.

This portable 1360kg puller is intuitively designed to handle all of your day-to-day conductor pulls.

The built-in capstan switch automatically turns the puller on and off.

Simply tug on the rope to start the pull and back off to shut it down.

Delivers dynamic performance in remote locations or areas where power is not yet available.



Battery Utility Puller

Part No. UPM3K

Ideal for Utility Applications

Includes Tow-bar Mount

Get high-speed performance and a unique set-up with iToolco's 3K Utility Puller™.

Designed for quick set-up, the 3K Utility Puller's articulating receiver adapter can be positioned 180 degrees vertically or horizontally at the precise angle needed to get the job done.

With this hardworking puller you can transfer heavy pulling loads to the ground within centimeters of the conduit you're pulling through.

For overhead pulls, line guide rollers keep the rope centered on the capstan.



Versatile Dual Capstan



Part No	Ordering information	Dimensions Collapsed (mm)	Dimensions Extended (mm)	Wt (kg)
CM3K	Winch, Conduit Adaptors & Rack Motor, 2 x Batteries, Charger	2121 (H) x 914 (W) x 686 (L)	Extends up to 3.0m	62.3
UPM3K		1905 (H) x 508 (W) x 508 (L)		74.1



Ideal for Overhead & Underground Pulling



Versatile Dual Capstan

Electric Capstan Winches, 2727kg - iTOOLco

Ideal for Industrial/Commercial applications. Take your cable pulling to the next level with these tough but versatile Electric Capstan Winches. When 2T is not quite enough and you don't want to drag a big puller around on the back of your vehicle, the iTOOLco winch is the ideal puller.

Features

- Pulling from remote locations no longer a challenge
- Built-In Rope Engagement Capstan Switch
- Ready for immediate use on site
- Quickly mobilised and placed in working position
- Pulling from remote locations
- 5 Conduit adaptors with built-in carry rack (C6K.2 Model)

Performance

Pull Speed:

Up to 8.5m p/m 2727kg small Capstan

Up to 21m p/m 1360kg large Capstan

Max pulling Capacity: 2727kg

Pull at max speed: 1360kg

Powered by: 230v Milwaukee 2 Speed motor



Electric Cannon Puller

Part No. C6K.2

The Cannon 6K is two wire pullers in one with dual capstans that can pull 2.4m and 8.5m per minute on low speed and 6.0m and 21m per minute on high speed.

This versatile wire puller is lightweight and easy to transport, making it the puller of choice for many electrical contractors and electricians.

Features

- 4 Speed dual capstan
- Self contained – ready to pull
- Quickly change from side pull to overhead, underground or truck hitch
- Pulls out 2.7m of extra wire



- No anchoring required
- Easy to transport
- Telescoping

Electric Utility Puller

Part No. UP6K

Ideal for Utility Applications

Tackle unique set-up challenges with precision and performance using iTOOLco's Utility Puller 6K™.

Designed for faster set-up, the Utility Puller 6K's articulating receiver adapter can be positioned 180 degrees vertically or horizontally at the precise angle needed to get the job done.

With the hardworking Utility Puller 6K, you can transfer heavy pulling loads to the ground within centimeters of the conduit you're pulling through. For overhead pulls, line guide rollers keep the rope centered on the capstan.



Part No	Description	Dimensions Collapsed (mm)	Dimensions Extended (mm)	Wt (kg)
C6K.2	Electric Capstan Winch	1220H x 546W x 546L	Extends up to 3.0m	59
UP6K	Electric Capstan Winch	1905H x 609W x 609L		59



Electric Capstan Winches, 4545kg & 5454kg - iTOOLco



10K Puller
C10K.2



SCAN OR CLICK TO VIEW VIDEO



12K Puller
C12K



SCAN OR CLICK TO VIEW VIDEO

iTOOLco's Cannon 10 & 12K pullers are the strongest wire pullers available.

These versatile cable pullers are easy to maneuver, and can be changed quickly from side pulls to overhead or underground.

Features

- Self-contained – ready to pull
- Quickly change from side pull to overhead, underground or truck hitch
- Adjustable counter-balance for easy setup
- Universal adapter – the universal adapter sits on the conduit lock nut, fits a wide range of sizes, and often eliminates the need to use the conduit adapters on lighter pull
- Easily maneuvers into tight spaces
- Rear swiveling casters for job site transportation and precise conduit positioning
- Pulls out 3.9m of extra wire from conduit opening to capstan
- Foot switches included

Part No. C10K.2

- Up to 5.5m (per min.) on low speed, Up to 12.0m (per min) on high speed
- 4545kg pulling capacity
- 4 Speed dual capstan

Part No. C12K

- 5454kg pulling capacity
- Pulling Speed up to 4.5m (per min.) on low speed, Up to 10.1m (per min) on high speed
- Customized motor with reverse gear
- 6 Speed dual capstan
- Extra 835mm & 375mm extensions allow for longer reach

Contact TEN for further information on the iTOOLco 10 & 12K Pullers

Running Line Tension Gauge - Safe Pull - iTOOLco

Part No. SPRLT20K

Accurately Monitor Cable Tension & Customer Overload Limits

Accurately monitor & save cable tension while preventing damage. Increase safety ensuring that cable is being pulled at a safe tension level by integrating the Safe Pull RLT. The lightweight design & included carrying case allows for easy transportation on the job-site. Track every pull remotely via your mobile device with the Safe Pull™ RLT application. Set load limits and get audible alarms on pulls with loads measuring up to 88kN (9T).

Features

- Easy Rope Installation with quick release pins
- Accepts rope sizes 4mm to 19mm
- Overhead & Right Angle Pulls
- GPS capability
- Smart-Phone App available for Apple and Android platforms
- Light-weight and Durable - Constructed from anodized aluminium.
- No structural Plastic parts
- Mounting Kit Included
- Reads in kN - kg - t - lb
- Accepts AA Batteries (500hr battery life)
- IP67 Rated

Contact TEN for information
on the Smart Phone APP



SCAN OR CLICK TO VIEW VIDEO

Part No	Description	Dimensions (mm)	Wt (kg)
SPRLT20K	Running Line Tensioner	422 (L) x 35 (W) x 152(H)	4.6